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DELTA REPORT

10-K

JELD - JELD-WEN HOLDING, INC.

10-K - DECEMBER 31, 2023 COMPARED TO 10-K - DECEMBER 31, 2022

The following comparison report has been automatically generated

TOTAL DELTAS	3941
CHANGES	336
DELETIONS	1706
ADDITIONS	1899

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2022 December 31, 2023

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission File Number: 001-38000

JELD-WEN Holding, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**93-1273278**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

2645 Silver Crescent Drive
Charlotte, North Carolina 28273
(Address of principal executive offices, zip code)

(704) 378-5700
(Registrant's telephone number, including area code)

Securities Registered Pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock (par value $0.01 per share)	JELD	New York Stock Exchange

Securities Registered Pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer", "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	x	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
Emerging growth company	☐		

If an emerging growth company, indicate by checkmark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C 7262(b)) by the registered public accounting firm that prepared or issued its audit report ☒

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of the common stock held by non-affiliates of the registrant was $1.3 billion $1.5 billion as of the end of the registrant's second fiscal quarter (based on the closing sale price for the common stock on the New York Stock Exchange on June 24, 2022 July 1, 2023). Shares of the registrant's voting stock held by each executive officer and director and by each entity or person that, to the registrant's knowledge, owned 10% or more of the registrant's outstanding common stock as of June 25, 2022 July 1, 2023 have been excluded from this number in that these persons may be deemed affiliates of the registrant.

The registrant had 84,598,589 85,573,598 shares of common stock, par value $0.01 per share, issued and outstanding as of February 16, 2023 February 16, 2024.

DOCUMENTS INCORPORATED BY REFERENCE

Part III of this Form 10-K incorporates by reference certain information from the registrant's Definitive Proxy Statement for its 2022 2024 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission within 120 days after December 31, 2022 December 31, 2023.

JELD-WEN HOLDING, Inc.
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Glossary of Terms

When the following terms and abbreviations appear in the text of this report, they have the meanings indicated below:

Form 10-K	Annual Report on Form 10-K for the fiscal year ended December 31, 2022 December 31, 2023
ABL Facility	Our $500 million asset-based loan revolving credit facility, dated as of October 15, 2014 and as amended from time to time, with JWI (as hereinafter defined) and JELD-WEN of Canada, Ltd., as borrowers, the guarantors party thereto, a syndicate of lenders, and Wells Fargo Bank, N.A., as administrative agent
ABS	JWI d/b/a American Building Supply, Inc.
Adjusted EBITDA from continuing operations	A supplemental non-GAAP financial measure of operating performance not based on any a standardized methodology prescribed by GAAP that we define as net Adjusted EBITDA from continuing operations as income (loss), from continuing operations, net of tax, adjusted for the following items: net (income) loss from discontinued operations, net of tax; income tax expense (benefit) expense; ; depreciation and amortization; interest expense, net; net; and certain special items consisting of non-recurring net legal and professional expenses and settlements; goodwill impairment; restructuring and asset related charges, net; charges; other facility closure, consolidation, and related costs and adjustments; M&A related costs; net (gain) loss on sale of property and equipment; loss on extinguishment of debt; share-based compensation expense; pension settlement charges; non-cash foreign exchange transaction/translation (income) loss; and other special items.
ASC	Accounting Standards Codification
ASU	Accounting Standards Update
AUD	Australian Dollar
CAP	Cleanup Action Plan
CARES Act	Coronavirus Aid, Relief, and Economic Security Act enacted on March 27, 2020
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CIO	Chief Digital and Information Officer
CISO	Chief Information Security Officer
Charter	Amended and Restated Certificate of Incorporation of JELD-WEN Holding, Inc.
Class B-1 Common Stock	Shares of our Class B-1 common stock, par value $0.01 per share, all of which were converted into shares of our Common Stock on February 1, 2017
CMI	JWI d/b/a CraftMaster Manufacturing, Inc.
COA	Consent Order and Agreement
CODM	Chief Operating Decision Maker, which is our Chief Executive Officer
Common Stock	The 900,000,000 shares of common stock, par value $0.01 per share, authorized under our Charter
Core Revenues	Revenue Net revenue excluding the impact of foreign exchange, divestitures, and acquisitions completed in the last twelve months
Corporate Credit Facilities	Collectively, our ABL Facility and our Term Loan Facility
COVID-19	A novel strain of the 2019-nCov coronavirus
Credit Facilities	Collectively, our Corporate Credit Facilities and our Australia Senior Secured Credit Facility as well as other acquired term loans and revolving credit facilities
D&O	Directors and Officers
DKK	Danish Krone Kroner
Domoferm	The Domoferm Group of companies
Dooria	Dooria AS
EPA	The U.S. Environmental Protection Agency
ERC	Employee Retention Credit
ERP	Enterprise Resource Planning
E.U.	European Union

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Exchange Act	Securities Exchange Act of 1934, as amended
FASB	Financial Accounting Standards Board

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Free Cash Flow	A non-GAAP financial measure that we define as net cash (used in) provided by operating activities less capital expenditures (including purchases of intangible assets)
GAAP	Generally Accepted Accounting Principles in the United States
GHGs	Greenhouse Gases
GILTI	Global Intangible Low-Taxed Income
IPO	The initial public offering of shares of our common stock, as further described in this report on Form 10-K
JELD-WEN	JELD-WEN Holding, Inc., together with its consolidated subsidiaries where the context requires
JWI	JELD-WEN, Inc., a Delaware corporation
LaCantina	JWI d/b/a LaCantina Doors, Inc.
LIBOR	London Interbank Offered Rate
M&A	Mergers and acquisitions
Mattiovi	Mattiovi Oy
MMI Door	JWI d/b/a Milliken Millwork, Inc.
MD&A	Management's Discussion and Analysis of Financial Condition and Results of Operations
NAV	Net asset value
NOL	Net operating loss
NYSE	New York Stock Exchange
Onex	Onex Partners III LP and certain affiliates
PaDEP	Pennsylvania Department of Environmental Protection
PLP	Potential Liability Party
Preferred Stock	90,000,000 shares of Preferred Stock, par value $0.01 per share, authorized under our Charter
PSU	Performance Stock Unit
R&R	Repair and Remodel
ROU asset	Right-of-use asset
Registration Rights Agreement	The agreement among JELD-WEN Holdings, Inc., Onex and its affiliates, and certain of our directors, executive officers and other pre-IPO stockholders entered into on October 3, 2011, as amended and restated on January 24, 2017 in connection with our IPO, and amended further on May 12, 2017 and November 12, 2017
RSU	Restricted Stock Unit
Sarbanes-Oxley	Sarbanes-Oxley Act of 2002, as amended
SEC	U.S. Securities and Exchange Commission
Securities Act	Securities Act of 1933, as amended
Senior Notes	$800.0 million of unsecured notes issued in December 2017 in a private placement in two tranches: $400.0 million bearing interest at 4.625% and maturing in December 2025 ($200.0 of which were redeemed in August 2023) and $400.0 million bearing interest at 4.875% and maturing in December 2027 2027.
Senior Secured Notes	$250.0 million of senior secured notes issued in May 2020 in a private placement bearing interest at 6.25% and maturing redeemed in May 2025 August 2023.
SOFR	Secured Overnight Financing Rate
SG&A	Selling, general, and administrative expenses
Tax Act	Tax Cuts and Jobs Act
Term Loan Facility	Our term loan facility, dated as of October 15, 2014, and as amended from time to time with JWI, as borrower, the guarantors party thereto, a syndicate of lenders, and Bank of America, N.A., as administrative agent
U.K.	United Kingdom of Great Britain and Northern Ireland

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U.S.	United States of America
VPI	JWI d/b/a VPI Quality Windows, Inc.
WADOE	Washington State Department of Ecology

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Working Capital	Accounts receivable plus inventory less accounts payable
WTW	Willis Towers Watson

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CERTAIN TRADEMARKS, TRADE NAMES, AND SERVICE MARKS

This report includes trademarks, trade names, and service marks owned by us. Our U.S. window and door trademarks include JELD-WEN®, AuraLast®, MiraTEC®, Extira®, LaCANTINA®, MMI Door®, Karona™, ImpactGard®, JW®, Aurora®, IWP®, True BLU®, ABS™, Siteline®, National Door®, Low-Friction Glider®, Hydrolock®, VPI™, AURALINE®, FINISHIELD®, MILLENNIUM®,TRUFIT®, EPICVUE®, and EVELIN®. Our trademarks are either registered or have been used as common law trademarks by us. The trademarks we use outside the U.S. include the Stegbar®, Regency®, William Russell Doors®, Airlite®, Trend®, The Perfect Fit™, Aneeta®, Breezway®, Kolder™ ,Corinthian® and A&L Windows ® marks in Australia, and Swedoor®, Dooria®, DANA®, Mattiovi™, Zargag® , Alupan®, and Domoferm®, Kellpax®,and HSE™ marks in Europe. ENERGY STAR® is a registered trademark of the U.S. Environmental Protection Agency. This report contains additional trademarks, trade names, and service marks of others, which are, to our knowledge, the property of their respective owners. Solely for convenience, trademarks, trade names, and service marks referred to in this report appear without the ®, ™ or SM symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the right of the applicable licensor to these trademarks, trade names, and service marks. We do not intend our use of other parties' trademarks, trade names, or service marks to imply, and such use or display should not be construed to imply, a relationship with, or endorsement or sponsorship of us by, these other parties.

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PART I - FINANCIAL INFORMATION

FORWARD-LOOKING STATEMENTS

In addition to historical information, this Form 10-K contains "forward-looking statements" within the meaning of Section 27A of the federal Securities Act and Section 21E of the Exchange Act, which are subject to the "safe harbor" created by those sections. All statements, other than statements of historical facts, included in this Annual Report on Form 10-K are forward-looking statements. Forward-looking statements are generally identified by our use of forward-looking terminology, including the terms "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "might," "plan," "potential," "predict," "seek," or "should," and, in each case, their negative or other various or comparable terminology. In particular, statements about the markets in which we operate, including growth of our various markets, and our expectations, beliefs, plans, strategies, objectives, prospects, assumptions, or future events or performance under Item 7 - *Management's Discussion and Analysis of Financial Condition and Results of Operations* and Item 1- 1 - *Business* are forward-looking statements. In addition, statements regarding the potential outcome and impact of pending litigation are forward-looking statements.

We have based these forward-looking statements on our current expectations, assumptions, estimates, and projections. Forward-looking While we believe these expectations, assumptions, estimates, and projections are reasonable, such forward-looking statements are only predictions and involve known and unknown risks and uncertainties, that many of which are beyond our control. These and other important factors, including those discussed under the headings Item 1A - *Risk Factors* in this Form 10-K may cause our actual results, performance or achievements to differ materially from any future results, performance or achievements expressed or implied by these forward-looking statements. Some of the factors that could cause actual results to differ materially from those expressed or implied by the forward-looking statements include:

- negative trends in overall business, financial market and economic conditions, and/or activity levels in our end markets;
- increases in interest rates and reduced availability of financing for the purchase of new homes and home construction and improvements;
- our highly competitive business environment;
- failure to timely identify or effectively respond to consumer needs, expectations, or trends;
- failure to maintain the performance, reliability, quality, and service standards required by our customers;
- failure to successfully implement our strategic initiatives, including our productivity, cost reduction and global footprint rationalization initiatives and strategic business review; initiatives;
- disruptions in our operations due to natural disasters, public health issues, such as COVID-19, and armed conflicts, including the ongoing conflict between Russia and Ukraine; Ukraine and instabilities in the Middle East;
- economic and geopolitical uncertainty and risks that arise from operating a multinational business;
- acquisitions, divestitures, or investments in other businesses that may not be successful;
- adverse outcome of pending or future litigation;
- declines in our relationships with and/or consolidation of our key customers;
- increases in interest rates and reduced availability of financing for the purchase of new homes and home construction and improvements;
- fluctuations in the prices of raw materials used to manufacture our products;
- delays or interruptions in the delivery of raw materials or finished goods;
- failure to retain and recruit executives, managers, and employees;

- seasonal business with varying revenue and profit;
- changes in weather patterns and related extreme weather conditions;
- political, regulatory, economic, and other risks, including the impact of political conflict on the global economy and the impact pandemics, including the COVID-19 pandemic, that arise from operating a multinational business;
- exchange rate fluctuations;
- disruptions in our operations due to natural disasters or acts of war;
- manufacturing realignments and cost savings programs resulting in a decrease in short-term earnings;
- security breaches and other cybersecurity incidents;
- increases in labor costs, potential labor disputes, and work stoppages at our facilities;
- changes in building codes that could increase the cost of our products or lower the demand for our windows and doors;
- compliance costs and liabilities under environmental, health, and safety laws and regulations;
- compliance costs with respect to legislative and regulatory proposals to restrict emission of GHGs;

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- lack of transparency, threat of fraud, public sector corruption, and other forms of criminal activity involving government officials;
- product liability claims, product recalls, or warranty claims;
- inability to protect our intellectual property;
- pension plan obligations;
- availability and cost of credit;
- our current level of indebtedness and the effect of restrictive covenants under our existing or future indebtedness including our Credit Facilities, Senior Secured Notes, and Senior Notes; and
- other risks and uncertainties, including those listed under Item 1A- 1A - *Risk Factors*.

Given these risks and uncertainties, you are cautioned not to place undue reliance on such forward-looking statements. Any forward-looking statement in this Form 10-K speaks only as of the date of this Form 10-K. We do not undertake any obligation to update any of the forward-looking statements, except as required by law.

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Item 1 - Business.

Our Company

We are a leading global designer, manufacturer, and distributor of high performance interior and exterior building products, offering one of the broadest selections of windows, interior and exterior doors, and wall systems. We design, produce, and distribute an extensive range of high-performance interior and exterior doors, windows, and other related building products, for use in serving the new construction and R&R of residential single and multi-family homes and, to a lesser extent, non-residential buildings. sectors.

The JELD-WEN family of brands includes JELD-WEN worldwide; LaCantina and VPI in North America; and Swedoor, DANA, and DANA Kellpex in Europe; and Corinthian, Stegbar and Breezway in Australasia. Europe. Our customers include wholesale distributors and retailers as well as individual contractors and consumers. Our business is highly diversified by distribution channel, geography, and construction application as illustrated below:

2022 2023 Net Revenues $5,129 million $4,304 million		
Channel	Geography	Construction Application(1)

5707 5708 5709

(1) Percentage of net revenues by construction application is management's estimate based on the end markets into which our customers sell.

As a leading global manufacturer of interior and exterior building products, we have invested significant capital to build a business platform that we believe is unique among our competitors. We operate 131 84 manufacturing and distribution facilities in 19 15 countries located primarily in North America Europe, and Australia. Our Europe. We are focused on optimizing our global manufacturing footprint is strategically sized to enhance performance and located to meet improve profit margins. On July 2, 2023, we completed the delivery requirements sale of our customers. Australasia business ("JW Australia"). The net assets and operations of the disposal group met the criteria to be classified as "discontinued operations" and are reported as such in all periods. Unless otherwise indicated, the description of our business provided in Part I pertains to continuing operations only (seeNote 1 - *Description of Company and Summary of Significant Accounting Policies* and Note 2 - *Discontinued Operations*to our consolidated financial statements for further information).

For many product lines, our manufacturing processes are vertically integrated, enhancing our range of capabilities, our ability to innovate, and our quality control, as well as providing us with supply chain, transportation, and working capital savings. We believe that our manufacturing network allows us to deliver our broad portfolio of products to a wide range of customers across the globe, while improving our customer service and strengthening our market positions.

Our History

We were founded in 1960 by Richard L. Wendt, when he, together with four business partners, bought a millwork plant in Oregon. The subsequent decades were a time of successful expansion and growth as we added different businesses and product categories such as interior doors, exterior steel doors, and vinyl windows. Our first overseas acquisition was Norma Doors in Spain in 1992 and since then we have acquired or established numerous businesses in Europe, Australia, Asia, Canada, and Mexico, making JELD-WEN a global company.

In October 2011, certain funds managed by affiliates of Onex acquired a majority of the combined voting power in the Company through the acquisition of convertible debt and convertible preferred equity. After the Onex investment, we began the transformation of our business from a family-run operation to a global organization with independent, professional management. The transformation accelerated after 2013 with the hiring of a new senior management team strategically recruited from a number of world-class industrial companies. Our current management team has extensive experience driving operational improvement, innovation, and growth, both organically and through acquisitions. As of December 31, 2020, Onex owned approximately 32.6% of our outstanding shares of Common Stock. In 2021, Onex exercised its rights under its Registration Rights Agreement and requested

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the registration for resale of all of their shares of our Common Stock in multiple underwritten public offerings ("Secondary Offerings"). offerings. During August 2021, Onex fully divested their ownership in the Company and no longer had representation on the Board of Directors.

Our Business Strategy and Operating Model

We strive to achieve best-in-industry financial performance and shareholder returns through the disciplined execution of our strategy which includes:

- streamlining and simplifying the business, optimizing product mix, rationalizing our global footprint and strategically sourcing our raw materials to improve returns on our investments;
- enhancing performance and improving profit margins through strategic cost-reduction and productivity initiatives, such as upgrading go-to-market processes, optimizing our sales force through training, right-sizing and consolidating our manufacturing network, investing in automation and leveraging our scale to streamline sourcing;
- disciplined capital allocation and working capital management designed to maximize shareholder returns, cash flows, and return on invested capital in a balanced manner;
- sustainability-focused innovations to drive profitable organic revenue growth;
- investing in our brands and marketing, and commercial excellence programs such as customer segmentation, and pricing price optimization;
- improving our profit margins through the deployment of the JELD-WEN Excellence Model, or JEM, including lean tools to drive manufacturing productivity savings, as well as fixed-cost savings and quality enhancements from our global facility rationalization and modernization initiatives;
- achieving high conversion of earnings to free cash flow and disciplined capital allocation designed to maximize shareholder returns in a balanced manner between debt reduction, strategic acquisitions, and share repurchases; and
- growing a premier performance culture with high employee engagement, supported led by our values and a keen focus on talent management.

Our Products

We provide a broad portfolio of interior and exterior doors, windows, and related building products manufactured from a variety of wood, metal, and composite materials offered across a full spectrum of price points. In the year ended December 31, 2022 December 31, 2023, our door sales accounted for 63% of net revenues, our window sales accounted for 22% 21% of net revenues, and our other ancillary products and services accounted for 15% 16% of net revenues.

Doors

We are a leading global manufacturer of residential doors. We offer a full line of residential interior and exterior door products, including patio doors and folding or sliding wall systems. Our non-residential door product offering is concentrated in Europe, where we are a leading non-residential door provider by net revenues in Germany, Austria, Switzerland, and Scandinavia. In order to We also offer non-residential doors across North America in certain markets. To meet the design, durability, and energy efficiency requirements of our customers, our product portfolio encompasses many types of materials, including wood veneer, composite wood, steel, glass, and fiberglass that satisfy a range of price points from mid-level entry-level to high-end. Our highest volume products include molded interior doors, which are made from two composite molded door skins joined by a wooden frame and filled with a hollow honey-cell core or other solid core materials. These low-cost value doors are the most popular choice for interior residential applications in North America, and are also prevalent in Australia, France and the U.K. In the U.S., we manufacture exterior doors primarily made from fiberglass and steel. Fiberglass Our fiberglass product line has grown in popularity due to its attractive thermal properties, aesthetics, and durability. We have dedicated additional resources to our exterior fiberglass door business, which includes door slabs and door systems, and believe we have a leading product offering based on quality, breadth of design options, and range of price points. We also manufacturer stile and rail doors in our U.S. manufacturing facilities. In Europe, we also sell high performance residential and non-residential doors, with features such as soundproofing, fire resistance, radiation resistance, security, and in Scandinavia we design and manufacture doors which can withstand extreme environmental conditions in coastal and arctic environments. We also manufacture stile and rail doors in our Southeast Asia and U.S. manufacturing facilities. In the U.S., we also manufacture folding and sliding wall systems. Additionally, we offer profitable value-added distribution services for residential and non-residential products in all of our markets, including customizable configuration services, specialized component options, and multiple finishing options. These services are valued by labor constrained customers and allow us to capture more profit from the sale of our door products. In the U.S., our acquisitions of ABS and MMI Door are examples of our increased focus on value-added services.

Windows

We are a leading global manufacturer of residential windows. windows in North America. We manufacture a full line of residential wood, vinyl, and wood composite windows in North America, and in Australia we manufacture wood and aluminum windows. America. Our window product lines comprise a full range of styles, features, and energy-saving options in order to meet the varied needs of our customers in each of our regional end markets. For example, our high-performance wood and vinyl windows with multi-pane glazing and superior energy efficiency properties are in greater demand in Canada and the northern U.S. By contrast, In addition, our lower-cost aluminum framed value windows are popular in some with production builders and the remodel and replacement markets. In select coastal regions, of the southern U.S., while in coastal Florida certain local building codes require we offer impact windows that can withstand the impact of debris propelled by hurricane-force winds. Wood hurricane force winds and satisfy local building codes. Our wood windows are remain prevalent as a high-end option in all of our markets because they possess both insulating qualities and the beauty of natural wood. In North America, our wood windows and patio doors include our proprietary

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AuraLast treatment, which is a unique water-based wood protection process that provides protection against wood rot and decay. We believe AuraLast is unique in its

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ability to penetrate and protect the wood through to the core, as opposed to being a shallow or surface-only treatment. Our most recent windows product introductions showcase our differentiated capability utilizing alternative materials including our Auraline true composite window and patio doors. Also, with With the acquisition of LaCantina Doors, the Company added LaCantina's innovative folding, multi-slide, and swing patio doors and wall systems to its already robust windows product offering. Additionally, with We also offer a non-residential line of vinyl windows for a broad assortment of commercial applications. With the acquisition of VPI, we added vinyl windows for mid-rise, multi-family, institutional, hospitality, and commercial properties to our product lineup. We believe that our innovative energy-efficient windows position us to benefit from increasing environmental awareness among consumers and from changes in local building codes. In recognition of our expansive energy-efficient product line, we have been an ENERGY STAR partner since 1998. We have received ENERGY STAR Canada's Excellence Award in 2023 and have won 7 ENERGY STAR Canada Manufacturer of the Year Awards.

Other Ancillary Products and Services

In certain regions, we sell a variety of other products that are ancillary to our door and window offerings, which we do not classify as door or window sales. These products include shower enclosures and wardrobes, moldings, trim board, lumber, cutstock, glass, hardware and locks, cabinets, and window screens. We also sell molded door skins to certain customers pursuant to long-term contracts, and these customers in turn use the molded door skins to manufacture interior doors and compete directly against us in the marketplace. Miscellaneous installation and other services are also included in this category.

Our Segments

We operate within the global market for residential and non-residential doors and windows with sales spanning approximately 90 71 countries. While we operate globally, the markets for doors and windows are regionally distinct with suppliers manufacturing finished goods in proximity to their customers. Finished doors and windows are generally bulky, expensive to ship, and, in the case of windows, fragile. Designs and specifications of doors and windows also vary from country to country due to differing construction methods, building codes, certification requirements, and consumer preferences. Customers also demand short delivery times and can require special order customizations. We believe that we are well-positioned to meet the global demands of our customers due to our market leadership, strong brands, broad product line, and strategically located manufacturing and distribution facilities.

Our operations are managed and reported in three two reportable segments, organized and managed principally by geographic region. Our reportable segments are North America Europe, and Australasia. Europe. We report all other business activities in Corporate and unallocated costs. Factors considered in determining the three two reportable segments include the nature of business activities, the management structure accountable directly to the CODM for operating and administrative activities, the discrete financial information available, and the information regularly reviewed by the CODM.

North America

In our North America segment, we compete primarily in the new construction and R&R market for residential doors and windows in the U.S. and Canada. We are the only manufacturer that offers a full line of interior and exterior door and window products, allowing us to offer a more complete solution to our customer base. While we expect to realize some benefit from share gains and continued growth from pricing strategies to offset higher inflation, and share gains in our retail channel, our North American market is expected to continue to face headwinds during 2023 2024 primarily due primarily to weaker market demand, heightened interest rates and continued labor inflation. We believe that our total market opportunity in North America will continue to include non-residential applications and other related building products, and value-added services. products.

Europe

The European market for doors is highly fragmented, and we have the only platform in the industry capable of serving nearly all European countries. In our Europe segment, we compete primarily in the market for residential and non-residential doors in Germany, the U.K., France, Austria, Switzerland, and Scandinavia. During 2022, the conflict between Russia 2024, we expect headwinds in our residential and Ukraine has driven broad inflation non-residential markets due to general economic weakness and rising as interest rates across the region. As a result, we expect new construction and R&R activity that are expected to soften throughout 2023.

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Australasia

In our Australasia segment, we compete primarily in the market for residential doors and windows in Australia, where we hold a leading position by net revenues. We believe that our total market opportunity in the Australasia region includes other countries in the region, as well as non-residential applications, other related building products, and value-added services. For example, we also sell a full line of shower enclosures and closet systems throughout Australia. The market for residential new construction in Australia contracted in prior years, primarily due to government-imposed rules that restricted credit availability for homebuyers, increased immigration restrictions limiting population growth due to COVID-19, and continued downward economic results further extended due to the pandemic. During 2022, Australasia experienced a backlog driven by new residential construction and extended build cycles, which we expect will drive strong demand through the first half of 2023. We expect full year new construction and R&R activity may soften as a result of heightened interest rates and weaker market demand.

We are executing on our strategy to maximize shareholder value and position JELD-WEN for long-term success. As part of this effort, we are evaluating a range of options for our Australasia business. This review is consistent with our goal to streamline and simplify our operations across the company. remain high.

Financial information regarding our segments is included in Note 14 - *Segment Information* to our financial statements included in this Form 10-K.

Materials

We generally maintain a diversified supply base for the materials used in our manufacturing operations. The primary materials used for our door business include wood, wood veneers, wood composites, steel, glass, internally produced door skins, fiberglass compound, and hardware, as well as petroleum-based products such as resin and binders. The primary materials for our window business include wood, wood components, glass, and hardware, as well as aluminum and vinyl extrusions. Wood components for our window operations are sourced primarily from our own manufacturing plants, which allow us to improve margins and take advantage of our proprietary technologies such as our AuraLast wood treatment process.

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We track commodities in order to understand our vendors' costs, realizing that our costs are determined by the broader competitive market as well as by increases in the inputs to our vendors. In order to manage the risk in material costs, we develop strategic relationships with suppliers, routinely evaluate substitute components, develop new products, vertically integrate, where applicable, and seek alternative sources of supply from multiple vendors and often from multiple geographies.

Seasonality

In a typical year, our operating results are impacted by seasonality. Historically, peak season for home construction and remodeling in our North America and Europe segments, which represent the substantial majority of our revenues, generally corresponds with the second and third calendar quarters, and therefore our sales volume is usually higher during those quarters. Seasonal variations in operating results may be impacted by inclement weather conditions, such as cold or wet weather, which can delay construction projects.

Sales and Marketing

We actively market and sell our products directly to our customers around the world through our global sales force and indirectly through our marketing and branding initiatives, which includes our enhanced social media presence. Our global sales force, which is organized and managed regionally, focuses on building and maintaining relationships with key customers as well as managing customer supply needs and arranging in-store promotional initiatives. In North America and Europe, we also have dedicated teams that focus on our retail customers.

We have recently made significant continue to make investments in tools and technologies to enhance the effectiveness of our sales force and ease of doing business. improve our customers' purchasing experience. For example, we are continuing to invest and utilize Salesforce in North America and Europe to enhance our customer relationships and support. We continue to leverage Salesforce for improved data management, service level tracking, Ecommerce, and workflow enhancements. We have also made investments in North America to streamline and automate order management and continue to expand post sales care through our virtual OnSite Applications and service scheduling. In Europe, we have started investments in new door configuration software to improve our customer's ordering experience with us which will enhance our digital service offering and improve our Net Promoter Score. We believe these investments will increase sales force effectiveness, create pull-through demand, and optimize sales force productivity.

We believe that our broad product portfolio of both doors and windows in North America and Australasia is a competitive advantage as it allows us to cross-sell our door and window products to our end customers, many of whom find it more efficient to choose one supplier for their door and window needs on a given project.

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Research and Development

A core aspect of our business strategy is the investment and innovation of new products and technologies. We believe that leading the market in innovation will enhance demand for our products and allow us to sell a higher margin product mix. Our research and development efforts encompass development of new products and material inputs, derivative product development, as well as value-added re-engineering of components in our existing products leading to reduced costs and manufacturing efficiencies. We have a governance process that prioritizes the most impactful projects, which is expected to improve the efficiency and quality of our research and development efforts. The governance process is currently being deployed globally, such that we can leverage best practices from region to region. Additionally, a substantial driver of our acquisition activity has been increasing access to new and innovative products, including the transfer and integration of acquired technology.

Although product specifications and certifications vary from country to country, the global nature of our operations allows us to leverage our global innovation capabilities and create product platforms which enable us to share new product designs across our markets. We believe that the global nature of our research and development capabilities is unique among our door and window competition.

Customers

We sell our products worldwide and have well-established relationships with numerous customers throughout the door and window distribution chain in each of our end markets, including retail home centers, wholesale distributors, and building product dealers that supply homebuilders, contractors, and consumers. Our wholesale customers include such industry leaders as ProBuild/Builders First Source, Saint-Gobain, and the Holzring group. Our home center customers include, among others, The Home Depot, Lowe's Companies, and Menards in North America; and B&Q, Howdens, and Bauhaus in Europe; and Bunnings Warehouse in Australia. Europe. We have maintained relationships with the majority of our top ten customers for over 25 years and believe that the strength and tenure of our customer relationships is based on the total value we provide, including the quality and breadth of our product offering, our customer service, innovation, and delivery capabilities. Our top ten customers together accounted for 39% approximately 43%, 44% and 43% of our net revenues in the year years ended December 31, 2022 December 31, 2023, 2022 and our largest customer, 2021, respectively. The Home Depot, accounted for approximately 14% a customer of our North America segment, represents 15%, 16%, and 17% of our consolidated net revenues in during the year years ended December 31, 2022. December 31, 2023, 2022, 2021, respectively. Lowe's Companies, another customer of our North America segment, represents 11%, 11%, and 10% of our consolidated net revenues during the years ended December 31, 2023, 2022, 2021, respectively.

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Competition

The door and window industry is highly competitive and includes a number of regional and international competitors. Competition is largely based on the functional and aesthetic quality of products, service quality, distribution capability, and price. We believe that we are well-positioned in our industry due to our leading brands, our broad product lines, our consistently high product quality and service, our global manufacturing and distribution capabilities, and our extensive multi-channel distribution. For North American interior doors, our major competitors include Masonite, Steves & Sons, Inc. and several smaller independent door manufacturers. For North American exterior doors, competitors include Masonite, Therma-Tru (a division of Fortune Brands), Plastpro and Plastpro. Steves & Sons, Inc. The North American window market is highly fragmented, with sizable competitors including Andersen, Pella, Marvin, Ply-Gem (a division of Cornerstone Building Systems, formerly NCI Building Systems), and Milgard (a division of MI Windows and Doors). The door manufacturers that we primarily compete with in our European markets include Huga, Prüm/Garant (a division of Arbonia Group), Viljandi, Masonite, Keyor, Herholz, and Herholz. The competitive landscape in Australia is varied across the door and window markets. In the Australian door market, Hume Doors is our primary competitor, while in the window, shower screen, and wardrobe markets we largely compete against a fragmented set of smaller companies. Hormann.

Intellectual Property

We rely primarily on patent, trademark, copyright, and trade secret laws and contractual commitments to protect our intellectual property and other proprietary rights. Generally, registered trademarks have a perpetual life, provided that they are renewed on a timely basis and continue to be used properly as trademarks. We intend to maintain the trademark registrations listed below so long as they remain valuable to our business.

Our U.S. window and door trademarks include JELD-WEN®, AuraLast®, MiraTEC®, Extira®, LaCANTINA®, MMI Door®, Karona™, ImpactGard®, JW®, Aurora®, IWP®, True BLU®, ABS™, Siteline®, National Door®, Low-Friction Glider®, Hydrolock®, VPI™, AURALINE®, FINISHIELD®, MILLENNIUM®,TRUFIT®, EPICVUE®, and EVELIN®. Our trademarks are either registered or have been used as common law trademarks by us. The trademarks we use outside the U.S. include the Stegbar®, Regency®, William Russell Doors®, Airlite®, Trend®, The Perfect Fit™, Aneeta®, Breezway®, Kolder™ ,Corinthian® and A&L Windows ® marks in Australia, and Swedoor®, Dooria®, DANA®, Mattiovi™, Zargag® , Alupan®, and Domoferm®, Kellpax®,and HSE™ marks in Europe.

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Environmental, Social, and Governance Matters

Human Capital Management

We believe that the success of our mission is realized by the engagement and empowerment of our employees and we are committed to investing in our people. Our senior leadership team, including our Chief Executive Officer and our Executive Vice President, Chief Human Resources Officer, is responsible for developing and executing our human capital strategy. This includes the attraction, retention, development, and engagement of talent. In addition, our Executive Vice President, Chief Human Resources Officer regularly updates senior management and our Board of Directors on the operation and status of our human capital management.

As of December 31, 2022 December 31, 2023, we employed approximately 23,400 17,700 people. Of our total number of employees, approximately 12,100 11,000 are employed in operations included in our North America segment and corporate operations, and approximately 7,300 6,700 are employed in operations included in our Europe segment, and approximately 4,000 are employed in operations included in our Australasia segment.

In total, approximately 1,170, 1,200, or 10% 11%, of our employees in the U.S. and Canada are unionized. Two facilities in the U.S., representing approximately 390 350 employees, are covered by collective bargaining agreements. In Canada, approximately 69% 68% of our employees work at facilities covered by collective bargaining agreements. As is common in Europe, and Australia, the majority of our facilities are covered by work councils and/or labor agreements. We believe we have satisfactory relationships with our employees and our organized labor unions.

Health and Safety

We strive to operate in a way that prioritizes the health and safety of our employees, business partners, and the communities in which we operate. JELD-WEN's commitment to the environmental health and safety ("EH&S") of our associates is foundational and embedded in our values. Our EH&S programs are designed around global policies and standards and a commitment to complying with or exceeding applicable requirements within our manufacturing, service and install, and headquarter operations. We proactively implement management systems consistent with ISO 14001 and 45001 requirements to prevent EH&S risks and to create a strong safety culture and improve performance. We are committed to continuous improvement and continue to measure, refine, and improve on our performance. We educate and train our employees to help ensure compliance with our policies, standards, and management systems. We also have policies and procedures in place to encourage employees to stop work to address at-risk conditions without the threat of retaliation. Our management and Board of Directors also periodically review our health and safety practices to address ongoing effectiveness and compliance.

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Diversity, Equity, and Inclusion (DE&I)

We believe that a diverse and engaged workforce is a strong competitive advantage and we strive to create an environment where individuals of all backgrounds can fully contribute and maximize their potential. Our employees are encouraged to bring their authentic selves to the workplace and work together to enrich a culture of inclusivity and belonging. Senior leadership teams review their succession plans, as well as their broader workforce demographics, on a regular cadence to ensure underrepresented groups are being offered fair consideration for open roles and internal promotions. As part of our recruitment process, we recruit from historically black colleges and universities, partner with affinity groups, and veterans' organizations, and work with minority owned recruiting firms to help ensure managers are presented with diverse candidate pools for their workforce needs. As part of our human capital strategy, we incorporate mentoring programs, support employee resources groups, and facilitate DE&I training sessions to encourage and promote an inclusive culture.

Training and Talent Development

We strive to not only attract and retain great talent but are committed to the continued development of our workforce. We invest in formal leadership development programs that help prepare senior leaders for succession into executive roles, in regional programs to accelerate the leadership conversion of mid-level managers, and in focused efforts to upskill our front-line leaders. Retaining and developing early career talent is an additional focus. Across our teams, we welcome apprenticeship and work study arrangements that seed talent into manufacturing and team lead roles. In North America specifically, we offer a summer internship program and a multi-year, cross-functional rotational program to identify, attract, and accelerate the growth of an internal pipeline of future managers. In our regions, we seek out, seed, and utilize financial grants and social educational investment requirements to reinvest in the ongoing learning and development needs of our diverse global workforce.

Internal job opportunities are posted for employees to review and our internal mobility philosophy encourages employees to apply for roles after they have passed twelve months on a job. Our human capital management system allows employees to document their skills, prior work experiences, and desired future areas of growth. As part of the annual performance management process, managers and employees meet to review individual development plans goals and performance and discuss actions for ongoing growth and development. The company Company continues to invest in its employees through new global learning platforms, content libraries, and additional formal and informal training programs.

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EmployeeEngagementOrganizational Health

We manage and measure our organizational health with a view to gaining insight into our employees' experiences, levels of workplace satisfaction, and feelings of engagement within the Company. Organizational health is driven through an "enterprise-guided" approach that includes both global and local initiatives in line with the Company's overall cultural vision and strategy. We measure employee engagement and manager effectiveness organizational health annually through our global engagement employee survey and strive to increase continually develop our engagement scores year over year. To assist in this formal effort, culture and employee engagement. Results of the annual survey are communicated as global themes across the Company, with managers are given direct access to sharing more detailed insights from their engagement results, share these results areas of the business directly with their teams, and create measurable action plans. teams. The senior leadership team demonstrates their commitment to engagement through transparent communications in town halls and leadership team meetings; they also carry engagement goals cultural targets on their individual annual goal plans. Engagement is also managed and measured at the local level. Each region, as well as the local facilities, host engagement events that align to the Company values of Investing in People, while also positively impacting the communities in which we work and live.

Environmental Sustainability

We strive to conduct our business in a manner that is environmentally sustainable and demonstrates environmental stewardship. Toward that end, we pursue processes that are designed to minimize waste, maximize efficient utilization of materials, and conserve resources, including using recycled and reused materials to produce portions of our products. We are taking steps to mitigate climate change by measuring and reducing our GHG emissions, implementing renewable energy solutions and pursuing efficiency projects. We offer a variety of products that contain pre-consumer recycled content, such as our vinyl windows, aluminum cladding, and window glass. In January 2023, we launched a new primer formula developed by our coatings division designed to decrease volatile organic compounds ("VOC") emissions in coatings applied to interior door skins. Our U.S. produced pine wood windows and select patio doors and door frames are made from AuraLast® pine, which is a proprietary, water-based wood protection process that results in a decrease of VOCs (volatile organic compounds) released during production. In addition, we manufacture many products that meet local green building provisions and top nationally recognized environmental programs. We continue to evaluate and modify our manufacturing and other processes on an ongoing basis to further reduce our impact on the environment.

Environmental Regulatory Actions

The geographic breadth of our facilities and the nature of our operations subject us to extensive environmental, health, and safety laws and regulations in jurisdictions throughout the world. Such laws and regulations relate to, among other things, air emissions, the treatment and discharge of wastewater, the discharge of hazardous materials into the environment, the handling, storage, use and disposal of solid, hazardous and other wastes, worker health and safety, or otherwise relate to health, safety, and protection of the environment. Many of our products are also subject to various laws and regulations, such as building and construction codes, product safety regulations, and regulations and mandates related to energy efficiency.

The nature of our operations, which involve the handling, storage, use, and disposal of hazardous wastes, exposes us to the risk of liability and claims associated with contamination at our current and former facilities or sites where we have disposed of or

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arranged for the disposal of waste, or with the impact of our products on human health and safety and the environment. Laws and regulations with respect to the investigation and remediation of contaminated sites can impose joint and several liability for releases or threatened releases of hazardous materials upon statutorily defined parties, including us, regardless of fault or the lawfulness of the original activity or disposal. We have been subject to claims, including having been named as a potentially responsible party, in certain proceedings initiated pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA") and similar state and foreign laws, regulations, and statutes, and may be named a potentially responsible party in other similar proceedings in the future. Unforeseen expenditures or liabilities may arise in connection with such matters.

We have also been the subject of certain environmental regulatory actions by the EPA and state regulatory agencies in the U.S. and foreign governmental authorities in jurisdictions in which we operate and are obligated to make certain expenditures in settlement of those actions. We do not expect expenditures for compliance with environmental laws and regulations to have a material adverse effect on our financial position or competitive position. However, the discovery of a presently unknown environmental condition, changes in environmental requirements or their enforcement, or other unanticipated events, may give rise to unforeseen expenditures and liabilities which could be material.

In 2007, we were identified by the WADOE as a PLP with respect to our former manufacturing site in Everett, Washington. In 2008, we entered into an Agreed Order with the WADOE to assess historic environmental contamination and remediation feasibility at the site. As part of the order, we agreed to develop a CAP, arising from the feasibility assessment. In December 2020, we submitted to the WADOE a draft feasibility assessment with an array of remedial alternatives, which we considered substantially complete. During 2021, several comment rounds were completed as well as the identification of the Port of Everett and W&W Everett Investment LLC as additional PLPs, with respect to this matter with each PLP being jointly and severally liable for the cleanup costs. The WADOE received the final feasibility assessment on December 31, 2021, containing various remedial alternatives with its preferred remedial alternatives totaling $23.4 million. Based on this study, we have determined our range of possible outcomes to be $11.8 million to $33.4 million. On March 1, 2022, we delivered a draft CAP to the WADOE consistent with its the preferred alternatives and on May 16, 2022, we received the WADOE's initial comments on the draft CAP. On June 13, 2022, we responded to the WADOE's comments, and on October 19, 2022 the which was approved by WADOE identified Wick Family Properties as another PLP. December 19, 2022, WADOE provided their most recent draft CAP to the Company and other PLPs. After further negotiation, the final CAP will ultimately be formalized in an August 2023. The existing Agreed Order or Consent Decree of 2008 was also modified with WADOE in July 2023 to support the WADOE, development of the Company, associated CAP investigation, sampling and the other PLPs. design components. We have made

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provisions within our financial statements within the range of possible outcomes; however, the contents and cost of the final CAP and allocation of the responsibility between the identified PLPs could vary materially from our estimates.

In December 2020, we entered into a COA with the PaDEP to remove a pile of wood fiber waste from our site in Towanda, Pennsylvania, which we acquired in connection with our acquisition of CMI in 2012, by using it as fuel for a boiler at that site. The COA replaced a 2018 Consent Decree between PaDEP and us. Under the COA, we are required to achieve certain periodic removal objectives and ultimately remove the entire pile by August 31, 2025. There are currently $2.3 million As of December 31, 2023 and December, 31, 2022 there was $1.4 million and $2.3 million, respectively in bonds posted in connection with these obligations. If we are unable to remove this pile by August 31, 2025, then the bonds will be forfeited, and we may be subject to penalties by PaDEP. We currently anticipate meeting all applicable removal deadlines; however, if our operations at this site decrease and we burn less fuel than currently anticipated, we may not be able to meet such deadlines.

For more information regarding the risks associated with environmental, health, and safety laws and regulations, see Item 1A - *Risk Factors.*

Government Regulation

As a public company with global operations, we are subject to the laws and regulations of the United States and multiple foreign jurisdictions. These regulations, which differ among jurisdictions, include those related to financial and other disclosures, accounting standards, corporate governance, intellectual property, tax, trade, antitrust, employment, privacy, and anti-corruption, in addition to the environmental laws and regulations described above.

For a more detailed description of the various laws and regulations that affect our business, see Item 1A - *Risk Factors.*

Available Information

Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to reports filed pursuant to Sections 13(a) and 15(d) of the Exchange Act, are filed with the SEC. We are subject to the informational requirements of the Exchange Act and file or furnish reports, proxy statements and other information with the SEC. Such reports and other information filed by us with the SEC are available free of charge on our website at investors.jeld-wen.com when such reports are made available and on the SEC's website at www.sec.gov. The contents of these websites are not incorporated into this filing. Further, our references to the URLs for these websites are intended to be inactive textual references only.

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Executive Officers of the Registrant

Set forth below is certain information about our executive officers. Ages are as of February 21, 2023 February 20, 2024. There are no family relationships among the following executive officers.

Julie C. Albrecht*, Executive Vice President and Chief Financial Officer.* Mrs. Ms. Albrecht, age 55, 56, joined the Company as Executive Vice President and Chief Financial Officer in July 2022. Previously, Mrs. Ms. Albrecht joined Sonoco Products Company in 2017 as Vice President, Treasurer / Assistant Chief Financial Officer before being named Vice President, Chief Financial Officer in which role she served until June 2022. Prior to Sonoco, Mrs. Ms. Albrecht served as Vice President, Finance, Investor Relations and Treasurer for Esterline Technologies Corporation (acquired by TransDigm in 2019). She began her finance career at PricewaterhouseCoopers. Mrs. Ms. Albrecht earned her bachelor's a bachelor's degree in accounting at from Wake Forest University.

Roya Behnia Peggie Bolan, *Executive Vice President Chief Legal Officer and Corporate Affairs. General Manager, North America Building Products and Fiber.* Ms. Behnia, Bolan, age 56, 52, joined the Company in June 2020 October 2012 as Executive Vice President and General Counsel, Manager, North American Building Products and Chief Compliance Officer. Fiber. She leads the global legal team, providing legal advice is a seasoned executive with experience in sales, marketing and guidance to the Board of Directors and the senior leadership team. Previously, Ms. Behnia was a Senior Advisor at BarkerGilmore LLC from 2017-2020. Prior to BarkerGilmore LLC, Ms. Behnia served as Senior Vice President, General Counsel for Pall Corporation and Rewards Network, Inc. She also held senior legal counsel roles at SPX Corporation and Brunswick Corporation. Prior to these corporate positions, Ms. Behnia was a partner at Kirkland & Ellis in Chicago, IL. operations. She earned an undergraduate a bachelor's degree in English from Harvard University and a law degree from the University of Chicago Law School. Vanderbilt University.

William J. Christensen*, Chief Executive Officer and Director.* Mr. Christensen, age 50, 51, joined the Company in April 2022 as Executive Vice President and President, Europe. In December 2022, he was appointed to his current role as Chief Executive Officer and Director of the Company. Prior to joining the Company, Mr. Christensen was Chief Executive Officer and Group Executive Board Chair of REHAU AG, a Swiss-based global manufacturer, from 2018 to 2021. Prior to his appointment as Chief Executive Officer in 2018, Mr. Christensen served as its Chief Marketing Officer. Prior to joining REHAU AG, Mr. Christensen was Chief Executive Officer of AFG Holding, a Swiss-based global building products manufacturer from 2014 to 2015. In addition, he spent ten years at Geberit International AG, a global plumbing manufacturer, in several executive roles including Group Executive Board Member and Head of International Sales, as well as President and Chief Executive Officer of The Chicago Faucets Company. He also served in various finance and business development roles at J.P. Morgan Securities and Rieter Automotive Systems. Mr. Christensen holds earned a bachelor's degree in economics from Rollins College and an MBA from the University of Chicago's Booth School of Business.

Timothy R. Craven James S. Hayes*, Executive Vice President, Human Resources. General Counsel and Corporate Secretary.* Mr. Craven, Hayes, age 54, was appointed Vice President, Employee Relations of the Company in July 2015 and was promoted to his current role as Executive Vice President, Human Resources in February 2016. Mr. Craven is responsible for global human resources and employee relation activities. His duties include talent acquisition, training and development, wage and benefit reviews, and employee engagement. Previously, Mr. Craven was employed at Eaton Corporation (formerly Cooper Industries) where he held a number of senior-level human resources roles from 2007-2015. Mr. Craven earned a bachelor's degree in human resource management from Western Illinois University.

John T. Krause*, Senior Vice President and General Manager, North America.* Mr. Krause, age 52, 51, joined the Company in August 2018 as Vice President, Deputy General Counsel. In August 2022, he was promoted to Senior Vice President, Deputy General Counsel and Corporate Secretary. He was appointed to his current role in June 2023. Mr. Hayes leads the global legal team, providing legal advice and guidance to the Board of Directors and the senior leadership team. Mr. Hayes earned a bachelor's degree in English and history from Emory University and a law degree from Villanova University School of Law.

Daniel Jacobs*, Vice President and General Manager, North America Windows.* Mr. Jacobs, age 38, joined the Company in September 2008 as a Sales Representative and was promoted to Sales Manager in 2010. He has held roles of increasing responsibility as a National Account Manager and Director of the Interior Doors business. National Accounts from 2010 to 2016. In December 2016, Mr. Jacobs was promoted to Director of Product Management. He was promoted to Vice President and General Manager, North America Windows Exterior Doors in June 2020 until May 2020 2022 and was promoted to his current role in May 2022. Previously, Mr. Krause held several leadership roles in the areas of marketing, product management and operations and finance at Eaton Corporation (formerly Cooper Industries) from August 2005 to July 2018. Mr. Krause is a veteran of the United States Marine Corps in which he served from 1990 to 1998. Mr. Krause Jacobs earned a bachelor's degree in corporate finance economics from Georgia State University. Rollins College.

Michael Leon*, Senior Vice President and Chief Accounting Officer.* Mr. Leon, age 43, joined the Company as Senior Vice President and Chief Accounting Officer in March 2023. Prior to joining the Company, Mr. Leon was the Chief Accounting Officer and Corporate Controller at Sealed Air, a global provider of packaging solutions, from June 2018 to March 2023, where he was also the Assistant Corporate Controller from December 2014 to June 2018. Mr. Leon earned a master's degree in accounting from the University of South Carolina.

Kevin C. Lilly*, Executive Vice President, Global Transformation.* Mr. Lilly, age 62, 63, joined the Company as Senior Vice President and Chief Information Officer in February 2019 and was promoted to Executive Vice President and Chief Information Officer in July 2022. Mr. Lilly served as the Company's Interim Chief Executive Officer from August 2022 until December 2022 when he was named Executive Vice President, Global Transformation. Mr. Lilly leads the Company's enterprise transformation initiatives and provides executive oversight for the European business and has responsibility for the global information technology organization. Prior to joining the Company, he served as Vice President of IT at Trane Technologies (formerly Ingersoll Rand) from 2011 to 2019. Previously, he was VP and Chief Information Officer for AGCO Corporation and served in a number of IT and finance positions of increasing responsibility for global companies including KPMG, Xerox, Delphi Automotive, General Motors, and EDS. Mr. Lilly received his earned a bachelor's degree in business administration from Houghton College and attended the executive graduate program at the Thunderbird School of Global Management.

Wendy Livingston*, Executive Vice President, Chief Human Resources Officer.* Ms. Livingston, age 50, joined the Company as Executive Vice President, Chief Human Resources Officer in June 2023. Prior to joining the Company, Ms. Livingston was the Chief People Officer for Spreetail, a multinational e-commerce company, from August 2022 to June 2023 and the Senior Vice President and Chief Human Resources Officer for Harsco Corporation (now Enviri Corporation), a global environmental services company, from August 2020 to August 2022. She held leadership roles of increasing responsibility at The Boeing Company, a global aerospace company, from 1996 to 2020, including interim Senior Vice President, Human Resources in 2020 and Vice President, Corporate Human Resources from 2017 to 2020. Ms. Livingston earned a bachelor's degree in business administration from Peru State College,

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a master's degree in human resource management from Lindenwood University and is certified by the Society for Human Resource Management.

Matthew Meier*, Executive Vice President, Chief Digital and Information Officer.* Mr. Meier, age 51, joined the Company as Executive Vice President, Chief Digital and Information Officer in January 2024. Previously, he was Executive Vice President, Chief Digital and Data Officer at Driven Brands Holding, Inc., an automotive services company, from October 2021 to January 2024. Prior to joining Driven Brands, Mr. Meier was employed at Whirlpool Corporation, a manufacturer of home appliances, as the Vice President, Global Technology Value Streams from 2020 to 2021 and as Vice President, Chief Information Officer from 2016 to 2020. Mr. Meier earned a bachelor's degree in industrial engineering from Purdue University, a master's degree in information systems management from Carnegie Mellon University and an MBA from the Massachusetts Institute of Technology Sloan School of Management.

Daniel Valenti, *Executive Vice President and General Manager, North America Doors & Distribution.* Mr. Valenti, age 46, joined the Company as Executive Vice President and General Manager, North America Doors & Distribution in January 2024. Previously, Mr. Valenti was employed at Whirlpool Corporation, a manufacturer of home appliances, as the Senior Vice President and General Manager, KitchenAid Small Appliances from September 2018 to December 2023. Mr. Valenti earned a bachelor's degree in business administration from the University of North Carolina at Chapel Hill.

Gustavo Vianna, *Executive Vice President and President, Europe.* Mr. Vianna, age 55, joined the Company as Executive Vice President and President, Europe in January 2024. Prior to joining the Company, Mr. Vianna was employed at Aliaxis Group SA, a global manufacturer of advanced fluid management solutions, as Chief Executive Officer, EMEA from November 2020 to September 2022 and as Chief Business Officer from September 2019 to November 2020. Previously, he was the Chief Executive Officer, Pipe Business for Saint-Gobain Europe du Nord, a manufacturer and distributor of construction materials, from September 2016 to February 2019. Mr. Vianna earned a bachelor's degree in electrical engineering from Pontifical Catholic University and a master's degree in business administration from Fundacão Getúlio Vargas.

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Item 1A - Risk Factors

Investing in our Common Stock involves a high degree of risk. These risks include those described below and may include additional risks and uncertainties not presently known to us or that we currently deem immaterial. You should carefully consider the following factors, as well as other information contained or incorporated by reference in this Annual Report on Form 10-K, before deciding to invest in shares of our Common Stock. Our business, financial condition, and results of operations could be materially adversely affected by any of these risks, and the trading price of our Common Stock could decline due to any of these risks, and you may lose all or part of your investment in our Common Stock.

Summary of Risk Factors

Our business is subject to a number of risks and uncertainties, including those risks discussed at-length below. These risks include, among others, the following:

- Negative trends in overall business, financial market and economic conditions, and activity levels in our end markets may reduce demand for our products, which could have a material adverse effect on our business, financial condition, and results of operations.
- Increases in interest rates used to finance home construction and improvements, such as mortgage and credit card interest rates, and the reduced availability of financing for the purchase of new homes and home construction and improvements, could have a material adverse impact on our business, financial condition, and results of operations.
- A decline in our relationships with our key customers, the amount of products they purchase from us, or a decline in our key customers' financial condition could have a material adverse effect on our business, financial condition, and results of operations.
- We operate in a highly competitive business environment. Failure to compete effectively could cause us to lose market share and any decrease in demand for our products could force us to reduce the prices we charge for our products. This competition could have a material adverse effect on our business, financial condition, and results of operations.
- Failure to maintain the performance, reliability, quality, and service standards required by our customers, or to timely deliver our products, could have a material adverse effect on our business, financial condition, and results of operations.
- A disruption in our operations due to natural disasters or acts of war could have a material adverse effect on our business, financial condition, and results of operations.
- The ongoing conflict between Russia and Ukraine has had and could continue to have a material adverse effect on our business, financial condition, and results of operations.
- We may not identify or effectively respond to consumer needs, expectations, or trends in a timely fashion, which could adversely affect our relationship with customers, our reputation, the demand for our brands, products, and services, and our market share.
- The COVID-19 pandemic has had, and may continue to have, a negative impact on the global economy and on our business, operations, and results.
- Prices and availability of raw materials, freight, energy and other critical inputs we use to manufacture our products are subject to fluctuations due to inflation and other factors, and we may be unable to pass along to our customers the effects of any price increases.
- Our business may be affected by delays or interruptions in the delivery of raw materials, finished goods, and certain component parts. A supply shortage or delivery chain interruption could have a material adverse effect on our business, financial condition, and results of operations.
- Increases in labor costs, potential labor disputes, and work stoppages at our facilities or the facilities of our suppliers could have a material adverse effect on our business, financial condition, and results of operations.
- Our business will suffer if we are unable to retain and recruit executives, managers and employees at a competitive cost.
- Changes in building codes and standards, including ENERGY STAR standards, could increase the cost of our products, lower the demand for our windows and doors, or otherwise adversely affect our business.

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- Changes in weather patterns, related extreme weather events, and legal, regulatory or market measures to address climate change, including proposals to restrict emissions of GHGs and other sustainability initiatives, could have an adverse impact on the Company's business and results of operations.
- Our failure to comply with the credit agreements governing our Credit Facilities and indentures governing the Senior Notes and Senior Secured Notes, including as a result of events beyond our control, could trigger events of default and acceleration of our indebtedness. Defaults under our debt agreements could have a material adverse effect on our business, financial condition, and results of operations.
- The market price of our Common Stock may be highly volatile.

Risks Relating to Our Business and Industry

Negative trends in overall business, financial market and economic conditions, and activity levels in our end markets may reduce demand for our products, which could have a material adverse effect on our business, financial condition, and results of operations.

Negative trends in overall business, financial market, and economic conditions globally or in the regions where we operate may reduce demand for our doors and windows, which is tied to activity levels in the R&R and new residential and non-residential construction end markets. In particular, the following factors may have a direct impact on our business in the regions where our products are marketed and sold:

- the strength of the economy;
- employment rates, and consumer confidence, and spending rates;
- the availability and cost of credit;
- interest rate fluctuations (including mortgage and credit card interest rates) and the availability of financing for our customers and consumers;
- the amount and type of residential and non-residential construction;
- housing sales and home values;
- the age of existing home stock, home vacancy rates, and foreclosures;
- interest rate fluctuations for our customers and consumers;
- volatility in both debt and equity capital markets;
- increases in the cost of raw materials or any shortage in supplies or labor, including as a result of tariffs or other trade restrictions;
- the effects of governmental regulation and initiatives to manage economic conditions;
- geographical shifts in population and other changes in demographics; and
- changes in weather patterns and extreme weather events.

While cyclicity in our new residential and non-residential construction end markets is moderated to a certain extent by R&R activity, much R&R spending is discretionary and can be deferred or postponed entirely when economic conditions are poor. We have experienced sales declines in all of our end markets during recent economic downturns.

Uncertain economic and political conditions may make it difficult for us and our customers or suppliers to accurately forecast and plan future business activities. For example, changes to policies related to global trade and tariffs may result in uncertainty surrounding the future of the global economy which could have an adverse impact on consumer spending as well as our input costs.

Global economic impacts as a result The ability of the COVID-19 pandemic and the ongoing conflict between Ukraine and Russia continue to evolve. Prior to the outbreak of COVID-19, Australia and certain European countries had entered housing and economic recessions, which were prolonged as a result of COVID-19. Negative business, financial market, and economic conditions, including rising inflation and interest rates, globally and within the industries or regions we compete in may materially and adversely affect demand for or costs to produce our products. This could have a material adverse effect on our business, financial condition, and results of operations.

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Increases in interest rates used consumers to finance home construction and improvements such as mortgage and credit card interest rates, and is affected by the reduced availability of financing for the purchase of new homes and home construction and improvements, could have a material adverse impact on our business, financial condition, and results of operations.

Our performance depends in part upon consumers having the ability to access third-party financing for the purchase of new homes and buildings and R&R of existing homes and other buildings. The ability of consumers to finance these purchases is affected by procure third-party financing and the interest rates available for home mortgages, credit card debt, home equity or other lines of credit, and other sources of third-party financing. Many of the regions where we Negative business, financial market, and sell economic conditions, including rising inflation, interest rates and difficulty for consumers to procure financing, globally and within the industries or regions we compete in may materially and adversely affect demand for or costs to produce our products which could have experienced rising interest rates during 2022. If interest rates were to remain heightened, and consequently, the ability of prospective buyers to finance purchases of new homes or home improvement products is adversely affected, a material adverse effect on our business, financial condition, and results of operations may be materially and adversely affected.

In addition to increased interest rates, the ability of consumers to procure third-party financing is impacted by such factors as new and existing home prices, unemployment levels, high mortgage delinquency and foreclosure rates, and lower housing turnover. Adverse developments affecting any of these factors could result in the imposition of more restrictive lending standards by financial institutions and reduce the ability of some consumers to finance home purchases or R&R expenditures. operations.

A decline in our relationships with our key customers, the amount of products they purchase from us, or a decline in our key customers' financial condition could have a material adverse effect on our business, financial condition, and results of operations.

Our business depends on our relationships with our key customers, which consist mainly of wholesale distributors and retail home centers. Our top ten customers together accounted for approximately 39% 43%, 44% and 43% of our net revenues in the year years ended December 31, 2022,

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December 31, 2023, 2022 and our largest customer, 2021, respectively. The Home Depot, accounted for approximately 14% a customer of our North America segment, represents 15%, 16%, and 17% of our consolidated net revenues in during the year years ended December 31, 2022. December 31, 2023, 2022, and 2021, respectively. Lowe's Companies, another customer of our North America segment, represents 11%, 11%, and 10% of our consolidated net revenues during the years ended December 31, 2023, 2022, and 2021, respectively. Although we have established and maintain significant long-term relationships with our key customers, we cannot assure you that all of these relationships will continue or will not diminish. We generally do not enter into long-term contracts with our customers and they generally do not have an obligation to purchase products from us. Accordingly, sales from customers that have accounted for a significant portion of our sales in past periods, individually or as a group, may not continue in future periods, or if continued, may not reach or exceed historical levels in any period. For example, certain of our large customers perform periodic line reviews to assess their product offering, which have in the past and may in the future lead to loss of business and pricing pressures. Some of our large customers may also experience economic difficulties or otherwise default on their obligations to us. Furthermore, our pricing optimization strategy, which requires maintaining pricing discipline in order to improve or maintain profit margins, has in the past and may in the future lead to the loss of certain customers, including key customers, who do not agree to our pricing terms. The loss of, or a diminution in our relationship with, any of our largest customers could lower our sales volumes which could increase our costs and lower our profitability. This could have a material adverse effect on our business, financial condition, and results of operations.

We operate in a highly competitive business environment. Failure to compete effectively could cause us to lose market share and any decrease in demand for our products could force us to reduce the prices we charge for our products. This competition could have a material adverse effect on our business, financial condition, and results of operations.

We operate in a highly competitive business environment. Some of our competitors may have greater financial, marketing, and distribution resources and may develop stronger relationships with customers in the markets where we sell our products. Some of our competitors may be less leveraged than we are, providing them with more flexibility to invest in new facilities and processes and also making them better able to withstand adverse economic or industry conditions.

In addition, some of our competitors, regardless of their size or resources, may choose to compete in the marketplace by adopting more aggressive sales policies, including price cuts, or by devoting greater resources to the development, promotion, and sale of their products. This could result in our loss of customers and/or market share to these competitors, which may cause us to reduce the prices at which we sell our products to remain competitive.

As a result of competitive bidding processes, we may have to provide pricing concessions to our significant customers in order for us to keep their business. Reduced pricing would result in lower product margins on sales to those customers. There is no guarantee that a reduction in prices would be offset by sufficient gains in market share and sales volume to those customers.

The loss of, or a reduction in orders from, any significant customers, or decreases in the prices of our products due to lower demand, could have a material adverse effect on our business, financial condition, and results of operations.

Failure to maintain the performance, reliability, quality, implement our strategic cost reduction and service standards required by our customers, or to timely deliver our products, productivity initiatives could have a material adverse effect on adversely impact our business, financial condition, and results of operations.

If Our future financial performance depends in part on our products have performance, reliability, or quality problems, management's ability to successfully implement our reputation strategic initiatives, including our productivity, cost reduction, and brand equity, global footprint rationalization initiatives. We cannot guarantee the successful implementation of these initiatives and related strategies throughout the geographic regions in which we believe is a substantial competitive advantage, operate or that such implementation will improve our operating results. Any failure to successfully implement these initiatives and related strategies could be materially adversely affected. We may also experience increased and unanticipated warranty and service expenses. Furthermore, we manufacture a significant portion of our products based on the specific requirements of our customers, and delays in providing our customers the products and services they specify on a timely basis could result in

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reduced or canceled orders and delays in the collection of accounts receivable. Additionally, claims from our customers, with or without merit, could result in costly and time-consuming litigation that could require significant time and attention of management and involve significant monetary damages that could have a material adverse effect on affect our business, financial condition, and results of operations. operations, including increases in our severance and asset related charges. We may, in addition, decide to alter or discontinue certain aspects of our business strategy at any time.

A disruption in our operations due to natural disasters, unstable geopolitical conditions or acts of war armed conflicts could have a material adverse effect on our business, financial condition, and results of operations.

We operate facilities worldwide. Many of our We have facilities are located in areas that are vulnerable to hurricanes, earthquakes, wildfires, and other natural disasters. In the event that a hurricane, earthquake, natural disaster, fire, pandemic, or other catastrophic event were to interrupt our operations for any extended period of time, it could delay shipment of merchandise to our customers, damage our reputation, or otherwise have a material adverse effect on our business, financial condition, and results of operations.

In addition, our operations may be interrupted by armed conflicts, terrorist attacks or other acts of violence or war. These attacks may directly impact our suppliers' or customers' physical facilities. Furthermore, these attacks may make travel and the transportation of our supplies and products more difficult and more expensive and ultimately have a material adverse effect on our business, financial condition, and results of operations. The U.S. has entered into armed conflicts, which could have an impact on our sales and our ability to deliver product to our customers. Political and economic instability in some regions of the world may also negatively impact the global economy and, therefore, our business. For instance, instabilities in the Middle East and the ongoing conflict between Russia and Ukraine, including sanctions imposed on Russia, has had and could continue to have an adverse impact on our business, such as shortages in materials and heightened inflation on materials, freight, and other variable costs, such as utilities. The consequences of any of these armed conflicts are unpredictable, and we may not be able to foresee events that could have an adverse effect on our business or your investment. More generally, any of these events could cause consumer confidence and spending

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to decrease or result in increased volatility in the worldwide financial markets. They could also result in economic recessions. Any of these occurrences could have a material adverse effect on our business, financial condition, and results of operations.

The ongoing conflict between Russia and Ukraine has had and could continue to have a material adverse effect on our business, financial condition, and results of operations.

In February 2022, the Russian military commenced an invasion of Ukraine. The impacts of the ongoing conflict, as well as sanctions imposed on Russia and economic and political uncertainty has had and could continue to have an adverse impact on our business. We do not have operations in Ukraine, and prior to the invasion, we held limited sales operations in Russia, which were discontinued in the first quarter of 2022. However, we have and may continue to experience shortages in materials and heightened inflation on materials, freight, and other variable costs, such as utilities, primarily in our European operations. The risks to our business may include, among others, adverse impacts on our supply chain, including trade barriers or restrictions, transportation and operating disruptions, decreased customer demand, elevated inflation, cybersecurity incidents, unfavorable foreign exchange, and higher borrowing costs, any of which could have a material adverse impact on our business, financial condition, and results of operations.

We may not identify or effectively respond to consumer needs, expectations, or trends in a timely fashion, which could adversely affect our relationship with customers, our reputation, the demand for our brands, products, and services, and our market share.

The quantity, type, Our business is subject to changing consumer and prices of products demanded by consumers industry trends, demands and our customers have shifted over time. For example, demand has increased for multi-family housing units such as apartments and condominiums, which typically require fewer of our products, and we are experiencing growth in certain channels for products with lower price points. In certain cases, these shifts have negatively impacted our sales and/or our profitability. Also, preferences that we must continually anticipate and adapt to, such as the increasing use of technology by our customers. Recent years have seen shifts in consumer preferences and purchasing practices and changes in the business models and strategies of our customers. Consumers are increasingly using the internet and mobile technology to research home improvement products and to inform and provide feedback on their purchasing and ownership experience for these products. Trends towards online purchases could impact our ability to compete as we currently sell a significant portion of our products through retail home centers, wholesale distributors, and building products dealers.

Accordingly, the success of our business depends in part on our ability to maintain strong brands and identify and respond promptly to evolving trends in demographics, consumer preferences, and expectations and needs, while also managing inventory levels. It is difficult to successfully predict the products and services our customers will demand. Even if we are successful in anticipating consumer preferences, our ability to adequately react to and address those preferences will in part depend upon our continued ability to develop and introduce innovative, high-quality products and acquire or develop the intellectual property necessary to develop new products or improve our existing products. There can be no assurance that the products we develop, even those to which we devote substantial resources, will be successful. While we continue to invest in innovation, brand building, and brand awareness, and intend to increase our investments in these areas in the future, these initiatives may not be successful. Failure to anticipate and successfully react to changing consumer preferences could have a material adverse effect on our business, financial condition, and results of operations.

In addition, our competitors could introduce new or improved products that would replace or reduce demand for our products or create new proprietary designs and/or changes in manufacturing technologies that may render our products obsolete or too

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expensive for efficient competition in the marketplace. Our failure to competitively respond to changing consumer and customer trends, demands, and preferences could cause us to lose market share, which could have a material adverse effect on our business, financial condition, and results of operations.

Manufacturing realignments and cost savings programs may result in a decrease in our short-term earnings and operating efficiency or expected benefits may not be achieved.

We continually review our manufacturing operations to address market changes and to implement efficiencies presented by past acquisitions. Effects of periodic manufacturing integrations, realignments, and cost savings programs have in the past and could in the future result in a decrease in our short-term earnings, cash flows, and operating efficiency until the expected results are achieved. Such programs may include the consolidation, integration, and upgrading of facilities, functions, systems, and procedures. Such programs involve substantial planning, often require capital investments, and may result in charges for fixed asset impairments or obsolescence and substantial severance costs. We also cannot assure that we will achieve all of our cost savings. Our ability to achieve cost savings and other benefits within expected time frames is subject to many estimates and assumptions. These estimates and assumptions are subject to significant economic, competitive, and other uncertainties, some of which are beyond our control. If these estimates and assumptions are incorrect, if we experience delays, or if other unforeseen events occur, our operations could experience disruption, and our business, financial condition, and results of operations could be materially and adversely affected.

The outbreak of COVID-19 has had, and may continue to have, a negative impact on the global economy and on our business, operations, and results.

The COVID-19 crisis has had and is expected to continue to have several significant effects on our employees, operations, supply chain, distribution system, customer demand, the housing market, and general market and economic conditions. The effects we have experienced and/or may continue to experience that have and/or may continue to adversely impact our financial and operational performance include:

- varying demand for our products as a result of a slowdown in the U.S. and global economies;
- supply chain disruptions of various types arising from COVID-19 may impact the Company's ability to make products, the cost for such products, and the ability to deliver products to customers. Closure or reduced operations of material suppliers could result in shortages of key raw materials, as well as impact prices for those materials. The volatility in the market for raw material and other critical inputs to manufacture our products impact the Company's profitability;
- increased storage costs as a result of larger volume of raw materials purchased to mitigate supply chain disruptions;

- labor shortages, absenteeism, and increased labor costs as a result of stay-at-home directives, including quarantining, and costs to attract and retain employees;
- transportation disruptions, including reduced availability of inbound and outbound freight, port closures, and increased border controls or closures resulting in supply chain delays and increased freight and duty costs;
- uncertain expense management in light of continued efforts to protect our employees; and
- complete or partial closures or other operational issues at one or more of our manufacturing or distribution facilities resulting from government action.

The degree to which COVID-19 and variant strains may continue to impact our business operations, financial condition, liquidity and results of operations remain uncertain at this time and will depend on future developments, including the continued spread of the virus and its variants, the efficacy of available vaccines, the severity of the disease, the duration of the pandemic, actions prescribed or ordered by governmental authorities, public health authority guidance, and when and to what extent economic and operating conditions can return to pre-pandemic levels.

Our business is seasonal, and revenue and profit can vary significantly throughout the year, which may adversely impact the timing of our cash flows and limit our liquidity at certain times of the year.

Our business is seasonal, and our net revenues and operating results can vary significantly from quarter to quarter based upon the timing of the building season in our markets. Our sales typically follow seasonal new construction and R&R industry patterns. The peak season for home construction and R&R activity in the majority of the geographies where we market and sell our products generally corresponds with the second and third calendar quarters, and therefore our sales volume is typically higher during those quarters. Our first and fourth quarter sales volumes are generally lower due to reduced R&R and new construction activity as a result of less favorable climate conditions in the majority of our geographic end markets. Failure to effectively manage our inventory in anticipation of or in response to seasonal fluctuations could negatively impact our liquidity profile during certain seasonal periods.

We may be unable to protect our intellectual property, and we may face claims of intellectual property infringement.

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We rely on a combination of patent, copyright, trademark, and trade secret laws, as well as confidentiality agreements, nondisclosure agreements, and other contractual commitments, to protect our intellectual property rights. However, these measures may not be adequate or sufficient, and third parties may not always respect these legal protections even if they are aware of them. In addition, our competitors may develop similar technologies and know-how without violating our intellectual property rights. Furthermore, the laws of foreign countries may not protect our intellectual property rights to the same extent as the laws of the U.S. The failure to obtain worldwide patent and trademark protection may result in other companies copying and marketing products based on our technologies or under brand or trade names similar to ours outside the jurisdictions in which we are protected. This could

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impede our growth in existing regions, create confusion among consumers, and result in a greater supply of similar products that could erode prices for our protected products.

Litigation may be necessary to protect our intellectual property rights. Intellectual property litigation can result in substantial costs, could distract our management, and could impinge upon other resources. Our failure to enforce and protect our intellectual property rights may cause us to lose brand recognition and result in a decrease in sales of our products.

Moreover, while we are not aware that any of our products or brands infringes upon the proprietary rights of others, third parties may make such claims in the future. From time to time, third parties may claim that we have infringed upon their intellectual property rights and we may receive notices from such third parties asserting such claims. Any such infringement claims are thoroughly investigated and, regardless of merit, could be time-consuming and result in costly litigation or damages, undermine the exclusivity and value of our brands, decrease sales, or require us to enter into royalty or licensing agreements that may not be on acceptable terms and that could have a material adverse effect on our business, financial condition, and results of operations.

We continue to implement strategic initiatives, including our productivity and global footprint rationalization initiatives and strategic review of the Australasia business. If we fail to implement these initiatives as expected, our business, financial condition, and results of operations could be adversely affected.

Our future financial performance depends in part on our management's ability to successfully implement our strategic initiatives, including our productivity and global footprint rationalization initiatives and strategic review of the Australasia business. We cannot guarantee the successful implementation of these initiatives and related strategies throughout the geographic regions in which we operate or that such implementation will improve our operating results. Any failure to successfully implement these initiatives and related strategies could adversely affect our business, financial condition, and results of operations, including increases in our severance and asset related charges. We may, in addition, decide to alter or discontinue certain aspects of our business strategy at any time.

Changes in weather patterns and related extreme weather events, including as a result of global climate change, could significantly affect our financial results or financial condition.

Weather patterns may affect our operating results and our ability to maintain our sales volume throughout the year. Because our customers depend on suitable weather to engage in construction projects, increased frequency or duration of extreme weather conditions could have a material adverse effect on our financial results or financial condition. Also, we cannot predict the effects that global climate change may have on our business. In addition to changes in weather patterns, it might, for example, reduce the demand for construction, destroy forests (increasing the cost and reducing the availability of wood products used in construction), and increase the cost and reduce the availability of raw materials and energy. New laws and regulations related to global climate change may increase our expenses or reduce our sales.

We are exposed to political, economic, and other risks that arise from operating a multinational business.

We have operations in North America Europe, Australia, and Asia. Europe. In the year ended December 31, 2022 December 31, 2023, our North America segment accounted for approximately 64% 73% of net revenues and our Europe segment accounted for approximately 25% 27% of net revenues, and our Australasia segment accounted for approximately 11% of our net revenues. Further, certain of our businesses obtain raw materials and finished goods from foreign suppliers. Accordingly, our business is subject to political, economic, and other risks that are inherent in operating in numerous countries.

These risks include:

- the difficulty of enforcing agreements and collecting receivables through foreign legal systems;
- trade protection measures and import or export licensing requirements;
- the imposition of, or increases in, tariffs or other trade restrictions;
- required compliance with a variety of foreign laws and regulations, including the application of foreign labor regulations;
- tax rates in foreign countries and the imposition of withholding requirements on foreign earnings;
- difficulty in staffing and managing widespread operations;

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- the imposition of, or increases in, currency exchange controls; and
- potential inflation and interest rate fluctuation in applicable non-U.S. economies.

The success of our business depends in part on our ability to anticipate and effectively manage these and other risks. We cannot assure you that these and other factors will not have a material adverse effect on our international operations or ultimately on our global business, financial condition, and results of operations.

Certain of our customers may expand through consolidation and internal growth, which may increase their buying power. The increased size of our customers could have a material adverse effect on our business, financial condition, and results of operations.

Certain of our significant customers are large companies with strong buying power, and our customers may expand through consolidation or internal growth. Consolidation could decrease the number of potential significant customers for our products and increase our reliance on key customers. Further, the increased size of our customers could result in our customers seeking more favorable terms, including pricing, for the products that they purchase from us. Accordingly, the increased size of our customers may further limit our ability to maintain or raise prices in the future. This could have a material adverse effect on our business, financial condition, and results of operations.

We are subject to the credit risk of our customers, suppliers, and other counterparties.

We are subject to the credit risk of our customers, because we provide credit to our customers in the normal course of business. All of our customers are sensitive to economic changes and to the cyclical nature of the building industry. Especially during protracted or severe economic declines and cyclical downturns in the building industry, our customers may be unable to perform on their payment obligations, including their debts to us. Any failure by our customers to meet their obligations to us may have a material adverse effect on our business, financial

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condition, and results of operations. In addition, we may incur increased expenses related to collections in the future if we find it necessary to take legal action to enforce the contractual obligations of a significant number of our customers.

Exchange rate fluctuations may impact our business, financial condition, and results of operations.

Our operations expose us to both transaction and translation exchange rate risks. In the year ended December 31, 2022 December 31, 2023, 42% 34% of our net revenues came from sales outside of the U.S., and we anticipate that our operations outside of the U.S. will continue to represent a significant portion of our net revenues for the foreseeable future. In addition, the nature of our operations often requires that we incur expenses in currencies other than those in which we earn revenue. In addition, if the effective price of our products were to increase as a result of fluctuations in foreign currency exchange rates, demand for our products could decline, which could adversely affect our business, financial condition, and results of operations. Also, because our financial statements are presented in U.S. dollars, we must translate the financial statements of our foreign subsidiaries and affiliates into U.S. dollars at exchange rates in effect during or at the end of each reporting period, and increases or decreases in the value of the U.S. dollar against other major currencies will affect our reported financial results, including the amount of our outstanding indebtedness.

We may be the subject of product liability claims or product recalls and we may not accurately estimate costs related to warranty claims. Expenses associated with product liability claims and lawsuits and related negative publicity or warranty claims in excess of our reserves could have a material adverse effect on our business, financial condition, and results of operations.

Our products are used in a wide variety of residential, non-residential, and architectural applications. We face the risk of exposure to product liability or other claims, including class action lawsuits, in the event our products are alleged to be defective or have resulted in harm to others or to property. We may in the future incur liability if product liability lawsuits against us are successful. Moreover, any such lawsuits, whether or not successful, could result in adverse publicity to us, which could cause our sales to decline materially. In addition, it may be necessary for us to recall defective products, which would also result in adverse publicity, as well as resulting in costs connected to the recall and loss of sales. We maintain insurance coverage to protect us against product liability claims, but that coverage may not be adequate to cover all claims that may arise, or we may not be able to maintain adequate insurance coverage in the future at an acceptable cost. Any liability not covered by insurance could have a material adverse effect on our business, financial condition, and results of operations.

In addition, consistent with industry practice, we provide warranties on many of our products and we may experience costs associated with warranty claims if our products have defects in manufacture or design or they do not meet contractual specifications. We estimate our future warranty costs based on historical trends and product sales, but we may fail to accurately estimate those costs and thereby fail to establish adequate warranty reserves for them. If warranty claims exceed our estimates, it may have a material adverse effect on our business, financial condition, and results of operations.

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We may make acquisitions, divestitures, or investments in other businesses, which may involve risks or may not be successful.

Generally, we may seek to acquire businesses that broaden our existing product lines and service offerings or expand our geographic reach. There can be no assurance that we will be able to identify suitable acquisition candidates or that our acquisitions or investments in other businesses will be successful. We may also seek to divest business that do not align with our long-term strategy and goal to streamline and simplify our operations. These acquisitions or investments in other businesses may also involve risks, many of which may be unpredictable and beyond our control, and which may have a material adverse effect on our business, financial condition, and results of operations, including risks related to:

- the nature of the acquired company's business;
- any acquired business not performing as well as anticipated;
- the potential loss of key employees of the acquired company;
- any damage to our reputation as a result of performance or customer satisfaction problems relating to an acquired business;
- the failure of our due diligence procedures to detect material issues related to the acquired business, including exposure to legal claims for activities of the acquired business prior to the acquisition;
- unexpected liabilities resulting from the acquisition for which we may not be adequately indemnified;
- our inability to enforce indemnification and non-compete agreements;
- the integration of the personnel, operations, technologies, and products of the acquired business, and establishment of internal controls, into the acquired company's operations;
- our failure to achieve projected synergies or cost savings;
- additional stock-based compensation issued or assumed in connection with an acquisition, including the impact on stockholder dilution and our results of operations;

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- our inability to establish uniform standards, controls, procedures, and policies;
- any requirement that we make divestitures of operations or properties in connection with any acquisitions;
- the diversion of management attention and financial resources;
- our inability to obtain approvals from government authorities; and
- any unforeseen management and operational difficulties, particularly if we acquire assets or businesses in new foreign jurisdictions where we have little or no operational experience.

Our inability to achieve the anticipated benefits of acquisitions and other investments could materially and adversely affect our business, financial condition, and results of operations.

In addition, the means by which we finance an acquisition may have a material adverse effect on our business, financial condition, and results of operations, including changes to our equity, debt, and liquidity position. If we issue Convertible Preferred or Common Stock to pay for an acquisition, the ownership percentage of our existing shareholders may be diluted. Using our existing cash may reduce our liquidity. Incurring additional debt to fund an acquisition may result in higher debt service and a requirement to comply with additional financial and other covenants, including potential restrictions on future acquisitions and distributions.

COVID-19 has had, and may continue to have, a negative impact on the global economy and on our business, operations, and results.

While the level of disruption caused by, and the economic impact of, the COVID-19 pandemic has lessened since 2021, there is no assurance that the pandemic will not worsen again, including as a result of the emergence of new strains of the virus, or another health-related emergency will not emerge. Any worsening of the pandemic or a new health-related emergency and their effects on the economy could have an adverse impact on our business, financial condition, and results of operations.

Risks Relating to Labor and Supply Chain

Prices and availability of raw materials, freight, energy and other critical inputs we use to manufacture our products are subject to fluctuations due to inflation and other factors, and we may be unable to pass along to our customers the effects of any price increases.

As a manufacturer, our sales and profitability are dependent on the availability and cost of raw materials, freight, energy and other inputs. Prices and availability of our critical inputs fluctuate for a variety of reasons beyond our control, many of which cannot be anticipated with any degree of reliability. The reasons for these fluctuations include, among other things, variable worldwide supply and demand across different industries, speculation in commodities futures, general economic or environmental conditions, inflation, political unrest and instability, such as the ongoing military conflict between Russia and Ukraine and instabilities in the Middle East, labor costs, competition, import duties, tariffs, worldwide currency fluctuations, freight, regulatory costs, and product and process evolutions that impact demand for the same materials. Our most significant raw materials include logs and lumber, vinyl extrusions, glass, steel, and aluminum, each of which has been subject to periods of rapid and significant fluctuations in price. Changes in the prices of critical inputs have, and may continue to have, a material adverse effect on our business, financial condition, and results of operations.

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The U.S. has imposed tariffs on certain products imported into the U.S. from China, as well as tariffs on certain steel and aluminum products imported from certain countries, and could impose additional tariffs or trade restrictions. The imposition of tariffs may impact the prices of materials purchased outside of the U.S. and include goods in transit as well as increasing the price of domestically sourced materials, including, in particular, steel and aluminum. Impositions of tariffs by other countries could also impact pricing and availability of raw materials. As another example, as global demand for key chemicals increases, the limited number of suppliers and investment in greater supply capacity drives increased global pricing. Additionally, anti-dumping and countervailing duty trade cases such as the January 8, 2020, Coalition of American Millwork Producers' anti-dumping petitions on imports of wood moldings and millwork products from Brazil and China and a countervailing duty petition on imports of wood moldings and millwork products from China, could impact our business and results of operations. While we believe our exposure to the potential increased costs of these tariffs and duties is no greater than the industry as a whole, our business and results of operations may be adversely affected if our efforts to mitigate their effects are unsuccessful.

We have short-term supply contracts with certain of our largest suppliers that limit our exposure to short term fluctuations in prices and availability of our materials, but we are susceptible to longer-term fluctuations in prices. Generally, we do not hedge against commodity price fluctuations, but may from time to time. Significant increases in the prices of raw materials for finished goods, including as a result of significant or protracted material shortages due to pandemic or otherwise, may be difficult to pass through to customers and may negatively impact our profitability and net revenues. We may attempt to modify products that use certain raw materials, but these changes may not be successful.

Some of our manufacturing operations require the use of substantial amounts of electricity and natural gas, which may be subject to significant price increases as the result of changes in overall supply and demand and the impacts of legislation and regulatory action. The current conflict between Russia and Ukraine has, and may continue to, affect the price of oil and natural gas throughout the world and impact the availability of energy supplies and other inputs at our manufacturing sites, particular particularly in Europe.

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Such a disruption in the supply of natural gas could impact our ability to continue our operations at such sites at normal levels. We have taken actions in an attempt to reduce the impact of energy price increases. However, these efforts may be insufficient to protect us against fluctuations in energy prices or shortages of natural gas and we could suffer adverse effects to net income and cash flow should we be unable to either offset or pass higher energy costs through to our customers in a timely manner or at all.

Our business may be affected by delays or interruptions in the delivery of raw materials, finished goods, and certain component parts. A supply shortage or delivery chain interruption could have a material adverse effect on our business, financial condition, and results of operations.

We rely upon regular deliveries of raw materials, finished goods, and certain component parts. For certain raw materials that are used in our products, we depend on a single or limited number of suppliers for our materials, and we typically do not have long-term contracts with our suppliers. If we are not able to accurately forecast our supply needs, our limited number of suppliers may make it difficult to quickly obtain additional raw materials to respond to shifting or increased demand. In addition, a supply shortage could occur as a result of unanticipated increases in market demand, including as a result of accelerated demand in reaction to the threat of tariffs or trade restrictions; difficulties in production or delivery, including insufficient energy supply; financial difficulties; or catastrophic events in the supply chain. Furthermore, because our products and the components of some of our products are subject to regulation, changes to these regulations could cause delays in delivery of raw materials, finished goods, and certain component parts.

We have experienced impacts to our supply chain as a result of COVID-19 from economic and geopolitical uncertainties, including the ongoing military conflict between Russia and Ukraine, on the supply chain, which have resulted in delays in receiving materials, manufacturing downtime, increased backlogs, and delayed out-bound freight. Although less severe than prior years, we have continued to experience adverse effects of supply chain disruptions in 2022 2023 and may continue to in the future.

Until we can make acceptable arrangements with alternate suppliers, any interruption or disruption could impact our ability to ship orders on time and could idle some of our manufacturing capability for those products. This could result in a loss of revenues, reduced margins, and damage to our relationships with customers, which could have a material adverse effect on our business, financial condition, and results of operations.

Increases in labor costs, potential labor disputes, and work stoppages at our facilities or the facilities of our suppliers could have a material adverse effect on our business, financial condition, and results of operations.

Our financial performance is affected by the availability of qualified personnel and the cost of labor. As of December 31, 2022, we had over 23,400 employees worldwide, including approximately 11,800 We have employees in the U.S. and Canada. Approximately 1,170, or 10%, of our employees in the U.S. and Canada that are unionized workers, and the majority of our workforce in other countries belong to work councils or are otherwise subject to labor agreements. U.S. and Canada employees represented by these unions are subject to collective bargaining agreements that are subject to periodic negotiation and renewal. If we are unable to enter into new, satisfactory labor agreements with our unionized employees upon expiration of their agreements, we could experience a significant disruption of our operations, which could cause us to be unable to deliver products to customers on a timely basis. Such disruptions could result in a loss of business and an increase in our operating expenses, which could reduce our net revenues and profit margins. In

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addition, our non-unionized labor force may become subject to labor union organizing efforts, which could cause us to incur additional labor costs and increase the related risks that we now face.

We believe many of our direct and indirect suppliers also have unionized workforces. Strikes, work stoppages, or slowdowns experienced by suppliers could result in slowdowns or closures of facilities where components of our products are manufactured or delivered. Any interruption in the production or delivery of these components could reduce sales, increase costs, and have a material adverse effect on us.

Our business will suffer if we are unable to retain and recruit executives, managers and employees at a competitive cost.

The success of our business depends upon the skills, experience, and efforts of our executives and other key employees. Our senior management team has acquired specialized knowledge and skills with respect to our business, and the loss of any of these individuals could harm our business, especially if we are not successful in developing adequate succession plans. In addition, we rely on the specialized knowledge and experience of certain key technical employees. Our business also depends on our ability to continue to recruit, train, and retain skilled employees, particularly skilled sales personnel. The loss of the services of these key executives and employees, or our inability to hire new personnel with the requisite skills, could have a material adverse effect on our business, financial condition, and results of operations. For example, our ability to develop new products or enhance existing products, sell products to our customers, or manage our business effectively could be impaired if we are unable to retain and attract qualified personnel. In addition, a significant increase in the wages paid by competing employers could result in a reduction of our qualified labor force, increases in the wage rates that we must pay, or both.

Our pension plan obligations are currently not fully funded, and we may have to make significant cash payments to these plans, which would reduce the cash available for our businesses.

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Although we have closed our U.S. pension plan to new participants and have frozen future benefit accruals for current participants, we continue to have unfunded obligations under that plan. The funded levels of our pension plan depend upon many factors, including returns on invested assets, certain market interest rates, and the discount rate used to determine pension obligations. The projected benefit obligation and unfunded liability included in our consolidated financial statements as of December 31, 2022 December 31, 2023 for our U.S. pension plan were approximately $325.5 million $283.9 million and $11.0 million $4.3 million, respectively. Unfavorable returns on the plan assets or unfavorable changes in applicable laws or regulations could materially change the timing and amount of required plan funding, which would reduce the cash available for our operations. In addition, a decrease in the discount rate used to determine pension obligations could increase the estimated value of our pension obligations, which would affect the reported funding status of our pension plans and would require us to increase the amounts of future contributions. Additionally, we have foreign defined benefit plans, some of which continue to be open to new participants. As of December 31, 2022 December 31, 2023, our foreign defined benefit plans had unfunded pension liabilities of approximately $29.1 million and overfunded pension assets of approximately $1.8 million $27.0 million.

Under the Employee Retirement Income Security Act of 1974, as amended, or “ERISA”, the U.S. Pension Benefit Guaranty Corporation, or the “PBGC”, also has the authority to terminate an underfunded tax-qualified U.S. pension plan under certain circumstances. In the event our tax-qualified U.S. pension plans were terminated by the PBGC, we could be liable to the PBGC for an amount that exceeds the underfunding disclosed in our consolidated financial statements. In addition, because our U.S. pension plan has unfunded obligations, if we have a substantial cessation of operations at a U.S. facility and, as a result of such cessation of operations an event under ERISA Section 4062(e) is triggered, additional liabilities that exceed the amounts disclosed in our consolidated financial statements could arise, including an obligation for us to provide additional contributions or alternative security for a period of time after such an event occurs. Any such action could have a material adverse effect on our business, financial condition, and results of operations.

Risks Relating to Cybersecurity and Data Privacy

We are highly dependent on information technology, the disruption of which could significantly impede our ability to do business.

Our operations depend on our network of information technology systems, which are vulnerable to damage from hardware failure, fire, power loss, telecommunications failure, and impacts of terrorism, natural disasters, or other disasters. We rely on our information technology systems to accurately maintain books and records, record transactions, provide information to management and prepare our financial statements. We may not have sufficient redundant operations to cover a loss or failure in a timely manner. Any damage to our information technology systems could cause interruptions to our operations that materially adversely affect our ability to meet customers’ requirements, resulting in an adverse impact to our business, financial condition, and results of operations. Periodically, these systems need to be expanded, updated, or upgraded as our business needs change. We may not be able to successfully implement changes in our information technology systems without experiencing difficulties, which could require significant financial and human resources. Moreover, our increasing dependence on technology may exacerbate this risk.

Our systems and IT infrastructure have been and may continue to be subject to security breaches and other cybersecurity incidents.

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We rely on the accuracy, capacity, and security of digital technologies, including information systems, infrastructure, and cloud applications, some of which are managed or hosted by third party service providers, and the sale of our products may involve the transmission and/or storage of data, including in certain instances customers’ and employees’ business and personally identifiable information. Maintaining the security of computers, computer networks, and data storage resources is a critical issue for us and our customers, as security breaches, including computer viruses and malware, denial of service actions, misappropriation of data and similar events through the interest, internet, including via devices and applications connected to the internet, and through email attachments and persons with access to these information systems could result in vulnerabilities and loss of and/or unauthorized access to confidential information. If our IT systems or those managed or hosted by third party service providers are breached, or cease to function as anticipated, we could suffer interruptions or inefficiencies The use of generative artificial intelligence (“AI”) in our operations or misappropriation internal systems may create new vulnerabilities. Because generative AI is a new field, understanding of proprietary or confidential information, including personal information.

security risks and protection methods continues to develop. We have experienced and expect to could continue to experience cybersecurity incidents, such as attempts by experienced hackers, cybercriminals, or others with authorized access to our systems to misappropriate our proprietary information and technology, interrupt our business, and/or gain unauthorized access to confidential information, some of which have been, and may continue to be, successful. The reliability and security of If our information technology infrastructure and software, and IT systems or those managed or hosted by third party service providers are breached, or cease to function as anticipated, we could suffer interruptions or inefficiencies in our ability to expand and continually update technologies in response to our changing needs is critical to our business. To the extent that any disruptions or security breaches result in a loss or damage to our data or our third partying service providers’, it could cause operations, harm to our reputation, or brand and could potentially cause production downtimes, operational delays, and other detrimental impacts on our operations. misappropriation of proprietary or confidential information, including personal information. This could lead some customers to stop purchasing our products and reduce or delay future purchases of our products or use competing products.

In addition, we could face enforcement actions by U.S. states, the U.S. federal government, or foreign governments, which could result in fines, penalties, and/or other liabilities, which may cause us to incur legal fees and costs, and/or additional costs associated with responding to the cyberattack. Increased regulation regarding cybersecurity may increase our costs of compliance, including fines and penalties, as well as costs of cybersecurity audits and associated repairs or updates to infrastructure, physical systems or data processing systems. Any of these actions could have a material adverse impact on our business and results of operations. Although we maintain insurance coverage to protect us against some of the risks, those policies may be insufficient to

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cover all losses or all types of claims that may arise in the event we experience a cybersecurity incident, data breach or disruption, unauthorized access, or failure of systems.

In addition, we are subject to state, foreign, and international laws and regulations, as well as contractual obligations, that apply to the collection, use, retention, protection, disclosure, transfer and other processing of personal data. These privacy and data-protection related laws and regulations are evolving, with new or modified laws and regulations proposed and implemented frequently and existing laws and regulations subject to new or different interpretations. In particular, the E.U. General Data Protection Regulation ("GDPR"), which became effective in 2018, poses increased compliance challenges both for companies operating within the E.U. and non-E.U. companies that administer or process certain personal data of E.U. residents. It is not possible to predict the ultimate content, and therefore effect, of data protection regulation over time, and efforts to comply with evolving regulation may result in additional costs.

We believe we have invested in industry-appropriate protections and monitoring practices for our data and information technology to reduce these risks and continue to monitor our systems on an ongoing basis for compliance with applicable privacy regulations and any current or potential threats. While we have not experienced any material breaches in security in our recent history, there can be no assurance that our efforts will prevent breakdowns or breaches to databases or systems that could have a material adverse effect on our business, financial condition, and results of operations, or that we will be subject to enforcement actions or penalties in connection with a failure or alleged failure to comply with applicable laws.

Risks Relating to our Governmental and Regulatory Environment

Changes in building codes and standards, including ENERGY STAR standards, could increase the cost of our products, lower the demand for our windows and doors, or otherwise adversely affect our business.

Our products and markets are subject to extensive and complex local, state, federal and foreign statutes, ordinances, rules, and regulations. These mandates, including building design and safety and construction standards and zoning requirements, affect the cost, selection, and quality requirements of building components like windows and doors.

These regulations often provide broad discretion to governmental authorities as to the types and quality specifications of products used in new residential and non-residential construction and home renovations and improvement projects, and different governmental authorities can impose different standards. Compliance with these standards and changes in such regulations may increase the costs of manufacturing our products or may reduce the demand for certain of our products in the affected geographical areas or product markets. Conversely, a decrease in product safety standards could reduce demand for our more modern products if less expensive alternatives that did not meet higher standards became available for use in that market. All or any of these changes could have a material adverse effect on our business, financial condition, and results of operations.

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In addition, in order for our products to obtain the "ENERGY STAR" certification, they must meet certain requirements set by the EPA. Changes in the energy efficiency requirements established by the EPA for the ENERGY STAR label could increase our costs, and a lapse in our ability to label our products as such or to comply with the new standards, may have a material adverse effect on our business, financial condition, and results of operations.

Domestic and foreign governmental regulations, legislation and government policy, including those applicable to general business operations, could increase the costs of operating our business and adversely affect our business.

We are subject to a variety of regulations regulation, legislation and government policies from U.S. and foreign governmental authorities relating to wage requirements, employee benefits, and other workplace matters. Changes While it is not possible to predict whether and when any changes to the federal or administrative landscape will occur, changes at the local, state, and federal level could significantly impact our business. For example, changes in local minimum or living wage requirements, rights of employees to unionize, healthcare regulations, and other requirements relating to employee benefits could increase our labor costs, which would in turn increase our cost of doing business. In addition, our international operations are subject to laws applicable to foreign operations, trade protection measures, foreign labor relations, differing intellectual property rights, privacy regulations, other legal and regulatory constraints, and currency regulations of the countries or regions in which we currently operate or where we may operate in the future. These factors may restrict the sales of, or increase costs of, manufacturing and selling our products.

We may be subject to significant compliance costs, as well as liabilities under environmental, health, and safety laws and regulations.

Our past and present operations, assets, and products are subject to extensive environmental laws and regulations at the federal, state, and local level worldwide. These laws regulate, among other things, air emissions, the discharge or release of materials into the environment, the handling and disposal of wastes, remediation of contaminated sites, worker health and safety, and the impact of products on human health and safety and the environment. Under certain of these laws, liability for contaminated property may be imposed on current or former owners or operators of the property or on parties that generated or arranged for waste sent to the property for disposal. Liability under these laws may be joint and several and may be imposed without regard to fault or the legality of

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the activity giving rise to the contamination. Notwithstanding our compliance efforts, we may still face material liability, limitations on our operations, fines, or penalties for violations of environmental, health, and safety laws and regulations, including releases of regulated materials and contamination by us or previous occupants at our current or former properties or at offsite disposal locations we use.

The applicable environmental, health, and safety laws and regulations, and any changes to them or in their enforcement, may require us to make material expenditures with respect to ongoing compliance with or remediation under these laws and regulations or require that we modify our products or processes in a manner that increases our costs and/or reduces our profitability. For example, additional pollution control equipment, process changes, or other environmental control measures may be needed at some of our facilities to meet future requirements. In addition, discovery of currently unknown or unanticipated soil or groundwater conditions at our properties could result in significant liabilities and costs. Accordingly, we are unable to predict the exact future costs of compliance with or liability under environmental, health, and safety laws and regulations.

Legal, regulatory or market measures to address stakeholder preferences regarding climate change including proposals to restrict emissions of GHGs and other sustainability initiatives, Environmental, Social, and Governance ("ESG") matters could have an adverse impact on the Company's business and results of operations.

Various legislative, regulatory, and inter-governmental proposals to restrict emissions Concerns over the long-term effects of GHGs, such as carbon dioxide ("CO_2"), are under consideration by governmental legislative bodies and regulators in the jurisdictions where we operate. In the U.S., the EPA adopted the Affordable Clean Energy Rule, or

“ACE”, in June 2019, which repealed the previously adopted Clean Power Plan and was expected to be significantly less burdensome for producers of energy than the requirements of the Clean Power Plan. As a result, certain states have adopted or may adopt more stringent regulations governing emissions of GHGs. In January 2021, the D.C. Circuit vacated the ACE rule, enabling the opportunity for a new federal rule to be adopted. In addition, many other jurisdictions in which we operate have continued to commit to limiting emissions of GHGs, most prominently through an agreement reached in Paris in December 2015 at the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change. The Paris Agreement sets out a new process for achieving global GHG reductions.

As some of our manufacturing facilities operate boilers or other process equipment that emit GHGs, such regulatory and global initiatives may require us to modify our operating procedures or production levels, incur capital expenditures, change fuel sources, or take other actions that may adversely affect our financial results.

Both Houses of the United States Congress have considered adopting legislation to reduce emissions of GHGs. The November 2021 bipartisan infrastructure bill does not impose GHG emission reductions, but it provides measures of protection against climate change disasters, including investments in clean energy. Given have led to, and may continue to lead to, governmental efforts around the high degree of uncertainty about the ultimate parameters of world to mitigate those effects. We will need to respond to any such regulatory or global initiatives, and the degree to which the U.S. will participate in initiatives at the federal or global level, we cannot predict at this time the ultimate impact of such initiatives on our operations or financial results.

Increasing regulations to reduce GHG emissions, as proposed throughout many of our operating regions, would be expected to increase energy costs, increase price volatility for fossil fuels and petroleum, and reduce petroleum production levels, which in turn

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could impact the prices of those raw materials. In addition, new laws and regulations relating as well as to forestry practices limit consumer, investor and business preferences resulting from climate change concerns, which may have an impact on our business, from the volume demand for our customers’ products in various industries to our costs of compliance in the manufacturing and manner of harvesting timber to mitigate environmental impacts, such as deforestation, soil erosion, damage to riparian areas, and GHG levels. The extent of these regulations and related compliance costs has grown in recent years and will increase our materials costs and may increase other aspects servicing of our production costs. customers’ products, all of which may impact our results of operations and result in costs to us in order to comply with any new laws, regulations or preferences. Overall, climate change, its effects and the resulting, unknown impact on government regulation, consumer, investor and business preferences could have a long-term material adverse effect on our business and results of operations.

The heightened Heightened stakeholder focus on Environmental, Social, and Governance, or “ESG,” ESG issues related to our business requires the continuous monitoring of various and evolving laws, regulations, standards and expectations and the associated reporting requirements. Specifically, certain stakeholders are beginning to require There can be no certainty that we provide information on our plans relating to certain climate-related matters such as greenhouse gas emissions, and we expect this trend to continue and be amplified by the potential adoption of the proposed SEC regulations relating to climate change disclosure. A failure to will adequately or timely meet stakeholder expectations and reporting requirements, which may result in noncompliance with any imposed regulations, the loss of business, reputational impacts, diluted market valuation, an inability to attract and retain customers, and an inability to attract and retain top talent. In addition, our adoption and the reporting of certain standards or mandated compliance to certain requirements could necessitate additional investments that could impact our profitability. There continues to be a The lack of consistent climate legislation, which creates economic and regulatory uncertainty. Such uncertainty certainty surrounding ESG may have an adverse impact on our business from the demand for our customers’ products in various industries to our costs of compliance in the manufacturing and servicing of our customers’ products, all of which may impact our results of operations.

Further, we have established and publicly disclosed other ESG targets and goals and other sustainability commitments that are subject to a variety of assumptions, risks and uncertainties. If we are unable to, or perceived to be unable to, meet these targets, goals or commitments, on our projected timelines or at all, or if they are not perceived to be sufficiently robust, our reputation, as well as our relationships with investors, customers and other stakeholders could be harmed, which could in turn adversely impact our business and results of operations. operations may be adversely impacted. In addition, not all of our competitors may seek to establish climate or other ESG targets and goals, or at a comparable level to ours, which could result in our competitors achieving competitive advantages through lower supply chain or operating costs.

Changes to legislative and regulatory policies that currently promote home ownership may have a material adverse effect on our business, financial condition, and results of operations.

Our markets are also affected by legislative and regulatory policies, such as U.S. tax rules, allowing for deductions of mortgage interest and the mandate of government-sponsored entities like Freddie Mac and Fannie Mae to promote home ownership through mortgage guarantees on certain types of home loans. The Tax Act passed in the U.S. in December 2017 made significant changes to some of these historical benefits of home ownership. The specific changes which could affect our markets are, among others, a reduction of the maximum amount of home mortgage indebtedness for which a tax deduction for interest paid may be claimed, an elimination of the deduction for interest paid on home equity indebtedness, and a limitation on the amount of state and local taxes allowed to be deducted annually as itemized deductions. These changes to the tax code and any future policy changes may adversely impact demand for our products and have a material adverse effect on our business, financial condition, and results of operations.

Lack of transparency, threat of fraud, public sector corruption, and other forms of criminal activity involving government officials increases the risk of potential liability under anti-bribery/anti-corruption or anti-fraud legislation, including the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act, and similar laws and regulations.

We operate manufacturing and distribution facilities in 19 countries and sell our products in approximately 90 countries around the world. As a result of the international nature of our operations, we may enter from time to time into negotiations and contractual arrangements with parties affiliated with foreign governments and their officials in the ordinary course of business. In connection with these activities, we may be subject to anti-corruption laws in various jurisdictions, including the U.S. Foreign Corrupt Practices Act, or the “FCPA”, the U.K. Bribery Act and other anti-bribery laws applicable to jurisdictions where we do business that prohibit improper payments or offers of payments to foreign government officials and political parties and others for the purpose of obtaining or retaining business, or otherwise receiving discretionary favorable treatment of any kind, and require the maintenance of internal controls to prevent such payments. In particular, we may be held liable for actions taken by agents in foreign countries where we operate, even though such parties are not always subject to our control. We have established anti-bribery/anti-corruption policies and

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procedures and offer several channels for raising concerns in an effort to comply with the laws and regulations applicable to us. However, there can be no assurance that our policies and procedures will effectively prevent us from violating these laws and regulations in every transaction in which we may engage. Allegations of violations of the FCPA or other anti-bribery or anti-corruption laws may result in internal, independent, or government investigations. Any determination that we have violated the FCPA or other anti-bribery/anti-corruption laws (whether directly or through acts of others, intentionally or through inadvertence) could result in severe criminal and civil sanctions and other liabilities that could have a material adverse effect on our business, reputation, financial condition, and results of operations.

As we continue to expand our business globally, including through foreign acquisitions, we may have difficulty anticipating and effectively managing these and other risks that our international operations may face, which may adversely impact our business

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outside of the U.S. and our financial condition and results of operations. In addition, any acquisition of businesses with operations outside of the U.S. may exacerbate this risk.

Changes in legislation, regulation, and government policy, including as a result of U.S. presidential and congressional elections, may have a material adverse effect on our business in the future.

We cannot predict the impact that may result from changes in the federal or administrative landscape as a result of U.S. presidential or congressional elections. While it is not possible to predict whether and when any such changes will occur, changes at the local, state, and federal level could significantly impact our business. Specific legislative and regulatory proposals that could have a material impact on us include, but are not limited to: infrastructure renewal programs, changes to immigration policy, modifications to international trade policy, including renegotiation of or withdrawal from trade agreements, the imposition of tariffs or trade restrictions, and changes to financial legislation and public company reporting requirements.

Our annual effective tax rate and the amount of taxes we pay can change materially as a result of changes in U.S. and foreign tax laws, changes in the mix of our U.S. and foreign earnings, adjustments to our estimates for the potential outcome of any uncertain tax issues, and audits by federal, state and foreign tax authorities.

As a large multinational corporation, we are subject to U.S. federal, state and local, and many foreign tax laws and regulations, all of which are complex and subject to significant change and varying interpretations. Changes in these laws or regulations, or any change in the position of taxing authorities regarding their application, administration or interpretation, could have a material adverse effect on our business, consolidated financial condition or results of our operations. For example, in the U.S., the Biden administration has proposed several corporate tax increases, including raising August 2022, the U.S. government enacted the Inflation Reduction Act of 2022 (the "Inflation Reduction Act") into law, which includes a new corporate income alternative minimum tax rate and greater taxation of international income, which, if enacted, could materially and adversely affect our an excise tax liability. on corporate stock repurchases. Future changes in tax law could significantly impact our provision for income taxes, the amount of taxes payable, and our deferred tax asset and liability balances. In addition, our products, and our customers' products, are subject to import and excise duties and/or sales or value-added taxes in many jurisdictions in which we operate. Increases in these indirect taxes could affect the affordability of our products and our customers' products, and, therefore, reduce demand.

Recently, international tax norms governing each country's jurisdiction to tax cross-border international trade have evolved, and are expected to continue to evolve, due in part to the Base Erosion and Profit Shifting project led by the Organization for Economic Cooperation and Development ("OECD"), which represents a coalition of member countries including the United States, and supported by the G20. Changes in these laws and regulations, or any change in the position of tax authorities regarding their application, administration or interpretation could adversely affect our financial results. In addition, a number of countries are actively pursuing changes to their tax laws applicable to multinational corporations.

In August 2022, the U.S. Inflation Reduction Act of 2022 was signed into law. This law, among other things, provides for a corporate alternative minimum tax on adjusted financial statement income, which if applicable for us would be effective January 1, 2023, and an excise tax on corporate stock repurchases after December 31, 2022. We are continuing to evaluate the impact this new law may have on our financial position and results of operations as new guidance is released.Under the current rules we do not meet the requirements of complying with the corporate alternative minimum tax as we do not meet the average annual adjusted book income requirement of $1 billion dollars for three consecutive periods that qualifies a corporation for this potential tax liability.In addition, there are several proposed changes to U.S. and non-U.S. tax legislation, which if enacted, could have a negative impact on our effective tax rate.

Due to widely varying tax rates in the taxing jurisdictions applicable to our business, a change in income generation to higher taxing jurisdictions or away from lower taxing jurisdictions may also have an adverse effect on our financial condition and results of operations.

We make estimates of the potential outcome of uncertain tax issues based on our assessment of relevant risks and facts and circumstances existing at the time, and we use these assessments to determine the adequacy of our provision for income taxes and other tax-related accounts. These estimates are highly judgmental. Although we believe we adequately provide for any reasonably foreseeable outcome related to these matters, future results may include favorable or unfavorable adjustments to estimated tax liabilities, which may cause our effective tax rate to fluctuate significantly.

In addition, our income tax returns are subject to regular examination by domestic and foreign tax authorities. These taxing authorities may disagree with the positions we have taken or intend to take regarding the tax treatment or characterization of any of our transactions. If any tax authorities were to successfully challenge the tax treatment or characterization of any of our transactions, it could have a material adverse effect on our business, consolidated financial condition or results of our operations. Furthermore, regardless of whether any such challenge is resolved in our favor, the final resolution of such matter could be expensive and time consuming to defend and/or settle.

Changes in accounting standards, new interpretations of existing standards and subjective assumptions, estimates, and judgments by management related to complex accounting matters could significantly affect our financial results or financial condition.

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GAAP and related accounting pronouncements, implementation guidelines and interpretations with regard to a wide range of matters that are relevant to our business, such as revenue recognition, asset impairment, impairment of goodwill, inventories, lease obligations, pensions, self-insurance, tax matters, and litigation, are highly complex and involve many subjective assumptions, estimates, and judgments. Changes in these rules or their interpretation or changes in underlying assumptions, estimates, or judgments could significantly change our reported results.

Risks Relating to our Indebtedness

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Our failure to comply with the credit agreements governing our Credit Facilities and indentures governing the Senior Notes and Senior Secured Notes, including as a result of events beyond our control, could trigger events of default and acceleration of our indebtedness. Defaults under our debt agreements could have a material adverse effect on our business, financial condition, and results of operations.

If there were an event of default under the credit agreements governing our Credit Facilities, the indentures governing the Senior Notes and Senior Secured Notes, or other indebtedness that we may incur, the holders of the defaulted indebtedness could cause all amounts outstanding with respect to that indebtedness to be immediately due and payable. It is likely that our cash flows would not be sufficient to fully repay borrowings under our Credit Facilities and principal amounts of the Senior Notes and Senior Secured Notes, if accelerated upon an event of default. If we are unable to repay, refinance, or restructure our secured debt, the holders of such indebtedness may proceed against the collateral securing that indebtedness.

Furthermore, any event of default or declaration of acceleration under one debt instrument may also result in an event of default under one or more of our other debt instruments. In exacerbated or prolonged circumstances, one or more of these events could result in our bankruptcy or liquidation. Accordingly, any default by us on our debt could have a material adverse effect on our business, financial condition, and results of operations.

Our indebtedness could adversely affect our financial flexibility and our competitive position.

Financial information regarding our indebtedness is included in Note 11 12 - *Long-Term Debt* to our financial statements included in this Form 10-K.

Our level of indebtedness increases the risk that we may be unable to generate cash sufficient to pay amounts due in respect of our indebtedness and could have other material consequences, including:

- limiting our ability to obtain financing in the future for working capital, capital expenditures, acquisitions, or other general corporate purposes;
- requiring us to use a substantial portion of our available cash flow to service our debt, which will reduce the amount of cash flow available for working capital, capital expenditures, acquisitions, and other general corporate purposes;
- increasing our vulnerability to general economic downturns and adverse industry conditions;
- limiting our flexibility in planning for, or reacting to, changes in our business and in our industry in general;
- limiting our ability to invest in and develop new products;
- placing us at a competitive disadvantage compared to our competitors that are not as highly leveraged, as we may be less capable of responding to adverse economic conditions, general economic downturns, and adverse industry conditions;
- restricting the way we conduct our business because of financial and operating covenants in the agreements governing our existing and future indebtedness;
- increasing the risk of our failing to satisfy our obligations with respect to borrowings outstanding under our Credit Facilities, Senior Notes, and Senior Secured Notes and/or being able to comply with the financial and operating covenants contained in our debt instruments, which could result in an event of default under the credit agreements governing our Credit Facilities and the agreements governing our other debt, including the indentures governing the Senior Notes and Senior Secured Notes, that, if not cured or waived, could have a material adverse effect on our business, financial condition, and results of operations; and
- increasing our cost of borrowing.

The credit agreements governing our Credit Facilities and the indentures governing the Senior Notes and Senior Secured Notes impose significant operating and financial restrictions on us that may prevent us from capitalizing on business opportunities.

The credit agreements governing our Credit Facilities and the indentures governing the Senior Notes and Senior Secured Notes impose significant operating and financial restrictions on us. These restrictions limit our ability, among other things, to:

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- incur or guarantee additional indebtedness;
- make certain loans, investments, or restricted payments, including dividends to our shareholders;
- repurchase or redeem capital stock;
- engage in certain transactions with affiliates;
- sell certain assets (including stock of subsidiaries) or merge with or into other companies; and
- create or incur liens.

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Under the terms of the ABL Facility, we will at times be required to comply with a specified fixed charge coverage ratio when the amount of certain unrestricted cash balances of the U.S. and Canadian loan parties plus the amount available for borrowing by the U.S. borrowers and Canadian borrowers is less than a specified amount. The Australia Senior Secured Credit Facility also contains financial maintenance covenants. Our ability to meet the specified covenants could be affected by events beyond our control, and our failure to meet these covenants will result in an event of default as defined in the applicable facility.

In addition, our ability to borrow under the ABL Facility is limited by the amount of the borrowing base applicable to U.S. dollar and Canadian dollar borrowings. Any negative impact on the elements of our borrowing base, such as eligible accounts receivable and inventory, will reduce our borrowing capacity under the ABL Facility. Moreover, the ABL Facility provides discretion to the agent bank acting on behalf of the lenders to impose additional requirements on what accounts receivable and inventory may be counted toward the borrowing base availability and to impose other reserves, which could materially impair the amount of borrowings that would otherwise be available to us. There can be no assurance that the agent bank will not impose such reserves or, were it to do so, that the resulting impact of this action would not materially and adversely impair our liquidity.

As a result of these covenants and restrictions, we are limited in how we conduct our business, and we may be unable to raise additional debt or equity financing to compete effectively or to take advantage of new business opportunities or engage in other activities that may be in our long-term best interests. The terms of any future indebtedness we may incur could include more restrictive covenants. We cannot assure you that we will be able to maintain compliance with these covenants in the future and, if we fail to do so, we may be unable to obtain waivers from the lenders or amend the covenants.

We require a significant amount of liquidity to fund our operations, and borrowing may increase our vulnerability to negative unforeseen events.

Our liquidity needs vary throughout the year. If our business experiences materially negative unforeseen events, we may be unable to generate sufficient cash flow from operations to fund our needs or maintain sufficient liquidity to operate and remain in compliance with our debt covenants, which could result in reduced or delayed purchases of raw materials, planned capital expenditures, and other investments and adversely affect our financial condition or results of operations. Our ability to borrow under the ABL Facility may be limited due to decreases in the borrowing base as described above.

Risks Relating to Ownership of Our Common Stock

The market price of our Common Stock may be highly volatile.

Our Common Stock has been listed for public trading since January 27, 2017. Securities markets worldwide experience significant price and volume fluctuations. This market volatility, as well as other general economic, market or political conditions, could reduce the market price of our shares in spite of our operating performance. The following Various factors, including those listed in this *Item 1A - Risk Factors* section, may have a significant impact on the market price of our Common Stock:

- negative trends in global economic conditions or activity levels in our end markets;
- increases in interest rates used to finance home construction and improvements;
- our ability to compete effectively against our competitors;
- changes in consumer needs, expectations, or trends;
- our ability to maintain our relationships with key customers;
- our ability to implement our business strategy;
- our ability to complete and integrate new acquisitions;
- variations in the prices of raw materials used to manufacture our products;
- adverse changes in building codes and standards or governmental regulations applicable to general business operations;
- product liability claims or product recalls;

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- any legal actions in which we may become involved, including disputes relating to our intellectual property;
- our ability to recruit and retain highly skilled staff;
- actual or anticipated fluctuations in our quarterly or annual operating results;
- trading volume of our Common Stock;
- sales of our Common Stock by us, our executive officers and directors, or our shareholders in the future; and
- general economic and market conditions and overall fluctuations in the U.S. equity markets.

In addition, broad market and industry factors, including the trading prices of the securities of our publicly traded competitors, may negatively affect the market price of our Common Stock, regardless of our actual operating performance, and factors beyond our control may cause our stock price to decline rapidly and unexpectedly. Furthermore, the stock market has experienced extreme volatility that, in some cases, has been unrelated or disproportionate to the operating performance of particular companies.

We may be subject to securities litigation, which is expensive and could divert management attention.

Our share price may be volatile and, in the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We may be the target of this type of litigation. Litigation of this type could result in substantial costs and diversion of management's attention and resources, which could have a material adverse effect on our business, financial condition, and results of operations. Any adverse determination in litigation could also subject us to significant liabilities and may negatively impact our share price.

If securities or industry analysts cease publishing research or reports about us, our business, or our market, or if they adversely change their recommendations or publish negative reports regarding our business or our stock, our stock price and trading volume could decline.

The trading market for our Common Stock can be influenced by the research and reports that industry or securities analysts may publish about us, our business, our market, or our competitors. We do not have any control over these analysts, and we cannot provide any assurance that analysts will cover us or provide favorable coverage. If any of the analysts who may cover us adversely change their recommendation regarding our stock, or provide more favorable relative recommendations about our competitors, our stock price could decline. If any analyst who may cover us were to cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

Because we have no current plans to pay cash dividends on our shares of Common Stock, shareholders must rely on appreciation of the value of our Common Stock for any return on their investment.

We currently anticipate that we will retain future earnings for the development, operation, and expansion of our business, to repay debt and potentially share repurchases, repurchase shares, and have no current plans to declare or pay any cash dividends in the foreseeable future. In addition, the terms of our Credit Facilities, Senior Notes, Senior Secured Notes, and any future debt agreements may preclude us from paying dividends. As a result, we expect that only appreciation of the price of our Common Stock, if any, will provide a return to shareholders for the foreseeable future.

Because we are a holding company with no operations of our own, we rely on dividends, distributions, and transfers of funds from our subsidiaries, and we could be harmed if such distributions were not made in the future.

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We are a holding company that conducts all of our operations through subsidiaries and the majority of our operating income is derived from JWI, our main operating subsidiary. Consequently, we rely on dividends or advances from our subsidiaries. We have no current plans to declare or pay dividends on our Common Stock for the foreseeable future; however, to the extent that we determine in the future to pay dividends on our Common Stock, none of our subsidiaries will be obligated to make funds available to us for the payment of dividends. The ability of such subsidiaries to pay dividends to us is subject to applicable local law and may be limited due to terms of other contractual arrangements, including our indebtedness. Such laws and restrictions would restrict our ability to continue operations. In addition, Delaware law may impose requirements that may restrict our ability to pay dividends to holders of our Common Stock.

Item 1B - Unresolved Staff Comments.

None.

Item 1C - Cybersecurity.

Risk Management and Strategy

We maintain a comprehensive process for assessing, identifying and managing material risks from cybersecurity threats as part of our overall risk management system and processes. Our cybersecurity risk management processes include the following:

a. We leverage the National Institute of Standards and Technology (“NIST”) framework to help ensure the Company’s risk posture remains in alignment with the Company’s overall risk appetite.

b. The Company utilizes policies, software, training programs, hardware solutions and managed services to protect and monitor our environment, including multifactor authentication on all critical systems, firewalls, intrusion detection and prevention systems, vulnerability and penetration testing, identity and access management systems and 24x7 security operations center.

c. The Company’s approach to managing cybersecurity and digital risk is led by our CIO and CISO. Our CIO is supported by the Company at the highest levels and regularly engages with cross-functional teams at the Company, including Legal, Audit, Finance, Human Resources and Enterprise Risk Management.

d. We also carry insurance that provides protection against the potential losses arising from a cybersecurity incident. Such insurance may be insufficient to cover all losses or all types of claims that may arise.

e. Our cybersecurity team conducts semi-annual cyber awareness training for professional associates using an independent third-party security training provider to educate best practices, policies and responsibilities pertaining to cybersecurity. We also conduct quarterly simulated phishing tests to generate awareness and run tabletop exercises to simulate a response to a cybersecurity incident and use the findings to improve our practices, procedures and technologies.

f. Our cybersecurity incident response plan coordinates the activities we take to prepare for, detect, respond to, and recover from cybersecurity incidents, which include processes to triage, assess severity for, escalate, contain, investigate, communicate and remediate the incident, as well as to comply with potentially applicable legal obligations and mitigate brand and reputational damage.

g. Our cybersecurity team regularly conduct tests of our information security environment and controls through vulnerability scanning, penetration testing and attack simulation testing.

Additionally, our cybersecurity risk management processes include review and assessment by external, independent third parties, who assess the maturity of our cybersecurity program and identify areas for continued focus and improvement. Furthermore, our Legal Department advises the Board about best practices for cybersecurity oversight by the Board, and the evolution of that oversight over time.

Our cybersecurity risk management processes extend to the oversight and identification of threats associated with our use of third-party service providers. Our cybersecurity team conducts third-party software security reviews for new software products being implemented into our production environments. The Company also has a third-party risk management process that regularly assesses and monitors risks, including cybersecurity, from vendors and suppliers.

See “Risk Factors” in Item 1A of this Annual Report on Form 10-K for information on cybersecurity risks that may materially affect our business strategy, results of operations and financial condition.

Governance

The cybersecurity risk management processes described above are led by our CIO and CISO, each having more than 25 years of information security experience. Our Board, Audit Committee, senior management and the Enterprise Risk Management Committee (a management committee of senior representatives from corporate functions and business lines) devote resources to cybersecurity and risk management processes. The Audit Committee is primarily responsible for the oversight of enterprise risk management and cybersecurity risks, including cybersecurity threats. To fulfill this responsibility, the Audit Committee receives periodic reports from the CIO. These reports include information regarding updates on cybersecurity initiatives, cybersecurity metrics, such as phishing

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results and attack volume metrics, results of any assessments performed by internal stakeholders or external third-party advisors and updates on cybersecurity trends and insights. The CIO provides a cybersecurity update to the full Board at least annually.

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Item 2 - Properties

Our principal executive office is located in Charlotte, North Carolina. We lease administrative office space in Charlotte, North Carolina; Carolina and in Birmingham, U.K.; and Sydney, Australia. We also own or lease other properties to support our primary operating activities, including sales offices closed facilities, and administrative office space in Klamath Falls, Oregon.

		Manufacturing	
		Manufacturing	
		Manufacturing	
North America			
North America			
North America			
United States and Caribbean			
United States and Caribbean			
United States and Caribbean			
Canada			
Canada			
Canada			
		Manufacturing	**Distribution**
North America			
United States		46	7
Canada		4	2
St. Kitts		—	1
		42	
Mexico		1	—
		51	**10**
		42	
		42	
Europe			
Europe			
Europe	**Europe**		
United Kingdom	United Kingdom	2	—
United Kingdom			
United Kingdom			
France	France	2	—
France			
France			
Austria			
Austria			
Austria	Austria	3	—
Czech Republic	Czech Republic	1	—
Czech Republic			
Czech Republic			

Switzerland			
Switzerland			
Switzerland	Switzerland	1	—
Hungary	Hungary	1	—
Hungary			
Hungary			
Germany			
Germany			
Germany	Germany	4	1
Sweden	Sweden	2	—
Sweden			
Sweden			
Denmark			
Denmark			
Denmark	Denmark	3	—
Latvia	Latvia	3	—
Latvia			
Latvia			
Estonia			
Estonia			
Estonia	Estonia	3	—
Finland	Finland	3	—
Finland			
Finland			
		26	
		26	
		26	
		28	**1**
Australasia			
Australia		33	4
Indonesia		2	—
Malaysia		2	—
		37	**4**
Total JELD-WEN	**Total JELD-WEN**	**116**	**15**
Total JELD-WEN			
Total JELD-WEN			

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Item 3 - Legal Proceedings

Information relating to this item is included within Note 24 25 - *Commitments and Contingencies* of our financial statements included elsewhere in this Form 10-K.

Item 4 - Mine Safety Disclosures.

Not applicable.

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PART II - OTHER INFORMATION

Item 5 - Market for Registrant’s Common Equity, Related Shareholder Matters and Issuer Purchases of Equity Securities

Market Information and Holders

Our Common Stock has been listed and traded on the NYSE under the symbol “JELD” since January 27, 2017. Prior to that time, there was no public trading market for our stock. As of February 16, 2023 February 16, 2024, there were approximately 1,365 1,374 shareholders of record of our Common Stock. The number of record holders does not include a substantially greater number of holders whose shares are held of record in nominee or “street name” accounts through banks, brokers, and other financial institutions.

Stock Performance Graph

The following graph depicts the total return to shareholders from December 31, 2017 December 31, 2018 through December 31, 2022 December 31, 2023, relative to the performance of the Standard & Poor's 500 Index and the Standard & Poor's 1500 Building Products Index. The graph assumes an investment of $100 in our Common Stock and each index on December 31, 2017 December 31, 2018, and the reinvestment of dividends paid since that date. The stock performance shown in the graph is not necessarily indicative of future price performance.

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*$100 invested on 12/31/17 18 in stock or index, including reinvestment of dividends.
Fiscal year ended December 31.

	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022
JELD-WEN Holding, Inc.	$100.00	$36.09	$59.46	$64.41	$66.95	$24.51
S&P 500	$100.00	$95.62	$125.72	$148.85	$191.58	$156.89
S&P 1500 Building Products Index	$100.00	$78.05	$110.97	$142.42	$208.97	$160.15

	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022	12/31/2023
JELD-WEN Holding, Inc.	$100.00	$164.74	$178.47	$185.5	$67.91	$132.86
S&P 500	$100.00	$131.49	$155.68	$200.37	$164.08	$207.21
S&P 1500 Building Products Index	$100.00	$142.18	$182.48	$267.75	$205.19	$295.93

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Equity Compensation Plans

See Item 12- 12 - *Security Ownership of Certain Beneficial Owners and Management and Related Shareholder Matters* for the information required by Item 201(d) of Regulation S-K regarding equity compensation plans.

Dividends

We do not currently expect to pay any cash dividends on our Common Stock for the foreseeable future. Instead, we intend to retain future earnings, if any, for the future operation and expansion of our business, the repayment of debt, and potentially for share repurchases. Any determination to pay dividends in the future will be at the discretion of our Board of Directors and will depend upon our results of operations, cash requirements, financial condition, contractual restrictions, restrictions imposed by applicable laws, and other factors that our Board of Directors may deem relevant.

The terms of the agreements governing our existing or future indebtedness may limit our ability to pay dividends and make distributions to our shareholders. Our business is conducted through our subsidiaries and dividends from, and cash generated by, our subsidiaries will be our principal sources of cash to repay indebtedness, fund operations, and pay any dividends. Accordingly, our ability to pay dividends to our shareholders is dependent on the earnings and distributions of funds from our subsidiaries (which distributions may be restricted by the terms of our Corporate Credit Facilities Senior Secured Notes, and Senior Notes).

Item 6 - [Reserved]

Not applicable.

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Item 7 - Management’s Discussion and Analysis of Financial Condition and Results of Operations

This MD&A contains forward-looking statements that involve risks and uncertainties. Please see “Forward-Looking Statements” in Item 1- 1 - *Business* and Item 1A- 1A - *Risk Factors* in this Form 10-K for a discussion of the uncertainties, risks and assumptions associated with these statements. This discussion should be read in conjunction with our historical financial statements and related notes thereto and the other disclosures contained elsewhere in this Form 10-K. The results of operations for the periods reflected herein are not necessarily indicative of results that may be expected for future periods, and our actual results may differ materially from those discussed in the forward-looking statements as a result of various factors, including but not limited to those listed under Item 1A- *Risk Factors* and included elsewhere in this Form 10-K.

This MD&A is a supplement to our financial statements and notes thereto included elsewhere in this Form 10-K and is provided to enhance your understanding of our results of operations and financial condition. Our discussion of results of operations is presented in millions throughout the MD&A and due to rounding may not sum or calculate precisely to the totals and percentages provided in the tables. Our MD&A is organized as follows:

- Company Overview. This section provides a general description of our Company and reportable segments, business and industry trends, our key business strategies and background information on other matters discussed in this MD&A.
- Consolidated Results of Operations and Operating Results by Business Segment. This section provides our analysis and outlook for the significant line items on our consolidated statements of operations, as well as other information that we deem meaningful to an understanding of our results of operations on both a consolidated basis and a business segment basis.
- Liquidity and Capital Resources. This section contains an overview of our financing arrangements and provides an analysis of trends and uncertainties affecting liquidity, cash requirements for our business, and sources and uses of our cash.
- Critical Accounting Policies and Estimates. This section discusses the accounting policies that we consider important to the evaluation and reporting of our financial condition and results of operations, and whose application requires significant judgments or a complex estimation process.

Company Overview

We are a leading global provider designer, manufacturer, and distributor of windows, doors, wall systems, and other building products. We design, produce, and distribute an extensive range of high performance interior and exterior doors, wood, vinyl, and aluminum windows, and related building products, for use in serving the new construction and R&R of residential homes, and, to a lesser extent, non-residential buildings. sectors.

We operate manufacturing and distribution facilities in 19 15 countries, located primarily in North America Europe, and Australia. Europe. For many product lines, our manufacturing processes are vertically integrated, enhancing our range of capabilities, our ability to innovate, and our quality control as well as providing supply chain, transportation, and working capital savings.

Business Segments

Our business is organized in geographic regions to ensure integration across operations serving common end markets and customers. We have three two reportable segments: North America Europe, and Australasia. Europe. Financial information related to our business segments can be found in Note 14 - *Segment Information* of our financial statements included elsewhere in this Form 10-K.

Acquisitions and Divestitures

During 2021, the Company ceased the appeal process for its litigation with Steves & Sons, Inc. ("Steves"). As a result, we are required to divest the Company's Towanda, PA operations ("Towanda"). Assuming customary closing conditions are met and subject to court approval, we believe the divestiture will occur within the next twelve months and qualifies for held for sale accounting. We have reclassified certain assets and liabilities to assets held for sale in the accompanying financial statements. We plan to continue to be reporting Towanda within our North America operations until the divestiture is finalized.

For additional information on the Steves litigation and divestiture, see Note 24 25 - *Commitments and Contingencies* of our financial statements included elsewhere in this Form 10-K.

On April 17, 2023, we entered into a Share Sale Agreement with Aristotle Holding III Pty Limited, a subsidiary of Platinum Equity Advisors, LLC, to sell our Australasia business. On July 2, 2023, we completed the sale. The net assets and operations of the disposal group met the criteria to be classified as "discontinued operations" and are reported as such in all periods presented unless otherwise noted. The consolidated statements of cash flows include cash flows from discontinued operations through the divestiture date of July 2, 2023. See Note 2- *Discontinued Operations* of our financial statements included elsewhere in this Form 10-K.

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Factors and Trends Affecting Our Business

Components of Net Revenues

The key components of our net revenues include core net revenues Core Revenues (which we define to include the impact of pricing and volume/mix, as discussed further under the heading, "Product Pricing and Volume/Mix" below), contribution from acquisitions and divestitures made within the prior twelve months, and the impact of foreign exchange. Net revenues reported in our financial statements are impacted by the fluctuating currency values in the geographies in which we operate, which we refer to as the impact from foreign exchange. Throughout this "Management's Discussion and Analysis of Financial Condition and Results of Operations", percentage changes in pricing are based on management schedules and are not derived directly from our accounting records.

Product Demand

General business, financial market, and economic conditions globally and in the regions where we operate influence overall demand in our end markets and for our products. In particular, the following factors may have a direct impact on demand for our products in the countries and regions where our products are marketed and sold:

- the strength of the economy;

- employment rates, and consumer confidence, and spending rates;
- the availability and cost of credit;
- interest rate fluctuations (including mortgage and credit card interest rates) and the availability of financing for our customers and consumers;
- the amount and type of residential and non-residential construction;
- housing sales and home values;
- the age of existing home stock, home vacancy rates, and foreclosures;
- interest rate fluctuations for our customers and consumers;
- volatility in both debt and equity capital markets;
- increases in the cost of raw materials or any shortage in supplies or labor, including as a result of tariffs or other trade restrictions;
- the effects of governmental regulation and initiatives to manage economic conditions;
- geographical shifts in population and other changes in demographics; and
- changes in weather patterns and extreme weather events.

In addition, we seek to drive demand for our products through the implementation of various strategies and initiatives. We believe we can enhance demand for our new and existing products by:

- innovating and developing new products and technologies;
- investing in branding and marketing strategies, including marketing campaigns in both print and social media, as well as our investments in training curriculum, in-field training and technologies to facilitate remote learning; and
- implementing channel initiatives to enhance our relationships with key channel partners and customers, including optimizing growth through rebate programs in North America.

Product Pricing and Volume/Mix

The price and mix of products that we sell are important drivers of our net revenues and net income. Under the heading "Results of Operations," references to (i) "pricing" refer to the impact of price increases or decreases, as applicable, for particular products between periods and (ii) "volume/mix" refer to the combined impact of both the number of products we sell in a particular period and the types of products sold, in each case, on net revenues. While we operate in competitive markets, the demand for our innovative products allows us to exercise pricing discipline, which is an important element of our strategy to achieve profitable growth through improved margins. Our strategy also includes incentivizing our channel partners to sell our higher margin products, and we believe a renewed focus on innovation and the development of new technologies will increase our sales volumes and the overall profitability of our product mix.

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Cost Reduction and Productivity Initiatives

Our senior management team has a proven track record of implementing operational excellence programs at various large, global manufacturing businesses, and we believe the same successes can be realized at JELD-WEN. Key areas of focus of our operational excellence, productivity, and footprint rationalization programs include:

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- reducing labor, overtime, and waste costs by reducing facility count while optimizing manufacturing capacity and improving planning and manufacturing processes;
- increasing rigor and alignment around capital expenditures with a clear linkage to our strategy and optimizing returns;
- generating value through supplier contracting to enable better supplier performance, strengthen our partnerships with strategic suppliers, and unlock additional value within the supply chain;
- reducing or minimizing increases in material usage and costs through value-added engineering;
- investing in logistics optimization programs to reduce freight costs and improving product function through value-added re-engineering of components; increase throughput;
- redesigning our supply chain network to reduce lead times and optimize inventory levels to increase cash flow; and
- reducing warranty costs by improving quality.

We continue to implement our strategic cost-reduction and productivity strategic initiatives under JEM to develop the culture and processes of operational excellence and continuous improvement. These cost reduction initiatives, which may include plant closures and consolidations, headcount reductions, and other various initiatives aimed at lowering production and overhead costs, may not produce the intended results within the intended timeframe.

Raw Material Costs

Commodities such as vinyl extrusions, glass, aluminum, wood, steel, plastics, glass, fiberglass, aluminum and other composites vinyl are major components in the production of our products. Changes in the underlying prices of these commodities have a direct impact on the cost of goods sold. While we attempt to pass on a substantial portion of such cost increases to our customers, we may not be successful in doing so. In addition, our results of operations for individual quarters may be negatively impacted by a delay between the time of raw material cost increases and a corresponding price increase. Conversely, our results of operations for individual quarters may be positively impacted by a delay between the time of a raw material price decrease and a corresponding competitive pricing decrease.

Freight Costs

We incur substantial freight and duty costs to third party logistics providers and port authorities to transport raw materials and work-in-process inventory to our manufacturing facilities and to deliver finished goods to our customers. Changes in freight and duty rates as well as the availability of freight services can have a significant impact on our cost of goods sold. Freight and duty costs have risen significantly due to a number of factors that have affected the supply and demand of trucking and port services, including increased regulation, such as logging of miles, increases in general economic activity, labor shortages, and an aging workforce. We attempt to mitigate some of these cost increases through various internal initiatives and to pass a substantial portion of these increases to our customers; however, we may not realize the intended results within the intended timeframe.

Working Capital and Seasonality

Working capital which we define as accounts receivable plus inventory less accounts payable, fluctuates throughout the year and is affected by seasonality of sales of our products and of customer payment patterns. The peak season for home construction and remodeling in our North America and Europe segments which represent the substantial majority of our revenues, generally corresponds with the second and third calendar quarters, and therefore our sales volume is usually higher during those quarters. Typically, working capital increases at the end of the first quarter and beginning of the second quarter in conjunction with, and in preparation for, our peak season, and working capital decreases starting in the third quarter as inventory levels and accounts receivable decline. Inventories fluctuate as we manage availability in our Global supply chain due to the impacts of COVID-19 markets and the ongoing conflict between Russia and Ukraine, and for certain raw materials with long delivery lead times, as we work through prior shipments and take delivery of new orders. Our working capital balances supply chains have been impacted by inflation certain events, resulting in shortages and extended lead times impacting our operations and profitability. We continue to apply a number of different strategies to mitigate the current year due to rising costs in raw materials impacting both inventory impact of these challenges on our operations, including extending our demand planning, seeking alternative sources, utilizing substitute products and accounts payable as well as higher accounts receivable balances as a result of price realization across leveraging our product portfolio. supplier relationships.

Foreign Currency Exchange Rates

We report our consolidated financial results in U.S. dollars. Due to our international operations, the weakening or strengthening of foreign currencies against the U.S. dollar can affect our reported operating results and our cash flows as we translate our foreign subsidiaries' financial statements from their reporting currencies into U.S. dollars. The exchange rates used to translate our foreign subsidiaries' financial results for the year ended December 31, 2022 compared to the year ended December 31, 2021 reflected, on average, the U.S. dollar strengthened against the Australian dollar, Canadian dollar, and Euro by 8%, 4% and 13%, respectively. See Item 1A - *Risk Factors*- Risks Relating to Our Business and Industry, Item 1A - *Risk Factors*- Exchange rate fluctuations may impact our business, financial condition, and results of operations, and Item 7A - *Quantitative and Qualitative Disclosures About Market Risk*- Exchange Rate Risk.

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Components of our Operating Results

Net Revenues

Our net revenues are a function of sales volumes and selling prices, each of which is a function of product mix, and consist primarily of:

- sales of a wide variety of interior and exterior doors, including patio doors, for use in residential and non-residential applications, with and without frames, to a broad group of wholesale and retail customers in all both of our geographic markets;
- sales of a wide variety of windows for both residential and certain non-residential uses, to a broad group of wholesale and retail customers primarily in North America and Australia; America; and
- other sales, including sales of moldings, trim board, cut-stock, glass, hardware and locks, door skins, shower enclosures, wardrobes, window screens, and miscellaneous installation and other services revenue. services. We also sell molded door skins to certain customers pursuant to long-term contracts, and these customers in turn use the molded door skins to manufacture interior doors and compete directly against us in the marketplace.

Net revenues do not include internal transfers of products between our component manufacturing, product manufacturing and assembly, and distribution facilities.

Cost of Sales

Cost of sales consists primarily of material costs, direct labor and benefit costs, repair and maintenance, depreciation, utility, rent and warranty expenses, outbound freight, insurance and benefits, supervision and tax expenses.

Material Costs. The single largest component of cost of sales is material costs, which include raw materials, components, and finished goods purchased for use in manufacturing our products or for resale. Our most significant material costs include glass, wood, wood composites, wood components, doors, steel, glass, internally produced door facings, door parts, skins, fiberglass compound, hardware, vinyl extrusions, steel, fiberglass, packaging materials, adhesives, resins petroleum-based products such as resin and other chemicals, core material, binders, as well as aluminum and aluminum vinyl extrusions. The cost of each of these items is impacted by global supply and demand trends, both within and outside our industry, as well as commodity price fluctuations, conversion costs, energy costs, and transportation costs. Material costs also include purchased finished goods. We have and may continue to experience inflation in our material costs, including increased costs for inbound freight, due to supply chain challenges as a result of COVID-19 from economic and geopolitical uncertainties, including the ongoing conflict between Ukraine Russia and Russia. Ukraine. The imposition of new tariffs on imports, new trade restrictions, or changes in tariff rates or trade restrictions may further impact material costs. See Item 7A - *Quantitative and Qualitative Disclosures About Market Risk*- Raw Materials Risk.

Direct Labor and Benefit Costs. Direct labor and benefit costs reflect a combination of production hours, average headcount, general wage levels, payroll taxes, and benefits provided to employees. Direct labor and benefit costs include wages, overtime, payroll taxes, and benefits paid to hourly employees at our facilities that are involved in the production and/or distribution of our products. These costs are generally managed by each facility and headcount is adjusted according to overall and seasonal production demand. We run multi-shift operations in many of our facilities to maximize return on assets and utilization. Direct labor and benefit costs fluctuate with headcount, but generally tend to increase with inflation due to increases in wages and health benefit costs.

Repair and Maintenance, Depreciation, Utility, Rent, and Warranty Expenses.

- Repairs and maintenance costs consist of equipment and facility maintenance expenses, purchases of maintenance supplies, and the labor costs involved in performing maintenance on our equipment and facilities.
- Depreciation includes depreciation expense associated with our production assets and plants.
- Rent is predominantly comprised of lease costs for facilities we do not own as well as vehicle fleet and equipment lease costs. Facility leases are typically multi-year and may include increases tied to certain measures of inflation.
- Warranty expenses represent all costs related to servicing warranty claims and product issues and are mostly related to our window and door products sold in the U.S. and Canada.

Outbound Freight. Outbound freight includes payments to third-party carriers for shipments of orders to our customers, as well as driver, vehicle, and fuel expenses when we deliver orders to customers. The majority of our products are shipped by third-party carriers.

Insurance and Benefits, Supervision, and Tax Expenses.

- Insurance and benefit costs are the expenses relating to our insurance programs, health benefits, retirement benefit programs (including the pension plan), and other benefits for employees that are not included in direct labor and benefits costs.

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- Supervision costs are the wages and bonus expenses related to plant managers. Both insurance and benefits and supervision expenses tend to be influenced by headcount and wage levels.

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- Tax costs are mostly payroll taxes for employees not included in direct labor and benefit costs, and property taxes. Tax expenses are impacted by changes in tax rates, headcount and wage levels, and the number and value of properties owned.

In addition, an appropriate portion of each of the insurance and benefits, supervision and tax expenses are allocated to SG&A expenses.

Selling, General, and Administrative Expenses

SG&A expenses consist primarily of research and development, sales and marketing, and general and administrative expenses.

Research and Development. Research and development expenses consist primarily of personnel expenses related to research and development, consulting and contractor expenses, tooling and prototype materials, and overhead costs allocated to such expenses. Substantially all of our research and development expenses are related to developing new products and services and improving our existing products and services. To date, research and development expenses have been expensed as incurred, because the period between achieving technological feasibility and the release of products and services for sale has been short and development costs qualifying for capitalization have been insignificant.

Sales and Marketing. Sales and marketing expenses consist primarily of advertising and marketing promotions of our products and services and related personnel expenses, as well as sales incentives, trade show and event costs, sponsorship costs, consulting and contractor expenses, travel, display expenses, and related amortization. Sales and marketing expenses are generally variable expenses.

General and Administrative. General and administrative expenses consist of personnel expenses for our finance, legal, human resources, and administrative personnel, as well as the costs of professional services, any allocated overhead, information technology, amortization of intangible assets acquired, and other administrative expenses.

Goodwill Impairment

Goodwill impairment consists of goodwill impairment charges associated with our Europe reporting unit. unit in the year ended December 31, 2022. For more information, refer to Note 5 6 - *Goodwill* in of our consolidated financial statements included in this Form 10-K.

Restructuring and Asset Related Charges Net

Restructuring charges, net consist primarily of all salary-related severance benefits that are accrued and expensed when a restructuring plan has been put into place, the plan has received approval from the appropriate level of management and the benefit is probable and reasonably estimable. In addition to salary-related costs, we incur other restructuring costs and adjustments when facilities are closed or capacity is realigned within the organization. Upon termination of an employment or commercial contract we record liabilities and expenses pursuant to the terms of the relevant agreement. For non-contractual restructuring activities, liabilities and expenses are measured and recorded at fair value in the period in which they are incurred. Asset related charges consist of accelerated depreciation and amortization of assets due to changes in asset useful lives.

Interest Expense, Net

Interest expense, net relates primarily to interest payments on our credit facilities and debt securities, as well as commitment fees and amortization of any original issue discount or debt issuance costs. Debt issuance costs are included as an offset to long-term debt in the accompanying consolidated balance sheets and are amortized to interest expense over the life of the related facility using the effective interest method. For additional details, see Note 11 12 - *Long-Term Debt* in of our financial statements for the year ended December 31, 2022 December 31, 2023 included elsewhere in this Form 10-K.

Other Income, Net

Other income, net, includes profit income and losses related to various miscellaneous non-operating expenses primarily relating expenses. For more information, refer to pension benefit income and expenses, governmental assistance, insurance reimbursements, loss on extinguishment Note 22 - *Other Income, Net* of debt, recovery of cost from interest received on impaired notes, gains and losses on sale of business units, property, and equipment, legal settlement income, credit for overpayments of utility expenses, and certain foreign currency related gains and losses, including from our hedging activities used to mitigate foreign exchange impacts. consolidated financial statements included in this Form 10-K.

Income Taxes

Income taxes are recorded using the asset and liability method of accounting for income taxes. Under this method, deferred tax assets and liabilities are recognized for the deferred tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered

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or settled. The effect on deferred tax assets and liabilities due to a change in tax rates is recognized in income in the period that includes the date of enactment. We recognize the effect of income tax positions only if those positions are more likely than not of being sustained. Recognized income tax positions are measured at the largest amount that is greater than 50% likely of being realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs. We record interest related For more information, refer to unrecognized tax benefits in income tax expense. As of December 31, 2022, our U.S. federal, state, and foreign net operating loss ("NOL") carryforwards were $1,449.6 million in the aggregate and $331.1 million of such NOL carryforwards do not expire. For additional details, see Note 13 15 - *Income Taxes* in to our consolidated financial statements for the year ended December 31, 2022 included elsewhere in this Form 10-K.

Significant Developments

In March 2020, the World Health Organization declared the outbreak of COVID-19 a global pandemic. Many of the limitations and mandates on operations have been lifted, however, the scope and nature of impacts from COVID-19, most of which are beyond our control, continue to evolve, and the outcome is uncertain. The ultimate effects of the COVID-19 pandemic on us and the end markets we service, are highly uncertain and will depend on future developments. Such effects could exist for an extended period even after the pandemic ends.

In February 2022, the Russian military commenced an invasion of Ukraine, which is ongoing as of the date of this report. As a result, we have experienced shortages in materials and heightened inflation on materials, freight, and other variable costs, such as utilities, primarily in our European operations.

The impact of the ongoing military conflict between Russia and Ukraine and COVID-19 on the global economy including rising prices of raw materials, freight, energy and other critical inputs due to inflation, supply chain disruptions, and the increase in interest rates including home mortgage rates are unpredictable and there may be developments outside our control that may adversely impact our business, operations, and results.

Results of Operations

The tables in this section summarize key components of our results of operations for the periods indicated, both in U.S. dollars and as a percentage of our net revenues. Certain percentages presented in this section have been rounded to the nearest whole number. Accordingly, totals may not equal the sum of the line items in the tables below.

We present several financial metrics in "Core" terms, such as Core Revenue, which excludes the impact of foreign exchange, acquisitions and divestitures completed in the last twelve months. We believe Core Revenue assists management, investors, and analysts in understanding the organic performance of our operations.

Comparison of the Year Ended December 31, 2023 to the Year Ended December 31, 2022

	Year Ended	
	December 31, 2023	**December 31, 2022**

(amounts in thousands)			% of Net Revenues			% of Net Revenues
Net revenues	$	4,304,334	100.0 %	$	4,543,808	100.0 %
Cost of sales		3,471,713	80.7 %		3,757,888	82.7 %
Gross margin		832,621	19.3 %		785,920	17.3 %
Selling, general and administrative		655,280	15.2 %		654,077	14.4 %
Goodwill impairment		—	— %		54,885	1.2 %
Restructuring and asset related charges		35,741	0.8 %		17,622	0.4 %
Operating income		141,600	3.3 %		59,336	1.3 %
Interest expense, net		72,258	1.7 %		82,505	1.8 %
Loss on extinguishment of debt		6,487	0.2 %		—	— %
Other income, net		(25,719)	(0.6)%		(53,433)	(1.2)%
Income from continuing operations before taxes		88,574	2.1 %		30,264	0.7 %
Income tax expense		63,339	1.5 %		18,041	0.4 %
Income from continuing operations, net of tax		25,235	0.6 %		12,223	0.3 %
Gain on sale of discontinued operations, net of tax		15,699	0.4 %		—	— %
Income from discontinued operations, net of tax		21,511	0.5 %		33,504	0.7 %
Net income	$	62,445	1.5 %	$	45,727	1.0 %

Consolidated Results

Net Revenues – Net revenues decreased $239.5 million, or 5.3%, to $4,304.3 million in the year ended December 31, 2023 from $4,543.8 million in the year ended December 31, 2022. The decrease was driven by a decrease in Core Revenues of 5% and a nominal impact from foreign exchange. Core Revenues decreased 5% due to a 10% decrease in volume/mix, partially offset by a 5% benefit from price realization.

Gross Margin – Gross margin increased $46.7 million, or 5.9%, to $832.6 million in the year ended December 31, 2023 from $785.9 million in the year ended December 31, 2022. Gross margin as a percentage of net revenues was 19.3% in the year ended December 31, 2023 and 17.3% in the year ended December 31, 2022. The increase in gross margin percentage was due primarily to favorable price/cost, partially offset by accelerated depreciation in North America from reviews of equipment capacity optimization.

SG&A Expense – SG&A expense increased $1.2 million, or 0.2%, to $655.3 million in the year ended December 31, 2023 from $654.1 million in the year ended December 31, 2022. SG&A expense as a percentage of net revenues increased to 15.2% in the year ended December 31, 2023 from 14.4% in the year ended December 31, 2022. The increase in SG&A expense was primarily due to increased performance-based variable compensation expenses and accelerated amortization of an ERP system that we intend to not utilize upon completion of the JW Australia Transition Services Agreement period, partially offset by decreased labor expenses driven by a reduction in headcount and lower bad debt expense in our North America segment due to improved collections.

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Goodwill Impairment – Goodwill impairment charges of $54.9 million in the year ended December 31, 2022 relate to goodwill impairment charges in our Europe reporting unit. For further information, refer to Note 6 - *Goodwill* of our consolidated financial statements included in this Form 10-K.

Restructuring and Asset Related Charges – Restructuring and asset related charges of $35.7 million in the year ended December 31, 2023 increased 102.8% from $17.6 million in the year ended December 31, 2022. The increase in restructuring charges was primarily due to an increase in charges incurred to close certain manufacturing facilities in our North America segment. For more information, refer to Note 19 - *Restructuring and Asset Related Charges* of our consolidated financial statements included in this Form 10-K.

Interest Expense, Net – Interest expense, net, decreased $10.2 million, or 12.4%, to $72.3 million in the year ended December 31, 2023 from $82.5 million in the year ended December 31, 2022. The decrease was primarily due to higher interest income from interest rate derivatives, the redemption of our Senior Secured Notes and partial redemption of our Senior Notes, and decreased borrowings on our Revolving Credit Facilities during the year ended December 31, 2023, partially offset by an increase to the cost of borrowing on our variable rate Term Loan Facility.

Loss on Extinguishment of Debt – The $6.5 million loss on extinguishment of debt is related to the redemption of our Senior Secured Notes and partial redemption of our Senior Notes during the year ended December 31, 2023. Refer to Note 12 - *Long-Term Debt* of our consolidated financial statements included in this Form 10-K.

Other Income, Net – Other income, net decreased $27.7 million, or 51.9%, to $25.7 million in the year ended December 31, 2023 from $53.4 million in the year ended December 31, 2022. Other income, net in the year ended December 31, 2023 primarily consisted of recovery of the JW Australia transition services costs incurred of $8.3 million, income from the refund of deposits from antidumping duties of$7.0 million, an ERC from the U.S. government of $6.1 million, recovery of cost from interest received on impaired notes of $3.5 million, and income from short-term investments and forward contracts related to the JW Australia divestiture of $3.1 million, partially offset by pension expense of $6.5

million and a $4.3 million settlement loss associated with our U.S. defined benefit pension plan. Other income, net in the year ended December 31, 2022 primarily consisted of the recovery of cost from interest received on impaired notes of $14.0 million, legal settlement income of $10.5 million, reimbursements from governmental assistance and insurance of $8.0 million, pension income of $4.9 million, credit for overpayments of utility expenses of $2.0 million, and foreign currency gains of $1.0 million.

Income Taxes – Income tax expense was $63.3 million and $18.0 million in the years ended December 31, 2023 and December 31, 2022, respectively. The effective tax rate in the year ended December 31, 2023 was 71.5% compared to 59.6% in the year ended December 31, 2022. The effective tax rate increased primarily due to the impacts of the $32.7 million net valuation allowance recorded in the year ended December 31, 2023, partially offset by the $54.9 million non-deductible goodwill impairment charge recorded for the year ended December 31, 2022 not recorded in the year ended December 31, 2023. For more information, refer to Note 15- *Income Taxes* of our consolidated financial statements included in this Form 10-K.

Gain on Sale of Discontinued Operations, net of tax – The $15.7 million gain on sale of discontinued operations, net of tax is related to the July 2, 2023 sale of JW Australia. Refer to Note 2 - *Discontinued Operations* of our consolidated financial statements included in this Form 10-K.

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Comparison of the Year Ended December 31, 2022 to the Year Ended December 31, 2021

(amounts in thousands)	December 31, 2022	% of Net Revenues	December 31, 2021	% of Net Revenues
Net revenues	$5,129,179	100.0 %	$4,771,719	100.0 %
Cost of sales	4,183,753	81.6 %	3,796,452	79.6 %
Gross margin	945,426	18.4 %	975,267	20.4 %
Selling, general and administrative	766,092	14.9 %	704,892	14.8 %
Goodwill impairment	54,885	1.1 %	—	— %
Restructuring and asset related charges, net	18,233	0.4 %	2,950	0.1 %
Operating income	106,216	2.1 %	267,425	5.6 %
Interest expense, net	82,060	1.6 %	77,566	1.6 %
Other income, net	(54,881)	(1.1) %	(14,503)	(0.3) %
Income before taxes	79,037	1.5 %	204,362	4.3 %
Income tax expense	33,310	0.6 %	35,540	0.7 %

December 31, 2022

December 31, 2022

December 31, 2022

(dollars in thousands)	December 31, 2022		% of Net Revenues	December 31, 2021		% of Net Revenues
Net revenues	$4,543,808	100.0	100.0 %	$ 4,181,690	100.0	100.0 %
Cost of sales	3,757,888	82.7	82.7 %	3,358,773	80.3	80.3 %
Gross margin	785,920	17.3	17.3 %	822,917	19.7	19.7 %
Selling, general and administrative	654,077	14.4	14.4 %	604,514	14.5	14.5 %
Goodwill impairment	54,885	1.2	1.2 %	—	—	— %
Restructuring and asset related charges	17,622		0.4 %	2,556		0.1 %
Operating income	59,336	1.3	1.3 %	215,847	5.2	5.2 %
Interest expense, net	82,505	1.8	1.8 %	76,788	1.8	1.8 %
Other income, net	(53,433)	(1.2)	(1.2)%	(13,241)	(0.3)	(0.3)%
Loss on extinguishment of debt	—		— %	1,342		— %
Income before taxes	30,264	0.7	0.7 %	150,958	3.6	3.6 %
Income tax expense	18,041	0.4	0.4 %	19,636	0.5	0.5 %

Income from continuing operations, net of tax						Income from continuing operations, net of tax	12,223		0.3 %	131,322	3.1 %
Income from discontinued operations, net of tax											
Income from discontinued operations, net of tax											
Income from discontinued operations, net of tax							33,504		0.7 %	37,500	0.9 %
Net income	Net income	$ 45,727	0.9 %	$ 168,822	3.5 %	Net income	$ 45,727	1.0	1.0 %	$ 168,822	4.0	4.0 %

Consolidated Results

Net Revenues – Net revenues increased $357.5 million $362.1 million, or 7.5% 8.7%, to $5,129.2 million $4,543.8 million in the year ended December 31, 2022 from $4,771.7 million $4,181.7 million in the year ended December 31, 2021. The increase was driven by core revenue growth due to an improvement in Core Revenues of 12%, partially offset by a 5% 4% adverse impact from foreign exchange impact. exchange. Core revenues Revenues increased due to a 13% benefit from price realization mostly related to significant cost inflation, partially offset by reductions in and unfavorable volume/mix of 1%.

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Gross Margin – Gross margin decreased $29.8 million $37.0 million, or 3.1% 4.5%, to $945.4 million $785.9 million in the year ended December 31, 2022 from $975.3 million $822.9 million in the year ended December 31, 2021. Gross margin as a percentage of net revenues was 18.4% 17.3% in the year ended December 31, 2022 and 20.4% 19.7% in the year ended December 31, 2021. The decrease in gross margin percentage was due primarily to the timing differences between increased input costs and our pricing actions in our end markets.

SG&A Expense – SG&A expense increased $61.2 million $49.6 million, or 8.7% 8.2%, to $766.1 million $654.1 million in the year ended December 31, 2022 from $704.9 million $604.5 million in the year ended December 31, 2021. SG&A expense as a percentage of net revenues increased decreased to 14.9% 14.4% in the year ended December 31, 2022 from 14.8% 14.5% in the year ended December 31, 2021. The increase in SG&A expense and SG&A as a percentage of net revenues was primarily due to increased variable compensation expenses, self-insurance costs, and sales and marketing expenses, partially offset by decreased legal and professional fees.

Goodwill Impairment – Goodwill impairment charges of $54.9 million in the year ended December 31, 2022 relate to goodwill impairment charges associated with for our Europe reporting unit. For more further information, refer to Note 5 - *Goodwill*in of our consolidated financial statements included in this Form 10-K.

Restructuring and Asset Related Charges Net – Restructuring and asset related charges net, increased $15.3 million $15.1 million, or 518.1% 589.4%, to $18.2 million $17.6 million in the year ended December 31, 2022 from $3.0 million $2.6 million in the year ended December 31, 2021. The increase in restructuring charges is primarily due to strategic transformation initiatives, cost savings, and footprint rationalization activities in our North America and Europe segments as well as changes to the management structure to align with our operations. For more information, refer to Note 19- *Impairment and Asset Related Charges* of our consolidated financial statements included in this Form 10-K.

Interest Expense, Net – Interest expense, net, increased $4.5 million $5.7 million, or 5.8% 7.4%, to $82.1 million $82.5 million in the year ended December 31, 2022 from $77.6 million $76.8 million in the year ended December 31, 2021. The increase was primarily due to an increase to the cost of borrowing on our Term Loan Facility and increased borrowings on the ABL Facility, in the current period, partially offset by interest income from interest rate derivatives in the current period, in the year ended December 31, 2022 and higher interest income earned on cash balances, and the repayment of the term loan portion of the Australia Facility during the second quarter of 2021. balances.

Other Income, Net – Other income, net increased $40.4 million $40.2 million, or 278.4% 303.5%, to $54.9 million $53.4 million in the year ended December 31, 2022 from $14.5 million $13.2 million in the year ended December 31, 2021. Other income, net in the year ended December 31, 2022 primarily

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consisted of the recovery of cost from interest received on impaired notes of $14.0 million, legal settlement income of $10.5 million, a net gain on sale or disposal of property and equipment of $8.1 million, reimbursements from governmental assistance and insurance of $8.0 million, pension income of $4.5 million $4.9 million, foreign currency gains of $2.3 million, and a credit for overpayments of utility expenses of $2.0 million, and foreign currency gains of $1.0 million. Other income, net in the year ended December 31, 2021 primarily consisted of foreign currency gains of $9.9 million $7.1 million and reimbursements from governmental pandemic assistance relating to COVID-19 and insurance of $3.2 million, partially offset by a loss.

Loss on sale or disposal Extinguishment of property and equipment of $2.0 million and a Debt – The $1.3 million loss on extinguishment of debt is related to an amendment of $1.3 million our Term Loan Facility during the year ended December 31, 2021. Refer to Note 12 - *Long-Term Debt* of our consolidated financial statements included in this Form

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Income Taxes – Income tax Tax expense decreased $2.2 million, or 6.3%, to $33.3 million was $18.0 million and $19.6 million in the year years ended December 31, 2022 from $35.5 million in the year ended and December 31, 2021. , respectively. The effective tax rate in the year ended December 31, 2022 was 42.1% 59.6% compared to 17.4% 13.0% in the year ended December 31, 2021. The increase in the effective tax rate in the year ended December 31, 2022 was primarily due to the non-deductible goodwill impairment charge of $54.9 million. The decrease in tax expense of $2.2 million in the current period was primarily due to a decrease in income before taxes, partially offset by the mix of income earned between jurisdictions in which the Company does business. For more information, refer to Note 13 15 - *Income Taxes* in of our consolidated financial statements included in this 10-K.

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Comparison of the Year Ended December 31, 2021 to the Year Ended December 31, 2020

	December 31, 2021		December 31, 2020	
(dollars in thousands)		% of Net Revenues		% of Net Revenues
Net revenues	$ 4,771,719	100.0 %	$ 4,235,677	100.0 %
Cost of sales	3,796,452	79.6 %	3,333,770	78.7 %
Gross margin	975,267	20.4 %	901,907	21.3 %
Selling, general and administrative	704,892	14.8 %	702,715	16.6 %
Restructuring and asset related charges, net	2,950	0.1 %	10,469	0.2 %
Operating income	267,425	5.6 %	188,723	4.5 %
Interest expense, net	77,566	1.6 %	74,800	1.8 %
Other income, net	(14,503)	(0.3)%	(2,752)	(0.1)%
Income before taxes	204,362	4.3 %	116,675	2.8 %
Income tax expense	35,540	0.7 %	25,089	0.6 %
Net income	$ 168,822	3.5 %	$ 91,586	2.2 %

Consolidated Results

Net Revenues – Net revenues increased $536.0 million, or 12.7%, to $4,771.7 million in the year ended December 31, 2021 from $4,235.7 million in the year ended December 31, 2020. The increase was due to an improvement in core revenues of 10% and a positive impact from foreign exchange of 3%. Core revenues increased due to a 7% benefit from price realization and favorable volume/mix of 3%.

Gross Margin – Gross margin increased $73.4 million, or 8.1%, to $975.3 million in the year ended December 31, 2021 from $901.9 million in the year ended December 31, 2020. Gross margin as a percentage of net revenues was 20.4% in the year ended December 31, 2021 and 21.3% in the year ended December 31, 2020. The decrease in gross margin percentage was primarily due to the impact of inflation on material costs, freight, and labor compensation in the current period, partially offset by improved pricing, positive manufacturing variances, and favorable volume/mix.

SG&A Expense – SG&A expense increased $2.2 million, or 0.3%, to $704.9 million in the year ended December 31, 2021 from $702.7 million in the year ended December 31, 2020. The increase in SG&A expense was primarily due to the non-recurrence of certain savings from cost reduction measures implemented in 2020 in response to COVID-19, primarily related to salary and benefits, and the impact of inflation on compensation in the current period, partially offset by reduced variable compensation and litigation related expenses.

Restructuring and Asset Related Charges, Net – Restructuring and asset related charges, net decreased $7.5 million, or 71.8%, to $3.0 million in the year ended December 31, 2021 from $10.5 million in the year ended December 31, 2020. Charges incurred in 2021 primarily relate to ongoing restructuring projects within our Europe segment and asset related charges in North America. Charges incurred in 2020 primarily related to severance charges for ongoing restructuring projects across all segments as well as asset related charges primarily related to accelerated amortization of capitalized costs of certain ERP modules due to delays in implementation and uncertainty of their future use. For more information, refer to Note 19 - *Impairment and Asset Related Charges, Net* to our consolidated financial statements included in this 10-K.

Interest Expense, Net – Interest expense, net, increased $2.8 million, or 3.7%, to $77.6 million in the year ended December 31, 2021 from $74.8 million in the year ended December 31, 2020. The increase was primarily due to interest on our Senior Secured Notes issued in May 2020, partially offset by lower interest rates throughout 2021.

Other Income, Net – Other income, net increased $11.8 million, or 427.0%, to $14.5 million in the year ended December 31, 2021 from $2.8 million in the year ended December 31, 2020. Other income, net in the year ended December 31, 2021 primarily consisted of foreign currency gains of $9.9 million and reimbursements from governmental pandemic assistance relating to COVID-19 and insurance of $3.2 million, partially offset by a loss on sale or disposal of property and equipment of $2.0 million and a loss on extinguishment of debt of $1.3 million. Other income, net in the year ended December 31, 2020 primarily consisted of foreign currency losses of $11.9 million and pension expense of $1.6 million, offset by reimbursements from governmental pandemic assistance relating to COVID-19 of $7.4 million, a gain on sale of property and equipment of $4.1 million, and insurance reimbursements of $1.4 million.

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Income Taxes – Income tax expense increased $10.5 million, or 41.7%, to $35.5 million in the year ended December 31, 2021 from $25.1 million in the year ended December 31, 2020. The effective tax rate in the year ended December 31, 2021 was 17.4% compared to 21.5% in the year ended December 31, 2020. The increase in income tax expense in the year ended December 31, 2021 was primarily due to an increase in income before taxes of $87.7 million, partially offset by a tax benefit from tax credits and GILTI HTE as well as a partial release of U.S. state valuation allowances.For more information, refer to Note 13 - *Income Taxes* to our consolidated financial statements included in this Form 10-K.

Segment Results

We report our segment information in the same way management internally organizes the business in assessing performance and making decisions regarding allocation of resources in accordance with ASC 280-10 - *Segment Reporting*. We define Adjusted EBITDA from continuing operations as income (loss) from continuing operations, net of tax, adjusted for the following items: income tax expense (benefit); depreciation and amortization; interest expense, net; and certain special items consisting of non-recurring net legal and professional expenses and settlements; goodwill impairment; restructuring and asset related charges; other facility closure, consolidation, and related costs and adjustments; M&A related costs; net (gain) loss on sale of property and equipment; loss on extinguishment of debt; share-based compensation expense; pension settlement charges; non-cash foreign exchange transaction/translation (income) loss; and other special items. This non-GAAP financial measure should be viewed in addition to, and not as a substitute for, the Company's reported results prepared in accordance with GAAP.

We have three two reportable segments in our continuing operations, organized and managed principally by geographic region. Our reportable segments are region: North America Europe, and Australasia. Europe. We report all other business activities in Corporate and unallocated costs.We define Adjusted EBITDA as net income (loss), adjusted for the following items: (income) loss from discontinued operations, net of tax; income tax (benefit) expense; depreciation and amortization; interest expense, net; restructuring and asset related charges, net; net (gain) loss on sale of property and equipment; share-based compensation expense; non-cash foreign exchange transaction/translation (income) loss; and other items.

Reconciliations of net income to Adjusted EBITDA from continuing operations for our segments' operations are as follows:

	Year Ended December 31, 2022					
(amounts in thousands)	North America	Europe	Australasia	Total Operating Segments	Corporate and Unallocated Costs	Total Consolidated
Net income (loss)	$ 260,590	$ (50,796)	$ 25,355	$ 235,149	$ (189,422)	$ 45,727
Income tax expense(1)	6,963	3,307	12,363	22,633	10,677	33,310
Depreciation and amortization	69,427	31,139	18,622	119,188	12,566	131,754
Interest expense, net	4,011	6,193	3,130	13,334	68,726	82,060
Goodwill impairment	—	54,885	—	54,885	—	54,885
Restructuring and asset related charges, net	7,338	6,042	611	13,991	4,242	18,233
Net (gain) loss on sale of property and equipment	(8,397)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Share-based compensation expense	4,870	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Non-cash foreign exchange transaction/translation loss	148	876	1,024	2,048	12,500	14,548
Other items(2)	7,935	19,596	2,899	30,430	3,098	33,528
Adjusted EBITDA	$ 352,885	$ 74,325	$ 65,574	$ 492,784	$ (70,628)	$ 422,156

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	Year Ended December 31, 2023				
(amounts in thousands)	North America	Europe	Total Operating Segments	Corporate and Unallocated Costs	Total Consolidated
Income (loss) from continuing operations, net of tax	$ [illegible]	$ [illegible]	$ [illegible]	$ [illegible]	$ [illegible]
Income tax expense (benefit)(1)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Depreciation and amortization(2)	79,900	30,185	110,085	24,911	134,996
Interest expense, net	4,713	3,224	7,937	64,321	72,258
Special items:(3)					
Net legal and professional expenses and settlements	946	3,726	4,672	23,512	28,184
Restructuring and asset-related charges	29,207	5,738	34,945	796	35,741
Other facility closure, consolidation, and related costs and adjustments	(5)	2,242	2,237	—	2,237
M&A related costs	759	—	759	5,816	6,575
Net loss (gain) on sale of property and equipment	1,223	(5,101)	(3,878)	(6,645)	(10,523)
Loss on extinguishment of debt	—	—	—	6,487	6,487
Share-based compensation expense	5,121	1,890	7,011	10,466	17,477
Pension settlement charge	4,349	—	4,349	—	4,349
Non-cash foreign exchange transaction/translation (income) loss	(261)	1,628	1,367	(772)	595
Other special items	1,047	(2,837)	(1,790)	(4,721)	(6,511)
Adjusted EBITDA from continuing operations	$ 382,189	$ 81,455	$ 463,644	$ (83,205)	$ 380,439

(1) Income tax expense in our Europe segment includes an increase in valuation allowance against net operating loss carryforwards of $30.0 million. Refer to Note 15 - *Income Taxes* of our consolidated financial statements for further information.

(2) North America depreciation and amortization expense includes accelerated depreciation of $9.1 million from reviews of equipment capacity optimization. Corporate and unallocated depreciation and amortization expense includes software accelerated amortization of $14.1 million for an ERP system that we intend to not utilize upon completion of the JW Australia Transition Services Agreement period.

(3) For the definitions of the Special items listed above, refer to Note 14 - *Segment Information* of our consolidated financial statements included in this Form 10-K.

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	Year Ended December 31, 2022				
(amounts in thousands)	North America	Europe	Total Operating Segments	Corporate and Unallocated Costs	Total Consolidated
Income (loss) from continuing operations, net of tax	$ 260,590	$ (50,796)	$ 209,794	$ (197,571)	$ 12,223
Income tax expense(1)	6,963	3,307	10,270	7,771	18,041
Depreciation and amortization	69,427	31,139	100,566	12,566	113,132
Interest expense, net	4,011	6,193	10,204	72,301	82,505
Special items:(2)					
Net legal and professional expenses and settlements	12	1,674	1,686	(1,973)	(287)
Goodwill impairment	—	54,885	54,885	—	54,885
Restructuring and asset-related charges	7,338	6,042	13,380	4,242	17,622
Other facility closure, consolidation, and related costs and adjustments	2,587	16,304	18,891	—	18,891
M&A related costs	736	—	736	9,016	9,752
Net (gain) loss on sale of property and equipment	(8,397)	354	(8,043)	7	(8,036)
Share-based compensation expense	4,870	2,729	7,599	6,978	14,577
Non-cash foreign exchange transaction/translation loss	148	876	1,024	11,413	12,437
Other special items	4,600	1,618	6,218	(3,113)	3,105
Adjusted EBITDA from continuing operations	$ 352,885	$ 74,325	$ 427,210	$ (78,363)	$ 348,847

(1) Income tax expense in Corporate and unallocated costs includes the tax impact of US U.S. Operations.

(2) Other non-recurring For the definitions of the Special items not core listed above, refer to ongoing business activity for the year ended December 31, 2022 Note 14 - *Segment Information* of our financial statements included in this Form 10-K.

	Year Ended December 31, 2021				
(amounts in thousands)	North America	Europe	Total Operating Segments	Corporate and Unallocated Costs	Total Consolidated
Income (loss) from continuing operations, net of tax	$ 255,975	$ 66,596	$ 322,571	$ (191,249)	$ 131,322
Income tax expense (benefit)(1)	5,704	16,980	22,684	(3,048)	19,636
Depreciation and amortization	72,095	32,855	104,950	11,405	116,355
Interest expense, net	6,080	9,282	15,362	61,426	76,788
Special items:(2)					
Net legal and professional expenses and settlements	1,450	563	2,013	13,585	15,598
Restructuring and asset-related charges, net	1,200	1,453	2,653	(97)	2,556
Other facility closure, consolidation, and related costs and adjustments	—	2,326	2,326	—	2,326
M&A related costs	664	375	1,039	4,167	5,206
Net loss (gain) on sale of property and equipment	1,589	584	2,173	(87)	2,086
Loss on extinguishment of debt	—			1,342	1,342
Share-based compensation expense	5,472	2,096	7,568	12,420	19,988

Non-cash foreign exchange transaction/translation gain	(51)	(10,108)	(10,159)	(262)	(10,421)
Other special items	2,703	4,290	6,993	2,999	9,992
Adjusted EBITDA from continuing operations	$ 352,881	$ 127,292	$ 480,173	$ (87,399)	$ 392,774

(1) is primarily driven by $16,304 of facility closure, consolidation, and other related costs and adjustments Income tax benefit in our European segment; as well as Corporate and unallocated costs includes the tax impact of $8,784 U.S. Operations.

(2) For the definitions of the Special items listed above, refer to Note 14 - *Segment Information* of our financial statements included in net legal and professional expenses and settlements, primarily relating to litigation, M&A evaluations, and strategic transformation initiatives, including $(10,500) of income resulting from a legal settlement, and $2,929 relating primarily to exit costs for executives. this Form 10-K.

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	Year Ended December 31, 2021					
(amounts in thousands)	North America	Europe	Australasia	Total Operating Segments	Corporate and Unallocated Costs	Total Consolidated
Net income (loss)	$ 255,975	$ 66,596	$ 32,163	$ 354,734	$ (185,912)	$ 168,822
Income tax expense (benefit)(1)	5,704	16,980	14,011	36,695	(1,155)	35,540
Depreciation and amortization	72,095	32,855	20,892	125,842	11,405	137,247
Interest expense, net	6,080	9,282	4,060	19,422	58,144	77,566
Restructuring and asset related charges, net	1,200	1,453	394	3,047	(97)	2,950
Net loss (gain) on sale of property and equipment	1,589	584	(37)	2,136	(87)	2,049
Share-based compensation expense	5,472	2,096	221	7,789	12,420	20,209
Non-cash foreign exchange transaction/translation (income)	(51)	(10,108)	(585)	(10,744)	(3,025)	(13,769)
Other items(2)	4,817	7,554	329	12,700	21,765	34,465
Adjusted EBITDA	$ 352,881	$ 127,292	$ 71,448	$ 551,621	$ (86,542)	$ 465,079

Comparison of the Year Ended December 31, 2023 to the Year Ended December 31, 2022

	Year Ended		
(amounts in thousands)	December 31, 2023	December 31, 2022	
Net revenues from external customers			**% Variance**
North America	$ 3,123,056	$ 3,259,353	(4.2) %
Europe	1,181,278	1,284,455	(8.0) %
Total Consolidated	$ 4,304,334	$ 4,543,808	(5.3) %
Percentage of total consolidated net revenues			
North America	72.6 %	71.7 %	
Europe	27.4 %	28.3 %	
Total Consolidated	100.0 %	100.0 %	
Adjusted EBITDA from continuing operations (1)			
North America	$ 382,189	$ 352,885	8.3 %
Europe	81,455	74,325	9.6 %
Corporate and unallocated costs	(83,205)	(78,363)	6.2 %
Total Consolidated	$ 380,439	$ 348,847	9.1 %
Adjusted EBITDA from continuing operations as a percentage of segment net revenues			
North America	12.2 %	10.8 %	
Europe	6.9 %	5.8 %	
Total Consolidated	8.8 %	7.7 %	

(1) Income tax Adjusted EBITDA from continuing operations is a financial measure that is not calculated in accordance with GAAP. For a discussion of our presentation of Adjusted EBITDA from continuing operations, see Note 14 - *Segment Information* of our financial statements included in this Form 10-K.

North America

Net revenues in North America decreased $136.3 million, or 4.2%, to $3,123.1 million in the year ended December 31, 2023 from $3,259.4 million in the year ended December 31, 2022. The decrease was primarily due to a decrease in Core Revenues of 4.0%. Core Revenues decreased due to an 8% unfavorable volume/mix driven by weakened market demand, partially offset by a 4% benefit from price realization.

Adjusted EBITDA from continuing operations in North America increased $29.3 million to $382.2 million, or 8.3%, in the year ended December 31, 2023 from $352.9 million in the year ended December 31, 2022. The increase was primarily due to favorable price/cost and positive productivity, partially offset by unfavorable volume/mix and higher SG&A. The increase in SG&A was primarily driven by increased performance-based variable compensation and the impact of inflation on labor expenses, partially offset by a reduction in bad debt expense (benefit) due to improved collections. Additionally, a decrease in other income, net, was primarily driven by net pension expense in the current period compared to gains in the same period last year, partially offset by income recognized for a refund of deposits for antidumping duties and an ERC during the year ended December 31, 2023.

Europe

Net revenues in Europe decreased $103.2 million, or 8.0%, to $1,181.3 million in the year ended December 31, 2023 from $1,284.5 million in the year ended December 31, 2022. The decrease was primarily due to a decrease in Core Revenues of 9%. Core Revenues decreased due to unfavorable volume/mix of 15% primarily due to market softness across the region, partially offset by a 7% benefit from price realization.

Adjusted EBITDA from continuing operations in Europe increased $7.1 million, or 9.6%, to $81.5 million in the year ended December 31, 2023 from $74.3 million in the year ended December 31, 2022. The increase was primarily due to favorable productivity and positive price/cost, partially offset by unfavorable volume/mix.

Corporate and unallocated costs

Corporate and unallocated costs includes the tax impact of US Operations.

(2) Other non-recurring items not core increased by $4.8 million, or 6.2%, to ongoing business activity for $83.2 million in the year ended December 31, 2021 is primarily driven by Corporate and unallocated costs of $17,752 December 31, 2023, from $78.4 million in legal and professional expenses relating primarily to litigation.

	Year Ended December 31, 2020					
(amounts in thousands)	North America	Europe	Australasia	Total Operating Segments	Corporate and Unallocated Costs	Total Consolidated
Net income (loss)	$ 217,407	$ 66,403	$ 21,954	$ 305,764	$ (214,178)	$ 91,586
Income tax expense (benefit)(1)	4,284	13,817	11,420	29,521	(4,432)	25,089
Depreciation and amortization	77,361	29,712	19,341	126,414	8,209	134,623
Interest expense, net	5,377	9,451	5,515	20,343	54,457	74,800
Restructuring and asset related charges, net	3,164	3,682	320	7,166	3,303	10,469
Net (gain) loss on sale of property and equipment	(4,102)	(164)	45	(4,221)	68	(4,153)
Share-based compensation expense	4,836	1,201	1,978	8,015	8,384	16,399
Non-cash foreign exchange transaction/translation (income) loss	(39)	9,499	1,245	10,705	2,199	12,904
Other items(2)	7,664	2,762	631	11,057	73,640	84,697
Adjusted EBITDA	$ 315,952	$ 136,363	$ 62,449	$ 514,764	$ (68,350)	$ 446,414

(1) Income tax expense in Corporate and unallocated costs includes the tax impact of US Operations.

(2) Other non-recurring items not core to ongoing business activity for the year ended December 31, 2020December 31, 2022. The increase in cost is primarily driven due to losses on foreign exchange transactions in the current period compared to gains in the same period last year, and a reduction in the recovery of cost from interest received on impaired notes, partially offset by Corporate and allocated lower labor costs of $66,565 in legal and professional expenses relating primarily due to litigation and $6,700 in environmental matters.

reduced headcount.

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Comparison of the Year Ended December 31, 2022 to the Year Ended December 31, 2021

	Year Ended	
(amounts in thousands)	December 31, 2022	December 31, 2021
(dollars in thousands)		
Net revenues from external customers		

Net revenues from external customers

Net revenues from external customers	**Net revenues from external customers**			**% Variance**	
North America	North America	$3,259,353	$2,829,240	15.2	%
Europe	Europe	1,284,455	1,352,450	(5.0)	%
Australasia		585,371	590,029	(0.8)	%
Total Consolidated	Total Consolidated	$5,129,179	$4,771,719	7.5	%
Percentage of total consolidated net revenues	**Percentage of total consolidated net revenues**				
North America	North America	63.5 %	59.3 %		
Europe		25.0 %	28.3 %		
Australasia		11.5 %	12.4 %		
Total Consolidated		100.0 %	100.0 %		
Adjusted EBITDA					
North America					
North America	North America	$ 352,885	$ 352,881	—	%
Europe	Europe	74,325	127,292	(41.6)	%
Australasia		65,574	71,448	(8.2)	%
Corporate and unallocated costs		(70,628)	(86,542)	(18.4)	%
Europe					
Europe					
Total Consolidated	Total Consolidated	$ 422,156	$ 465,079	(9.2)	%
Adjusted EBITDA as a percentage of segment net revenues					
Total Consolidated					
Total Consolidated					
Adjusted EBITDA from continuing operations (1)					
Adjusted EBITDA from continuing operations (1)					
Adjusted EBITDA from continuing operations (1)					
North America					
North America					
North America	North America	10.8 %	12.5 %		
Europe	Europe	5.8 %	9.4 %		
Australasia		11.2 %	12.1 %		
Corporate and Unallocated costs					
Total Consolidated	Total Consolidated	8.2 %	9.7 %		

North America	$3,259,353	$	$2,829,240	15.2		15.2
Europe	1,284,455	1,352,450	1,352,450	(5.0)		(5
Total Consolidated	$4,543,808	$	$4,181,690	8.7		8.7

	$352,885	$	$352,881	—	—	%
Europe	74,325	127,292	127,292	(41.6)		(41
Corporate and Unallocated costs	(78,363)		(87,399)		(10.3)	%
Total Consolidated	$ 348,847	$	$ 392,774	(11.2)		(11.2)

Adjusted EBITDA from continuing operations as a percentage of segment net revenues	
North America	
North America	
North America	
Europe	
Europe	
Europe	
Total Consolidated	
Total Consolidated	
Total Consolidated	

(1) Adjusted EBITDA from continuing operations is a financial measure that is not calculated in accordance with GAAP. For a discussion of our presentation of Adjusted EBITDA from continuing operations, see Note 14 - *Segment Information*to our financial statements included in this Form 10-K.

North America

Net revenues in North America increased $430.1 million, or 15.2%, to $3,259.4 million in the year ended December 31, 2022 from $2,829.2 million in the year ended December 31, 2021. The increase was primarily due to an increase in core revenues Core Revenues of 15%. Core revenues Revenues increased due to a 14% benefit from price realization mostly related to significant cost inflation, and positive volume/mix of 1%.

Adjusted EBITDA in North America remained relatively consistent at $352.9 million in the year ended December 31, 2022 and from $352.9 million in the year ended December 31, 2021, respectively. . While Adjusted EBITDA increased slightly primarily driven by improved volume/mix and productivity, the increase was offset by higher SG&A expenses.

Europe

Net revenues in Europe decreased $68.0 million, or 5.0%, to $1,284.5 million in the year ended December 31, 2022 from $1,352.5 million in the year ended December 31, 2021. The decrease was primarily due to a 12% adverse impact from foreign exchange, partially offset by an increase in core revenue Core Revenues of 7%. Core revenues Revenues increased due to an a 11% benefit from price realization mostly related to significant cost inflation, partially offset by lower volume/mix of 4%.

Adjusted EBITDA in Europe decreased $53.0 million, or 41.6%, to $74.3 million in the year ended December 31, 2022 from $127.3 million in the year ended December 31, 2021. The decrease was primarily due to lower volume/mix, higher SG&A expenses, and negative price/cost, partially offset by improved productivity.

Australasia

Net revenues in Australasia decreased $4.7 million, or 0.8%, to $585.4 million in the year ended December 31, 2022 from $590.0 million in the year ended December 31, 2021. The decrease was primarily due to a negative impact from foreign exchange of 8%, partially offset by an increase in core revenues of 7%. Core revenues increased due to an 8% benefit from price realization mostly related to significant cost inflation, partially offset by reduced volume/mix of 1%.

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Adjusted EBITDA in Australasia decreased $5.9 million, or 8.2%, to $65.6 million in the year ended December 31, 2022 from $71.4 million in the year ended December 31, 2021. The decrease was primarily due to higher SG&A expenses and unfavorable volume/mix, partially offset by favorable price/cost.

Corporate and unallocated costs

Corporate and unallocated costs decreased in the year ended December 31, 2022 by $15.9 million $9.0 million, or 18.4% 10.3%, compared to the year ended December 31, 2021 primarily due to the recovery of cost from interest received on impaired notes, a gain on foreign exchange transactions, reduced legal and professional fees, and insurance recoveries, partially offset by increased variable compensation and self-insurance costs in the current period.

Comparison of the Year Ended December 31, 2021 to the Year Ended December 31, 2020

(dollars in thousands)	December 31, 2021	December 31, 2020	% Variance
Net revenues from external customers			
North America	$ 2,829,240	$ 2,528,993	11.9 %
Europe	1,352,450	1,187,777	13.9 %
Australasia	590,029	518,907	13.7 %
Total Consolidated	$ 4,771,719	$ 4,235,677	12.7 %

Percentage of total consolidated net revenues			
North America	59.3 %	59.7 %	
Europe	28.3 %	28.0 %	
Australasia	12.4 %	12.3 %	
Total Consolidated	100.0 %	100.0 %	
Adjusted EBITDA(1)			
North America	$ 352,881	$ 315,952	11.7 %
Europe	127,292	136,363	(6.7)%
Australasia	71,448	62,449	14.4 %
Corporate and Unallocated costs	(86,542)	(68,350)	26.6 %
Total Consolidated	$ 465,079	$ 446,414	4.2 %
Adjusted EBITDA as a percentage of segment net revenues			
North America	12.5 %	12.5 %	
Europe	9.4 %	11.5 %	
Australasia	12.1 %	12.0 %	
Total Consolidated	9.7 %	10.5 %	

(1) Adjusted EBITDA is a financial measure that is not calculated in accordance with GAAP. For a discussion of our presentation of Adjusted EBITDA, see Note 14 - *Segment Information* in our consolidated financial statements.

North America

Net revenues in North America increased $300.2 million, or 11.9%, to $2,829.2 million in the year ended December 31, 2021 from $2,529.0 million in the year ended December 31, 2020. The increase was primarily due to an increase in core revenues of 12%. Core revenues increased due to a 10% benefit from price realization and favorable volume/mix of 2%.

Adjusted EBITDA in North America increased $36.9 million, or 11.7%, to $352.9 million in the year ended December 31, 2021 from $316.0 million in the year ended December 31, 2020. The increase was due to favorable pricing, volume growth, and positive manufacturing variances, partially offset by the impact of inflation on material costs, freight, and labor compensation.

Europe

Net revenues in Europe increased $164.7 million, or 13.9%, to $1,352.5 million in the year ended December 31, 2021 from $1,187.8 million in the year ended December 31, 2020. The increase was primarily due to an increase in core revenue of 9% and a positive impact from foreign exchange of 5%. Core revenues increased due to a 5% benefit from price realization and favorable volume/mix of 4%.

Adjusted EBITDA in Europe decreased $9.1 million, or 6.7%, to $127.3 million in the year ended December 31, 2021 from $136.4 million in the year ended December 31, 2020. The decrease was primarily due to the impact of inflation on material costs, freight, and labor compensation in the current period, partially offset by favorable pricing and positive manufacturing variances. periods.

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Australasia

Net revenues in Australasia increased $71.1 million, or 13.7%, to $590.0 million in the year ended December 31, 2021 from $518.9 million in the year ended December 31, 2020. The increase was primarily due to a positive impact from foreign exchange of 9% and an increase in core revenues of 5%. Core revenues increased due to favorable volume/mix of 3% and 2% benefit from price realization.

Adjusted EBITDA in Australasia increased $9.0 million, or 14.4%, to $71.4 million in the year ended December 31, 2021 from $62.4 million in the year ended December 31, 2020. The increase was primarily due to improved volume/mix and positive manufacturing variances, partially offset by the impact of inflation on material costs.

Corporate and unallocated costs

Corporate and unallocated costs increased in the year ended December 31, 2021 by $18.2 million, or 26.6%, compared to the year ended December 31, 2020 primarily due to the non-recurrence of certain savings from cost reduction measures implemented in 2020 in response to COVID-19, primarily related to salary and benefits, and the impact of inflation as well as increased health benefit costs and software related expenditures, partially offset by reduced variable compensation expenses.

Liquidity and Capital Resources

Overview

We have historically funded our operations through a combination of cash from operations, draws on our revolving credit facilities, and the issuance of non-revolving debt such as our Term Loan Facility and our Senior Notes, and Senior Secured Notes. We place a strong emphasis on cash flow generation, which includes an operating discipline focused on working capital management. Working capital fluctuates throughout the year and is impacted by inflation, the seasonality of our sales, customer payment patterns, supply availability, and the translation of the balance sheets of our foreign operations into the U.S. dollar. Typically, working capital increases at the end of the first quarter and beginning of the second quarter in conjunction with, and in preparation for, the peak season for home construction and remodeling in our North America and Europe segments, which represent the substantial majority of our revenues, and decreases starting in the fourth quarter as inventory levels and accounts receivable decline. Inventories fluctuate for raw materials with that have long delivery lead times, such as steel, as we work through prior shipments and take delivery of new orders.

As of December 31, 2022 December 31, 2023, we had total liquidity (a non-GAAP measure) of $645.5 million $750.6 million, consisting of $219.4 million $288.3 million in unrestricted cash, $410.7 million $462.3 million available for borrowing under the ABL Facility, and AUD 22.8 million ($15.4 million) available for borrowing under the Australia Senior Secured Credit Facility, compared to total liquidity of $837.8 million $575.2 million as of December 31, 2021 December 31, 2022 (on a continuing operations basis and excluding JW Australia). The decrease increase in total liquidity was primarily due to both lower higher cash balances and lower availability borrowings on our ABL Facility at December 31, 2022 December 31, 2023 compared to December 31, 2021 December 31, 2022. The main drivers to our lower cash balances are decreased earnings, higher working capital balances, and share repurchases, partially offset by the non-recurrence of legal settlements paid in 2021. The reduced ABL Facility availability is driven by increased borrowings in the current period compared to the prior year end.

As of December 31, 2022 December 31, 2023, our cash balances, including $1.5 million $0.8 million of restricted cash, consisted of $13.5 million $72.9 million in the U.S. and $207.4 million $216.3 million in non-U.S. subsidiaries. During the fiscal year ended December 31, 2022, the Company The company repatriated $21.8 million and $132.8 million from non-U.S. subsidiaries during the year ended December 31, 2023 and repaid December 31, 2022, respectively. The Company utilized cash repatriated from non-U.S. subsidiaries to repay a portion of the outstanding ABL Facility. Facility during the year ended December 31, 2022. Based on our current and forecasted level of operations the and seasonality of our business, and anticipated growth, we believe that cash provided by operations and other sources of liquidity, including cash, cash equivalents, and availability under our revolving credit facilities, will provide adequate liquidity for ongoing operations, planned capital expenditures and other investments, and debt service requirements for at least the next twelve months.

We may, from time to time, refinance, reprice, extend, retire, or otherwise modify our outstanding debt to lower our interest payments, reduce our debt, or otherwise improve our financial position. These actions may include repricing amendments, extensions, and/or opportunistic refinancing of debt. The amount of debt that may be refinanced, repriced, extended, retired, or otherwise modified, if any, will depend on market conditions, trading levels of our debt, our cash position, compliance with debt covenants, and other considerations.

We may, from time to time, seek to retire or purchase our outstanding debt through cash purchases and/or exchanges for equity or debt, in open market purchases, privately negotiated transactions or otherwise. Such repurchases or exchanges, if any, will be on such terms and at such prices as we may determine, and will depend on prevailing market conditions, our liquidity requirements, contractual restrictions and other factors. The amounts involved may be material.

Based on hypothetical variable rate debt that would have resulted from drawing each revolving credit facility up to the full commitment amount, a 1.0% 100 basis point decrease in interest rates would have reduced our interest expense by $7.2 million $10.8 million in the year ended December 31, 2022 December 31, 2023. A 1.0% 100 basis point increase in interest rates would have increased our interest expense by $7.3 million $10.8 million in the same period. The In certain instances, the impact of a hypothetical decrease would have been partially mitigated by interest rate floors that apply to certain of our debt agreements.

Contractual Obligations

In addition to our discussion and analysis surrounding our liquidity and capital resources, we have significant contractual obligations and commitments as of December 31, 2022 December 31, 2023 relating to the following:

- Long-term debt and interest obligations – As of December 31, 2022 December 31, 2023 our outstanding debt balance was $1,759.2 million $1,232.8 million. See Note 11 - 12- *Long-Term Debt* to of our consolidated financial statements for additional details regarding the timing of

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expected future principal payments. Interest on long-term debt is calculated based on debt outstanding and interest rates in effect on December 31, 2022 December 31, 2023, taking into account scheduled maturities and amortization payments. As of December 31, 2022 December 31, 2023, we estimate interest payments of $81.1 million due in 2023 and $315.9 million $72.9 million due in 2024 and $179.6 million due in 2025 and thereafter.

- Finance and operating lease obligations – As of December 31, 2022 December 31, 2023, our remaining contractual commitments for finance and operating leases was $212.2 million. $192.7 million. See Note 7 8 - *Leases* to of our consolidated financial statements for additional details regarding the timing of expected future payments payments.
- Purchase obligations – As of December 31, 2022 December 31, 2023, we have purchase obligations of $29.2 million $26.7 million due in 2023 2024 and $14.4 million $28.1 million due in 2024 2025 and thereafter. These purchase obligations are primarily relating to software hosting services and in-bound freight. equipment purchase agreements. Purchase obligations are defined as purchase agreements that are enforceable and legally binding and that specify all significant terms, including quantity, price, and the approximate timing of the transaction.

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Borrowings and Refinancings

In December 2021, we amended our Australia Senior Secured Credit Facility resulting in reduced borrowing fees and reinstated maintenance financial covenant ratios to pre-pandemic thresholds.

In July 2021, we refinanced our existing Term Loan Facility and ABL Facility by issuing replacement loans that aggregated to $550.0 million in principal amount under the Term Loan Facility and added $100.0 million in potential additional revolving loan capacity to our ABL Facility.

In June 2023, we amended the fourth quarter Term Loan Facility to replace LIBOR with a Term SOFR based rate as the successor benchmark rate and made certain other technical amendments and related conforming changes. All other material terms and conditions were unchanged.

On August 3, 2023, we redeemed all $250.0 million of 2020, we began to include the eligible accounts receivable and inventory balances of certain recently acquired U.S. businesses in determining our borrowing base on our U.S. ABL Facility, which increased our availability.

In May 2020, we issued $250.0 million of 6.25% Senior Secured Notes and $200.0 million of our 4.63% Senior Notes. The Company recognized a pre-tax loss of $6.5 million on the proceeds redemption in year ended December 31, 2023, consisting of which were used to repay the outstanding balance under our ABL Facility, with the remainder to be used for general corporate purposes. $3.9 million in call premium and $2.6 million in accelerated amortization of debt issuance costs.

In addition, January 2024, we amended our Australia Senior Credit the Term Loan Facility to add AUD 30.0 million lower the applicable margin for replacement term loans, remove certain provisions no longer relevant to the parties, and make certain other technical amendments related to related conforming changes. Pursuant to the amendment, replacement term loans bear interest at SOFR plus a margin of additional revolving loan capacity. This supplemental facility matured 1.75% to 2.00% depending on June 30, 2021 JWI's corporate credit ratings, compared to a margin of 2.00% to 2.25% under the previous amendment. All other material terms and was not renewed. conditions of the Term Loan Agreement were unchanged.

As of December 31, 2022 December 31, 2023, we were in compliance with the terms of all of our Credit Facilities and the indentures governing the Senior Notes and Senior Secured Notes.

Our results have been and will continue to be impacted by substantial changes in our net interest expense throughout the periods presented and into the future. See Note 11 12 - *Long-Term Debt* to of our consolidated financial statements for additional details.

Cash Flows [(1)]

The following table summarizes the changes to our cash flows for the periods presented:

			Year Ended					
		Year Ended						Year Ended
(amounts in thousands)	(amounts in thousands)	December 31, 2022	December 31, 2021	December 31, 2020	(amounts in thousands)	December 31, 2023	December 31, 2022	December 31, 2021
Cash provided by (used in):	Cash provided by (used in):							
Operating activities								
Operating activities								
Operating activities	Operating activities	$ 30,337	$ 175,666	$ 355,655				
Investing activities	Investing activities	(67,030)	(92,361)	(82,003)				
Financing activities	Financing activities	(120,014)	(401,209)	207,909				
Effect of changes in exchange rates on cash and cash equivalents	Effect of changes in exchange rates on cash and cash equivalents	(19,315)	(21,800)	25,157				
Net change in cash and cash equivalents	Net change in cash and cash equivalents	$(176,022)	$(339,704)	$ 506,718				

(1) Cash flow information is inclusive of cash flows from JW Australia as discontinued operations through the divestiture date of July 2, 2023.

Cash Flow from Operations

Net cash provided by operating activities increased $314.9 million to a $345.2 million source of cash in the year ended December 31, 2023 compared to a $30.3 million source of cash in the year ended December 31, 2022. The increase in cash provided by operating activities was primarily due to a $342.5 million improvement in net cash provided by our working capital accounts. Cash flow provided by Inventory was $193.1 million favorable compared to the year ended December 31, 2022, primarily driven by demand planning that drove lower inventory days on hand, which mitigated inflation on raw materials. Cash flow provided by Accounts receivable, net of $90.6 million was favorable in the year ended December 31, 2023 compared to the year ended December 31, 2022, which was primarily due to decreased sales, partially offset by slightly deteriorated days sales outstanding. Cash flow provided by Accounts payable was $58.8 million favorable compared to the year ended December 31, 2022, which was primarily due to lower raw material inflation on purchases in the current year as compared to prior year, partially offset by demand planning that drove moderated purchasing.

Net cash provided by operating activities decreased $145.3 million to a $30.3 million net source of cash used in the year ended December 31, 2022 compared to a $175.7 million net source of cash provided in the year ended December 31, 2021December 31, 2021. The decrease in cash provided by operating activities was primarily due to increased working capital and decreased earnings in the current year ended December 31, 2022, partially offset by non-recurrence of legal settlements paid in 2021.

Net cash provided by operating activities decreased $180.0 million to $175.7 million in the year ended December 31, 2021 compared to $355.7 million in the year ended December 31, 2020. The decrease in cash provided by operating activities was due primarily to increased inventory costs, increased accounts receivable, cash paid for legal settlements, and increased cash taxes, partially offset by increased earnings.

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Cash Flow from Investing Activities

Net cash provided by (used in) investing activities improved to a $279.2 million source of cash in the year ended December 31, 2023 compared to a $67.0 million use of cash in the year ended December 31, 2022, primarily driven by $365.6 million in net proceeds (payments) related to the sale of JW Australia, partially offset by an increase in capital expenditures of $18.7 million and a decrease in cash received from the recovery of cost from interest received on impaired notes of $10.4 million.

Net cash used in investing activities decreased $25.3 million to a $67.0 million use of cash in the year ended December 31, 2022 compared to a $92.4 million use of cash in the year ended December 31, 2021December 31, 2021 primarily due to cash received from the recovery of cost from interest received on impaired notes of $14.0 million, an increase in cash received from the sale of property and equipment, and a reduction in capital expenditures.

Net cash used in investing activities increased $10.4 million to $92.4 million in the year ended December 31, 2021 compared to $82.0 million in the year ended December 31, 2020 primarily due to a decrease in proceeds from the sale of property, plant and equipment.

Cash Flow from Financing Activities

Net cash used in financing activities was increased $443.1 million to $563.2 million in the year ended December 31, 2023 compared to $120.0 million in the year ended December 31, 2022, primarily due to net debt payments and consisted primarily payments of debt extinguishment costs of $561.3 million in the year ended December 31, 2023 compared to net debt borrowings of $12.7 million in the year ended December 31, 2022, partially offset by the non-recurrence of repurchases of our Common Stock of $132.0 million, partially offset by net borrowings of $12.7 million in the year ended December 31, 2022.

Net cash used in financing activities was decreased $281.2 million to $120.0 million in the year ended December 31, 2022 compared to $401.2 million in the year ended December 31, 2021 and consisted , primarily due to a decrease of $191.7 million in repurchases of our Common Stock of $323.7 million and net debt repayments borrowings of $86.1 million.

Net cash provided by financing activities was $207.9 million $12.7 million in the year ended December 31, 2020 December 31, 2022, compared to net debt payments and consisted primarily payments of net borrowings debt extinguishment cost of $210.9 million, partially offset by repurchases of our Common Stock of $5.0 million $86.1 million in the year ended December 31, 2021.

Holding Company Status

We are a holding company that conducts all of our operations through subsidiaries, and we rely on dividends or advances from our subsidiaries to fund the holding company. The majority of our operating income is derived from JWI, our main operating subsidiary. The ability of our subsidiaries to pay dividends to us is subject to applicable local law and may be limited due to the terms of other contractual arrangements, including our Credit Facilities Senior Notes, and Senior Secured Notes.

The Australia Senior Secured Credit Facility also contains restrictions on dividends that limit the amount of cash that the obligors under these facilities can distribute to JWI. Obligors under the Australia Senior Secured Credit Facility may pay dividends only to the extent they do not exceed 80% of after tax net profits (with a one-year carryforward of unused amounts) and only while no default is continuing under such agreement. For further information regarding the Australia Senior Secured Credit Facility, see Note 11 - *Long-Term Debt* in our consolidated financial statements.

The amount of our consolidated net assets that were available to be distributed under our credit facilities Credit Facilities as of December 31, 2022 December 31, 2023 was $800.7 million $889.6 million.

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Critical Accounting Policies and Estimates

The following disclosure is provided to supplement the description of our accounting policies contained in Note 1 - *Description of Company and Summary of Significant Accounting Policies* in of our consolidated financial statements. Our MD&A is based upon our consolidated financial statements, which have been prepared in accordance with GAAP. The preparation of these consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate our estimates. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which may differ from these estimates. The following discussion highlights the estimates we believe are critical and should be read in conjunction with the consolidated financial statements included in Part II, Item 8 of this Form 10-K.

Acquisitions

We allocate the fair value of purchase consideration to the tangible assets acquired, liabilities assumed, and intangible assets acquired based on their acquisition date fair values. Goodwill as of the acquisition date is measured as the excess of consideration transferred over the net of the acquisition date fair values of the assets acquired and the liabilities assumed. If the fair value of the acquired assets exceeds the purchase price the difference is recorded as a bargain purchase in other (income) expense, income, net. Such valuations require us to make significant estimates and assumptions, especially with respect to intangible assets. As a result, during the measurement period, which may be up to one year from the acquisition date, material adjustments must be reflected in the comparative consolidated financial statements in the period in which the adjustment amount will be is determined. Upon the conclusion of the measurement period or final determination of the values of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recorded to our consolidated statements of operations. Newly acquired entities are included in our results from the date of their respective acquisitions.

Recoverability of Long-Lived and Intangible Assets

Long-lived assets, other than goodwill, are reviewed for impairment whenever events or changes in circumstances indicate the carrying amount of such asset groups may not be recoverable. Such events or circumstances include, but are not limited to, a significant decrease in the fair value of the underlying business or a change in utilization of property and equipment.

We group assets to test for impairment at the lowest level for which identifiable cash flows are largely independent of the cash flows of other groups of assets and liabilities. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the assets.

When a triggering event is identified, we perform an impairment test by reviewing the expected undiscounted cash flows generated from the anticipated use and eventual disposition of the asset group compared to the carrying value of the asset group. If the expected undiscounted cash flows are less than the carrying value of the asset group, then we recognize an impairment loss, and the carrying amount of the asset is adjusted to fair value based on the discounted estimated future net cash flows. For depreciable long-lived assets and an amortizable intangible asset, the new cost basis will be amortized over the remaining useful life of the asset. Our impairment loss calculations require management to apply judgments in estimating future cash flows to determine asset fair values, including forecasting useful lives of the assets.

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Goodwill

Goodwill is tested for impairment on an annual basis during the fourth quarter and between annual tests if indicators of potential impairment exist. Current accounting guidance provides an entity the option to perform a qualitative assessment to determine whether it is more-likely-than-not that the fair value of a reporting unit is impaired. less than its carrying amount. If we do not perform a qualitative assessment, or if we determine that it is more likely than not that the fair value of the reporting unit exceeds is less than its carrying amount, we perform a quantitative goodwill impairment test test. Prior to 2023, the estimated fair values of reporting units were derived using the only an income approach (implied fair value measured on a non-recurring basis using level 3 inputs). Beginning in 2023, the estimated fair values of our reporting units were derived using a combination of income and market approaches, both of which yielded substantially equivalent indications of fair value. Absent an indication of fair value from a potential buyer or similar specific transactions, we believe that the use of these methods provides a reasonable estimate of a reporting unit's fair value. Fair value computed by these models is arrived at using a number of factors and inputs. There are inherent uncertainties, however, related to fair value models, the inputs, factors and our judgment in applying them to this analysis. Nonetheless, we believe that the combination of these methods provides a reasonable approach to estimate the fair values of our reporting units.

Under the income approach, the fair value of a reporting unit is based on a discounted cash flow analysis of management's short-term and long-term forecast of operating performance. This analysis contains significant assumptions and estimates including revenue growth rates, expected EBITDA margins, discount rates, capital expenditures, and terminal growth rates. Changes in assumptions or estimates used in our goodwill impairment testing could materially affect the determination of the fair value of a reporting unit, and therefore, could eliminate the excess of fair value over carrying value amount of a reporting unit and, in some cases, could result in impairment. Such changes in assumptions could be caused by items such as a loss of one or more significant customers, decline in the demand for our products due to changing economic conditions, or failure to control cost increases above what can be recouped in sale price increases. These types of changes would negatively affect our profits, revenues, and growth over the long term and such a decline could significantly affect the fair value assessment of our reporting units and cause our goodwill to become impaired.

We During the year ended 2022, we identified three reporting units for the purpose of conducting our goodwill impairment assessment: North America, Europe and Australasia. After the divestiture of our Australasia reporting unit in the third quarter of 2023, we identified two reporting units: North America and Europe. In determining our reporting units, we considered (i) whether an operating segment or a component of an operating segment was a business, (ii) whether discrete financial information was available, and (iii) whether the financial information is regularly reviewed by management of the operating segment.

During We performed our annual impairment assessment during the fourth quarter of 2023 using a quantitative analysis for our North America and Europe reporting units. No indication of goodwill impairment was identified. We determined that the fair value of our North America reporting unit would have to decline significantly to be considered for potential impairment. We determined the fair value of our Europe reporting unit would have to decline by approximately 3% to be considered for potential impairment. Keeping all other assumptions consistent, an increase in the discount rate of 1% would result in the carrying amount exceeding fair value by approximately 1% for our Europe reporting unit.

As further described below, we recorded an impairment of goodwill for our Europe reporting unit during the third quarter of 2022. Following this partial impairment, the reporting unit's carrying amount equaled the fair value. We believe that our Europe reporting unit is at risk of impairment in the near term if the reporting unit's operating performance does not improve in line with management's expectations, or if there is a change in the long-term outlook for the business or in other factors, such as the discount rate. The current goodwill impairment analysis for our Europe reporting unit incorporates mid-to-low market outlook growth assumptions and realization of certain improvement plans.

During the quarter ended September 24, 2022, management identified various qualitative and quantitative factors which collectively indicated a triggering event had occurred within our North America and Europe reporting units. These factors included the macroeconomic environment in each region including increasing interest rates, persistent inflation, and operational inefficiencies

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attributable to ongoing global supply chain disruptions, the continuing geopolitical environment in Europe associated with the war conflict between Russia in Ukraine, and foreign exchange fluctuations. These factors have negatively impacted our business performance. Based upon the results of our interim impairment analysis, we concluded that the carrying value amount of our Europe reporting unit exceeded its fair value, and we recorded a goodwill impairment charge of $54.9 million, representing a partial impairment of goodwill assigned to the Europe reporting unit. In addition, we determined that our North America reporting unit was not impaired.

We performed our annual impairment assessment as during the fourth quarter of the beginning of our December fiscal month of 2022 and 2021 using a quantitative analysis for our North American and Europe reporting units and a qualitative analysis for our Australasia reporting unit. At the assessment date, our qualitative analysis of Australasia supported a conclusion that there is more than a 50% likelihood that the fair value of the reporting exceeds its carrying value. Quantitatively, we determined that the fair value each of our North America and Europe reporting units would have to decline by approximately 11% and 9%, respectively, to be considered for potential impairment. Keeping all other assumptions consistent, an increase in the discount rate of 1% would result in the fair value of a reporting unit over its carrying value of 2% for our North American reporting unit and would result in the carrying value exceeding fair value by 2% for our Europe reporting units. No indication of goodwill impairment was identified.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on the deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. We evaluate both the positive and negative evidence that is relevant in assessing whether we will realize the deferred tax assets. A valuation allowance is recorded when it is more likely than not that some of the deferred tax assets will not

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be realized. This projected realization is directly related to our future projections of the performance of our business and management's planning initiatives at any point in time. As a result, valuation allowances are subject to change as proven business trends and planning initiatives develop.

The tax effects from an uncertain tax position can be recognized in the consolidated financial statements only if the position is more likely than not to be sustained, based on the technical merits of the position and the jurisdiction. We recognize the financial statement benefit of a tax position only after determining that the relevant tax authority would more likely than not sustain the position following an audit and the tax related to the position would be due to the entity and not the owners. For tax positions meeting the more likely than not threshold, the amount recognized in the consolidated financial statements is the largest benefit that has a greater than 50 percent likelihood of being realized, upon ultimate settlement with the relevant tax authority. We apply this accounting standard to all tax positions for which the statute of limitations remains open. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs.

We file a consolidated federal income tax return in the U.S. and various states. For financial statement purposes, we calculate the provision for federal income taxes using the separate return method. Certain subsidiaries file separate tax returns in certain countries and states. Any U.S. federal, state and foreign income taxes refundable and payable are reported in other current assets and other current liabilities in the consolidated balance sheets as of December 31, 2022 December 31, 2023 and December 31, 2021 December 31, 2022. We record interest and penalties on amounts due to tax authorities as a component of income tax expense in the consolidated statements of operations. We have elected to account for the impact of GILTI in the period in which it is incurred.

The Company continues to monitor and evaluate legislative developments related to the Global Anti-Base Erosion Proposal ("GloBE") established by the Organization of Economic Cooperation and Development's ("OECD") Pillar Two framework. Several countries in which the Company's subsidiaries operate have adopted those rules into legislation. The Company continues to evaluate impacts as further guidance is released.

Contingent Liabilities

Contingent liabilities require significant judgment in estimating potential losses for legal and environmental claims. Each quarter, we review significant new claims and litigation for the probability of an adverse outcome. Estimates are recorded as liabilities when it is probable that a liability has been incurred and the amount of the loss is reasonably estimable. Disclosure is required when there is a reasonable possibility that the ultimate loss will materially exceed the recorded provision. Contingent liabilities are often resolved over long time periods. Estimating probable losses requires analysis of multiple forecasts that often depend on judgments about potential actions by third parties such as regulators, and the estimated loss can change materially as individual claims develop.

Share-based Compensation Plan

We have share-based compensation plans that provide for compensation to employees through various grants of share-based instruments. We apply the fair value method of accounting using the Black-Scholes option-pricing model to determine the compensation expense for stock options. The compensation expense for RSUs awarded is based on the fair value of the RSU at the date of grant. Compensation expense is recorded in the consolidated statements of operations and is recognized over the requisite service period. The determination of obligations and compensation expense requires the use of several mathematical and judgmental factors, including stock price, expected volatility, the anticipated life of the option, estimated risk-free rate, and the number of shares

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or share options expected to vest. Any difference in the number of shares or share options that actually vest can affect future compensation expense. Other assumptions are not revised after the original estimate.

The Black-Scholes option-pricing model requires the use of weighted average assumptions for estimated expected volatility, estimated expected term of stock options, risk-free rate, estimated expected dividend yield, and the fair value of the underlying common stock at the date of grant. We estimate the expected term of all stock options based on previous history of exercises. The risk-free rate is based on the U.S. Treasury yield curve in effect at the time of grant for the expected term of the stock option. The expected dividend yield rate is 0% which is consistent with the expected dividends to be paid on common stock.

For PSUs issued prior to 2021, the number of PSUs that vest is determined by a payout factor consisting of equally weighted performance measures of Adjusted EBITDA and free cash flow, each as reported over the applicable three-year performance period and is adjusted based upon a market condition measured by our relative total shareholder return ("TSR") over the applicable three-year performance period as compared to the TSR of the Russell 3000 index. For PSUs issued in 2021 and thereafter, the number of PSUs that vest is determined by a payout factor consisting of equally weighted pre-set three year three-year performance targets on return on invested capital ("ROIC") and TSR. The fair value of the award is estimated using a Monte Carlo simulation approach in a risk-neutral framework to model future stock price movements based on historical volatility, risk free rates of return, and correlation matrix.

We estimate forfeitures based on our historical analysis of actual stock option forfeitures. Actual forfeitures are recorded when incurred and estimated forfeitures are reviewed and adjusted at least annually.

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Employee Retirement and Pension Benefits

The obligations under our defined benefit pension plans are calculated using actuarial models and methods. The most critical assumption and estimate used in the actuarial calculations is the discount rate for determining the current value of benefit obligations. Other assumptions and estimates used in determining benefit obligations and plan expenses include expected return on plan assets, inflation rates, and demographic factors such as retirement age, mortality, and turnover. These assumptions and estimates are evaluated periodically and are updated accordingly to reflect our actual experience and expectations.

The discount rate used to determine the benefit obligations was computed through a projected benefit cash flow model. This approach determines the discount rate as the rate that equates the present value of the cash flows (determined using that single rate) to the present value of the cash flows where each cash flows' present value is determined using the spot rates from the Willis Towers Watson WTW RATE: Link 10:90 Yield Curve.

The discount rate utilized to calculate the projected benefit obligation at the measurement date for our U.S. pension plan increased decreased to 5.05% at December 31, 2023 from 5.39% at December 31, 2022 from 2.88% at December 31, 2021. As the discount rate is reduced or increased, the pension and post retirement obligation would increase or decrease, respectively, and future pension and post-retirement expense would increase or decrease, respectively. Lowering the discount rate by 0.25% would increase the U.S. pension and post-retirement obligation at December 31, 2022 December 31, 2023 by approximately $8.9 million, however the $7.2 million and would decrease estimated fiscal year 2023 2024 pension expense would remain unchanged. by approximately $0.1 million. Increasing the discount rate by 0.25% would decrease the U.S. pension and post-retirement obligation at December 31, 2022 December 31, 2023 by approximately $8.5 million $6.9 million and would decrease increase estimated fiscal year 2023 2024 pension expense by approximately $0.1 million $0.3 million.

We determine the expected long-term rate of return on plan assets based on the plan assets' historical long-term investment performance, current asset allocation, and estimates of future long-term returns by asset class. Holding all other assumptions constant, a 1% increase or decrease in the assumed rate of return on plan assets would decrease or increase, respectively, 2023 2024 net periodic pension expense by approximately $3.1 $2.7 million.

The actuarial assumptions we use in determining our pension benefits may differ materially from actual results because of changing market and economic conditions, higher or lower withdrawal rates, or longer or shorter life spans of participants. While we believe that the assumptions used are appropriate, differences in actual experience or changes in assumptions might materially affect our financial position or results of operations.

Capital Expenditures

We expect that our capital expenditures will be focused on supporting our cost reduction and efficiency improvement projects sustaining our current manufacturing operations. We are subject to health, safety, and environmental regulations that may require us to make capital expenditures to ensure our facilities are compliant with those various regulations.

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Item 7A - Quantitative and Qualitative Disclosures About Market Risk

We are exposed to various types of market risks, including the effects of adverse fluctuations risk that our earnings, cash flows and equity could be adversely impacted by changes in foreign currency exchange rates, adverse changes in interest rates and adverse movements in commodity prices for products we use in our manufacturing. To reduce our exposure to these risks, we prices. We maintain risk management controls and policies to monitor these risks and take appropriate actions risk mitigation actions. We use certain derivative instruments, when available on a cost-effective basis, to attempt to mitigate such forms hedge our underlying economic exposures. For additional information on our financial instruments and hedging strategies, See Note 23 – *Derivative Financial Instruments* of market risk. our consolidated financial statements for the year ended December 31, 2023 included elsewhere in this Form 10-K.

Exchange Rate Risk

We have global operations and therefore enter into transactions denominated in various foreign currencies. To mitigate cross-currency transaction risk, we analyze significant forecast exposures where we expect receipts or payments in a currency other than the functional currency of our operations, and from time to time we may strategically enter into short-term foreign currency forward contracts to lock in some or all of the cash flows associated with these transactions. In most of the countries in which we operate, the exposure to foreign currency movements is limited because the operating revenues and expenses of our business units are substantially denominated in the local currency. We also are subject to currency translation risk associated with converting our foreign operations' financial statements into U.S. dollars. The exchange rates used to translate our foreign subsidiaries' financial results for the year ended December 31, 2023 compared to the year ended December 31, 2022 reflected, on average, the U.S. dollar strengthened against the Canadian dollar 4% and weakened against the Euro by 3%, respectively. Exchange rates had a negative nominal impact of 5% on our consolidated net revenues and Adjusted EBITDA from continuing operations, respectively, in the year ended December 31, 2023 as compared to an adverse impact of (4%) and of (3%) on our consolidated net revenues and Adjusted EBITDA from continuing operations, respectively, in the year ended December 31, 2022 as compared to a positive impact of 3% in the year ended December 31, 2021.

We cannot assure you be certain that fluctuations in foreign currency exchange rates, particularly the strengthening of the U.S. dollar against major currencies, such as the Euro, the Australian dollar, the Canadian dollar, the British pound, or the currencies of large developing countries, would not materially adversely affect our business, financial condition, and results of operations.

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We use short-term foreign currency forward contracts to mitigate the impact of foreign exchange fluctuations on consolidated earnings. As of December 31, 2022 December 31, 2023, we held foreign currency derivative contracts, with a total notional amount of $80.0 million $95.9 million in order to manage the effect of exchange fluctuations on forecasted sales, purchases, acquisitions, and capital expenditures and certain intercompany transactions that are denominated in foreign currencies. We have foreign currency derivative contracts, with a total notional amount of $140.1 million, to manage the risks of foreign currency gains and losses on intercompany loans and interest. We also used foreign currency derivative contracts, with a total notional amount of $85.1 million $28.9 million as of December 31, 2022 December 31, 2023, to mitigate the impact to the consolidated earnings of the Company from the effect of the translation of certain subsidiaries' local currency results into U.S. dollars. We do not use derivative financial instruments for trading or speculative purposes.

By using derivative financial instruments to hedge exposures to foreign currency fluctuations, we are exposed to credit risk and market risk. Credit risk is the failure of the counterparty to perform under the terms of the derivative contract. When the fair value of a derivative contract is positive, the counterparty owes us, which creates credit risk for us. When the fair value of a derivative contract is negative, we owe the counterparty and, therefore, we are not exposed to the counterparty's credit risk in those circumstances. We attempt to minimize counterparty credit risk in derivative instruments by entering into transactions with high-quality counterparties whose credit rating is at least upper-medium investment grade. Our derivative instruments do not contain credit risk related contingent features.

Interest Rate Risk

We are exposed to interest rate market risk in connection with our long-term debt, some of which is based upon floating interest rates. To manage our interest rate risk, we may enter into interest rate derivatives, such as interest rate swaps, caps, or caps collars when we deem it to be appropriate. We do not use derivative financial instruments for trading or other speculative purposes and are not a party to any leveraged derivative instruments. Our net exposure to interest rate risk would primarily be based on the difference between outstanding variable rate debt and the notional amount of any interest rate derivatives. We assess interest rate risk by identifying and monitoring changes in interest rate exposures that may adversely impact expected future cash flows and by evaluating hedging opportunities. We monitor interest rate risk attributable to our outstanding debt obligations, involving the use of analytical techniques to determine the potential impact of interest rate volatility on future interest payments.

In 2021, ICE Benchmark Administration Limited (IBA) confirmed it would cease publication of the one-week and two-month USD LIBOR tenors immediately following the LIBOR publication on December 31, 2021, and the remaining USD LIBOR tenors immediately following the LIBOR publication on June 30, 2023. As a result, we may incur incremental interest expense depending on the new standard determined. We have elected certain optional expedients provided by ASC Topic 848 Reference Rate Reform in order to mitigate the risk of dedesignation of our hedged interest rate swaps, which could result in an increase in interest expense. At this time, we have elected to continue the method of assessing effectiveness as documented in the original hedge documentation and apply the practical expedients related to probability to assume that the reference rate on the hypothetical derivative matches the reference rate on the hedging instrument. We plan to evaluate the remaining expedients for adoption, as applicable, when contracts are modified. Although our ABL Facility agreement and Term Loan Facility agreement contain provisions intended to address the anticipated unavailability of LIBOR, we may need to amend these and other contracts to accommodate any replacement rate. The potential effect of any such event on our cost of capital cannot yet be determined but we do not expect it to have a material impact on our consolidated financial condition, results of operations, or cash flows.

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Raw Materials Risk

Our major raw materials include wood, wood composites, wood components, steel, glass, internally produced door skins, fiberglass compound, hardware, petroleum-based products such as resin and binders, as well as aluminum and vinyl extrusions, aluminum, steel, wood, hardware, adhesives, and packaging. extrusions. Prices of these commodities materials can fluctuate significantly in response to, among other things, variable worldwide supply and demand across different industries, speculation in commodities futures, general economic or environmental conditions, labor costs, competition, import duties, tariffs, worldwide currency fluctuations, freight, regulatory costs, and product and process evolutions that impact demand for the same materials. Increasing raw material prices directly impact our cost of sales and our ability to maintain margins depends on implementing price increases in response to increasing raw material costs. The market for our products may or may not accept price increases, and as such, there is no assurance that we can maintain margins in an environment of rising commodity prices. See Item 1A- *Risk Factors* - Prices and availability of the raw materials we use to manufacture our products are subject to fluctuations and we may be unable to pass along to our customers the effects of any price increases.

Generally, we do not use derivatives or similar instruments to hedge commodity price fluctuations, but may from time to time. We purchase from multiple geographically diverse companies to mitigate the adverse impact of higher prices for our raw materials. Also, from time to time, we enter into derivatives to hedge commodity price fluctuations that are immaterial to the consolidated financial statements. For more information about our derivative asset and liabilities, refer to Note 23 - *Derivative Financial Instruments* of our audited consolidated financial statements included in this Form 10-K. We also maintain other strategies to mitigate the impact of higher raw material, energy, and commodity costs, which typically offset only a portion of the adverse impact.

Item 8 - Financial Statements and Supplementary Data

See Index to Consolidated Financial Statements beginning on page F-1 of the Form 10-K.

Item 9 - Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A - Controls and Procedures

Disclosure Controls and Procedures

The Company maintains disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”)), which are designed to ensure that information required to be disclosed by

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the Company in reports that it files or submits under the Exchange Act, including this Report, are recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms. These disclosure controls and procedures include controls and procedures designed to ensure that information required to be disclosed by the Company under the Exchange Act is accumulated and communicated to the Company’s management, including its principal executive officer (“CEO”) and principal financial officer (“CFO”), as appropriate to allow timely decisions regarding required disclosure.

The Company’s management, including the Company’s CEO and CFO, conducted an evaluation of the effectiveness of the Company’s disclosure controls and procedures as of the end of the period covered by this Report and, based on that evaluation, the CEO and CFO concluded that the Company’s disclosure controls and procedures were effective as of December 31, 2022 December 31, 2023.

Management’s Report on Internal Control over Financial Reporting

The Company’s management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f).

The Company carried out an evaluation under the supervision and with the participation of the Company’s management, including the Company’s CEO and CFO, of the effectiveness of the Company’s internal control over financial reporting. The Company’s management used the framework in *Internal Control-Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations (COSO) to perform this evaluation. Based on this evaluation, management has concluded that our internal control over financial reporting was effective as of December 31, 2022 December 31, 2023.

The effectiveness of our internal control over financial reporting as of December 31, 2022 December 31, 2023 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report appearing under Item 8- *Financial Statements and Supplementary Data*.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the Company’s most recently completed quarter ended December 31, 2022 December 31, 2023 that have materially affected, or are reasonably likely to materially affect, the Company’s internal control over financial reporting.

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Item 9B - Other Information

None. (c) During the year ended December 31, 2023, no director or officer (as defined in Rule 16a-1(f) of the Exchange Act) of the Company adopted or terminated a “Rule 10b5-1 trading arrangement” or “non-Rule 10b5-1 trading arrangement,” as each term is defined in Item 408(a) of Regulation S-K.

Item 9C - Disclosures Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

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PART III

Item 10 - Directors, Executive Officers and Corporate Governance

The information required by this item with respect to our executive officers appears in Part I of this Form 10-K under the heading, “Executive Officers of the Registrant”. The other information required by this item is incorporated by reference to the Company’s definitive Proxy Statement for its 2023 2024 Annual Meeting of Stockholders to be held on May 3, 2023 April 25, 2024, which will be filed with the SEC within 120 days of the Company’s fiscal year end covered by this Form 10-K (“Proxy Statement”).

Item 11 - Executive Compensation

The information required by this item is incorporated by reference to the Proxy Statement, except as to information required pursuant to Item 402(v) of SEC Regulation S-K relating to pay versus performance.

Item 12 - Security Ownership of Certain Beneficial Owners and Management and Related Shareholder Matters

Equity Compensation Plan Information

The following table sets forth information with respect to shares of our Common Stock that may be issued under our existing equity compensation plans, as of December 31, 2022 December 31, 2023:

(a)		(a)	(b)	(c)		(b)	(c)	
Plan Category	**Plan Category**	**Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants, and Rights**	**Weighted Average Exercise Price of Outstanding Options, Warrants, and Rights(1)**	**Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))**	**Plan Category**	**Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants, and Rights**	**Weighted Average Exercise Price of Outstanding Options, Warrants, and Rights(1)**	
Equity compensation plans approved by security holders	Equity compensation plans approved by security holders	3,994,272(2)	$21.48	4,535,951(3)	Equity compensation plans approved by security holders	3,935,257(2)	$20.42	
Equity compensation plans not approved by security holders	Equity compensation plans not approved by security holders	—	—	—	Equity compensation plans not approved by security holders			—
Total	Total	3,994,272	$21.48	4,535,951	Total	3,935,257	$20.42	

(1) Excludes RSUs and PSUs, which have no exercise price.

(2) Consists of shares underlying 1,716,944 1,452,819 stock options, 1,997,512 2,224,642 RSUs, and 279,816 257,796 PSUs outstanding under the 2011 Stock Incentive Plan and 2017 Omnibus Equity Plan.

(3) Number of securities remaining for future issuances includes only shares available under the 2017 Omnibus Equity Plan.

The other information required by this item is incorporated by reference to the Proxy Statement.

Item 13 - Certain Relationships and Related Transactions, and Director Independence

The information required by this item is incorporated by reference to the Proxy Statement.

Item 14 - Principal Accounting Fees and Services

The information required by this item is incorporated by reference to the Proxy Statement.

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PART IV

Item 15 - Exhibits and Financial Statement Schedules

1. **Financial Statements**

The financial statements are set forth under Item 8- 8 - *Financial Statements and Supplementary Data* of this Form 10-K.

2. Financial Statement Schedules

All financial statements and schedules are omitted because they are not applicable, not required, or the information is included in the financial statements or the notes thereto.

3. Exhibits

The exhibits listed on the accompanying Exhibit Index are filed or incorporated by reference as part of this Form 10-K and such Exhibit Index is incorporated herein by reference.

Exhibit No.	Exhibit Description	Form	File No.	Exhibit	Filing Date
3.1	Second Amended and Restated Certificate of Incorporation of JELD-WEN Holding, Inc.	8-K	001-38000	3.1	May 4, 2022
3.2	Third Amended and Restated Bylaws of JELD-WEN Holding, Inc.	8-K	001-38000	3.2	May 4, 2022
4.1*	Description of Securities.				
4.2	Indenture, dated as of December 14, 2017, among JELD-WEN, Inc., the guarantors party thereto and Wilmington Trust, National Association, as Trustee (including for of Note).	8-K	001-38000	4.1	December 14, 2017
4.3	First Supplemental Indenture, dated as of December 21, 2018, among American Building Supply, Inc., J B L Hawaii, Limited and Wilmington Trust, National Association, as Trustee.	8-K	001-38000	4.1	December 27, 2018
4.4	Second Supplemental Indenture, dated as of September 24, 2020, among Milliken Millwork, Inc., VPI Quality Windows, Inc., subsidiaries of JELD-WEN, Inc. and Wilmington Trust, National Association, as Trustee.	10-Q	001-38000	4.2	November 3, 2020
4.5	Third Supplemental Indenture, dated as of December 31, 2020, among JELD-WEN, Inc., the guarantors party thereto and Wilmington Trust, National Association, as Trustee.	10-K	001-38000	4.9	February 23, 2021
4.6	Indenture, dated as of May 4, 2020, among JELD-WEN, Inc., the guarantors party thereto and Wilmington Trust, National Association, as trustee and notes collateral agent (including form of Notes).	8-K	001-38000	4.1	May 5, 2020
4.7	First Supplemental Indenture, dated September 24, 2020, to the Senior Secured Notes Indenture, dated May 4, 2020, to the Senior Secured Notes Indenture, dated May 4, 2020, among Milliken Millwork, Inc., subsidiaries of JELD-WEN, Inc., and Wilmington Trust, National Association, as Trustee.	10-Q	001-38000	4.1	November 3, 2020
4.8	Second Supplemental Indenture, dated as of December 31, 2020, among JELD-WEN, Inc., the guarantors party thereto and WilmingtonTrust, National Association, as Trustee and Notes Collateral Agent.	10-K	001-38000	4.12	February 23, 2021
4.9	Pledge and Security Agreement, dated as of May 4, 2020, among JELD-WEN, Inc., JELD-WEN Holding, Inc., the other grantors party thereto and Wilmington Trust, National Association, as notes collateral agent.	8-K	001-38000	4.2	May 5, 2020
4.10	Guarantor Joinder Agreement, dated as of September 24, 2020, to the Term Loan Credit Agreement, dated as of October 15, 2014 (as amended on July 1, 2015, November 1, 2016, March 7, 2017, December 14, 2017, September 20, 2019) among Milliken Millwork, Inc., VPI Quality Windows, Inc., and Bank of America, N.A., as Administrative Agent.	10-Q	001-38000	4.3	November 3, 2020
4.11	Borrower Joinder Agreement, dated as of September 24, 2020, to the Revolving Credit Agreement, dated as of October 15, 2014 (as amended on July 1, 2015, November 1, 2016, December 14, 2017, December 21, 2018 and December 31, 2019) among Milliken Millwork, Inc., VPI Quality Windows, Inc., and Wells Fargo Bank, National Association, as Administrative Agent.	10-Q	001-38000	4.4	November 3, 2020

Exhibit No.	Exhibit Description	Form	File No.	Exhibit	Filing Date
3.1	Second Amended and Restated Certificate of Incorporation of JELD-WEN Holding, Inc.	8-K	001-38000	3.1	May 4, 2022
3.2	Fourth Amended and Restated Bylaws of JELD-WEN Holding, Inc.	8-K	001-38000	3.1	February 9, 2024
4.1	Description of Securities.	10-K	001-38000	4.1	February 22, 2022
4.2	Indenture, dated as of December 14, 2017, among JELD-WEN, Inc., the guarantors party thereto and Wilmington Trust, National Association, as Trustee (including for of Note).	8-K	001-38000	4.1	December 14, 2017
4.3	First Supplemental Indenture, dated as of December 21, 2018, among American Building Supply, Inc., J B L Hawaii, Limited and Wilmington Trust, National Association, as Trustee.	8-K	001-38000	4.1	December 27, 2018

4.4	Second Supplemental Indenture, dated as of September 24, 2020, among Milliken Millwork, Inc., VPI Quality Windows, Inc., subsidiaries of JELD-WEN, Inc. and Wilmington Trust, National Association, as Trustee.	10-Q	001-38000	4.2	November 3, 2020
4.5	Third Supplemental Indenture, dated as of December 31, 2020, among JELD-WEN, Inc., the guarantors party thereto and Wilmington Trust, National Association, as Trustee.	10-K	001-38000	4.9	February 23, 2021
4.6	Indenture, dated as of May 4, 2020, among JELD-WEN, Inc., the guarantors party thereto and Wilmington Trust, National Association, as trustee and notes collateral agent (including form of Notes).	8-K	001-38000	4.1	May 5, 2020
4.7	First Supplemental Indenture, dated September 24, 2020, to the Senior Secured Notes Indenture, dated May 4, 2020, to the Senior Secured Notes Indenture, dated May 4, 2020, among Milliken Millwork, Inc., subsidiaries of JELD-WEN, Inc., and Wilmington Trust, National Association, as Trustee.	10-Q	001-38000	4.1	November 3, 2020
4.8	Second Supplemental Indenture, dated as of December 31, 2020, among JELD-WEN, Inc., the guarantors party thereto and WilmingtonTrust, National Association, as Trustee and Notes Collateral Agent.	10-K	001-38000	4.12	February 23, 2021
4.9	Pledge and Security Agreement, dated as of May 4, 2020, among JELD-WEN, Inc., JELD-WEN Holding, Inc., the other grantors party thereto and Wilmington Trust, National Association, as notes collateral agent.	8-K	001-38000	4.2	May 5, 2020
4.10	Guarantor Joinder Agreement, dated as of September 24, 2020, to the Term Loan Credit Agreement, dated as of October 15, 2014 (as amended on July 1, 2015, November 1, 2016, March 7, 2017, December 14, 2017, September 20, 2019) among Milliken Millwork, Inc., VPI Quality Windows, Inc., and Bank of America, N.A., as Administrative Agent.	10-Q	001-38000	4.3	November 3, 2020
4.11	Borrower Joinder Agreement, dated as of September 24, 2020, to the Revolving Credit Agreement, dated as of October 15, 2014 (as amended on July 1, 2015, November 1, 2016, December 14, 2017, December 21, 2018 and December 31, 2019) among Milliken Millwork, Inc., VPI Quality Windows, Inc., and Wells Fargo Bank, National Association, as Administrative Agent.	10-Q	001-38000	4.4	November 3, 2020

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Exhibit No.	Exhibit Description	Form	File No.	Exhibit	Filing Date
10.1	Credit Agreement, among JELD-WEN Holding, Inc., JELD-WEN, Inc., JELD-WEN of Canada, Ltd., the other guarantors party thereto, Wells Fargo Bank, National Association, and the lenders party thereto, dated October 15, 2014.	S-1	333-211761	10.1	June 1, 2016
10.2	Amendment No. 1 to Credit Agreement, among JELD-WEN Holding, Inc., JELD-WEN, Inc., JELD-WEN of Canada, Ltd., the subsidiary guarantors party thereto, Wells Fargo Bank, National Association, and the lenders party thereto, dated July 1, 2015.	S-1	333-211761	10.1.1	June 1, 2016
10.3	Amendment No. 2 to Credit Agreement, among JELD-WEN Holding, Inc., JELD-WEN, Inc., JELD-WEN of Canada, Ltd., Karona, Inc., the subsidiary guarantors party thereto, Wells Fargo Bank, National Association, and the lenders party thereto, dated November 1, 2016.	S-1/A	333-211761	10.1.2	November 17, 2016
10.4	Amendment No. 3 to Credit Agreement, among JELD-WEN, Inc., JELD-WEN Holding, Inc., JELD-WEN of Canada, Ltd., the other borrowers party thereto, the subsidiary guarantors party thereto, the lenders party thereto, Wells Fargo Bank, National Association, as administrative agent, issuing bank and swingline lender and the other parties thereto, dated as of December 14, 2017.	8-K	001-38000	10.1	December 15, 2017
10.5	Amendment No. 4, dated as of December 21, 2018, among JELD-WEN, Inc., American Building Supply, Inc., J B L Hawaii, Limited, the other borrowers party thereto, the subsidiary guarantors party thereto, the lenders party thereto and Wells Fargo Bank, National Association, as administrative agent.	8-K	001-38000	10.1	December 27, 2018
10.6	Amendment No. 5, dated as of December 31, 2019, among JELD-WEN Holding, Inc., JELD-WEN, Inc., JELD-WEN of Canada, Ltd., the other borrowers and subsidiary guarantors party thereto, Wells Fargo Bank, National Association, as administrative agent, and the lenders party thereto.	8-K	001-38000	10.1	January 6, 2020

10.7	Amendment No. 6, dated as of July 28, 2021, among JELD-WEN Holding, Inc., JELD_WEN, Inc., the subsidiary guarantors party thereto, and Bank of America, N.A., as administrative agent.	10-Q	001-38000	10.2	August 2, 2021
10.8	Term Loan Credit Agreement, among JELD-WEN Holding, Inc., JELD-WEN, Inc., Onex BP Finance LP, the other guarantors party thereto, Bank of America, N.A. and the lenders party thereto, dated October 15, 2014.	S-1	333-211761	10.2	June 1, 2016
10.9	Amendment No. 1 to Term Loan Credit Agreement, among JELD-WEN Holding, Inc., JELD-WEN, Inc., Onex BP Finance LP, the subsidiary guarantors party thereto, Bank of America, N.A., and the lenders party thereto, dated July 1, 2015.	S-1	333-211761	10.2.1	June 1, 2016
10.10	Amendment No. 2 to Term Loan Credit Agreement, among JELD-WEN Holding, Inc., JELD-WEN, Inc. the subsidiary guarantors party thereto, Onex BP Finance LP, Bank of America, N.A., and the lenders party thereto, dated November 1, 2016.	S-1/A	333-211761	10.2.2	November 17, 2016
10.11	Amendment No. 3 to Term Loan Credit Agreement, among JELD-WEN Holding, Inc., JELD-WEN, Inc. the subsidiary guarantors party thereto, Onex BP Finance LP, Bank of America, N.A., and the lenders party thereto, dated March 7, 2017.	8-K	001-38000	10.1	March 8, 2017
10.12	Amendment No. 4, by and among JELD-WEN, Inc., JELD-WEN Holding, Inc., the subsidiary guarantors party thereto, the lenders party thereto, Bank of America, N.A., as administrative agent and the other parties thereto, dated as of December 14, 2017.	8-K	001-38000	10.2	December 15, 2017
10.13	Amendment No. 5, dated as of September 20, 2019, among JELD-WEN Holding, Inc., JELD-WEN, Inc., the subsidiary guarantors party thereto, the lenders party thereto and Bank of America, N.A., as administrative agent.	8-K	001-38000	10.1	September 20, 2019
10.14	Amendment No. 6, dated as of July 28, 2021, among JELD-WEN Holding, Inc., JELD-WEN, Inc., JELD-WEN of Canada, Ltd., the other borrowers and subsidiary guarantors party thereto, Wells Fargo Bank, National Association, as administrative agent, and the lenders party thereto.	10-Q	001-38000	10.3	August 2, 2021
10.15+	JELD-WEN Holding, Inc. Amended and Restated Stock Incentive Plan, dated January 30, 2017.	10-Q	001-38000	10.14	May 12, 2017
10.16+	Form of Nonstatutory Common Stock Option Agreement under JELD-WEN Holding, Inc. Amended and Restated Stock Incentive Plan.	S-1/A	333-211761	10.7	December 16, 2016
10.17+	Form of Nonstatutory Class B-1 Common Stock Option Agreement under JELD-WEN Holding, Inc. Amended and Restated Stock Incentive Plan.	S-1/A	333-211761	10.8	December 16, 2016

Exhibit No.	Exhibit Description	Form	File No.	Exhibit	Filing Date
10.1	Credit Agreement, among JELD-WEN Holding, Inc., JELD-WEN, Inc., JELD-WEN of Canada, Ltd., the other guarantors party thereto, Wells Fargo Bank, National Association, and the lenders party thereto, dated October 15, 2014.	S-1	333-211761	10.1	June 1, 2016
10.2	Amendment No. 1 to Credit Agreement, among JELD-WEN Holding, Inc., JELD-WEN, Inc., JELD-WEN of Canada, Ltd., the subsidiary guarantors party thereto, Wells Fargo Bank, National Association, and the lenders party thereto, dated July 1, 2015.	S-1	333-211761	10.1.1	June 1, 2016
10.3	Amendment No. 2 to Credit Agreement, among JELD-WEN Holding, Inc., JELD-WEN, Inc., JELD-WEN of Canada, Ltd., Karona, Inc., the subsidiary guarantors party thereto, Wells Fargo Bank, National Association, and the lenders party thereto, dated November 1, 2016.	S-1/A	333-211761	10.1.2	November 17, 2016
10.4	Amendment No. 3 to Credit Agreement, among JELD-WEN, Inc., JELD-WEN Holding, Inc., JELD-WEN of Canada, Ltd., the other borrowers party thereto, the subsidiary guarantors party thereto, the lenders party thereto, Wells Fargo Bank, National Association, as administrative agent, issuing bank and swingline lender and the other parties thereto, dated as of December 14, 2017.	8-K	001-38000	10.1	December 15, 2017
10.5	Amendment No. 4, dated as of December 21, 2018, among JELD-WEN, Inc., American Building Supply, Inc., J B L Hawaii, Limited, the other borrowers party thereto, the subsidiary guarantors party thereto, the lenders party thereto and Wells Fargo Bank, National Association, as administrative agent.	8-K	001-38000	10.1	December 27, 2018
10.6	Amendment No. 5, dated as of December 31, 2019, among JELD-WEN Holding, Inc., JELD-WEN, Inc., JELD-WEN of Canada, Ltd., the other borrowers and subsidiary guarantors party thereto, Wells Fargo Bank, National Association, as administrative agent, and the lenders party thereto.	8-K	001-38000	10.1	January 6, 2020
10.7	Amendment No. 6, dated as of July 28, 2021, among JELD-WEN Holding, Inc., JELD_WEN, Inc., the subsidiary guarantors party thereto, and Bank of America, N.A., as administrative agent.	10-Q	001-38000	10.2	August 2, 2021

10.8	Amendment No. 7 to Credit Agreement, dated as of June 15, 2023, among JELD-WEN Holding, Inc., JELD-WEN, Inc., JELD-WEN of Canada, Ltd., the other borrowers and subsidiary guarantors party thereto, Wells Fargo Bank, National Association, as administrative agent, and the lenders party thereto	8-K	001-38000	10.1	June 16, 2023
10.9	Term Loan Credit Agreement, among JELD-WEN Holding, Inc., JELD-WEN, Inc., Onex BP Finance LP, the other guarantors party thereto, Bank of America, N.A. and the lenders party thereto, dated October 15, 2014.	S-1	333-211761	10.2	June 1, 2016
10.10	Amendment No. 1 to Term Loan Credit Agreement, among JELD-WEN Holding, Inc., JELD-WEN, Inc., Onex BP Finance LP, the subsidiary guarantors party thereto, Bank of America, N.A., and the lenders party thereto, dated July 1, 2015.	S-1	333-211761	10.2.1	June 1, 2016
10.11	Amendment No. 2 to Term Loan Credit Agreement, among JELD-WEN Holding, Inc., JELD-WEN, Inc. the subsidiary guarantors party thereto, Onex BP Finance LP, Bank of America, N.A., and the lenders party thereto, dated November 1, 2016.	S-1/A	333-211761	10.2.2	November 17, 2016
10.12	Amendment No. 3 to Term Loan Credit Agreement, among JELD-WEN Holding, Inc., JELD-WEN, Inc. the subsidiary guarantors party thereto, Onex BP Finance LP, Bank of America, N.A., and the lenders party thereto, dated March 7, 2017.	8-K	001-38000	10.1	March 8, 2017
10.13	Amendment No. 4, by and among JELD-WEN, Inc., JELD-WEN Holding, Inc., the subsidiary guarantors party thereto, the lenders party thereto, Bank of America, N.A., as administrative agent and the other parties thereto, dated as of December 14, 2017.	8-K	001-38000	10.2	December 15, 2017
10.14	Amendment No. 5, dated as of September 20, 2019, among JELD-WEN Holding, Inc., JELD-WEN, Inc., the subsidiary guarantors party thereto, the lenders party thereto and Bank of America, N.A., as administrative agent.	8-K	001-38000	10.1	September 20, 2019
10.15	Amendment No. 6, dated as of July 28, 2021, among JELD-WEN Holding, Inc., JELD-WEN, Inc., JELD-WEN of Canada, Ltd., the other borrowers and subsidiary guarantors party thereto, Wells Fargo Bank, National Association, as administrative agent, and the lenders party thereto.	10-Q	001-38000	10.3	August 2, 2021
10.16	Amendment No. 7 to Term Loan Credit Agreement, dated as of June 16, 2023, among JELD-WEN Holding, Inc., JELD-WEN, Inc., the other guarantors party thereto, the lenders party thereto, Bank of America, N.A., as administrative agent, and the other parties thereto.	8-K	001-38000	10.2	June 16, 2023

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Exhibit No.	Exhibit Description	Form	File No.	Exhibit	Filing Date
10.18*+	JELD-WEN Holding, Inc. 2017 Omnibus Equity Plan.				
10.19+	Amendment to Form of Nonqualified Stock Option Agreement under JELD-WEN Holding, Inc. 2017 Omnibus Equity Plan.	10-Q	001-38000	10.2	April 30, 2021
10.20+	Form of Restricted Stock Unit Award Agreement under JELD-WEN Holding, Inc. 2017 Omnibus Plan.	10-K	001-38000	10.20	February 22, 2022
10.21+	Form of Performance Share Unit Award Agreement under JELD-WEN Holding, Inc. 2017 Omnibus Plan.	10-K	001-38000	10.21	February 22, 2022
10.22+	JELD-WEN Holding, Inc. 2022 Management Incentive Plan.	10-K	001-38000	10.22	February 22, 2022
10.23+	Form of Indemnification Agreement.	S-1	333-211761	10.25	June 1, 2016
10.24+	Form of Separation Agreement between JELD-WEN Holding, Inc. and executive officers.	10-Q	001-38000	10.1	September 24, 2022
10.25+	Amendment to Executive Employment Agreement between JELD-WEN, Holding, Inc. and Kevin C. Lilly, effective August 3, 2022.	10-Q	001-38000	10.2	September 24, 2022
10.26+	Form of Executive Employment Agreement between JELD-WEN Holding, Inc. and executive officers.	10-Q	001-38000	10.1	August 5, 2020
10.27	The JELD-WEN Deferred Compensation Plan, effective April 1, 2022	8-K	001-38000	10.1	February 18, 2022
21.1*	List of subsidiaries of JELD-WEN Holding, Inc.				
22.1	Subsidiary Guarantors and Issuers of Guaranteed Securities.	10-K	001-38000	22.1	February 22, 2022
23.1*	Consent of PricewaterhouseCoopers LLP, independent registered public accounting firm.				
24.1*	Power of Attorney (included on the signature page of this Annual Report on Form 10-K).				
31.1*	Certification of Periodic Report by Chief Executive Officer under Section 302 of the Sarbanes-Oxley Act of 2002.				

31.2*	Certification of Periodic Report by Chief Financial Officer under Section 302 of the Sarbanes-Oxley Act of 2002.				
32.1*	Certification of Chief Executive Officer and Chief Financial Officer Pursuant to 18 U.S.C. Section 1350 as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
101.INS*	Inline XBRL Instance Document.				
101.SCH*	Inline XBRL Taxonomy Extension Schema Document.				
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document.				
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document.				
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document.				
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document.				
104	Cover Page Interactive Data File (formatted in Inline XBRL and contained in Exhibit 101).				

* Filed herewith.

\+ Indicates management contract or compensatory plan.

Exhibit No.	Exhibit Description	Form	File No.	Exhibit	Filing Date
10.17	Amendment No. 8 to Term Loan Credit Agreement, dated as of January 19, 2024, among JELD-WEN Holding, Inc., JELD-WEN, Inc., the other guarantors party thereto, the lenders party thereto, Bank of America, N.A., as administrative agent, and the other parties thereto.	8-K	001-38000	10.1	January 19, 2024
10.18	Share Sale Agreement, dated April 17, 2023, by and between JW International Holdings, Inc. and Aristotle Holding III Pty Limited	8-K	001-38000	2.1	April 18, 2023
10.19+	JELD-WEN Holding, Inc. Amended and Restated Stock Incentive Plan, dated January 30, 2017.	10-Q	001-38000	10.14	May 12, 2017
10.20+	Form of Nonstatutory Common Stock Option Agreement under JELD-WEN Holding, Inc. Amended and Restated Stock Incentive Plan.	S-1/A	333-211761	10.7	December 16, 2016
10.21+	Form of Nonstatutory Class B-1 Common Stock Option Agreement under JELD-WEN Holding, Inc. Amended and Restated Stock Incentive Plan.	S-1/A	333-211761	10.8	December 16, 2016
10.22+	JELD-WEN Holding, Inc. 2017 Omnibus Equity Plan.	10-K	001-38000	10.18	February 22, 2022
10.23+	Amendment to Form of Nonqualified Stock Option Agreement under JELD-WEN Holding, Inc. 2017 Omnibus Equity Plan.	10-Q	001-38000	10.2	April 30, 2021
10.24+	Form of Restricted Stock Unit Award Agreement under JELD-WEN Holding, Inc. 2017 Omnibus Plan.	10-K	001-38000	10.20	February 22, 2022
10.25+	Form of Performance Share Unit Award Agreement under JELD-WEN Holding, Inc. 2017 Omnibus Plan.	10-K	001-38000	10.21	February 22, 2022
10.26*+	Form of Nonqualified Stock Option Agreement under JELD-WEN Holding, Inc. 2017 Omnibus Plan.				
10.27*+	Form of Restricted Stock Unit Award Agreement under JELD-WEN Holding, Inc. 2017 Omnibus Plan.				
10.28*+	Form of Performance Share Unit Award Agreement under JELD-WEN Holding, Inc. 2017 Omnibus Plan.				
10.29*+	JELD-WEN Holding, Inc. 2024 Management Incentive Plan				
10.30+	Form of Indemnification Agreement.	S-1	333-211761	10.25	June 1, 2016
10.31+	Form of Separation Agreement between JELD-WEN Holding, Inc. and executive officers.	10-Q	001-38000	10.1	September 24, 2022
10.32+	Amendment to Executive Employment Agreement between JELD-WEN, Holding, Inc. and Kevin C. Lilly, effective August 3, 2022.	10-Q	001-38000	10.2	September 24, 2022
10.33+	Form of Executive Employment Agreement between JELD-WEN Holding, Inc. and executive officers.	10-Q	001-38000	10.1	August 5, 2020
10.34	The JELD-WEN Deferred Compensation Plan, effective April 1, 2022	8-K	001-38000	10.1	February 18, 2022
19.1*	Securities Trading and Disclosure Policy				
21.1*	List of subsidiaries of JELD-WEN Holding, Inc.				
22.1	Subsidiary Guarantors and Issuers of Guaranteed Securities.	10-K	001-38000	22.1	February 22, 2022
23.1*	Consent of PricewaterhouseCoopers LLP, independent registered public accounting firm.				
24.1*	Power of Attorney (included on the signature page of this Annual Report on Form 10-K).				
31.1*	Certification of Periodic Report by Chief Executive Officer under Section 302 of the Sarbanes-Oxley Act of 2002.				

31.2*	Certification of Periodic Report by Chief Financial Officer under Section 302 of the Sarbanes-Oxley Act of 2002.
32.1*	Certification of Chief Executive Officer and Chief Financial Officer Pursuant to 18 U.S.C. Section 1350 as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
97.1*	JELD-WEN Holding, Inc. Incentive Compensation Clawback Policy
101.INS*	Inline XBRL Instance Document.
101.SCH*	Inline XBRL Taxonomy Extension Schema Document.
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104	Cover Page Interactive Data File (formatted in Inline XBRL and contained in Exhibit 101).

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Exhibit No.	Exhibit Description	Form	File No.	Exhibit	Filing Date
*	Filed herewith.				
+	Indicates management contract or compensatory plan.				

Item 16 - Form 10-K Summary

None.

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized.

JELD-WEN HOLDING, INC.

(Registrant)

By: /s/ Julie Albrecht

Julie Albrecht

Executive Vice President and Chief Financial Officer

Date: February 21, 2023 February 20, 2024

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Julie Albrecht and Roya Behnia, James Hayes, jointly and severally, his or her attorney-in-fact, with the power of substitution, for him or her in any and all capacities, to sign any amendments to this Annual Report on Form 10-K and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his or her substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities and Exchange Act of 1934, this Annual Report on Form 10-K has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ William Christensen William J. Christensen	Chief Executive Officer and Director (Principal Executive Officer)	February 21, 2023 20, 2024
/s/ Julie Albrecht Julie Albrecht	Chief Financial Officer (Principal Financial Officer)	February 21, 2023 20, 2024
/s/ Scott Vining Michael Leon Scott Vining Michael Leon	Chief Accounting Officer (Principal Accounting Officer)	February 21, 2023 20, 2024
/s/ Roderick C. Wendt David Nord Roderick C. Wendt David Nord	Vice Chair and Director	February 21, 2023 20, 2024
/s/ Catherine A. Halligan Catherine Halligan	Director	February 21, 2023 20, 2024
/s/ Michael F. Hilton Michael F. Hilton	Director	February 20, 2024
/s/ Tracey I. Joubert Tracey I. Joubert	Director	February 21, 2023 20, 2024
/s/ Cynthia Marshall Cynthia Marshall	Director	February 21, 2023 20, 2024
/s/ Suzanne Stefany Suzanne Stefany	Director	February 21, 2023 20, 2024

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Signature	Title	Date
/s/ Bruce Taten Bruce Taten	Director	February 21, 2023 20, 2024
/s/ Roderick C. Wendt Roderick C. Wendt	Director	February 20, 2024
/s/ Steven E. Wynne Steven E. Wynne	Director	February 21, 2023 20, 2024

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of JELD-WEN Holding, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of JELD-WEN Holding, Inc. and its subsidiaries (the "Company") as of December 31, 2022 December 31, 2023 and 2021, 2022, and the related consolidated statements of operations, of comprehensive income (loss), of equity and of cash flows for each of the three years in the period ended December 31, 2022 December 31, 2023, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2022 December 31, 2023, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2022 December 31, 2023 and 2021, 2022, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022 December 31, 2023 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022 December 31, 2023, based on criteria established in Internal Control - Integrated Framework (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

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Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Interim and Annual Goodwill Impairment Assessments Assessment – North America and Europe Reporting Units Unit

As described in Notes 1 and 5 6 to the consolidated financial statements, the Company's consolidated goodwill balance was $460.5 million $390.2 million as of December 31, 2022 December 31, 2023, and the goodwill associated with the North America and Europe reporting units unit was $182.3 million and $199.7 million, respectively. $207.8 million. Management tests goodwill for impairment on an annual basis during the fourth quarter and between annual tests if indicators of potential impairment exist. During the quarter ended September 24, 2022, management identified various qualitative and quantitative factors which collectively indicated a triggering event had occurred within the North America and Europe reporting units. Based on the results of the interim impairment assessment, management concluded that the carrying value of the Europe reporting unit exceeded its fair value and recorded a goodwill impairment charge of $54.9 million, representing a partial impairment of goodwill assigned to the Europe reporting unit. In addition, management determined that the North America reporting unit was not impaired. Management performed its annual goodwill impairment assessment as of the beginning of the December fiscal month of 2022 and determined that the fair value of the North America and Europe reporting units exceeded their net carrying value and no additional goodwill impairment was recorded. Management estimates the fair value of reporting units using the income approach. and market approaches. Under the income approach, the fair value of a reporting unit is based on discounted cash flow analysis that contains significant assumptions and estimates including revenue growth rates, expected EBITDA margins, discount rates, capital expenditures, and terminal growth rates.

The principal considerations for our determination that performing procedures relating to the interim and annual goodwill impairment assessments assessment for the North America and Europe reporting units unit is a critical audit matter are (i) the significant judgment by management when developing the fair value estimates estimate of the reporting units; unit; (ii) a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating management's significant assumptions related to revenue growth rates, expected EBITDA margins, the discount rates, rate, capital expenditures, and the terminal growth rates; rate; and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's interim and annual goodwill impairment assessments, assessment, including controls over the valuation of the North America and Europe reporting units. unit. These procedures included, among others (i) testing management's process for developing the fair value estimates; estimate of the Europe reporting unit; (ii) evaluating the appropriateness of the discounted cash flow model; analysis used by management; (iii) testing the completeness and accuracy of underlying data used in the model; discounted cash flow analysis; and (iv) evaluating the reasonableness of the significant assumptions used by management related to revenue growth rates, expected EBITDA margins, the discount rates, rate, capital expenditures, and the terminal growth rates. rate. Evaluating management's assumptions related to revenue growth rates, expected EBITDA margins, and capital expenditures involved evaluating whether the assumptions used by management were reasonable considering (i) the current and past performance of the reporting unit; (ii) the consistency with external market and industry data; and (iii) whether these assumptions were consistent with evidence obtained in other areas of the audit. Professionals with specialized skill and knowledge were used to assist in evaluating (i) the evaluation appropriateness of the Company's discounted cash flow model analysis and assumptions related to (ii) the reasonableness of the discount rate and terminal growth rates and discount rates.

rate assumptions.

/s/ PricewaterhouseCoopers LLP
Charlotte, North Carolina
February 21, 2023 20, 2024

We have served as the Company's auditor since 2000.

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Item 1 - Financial Statements

JELD-WEN HOLDING, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS

		For the Years Ended December 31,					
		For the Years Ended December 31,					
		For the Years Ended December 31,					
		For the Years Ended December 31,					
(amounts in thousands, except share and per share data)							
(amounts in thousands, except share and per share data)							
(amounts in thousands, except share and per share data)	**(amounts in thousands, except share and per share data)**	**2022**	**2021**	**2020**	**2023**	**2022**	**2021**
Net revenues	Net revenues	$5,129,179	$4,771,719	$ 4,235,677			
Cost of sales	Cost of sales	4,183,753	3,796,452	3,333,770			
Gross margin	Gross margin	945,426	975,267	901,907			
Selling, general and administrative	Selling, general and administrative	766,092	704,892	702,715			
Goodwill impairment		54,885	—	—			
Restructuring and asset related charges, net		18,233	2,950	10,469			

Selling, general and administrative				
Selling, general and administrative				
Goodwill impairment (Note 6)				
Restructuring and asset related charges (Note 19)				
Operating income	Operating income	106,216	267,425	188,723
Interest expense, net		82,060	77,566	74,800
Interest expense, net (Note 21)				
Interest expense, net (Note 21)				
Interest expense, net (Note 21)				
Loss on extinguishment of debt (Note 12)				
Other income, net (Note 22)				
Other income, net		(54,881)	(14,503)	(2,752)
Income before taxes		79,037	204,362	116,675
Income tax expense		33,310	35,540	25,089
Other income, net (Note 22)				
Other income, net (Note 22)				
Income from continuing operations before taxes				
Income tax expense (Note 15)				
Income from continuing operations, net of tax				
Gain on sale of discontinued operations, net of tax (Note 2)				
Income from discontinued operations, net of tax (Note 2)				
Net income	Net income	$ 45,727	$ 168,822	$ 91,586
Weighted average common shares outstanding:				
Weighted average common shares outstanding (Note 17):				
Weighted average common shares outstanding (Note 17):				
Weighted average common shares outstanding (Note 17):				

Basic				
Basic				
Basic				
Diluted				
Net income per share from continuing operations				
Basic				
Basic				
Basic				
Diluted				
Net income per share from discontinued operations				
Basic				
Basic				
Basic				
Diluted				
Net income per share				
Basic				
Basic				
Basic	Basic	86,374,499	96,563,155	100,633,392
Diluted	Diluted	87,075,176	98,371,142	101,681,981
Net income per share				
Basic		$ 0.53	$ 1.75	$ 0.91
Diluted		$ 0.53	$ 1.72	$ 0.90

Net income per share may not sum due to rounding.

The accompanying notes are an integral part of these Consolidated Financial Statements.

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JELD-WEN HOLDING, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

	For the Years Ended December 31,		
(amounts in thousands)	2022	2021	2020
Net income	$ 45,727	$ 168,822	$ 91,586
Other comprehensive (loss) income, net of tax:			
Foreign currency translation adjustments, net of tax expense (benefit) of $1,502, $(4,096), and $0, respectively	(71,811)	(77,904)	105,442
Interest rate hedge adjustments, net of tax expense (benefit) of $3,268, $1,302, and $(468), respectively	9,668	3,850	(1,384)
Defined benefit pension plans, net of tax expense (benefit) of $4,104, $13,226, and $(3,800), respectively	13,255	39,001	(11,476)
Total other comprehensive (loss) income, net of tax	(48,888)	(35,053)	92,582
Comprehensive (loss) income	$ (3,161)	$ 133,769	$ 184,168

	For the Years Ended December 31,

(amounts in thousands)	2023	2022	2021
Net income	$ 62,445	$ 45,727	$ 168,822
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustments, net of tax expense (benefit) of $2,301, $1,502, and $(4,096), respectively	45,859	(71,811)	(77,904)
Interest rate hedge adjustments, net of tax (benefit) expense of $(4,076), $3,268, and $1,302, respectively	(12,159)	9,668	3,850
Defined benefit pension plans, net of tax expense of $3,287, $4,104, and $13,226, respectively	13,624	13,255	39,001
Total other comprehensive income (loss), net of tax	47,324	(48,888)	(35,053)
Comprehensive income (loss)	$ 109,769	$ (3,161)	$ 133,769

The accompanying notes are an integral part of these Consolidated Financial Statements.

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JELD-WEN HOLDING, INC.
CONSOLIDATED BALANCE SHEETS

(amounts in thousands, except share and per share data)	December 31, 2023	December 31, 2022
ASSETS		
Current assets		
Cash and cash equivalents	$ 288,312	$ 164,475
Restricted cash	835	1,463
Accounts receivable, net (Note 3)	516,674	531,232
Inventories (Note 4)	481,451	594,471
Other current assets	71,507	73,485
Assets held for sale (Note 20)	135,563	125,748
Current assets of discontinued operations (Note 2)	—	204,732
Total current assets	1,494,342	1,695,606
Property and equipment, net (Note 5)	644,242	642,004
Deferred tax assets (Note 15)	150,453	182,161
Goodwill (Note 6)	390,170	381,953
Intangible assets, net (Note 7)	123,910	148,106
Operating lease assets, net (Note 8)	146,931	128,993
Other assets	30,077	25,778
Non-current assets of discontinued operations (Note 2)	—	296,760
Total assets	$ 2,980,125	$ 3,501,361
LIABILITIES AND EQUITY		
Current liabilities		
Accounts payable	$ 269,322	$ 286,978
Accrued payroll and benefits (Note 9)	132,550	107,002
Accrued expenses and other current liabilities (Note 10)	233,796	247,901
Current maturities of long-term debt (Note 12)	36,177	34,093
Liabilities held for sale (Note 20)	7,064	6,040
Current liabilities of discontinued operations (Note 2)	—	104,612
Total current liabilities	678,909	786,626
Long-term debt (Note 12)	1,190,075	1,712,790
Unfunded pension liability (Note 26)	26,502	31,109
Operating lease liability (Note 8)	121,993	105,068
Deferred credits and other liabilities (Note 13)	104,831	95,936
Deferred tax liabilities (Note 15)	7,170	7,862

Non-current liabilities of discontinued operations *(Note 2)*	—	38,422
Total liabilities	2,129,480	2,777,813
Commitments and contingencies *(Note 25)*		
Shareholders' equity		
Preferred Stock, par value $0.01 per share, 90,000,000 shares authorized; no shares issued and outstanding	—	—
Common Stock: 900,000,000 shares authorized, par value $0.01 per share, 85,309,220 and 84,347,712 shares issued and outstanding as of December 31, 2023 and December 31, 2022, respectively.	853	843
Additional paid-in capital	752,171	734,853
Retained earnings	192,931	130,486
Accumulated other comprehensive loss	(95,310)	(142,634)
Total shareholders' equity	850,645	723,548
Total liabilities and shareholders' equity	$ 2,980,125	$ 3,501,361

(amounts in thousands, except share and per share data)	December 31, 2022	December 31, 2021
ASSETS		
Current assets		
Cash and cash equivalents	$ 219,405	$ 395,596
Restricted cash	1,463	1,294
Accounts receivable, net	603,748	552,041
Inventories	666,455	615,971
Other current assets	78,787	55,531
Assets held for sale	125,748	119,424
Total current assets	1,695,606	1,739,857
Property and equipment, net	762,486	798,804
Deferred tax assets	195,180	204,232
Goodwill	460,505	545,213
Intangible assets, net	192,105	222,181
Operating lease assets, net	167,880	201,781
Other assets	27,599	26,603
Total assets	$ 3,501,361	$ 3,738,671
LIABILITIES AND EQUITY		
Current liabilities		
Accounts payable	$ 320,682	$ 418,774
Accrued payroll and benefits	133,637	135,989
Accrued expenses and other current liabilities	291,876	289,676
Current maturities of long-term debt	34,391	38,561
Liabilities held for sale	6,040	5,868
Total current liabilities	786,626	888,868
Long-term debt	1,713,238	1,667,696
Unfunded pension liability	35,505	61,438
Operating lease liability	135,822	166,318
Deferred credits and other liabilities	97,898	102,879
Deferred tax liabilities	8,724	9,254
Total liabilities	2,777,813	2,896,453
Commitments and contingencies *(Note 24)*		
Shareholders' equity		
Preferred Stock, par value $0.01 per share, 90,000,000 shares authorized; no shares issued and outstanding	—	—
Common Stock: 900,000,000 shares authorized, par value $0.01 per share, 84,347,712 and 90,193,550 shares issued and outstanding as of December 31, 2022 and December 31, 2021, respectively.	843	902
Additional paid-in capital	734,853	719,451
Retained earnings	130,486	215,611

Accumulated other comprehensive loss	(142,634)	(93,746)
Total shareholders' equity	723,548	842,218
Total liabilities and shareholders' equity	$ 3,501,361	$ 3,738,671

The accompanying notes are an integral part of these Consolidated Financial Statements.

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JELD-WEN HOLDING, INC.
CONSOLIDATED STATEMENTS OF EQUITY

	December 31, 2023		December 31, 2022		December 31, 2021	
(amounts in thousands, except share and per share amounts)	Shares	Amount	Shares	Amount	Shares	Amount
Preferred stock, $0.01 par value per share	—	$ —	—	$ —	—	$ —
Common stock, $0.01 par value per share						
Balance at beginning of period	84,347,712	$ 843	90,193,550	$ 902	100,806,068	$ 1,008
Shares issued for exercise/vesting of share-based compensation awards	1,069,969	11	1,128,181	11	1,011,439	10
Shares repurchased	—	—	(6,848,356)	(69)	(11,564,009)	(115)
Shares surrendered for tax obligations for employee share-based transactions	(108,461)	(1)	(125,663)	(1)	(59,948)	(1)
Balance at period end	85,309,220	$ 853	84,347,712	$ 843	90,193,550	$ 902
Additional paid-in capital						
Balance at beginning of period		$ 735,526		$ 720,124		$ 691,360
Shares issued for exercise/vesting of share-based compensation awards		552		1,998		10,174
Shares surrendered for tax obligations for employee share-based transactions		(1,637)		(2,764)		(1,619)
Amortization of share-based compensation		18,403		16,168		20,209
Balance at period end		752,844		735,526		720,124
Employee stock notes						
Balance at beginning of period		(673)		(673)		(673)
Net issuances, payments and accrued interest on notes		—		—		—
Balance at period end		(673)		(673)		(673)
Balance at period end		$ 752,171		$ 734,853		$ 719,451
Retained earnings						
Balance at beginning of period		$ 130,486		$ 215,611		$ 371,462
Shares repurchased		—		(130,852)		(324,673)
Net income		62,445		45,727		168,822
Balance at period end		$ 192,931		$ 130,486		$ 215,611
Accumulated other comprehensive income (loss)						
Balance at beginning of period		$ (142,634)		$ (93,746)		$ (58,693)
Foreign currency adjustments		45,859		(71,811)		(77,904)
Unrealized (loss) gain on interest rate hedges		(12,159)		9,668		3,850
Net actuarial pension gain		13,624		13,255		39,001
Balance at period end		$ (95,310)		$ (142,634)		$ (93,746)
Total shareholders' equity at period end		$ 850,645		$ 723,548		$ 842,218

	December 31, 2022		December 31, 2021		December 31, 2020	
(amounts in thousands, except share and per share amounts)	Shares	Amount	Shares	Amount	Shares	Amount
Preferred stock, $0.01 par value per share	—	$ —	—	$ —	—	$ —
Common stock, $0.01 par value per share						

Balance at beginning of period	90,193,550	$	902	100,806,068	$	1,008	100,668,003	$	1,007
Shares issued for exercise/vesting of share-based compensation awards	1,128,181		11	1,011,439		10	427,950		5
Shares repurchased	(6,848,356)		(69)	(11,564,009)		(115)	(265,589)		(3)
Shares surrendered for tax obligations for employee share-based transactions	(125,663)		(1)	(59,948)		(1)	(24,296)		(1)
Balance at period end	84,347,712	$	843	90,193,550	$	902	100,806,068	$	1,008
Additional paid-in capital									
Balance at beginning of period		$	720,124		$	691,360		$	672,445
Shares issued for exercise/vesting of share-based compensation awards			1,998			10,174			2,979
Shares surrendered for tax obligations for employee share-based transactions			(2,764)			(1,619)			(463)
Amortization of share-based compensation			16,168			20,209			16,399
Balance at period end			735,526			720,124			691,360
Employee stock notes									
Balance at beginning of period			(673)			(673)			(673)
Net issuances, payments and accrued interest on notes			—			—			—
Balance at period end			(673)			(673)			(673)
Balance at period end		$	734,853		$	719,451		$	690,687
Retained earnings									
Balance at beginning of period		$	215,611		$	371,462		$	290,583
Shares repurchased			(130,852)			(324,673)			(4,997)
Adoption of new accounting standard ASU No. 2016-13			—			—			(5,710)
Net income			45,727			168,822			91,586
Balance at period end		$	130,486		$	215,611		$	371,462
Accumulated other comprehensive income (loss)									
Balance at beginning of period		$	(93,746)		$	(58,693)		$	(151,275)
Foreign currency adjustments			(71,811)			(77,904)			105,442
Unrealized gain (loss) on interest rate hedges			9,668			3,850			(1,384)
Net actuarial pension gain (loss)			13,255			39,001			(11,476)
Balance at period end		$	(142,634)		$	(93,746)		$	(58,693)
Total shareholders' equity at period end		$	723,548		$	842,218		$	1,004,464

The accompanying notes are an integral part of these Consolidated Financial Statements

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JELD-WEN HOLDING, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

	For the Years Ended December 31,					
(amounts in thousands)		December 31, 2023		December 31, 2022		2021
OPERATING ACTIVITIES						
Net income	$	62,445	$	45,727	$	168,822
Adjustments to reconcile net income to cash provided by (used in) operating activities:						
Depreciation and amortization		140,192		131,754		137,247
Deferred income taxes		31,735		(4,394)		(14,973)
Net (gain) loss on disposition of assets		(10,472)		(7,969)		1,979
Goodwill impairment		—		54,885		—
Adjustment to carrying value of assets		7,862		2,375		2,076
Amortization of deferred financing costs		2,614		3,150		3,175
Loss on extinguishment of debt		6,487		—		1,001
Gain on sale of discontinued operations		(23,982)		—		—

Stock-based compensation	18,403	16,168	20,209
Amortization of U.S. pension expense	480	1,798	9,092
Recovery of cost from interest received on impaired notes	(3,514)	(13,953)	—
Other items, net	(7,439)	24,597	3,804
Net change in operating assets and liabilities:			
Accounts receivable	10,862	(79,692)	(91,920)
Inventories	119,560	(73,575)	(134,482)
Other assets	11,595	(4,875)	(14,575)
Accounts payable and accrued expenses	(21,548)	(58,615)	70,184
Change in short-term and long-term tax liabilities	(92)	(7,044)	14,027
Net cash provided by operating activities	345,188	30,337	175,666
INVESTING ACTIVITIES			
Purchases of property and equipment	(98,332)	(83,217)	(83,603)
Proceeds from sale of property and equipment	16,751	11,871	3,166
Purchase of intangible assets	(12,550)	(9,003)	(16,090)
Proceeds (payments) related to the sale of JW Australia(1)	365,555	—	—
Recovery of cost from interest received on impaired notes	3,514	13,953	—
Cash received for notes receivable	261	94	4,166
Cash received from insurance proceeds	5,115	—	—
Change in securities for deferred compensation plan	(1,140)	(728)	—
Net cash provided by (used in) investing activities	279,174	(67,030)	(92,361)
FINANCING ACTIVITIES			
Change in long-term debt and payments of debt extinguishment costs	(561,338)	12,729	(86,051)
Common stock issued for exercise of options	563	2,009	10,184
Common stock repurchased	—	(131,987)	(323,722)
Payments to tax authorities for employee share-based compensation	(1,638)	(2,765)	(1,620)
Payments related to the sale of JW Australia	(744)	—	—
Net cash used in financing activities	(563,157)	(120,014)	(401,209)
Effect of foreign currency exchange rates on cash	7,074	(19,315)	(21,800)
Net increase (decrease) in cash and cash equivalents	68,279	(176,022)	(339,704)
Cash, cash equivalents and restricted cash, beginning	220,868	396,890	736,594
Cash, cash equivalents and restricted cash, ending	$ 289,147	$ 220,868	$ 396,890
Balances included in the Consolidated Balance Sheets:			
Cash, cash equivalents, and restricted cash	$ 289,147	$ 165,938	$ 344,062
Cash and cash equivalents included in current assets of discontinued operations	—	54,930	52,828
Cash and cash equivalents at end of period	$ 289,147	$ 220,868	$ 396,890

For further information see Note 27 - *Supplemental Cash Flow.*

Cash flows from discontinued operations through the divestiture date of July 2, 2023 are included in the above amounts and explained in Note 1 — *Basis of Presentation* and Note 2 — *Discontinued Operations.*

	For the Years Ended December 31,		
(amounts in thousands)	2022	2021	2020
OPERATING ACTIVITIES			
Net income	$ 45,727	$ 168,822	$ 91,586
Adjustments to reconcile net income to cash used in operating activities:			
Depreciation and amortization	131,754	137,247	134,623
Deferred income taxes	(4,394)	(14,973)	(9,063)
Net (gain) loss on disposition of assets	(7,969)	1,979	(4,122)
Goodwill impairment	54,885	—	—
Adjustment to carrying value of assets	2,375	2,076	5,537
Amortization of deferred financing costs	3,150	3,175	2,679

Loss on extinguishment of debt	—	1,001	—
Stock-based compensation	16,168	20,209	16,399
Contributions to U.S. pension plan	—	—	(12,619)
Amortization of U.S. pension expense	1,798	9,092	6,852
Recovery of cost from interest received on impaired notes	(13,953)	—	—
Other items, net	24,597	3,804	21,125
Net change in operating assets and liabilities, net of effect of acquisitions:			
Accounts receivable	(79,692)	(91,920)	10,819
Inventories	(73,575)	(134,482)	9,849
Other assets	(4,875)	(14,575)	5,520
Accounts payable and accrued expenses	(58,615)	70,184	62,880
Change in short term and long-term tax liabilities	(7,044)	14,027	13,590
Net cash provided by operating activities	30,337	175,666	355,655
INVESTING ACTIVITIES			
Purchases of property and equipment	(83,217)	(83,603)	(77,692)
Proceeds from sale of property and equipment	11,871	3,166	14,308
Purchase of intangible assets	(9,003)	(16,090)	(19,204)
Recovery of cost from interest received on impaired notes	13,953	—	—
Cash received for notes receivable	94	4,166	585
Change in securities for deferred compensation plan	(728)	—	—
Net cash used in investing activities	(67,030)	(92,361)	(82,003)
FINANCING ACTIVITIES			
Change in long-term debt	12,729	(86,051)	210,858
Common stock issued for exercise of options	2,009	10,184	2,984
Common stock repurchased	(131,987)	(323,722)	(5,000)
Payments to tax authorities for employee share-based compensation	(2,765)	(1,620)	(933)
Net cash (used in) provided by financing activities	(120,014)	(401,209)	207,909
Effect of foreign currency exchange rates on cash	(19,315)	(21,800)	25,157
Net (decrease) increase in cash and cash equivalents	(176,022)	(339,704)	506,718
Cash, cash equivalents and restricted cash, beginning	396,890	736,594	229,876
Cash, cash equivalents and restricted cash, ending	$ 220,868	$ 396,890	$ 736,594

For further information see Note 26 - *Supplemental Cash Flow.*

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(1) Includes proceeds from the sale of JW Australia, net of the $73.9 million of cash divested.

The accompanying notes are an integral part of these Consolidated Financial Statements.

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JELD-WEN HOLDING, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1. Description of Company and Summary of Significant Accounting Policies

Nature of Business – JELD-WEN Holding, Inc., along with its subsidiaries, is a vertically integrated global manufacturer and distributor of windows, doors, and other building products that derives substantially all its revenues from the sale of its door and window products. Unless otherwise specified or the context otherwise requires, all references in these notes to “JELD-WEN,” “we,” “us,” “our,” or the “Company” are to JELD-WEN Holding, Inc. and its subsidiaries.

We have facilities primarily located in the U.S., Canada, Europe, Australia, Asia, and Mexico. Europe. Our products are marketed primarily under the JELD-WEN brand name in the U.S. and Canada and under JELD-WEN and a variety of acquired brand names in Europe, Australia, and Asia. Europe.

Our revenues are affected by the level of new housing starts, residential and non-residential building construction, and repair and remodeling activity in each of our markets. Our sales typically follow seasonal new construction and repair and remodeling industry patterns. The peak season for home construction and remodeling in many of our markets generally corresponds with the second and third calendar quarters, and therefore, sales volume is typically higher during those quarters. Our first and fourth quarter sales volumes are generally lower due to reduced repair and remodeling activity and reduced activity in the building and construction industry as a result of colder and more inclement weather in certain areas of our geographic end markets.

Basis of Presentation – The accompanying consolidated financial statements have been prepared in accordance with GAAP and pursuant to the rules and regulations of the SEC. All intercompany balances and transactions have been eliminated in consolidation.

On April 17, 2023, we entered into a Share Sale Agreement with Aristotle Holding III Pty Limited, a subsidiary of Platinum Equity Advisors, LLC, to sell our Australasia business ("JW Australia"). On July 2, 2023, we completed the sale. The net assets and operations of the disposal group met the criteria to be classified as "discontinued operations" and are reported as such in all periods presented unless otherwise noted. The consolidated statements of cash flows include cash flows from discontinued operations through the divestiture date of July 2, 2023. See Note 2 - *Discontinued Operations* for further information.

All U.S. dollar and other currency amounts, except per share amounts, are presented in thousands unless otherwise noted.

Ownership – As of December 31, 2020, Onex owned approximately 33% of the outstanding shares of our Common Stock. On March 1, 2021, May 10, 2021, and August 16, 2021, Onex exercised its rights under its Registration Rights Agreement and requested the registration for resale of 8,000,000, 10,000,000, 14,883,094 shares of our Common Stock, respectively, in underwritten public offerings (the "Secondary Offerings"), and as provided under the terms of the Registration Rights Agreement, we were responsible for all related fees and expenses except for the underwriters' discounts and commissions, which were paid by Onex. The Secondary Offerings were completed on March 3, 2021, May 13, 2021, and August 18, 2021, and the Company purchased from the underwriter 800,000, 1,000,000, and 7,017,543 of the aggregate shares of our Common Stock that were the subject of the Secondary Offerings at a price per share of $28.61, $28.80, and $28.50, respectively, which is the price at which the underwriter purchased the shares from Onex in the Secondary Offerings. After the Secondary Offerings, Onex held approximately 25%, 15%, and 0% of our outstanding shares of Common Stock, respectively.

Share Repurchases – On July 27, 2021, the Board of Directors increased the authorization under our existing share repurchase program to a total of $400.0 million with no expiration date. On July 28, 2022, our Board of Directors authorized a new share repurchase program, replacing our previous share repurchase authorization, with an aggregate value of $200.0 million and no expiration date. As of December 31, 2022 December 31, 2023, there have been no share repurchases under this program.

We did not repurchase shares of our Common Stock during the year ended December 31, 2023. During the years ended December 31, 2022, and December 31, 2021, and December 31, 2020, we paid $132.0 million, $323.7 million $132.0 million and $5.0 million, $323.7 million, respectively, to repurchase 6,848,356 11,564,009, and 265,589 11,564,009 shares of our Common Stock, respectively.

Fiscal Year – We operate on a fiscal calendar year, and each interim quarter is comprised of two 4-week periods and one 5-week period, with each week ending on a Saturday. Our fiscal year always begins on January 1 and ends on December 31. As a result, our first and fourth quarters may have more or fewer days included than a traditional 91-day fiscal quarter.

Use of Estimates – The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates, assumptions, and allocations that affect amounts reported in the consolidated financial statements and related notes. Significant items that are subject to such estimates and assumptions include, but are not limited to, long-lived assets including goodwill and other intangible assets, employee benefit obligations, income tax uncertainties, contingent assets and liabilities, provisions for bad debt, inventory, warranty liabilities, legal claims, valuation of derivatives, environmental remediation, and claims relating to self-insurance. Actual results could differ due to the uncertainty inherent in the nature of these estimates.

COVID-19 CARES Act – In March 2020, the United States government enacted the CARES Act to provide certain relief as a result of the COVID-19 pandemic. The CARES Act in the U.S. and similar legislation in provided for tax relief, along with other jurisdictions includes stimulus measures, that assisted companies in responding to the COVID-19 pandemic. These measures consisted primarily of cash assistance to support employment levels and deferment of remittance of certain non-income tax expense payments. The most significant impact was from the CARES Act in the U.S., which included including a provision that allows allowed employers to defer the remittance of the

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employer portion of the social security tax relating to 2020. The deferred employment payment was required to be paid over two years. Original payment due dates were in 2021 and 2022, however updated guidance provided by the Internal Revenue Service in December 2021 allowed for these payments to be made during 2022 and 2023. The Company deferred $20.9 million of the employer portion of social security tax in 2020, all of which of which $9.9 million was paid in the first quarter year ended December 31, 2022. The CARES Act also included a provision for an ERC designed to encourage businesses to retain employees during the COVID-19 pandemic. During the year ended December 31, 2023, we recorded an ERC from the

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U.S. government of 2022 and the remaining $11.0 $6.1 million was paid in other income, net in the fourth quarter accompanying consolidated statements of 2022. As of December 31, 2021, the deferral of $20.9 million was equally recorded between accrued payroll and benefits and deferred credits and operations. The balance is included in other liabilities current assets in the accompanying consolidated balance sheet. sheets as of December 31, 2023.

Segment Reporting – Our reportable segments are organized and managed principally by geographic region: North America Europe, and Australasia. Europe. We report all other business activities in Corporate and unallocated costs. In addition to similar economic characteristics, we also We consider the following factors in determining the reportable segments: the nature of business activities, the management structure accountable directly accountable to our the CODM, for operating and administrative activities, the discrete financial information regularly reviewed by the CODM, and information presented to the Board of Directors and investors. No operating segments have been aggregated for our presentation. presentation of reportable segments.

Cash and Cash Equivalents – We consider all highly-liquid investments purchased with an original or remaining maturity at the date of purchase of three months ninety days or less to be cash equivalents. Our cash management system is designed to maintain zero bank balances at certain banks. Checks written and not presented to these banks for payment are reflected as book overdrafts and are a component of accounts payable.

Restricted Cash – Restricted cash consists primarily of cash required to meet certain bank guarantees.

Accounts Receivable – Accounts receivable are recorded at their net realizable value. Our customers are primarily retailers, distributors, and contractors. As of December 31, 2022, two Two customers, The Home Depot and Lowe's Companies, each accounted for 26.9% more than 10% of the consolidated accounts receivable, balance. As net balance as of December 31, 2021, two customers accounted for 30.5% of the consolidated accounts receivable balance. December 31, 2023 and December 31, 2022. We maintain allowances for credit losses resulting from the inability of our customers to make required payments. We estimate the allowance for doubtful accounts credit losses based on quantitative and qualitative factors associated with the credit risk of our accounts receivable, including historical credit collections within each region where we have operations. If the financial condition of a customer deteriorates or other circumstances occur that result in an impairment of a customer's ability to make payments, we record additional allowances as needed. We write off uncollectible trade accounts receivable against the allowance for credit losses when collection efforts have been exhausted and/or any legal action taken by us has concluded.

Inventories – Inventories in the accompanying consolidated balance sheets are valued at the lower of cost or net realizable value and are determined by the first-in, first-out ("FIFO") or average cost methods. We record provisions to write-down obsolete and excess inventory to its estimated net realizable value. The process for evaluating obsolete and excess inventory requires us to evaluate historical inventory usage and expected future production needs. Accelerating the disposal process or incorrect estimates may cause actual results to differ from the estimates at the time such inventory is disposed or sold. We classify certain inventories that are available for sale directly to external customers or used in the manufacturing of a finished good within raw materials.

Notes Receivable – Notes receivable are recorded at their net realizable value. The balance consists primarily of installment notes and affiliate notes. The allowance for credit losses is based upon credit risks, historical loss trends, and specific reviews of delinquent notes. We write off uncollectible note receivables against the allowance for doubtful accounts credit losses when collection efforts have been exhausted and/or any legal action taken by us has been concluded. Current maturities and interest, net of short-term allowance are reported as other current assets.

Customer Displays – Customer displays include all costs to manufacture, ship, and install the displays of our products in retail store locations. Capitalized display costs are included in other assets and are amortized over the life of the product lines, typically 1 to 3 years, and are included in SG&A expense in the accompanying consolidated statements of operations and was $3.9 million in 2023, $1.4 million in 2022, and $3.0 million in 2021, and $7.9 million in 2020. 2021.

Cloud Computing Arrangements –We capitalize qualified cloud computing implementation costs associated with the application development stage and subsequently amortize these costs over the term of the hosting agreement and stated renewal period, if it is reasonably certain we will renew, typically 3 to 5 years. Capitalized costs are included in other assets on the consolidated balance sheet and amortization is included in SG&A expense in the accompanying consolidated statement of operations.

Property and Equipment – Property and equipment are recorded at cost. The cost of major additions and betterments are capitalized and depreciated using the straight-line method over their estimated useful lives. Replacements, maintenance, and repairs that do not improve or extend the useful lives of the related assets or adapt the property to a new or different use are expensed as incurred. Interest over the construction period is capitalized as a component of cost of constructed assets.

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Upon sale or retirement of property or equipment, cost and related accumulated depreciation are removed from the accounts and any gain or loss is charged to income and included in other income, net SG&A expense in the accompanying statements of operations.

Leasehold improvements are amortized over the shorter of the useful life of the improvement, the lease term, or the life of the building. Depreciation is generally provided over the following estimated useful service lives:

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Land improvements	10 - 20 years
Buildings and improvements	10 - 45 years
Machinery and equipment	3 - 20 years

Intangible Assets – Definite lived intangible assets are amortized based on the pattern of economic benefit over the following estimated useful lives:

Trademarks and trade names	10 - 40 years
Software	3 - 10 years
Patents, licenses and rights	5 - 25 years
Customer relationships	5 - 20 years

The lives of definite lived intangible assets are reviewed and reduced if necessary, whenever changes in their planned use occur. Legal and registration costs related to internally-developed patents and trademarks are capitalized and amortized over the lesser of their expected useful life or the legal patent life. Cost andaccumulated amortization are removed from the accounts in the period that an intangible asset becomesfully amortized. The carrying value of intangible assets is reviewed by management to assess the recoverability of the assets when facts and circumstances indicate that the carrying value may not be recoverable. The recoverability test requires us to first compare undiscounted cash flows expected to be generated by that definite lived intangible asset or asset group to its carrying amount. If the carrying amounts of the definite lived intangible assets are not recoverable on an undiscounted cash flow basis, an impairment charge is recognized to the extent that the carrying amount exceeds its fair value. Fair value is determined through various valuation techniques.

Our valuation of identifiable intangible assets acquired is based on information and assumptions available to us at the time of acquisition, using income and market approaches to determine fair value. We do not amortize indefinite-lived intangible assets, but test for impairment annually, or when indications of potential impairment exist. For intangible assets other than goodwill, if the carrying value exceeds the fair value, we recognize an impairment loss in an amount equal to the excess. No material impairments were identified during the years ended December 31, 2022 December 31, 2023, December 31, 2021 December 31, 2022 and December 31, 2020 December 31, 2021.

We capitalize certain qualified internal use software costs during the application development stage and subsequently amortize these costs over the estimated useful life of the asset. Costs incurred during the preliminary project stage and post-implementation operation stage are expensed as incurred.

Long-Lived Assets – Long-lived assets, other than goodwill, are reviewed for impairment whenever events or changes in circumstances indicate the carrying amount of such assets or asset groups may not be recoverable. If a triggering event is identified, we perform an impairment test by reviewing the expected undiscounted cash flows generated from the anticipated use and eventual disposition of the asset group compared to the carrying value of the asset group. If the expected undiscounted cash flows are less than the carrying value of the asset group, then an impairment charge is required to reduce the carrying value of the asset group to fair value. Long-lived assets currently available for sale and expected to be sold within one year are classified as assets held for sale.

Leases – We lease certain warehouses, distribution centers, office spaces, land, vehicles, and equipment. We determine if an arrangement is a lease at inception. A contract contains a lease if the contract conveys the right to control the use of identified property, plant, or equipment (an identified asset) for a period of time in exchange for consideration. Amounts associated with operating leases are included in operating lease assets (“ROU assets”), net, accrued expense and other current liabilities and operating lease liability in our consolidated balance sheet. Amounts associated with finance leases are included in property and equipment, net, current maturities of long-term debt, and long-term debt in our consolidated balance sheet.

ROU assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. ROU assets and liabilities are recognized at the lease commencement date based on the estimated present value of lease payments over the lease term.

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If the lease does not provide an implicit rate, we use our incremental borrowing rate based on the information available at the lease commencement date in determining the present value of lease payments. The incremental borrowing rate for operating leases that commenced in the period is determined by using the prior quarter end’s incremental borrowing rates.

We have elected not to recognize an ROU asset and lease liability for leases with an initial term of twelve months or less as well as any lease covering immaterial assets. We recognize lease expense for these leases on a straight-line basis over the lease term. Variable lease payments that are dependent on usage, output, or may vary for other reasons, are excluded from lease payments in the measurement of the ROU asset and lease liability, and accordingly are recognized as lease expense in the period the obligation for those payments is incurred. For lease agreements entered into or reassessed after the adoption of Topic 842, we We combine lease and non-lease components. components for all agreements, with the exception of building leases.

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Certain leases include renewal and/or termination options, with renewal terms that can extend the lease term from 1 to 20 years or more, and the exercise of lease renewal options under these leases is at our sole discretion. These options are included in the lease term used to determine ROU assets and corresponding liabilities when we are reasonably certain we will exercise the option. The depreciable life of assets and leasehold improvements are limited by the expected lease term. Our lease agreements do not contain any material residual value guarantees or material restrictive covenants.

Goodwill – Goodwill is tested for impairment on an annual basis during the fourth quarter and between annual tests if indicators of potential impairment exist, using a fair-value-based approach. exist. Current accounting guidance provides an entity the option to perform a qualitative assessment to determine whether it is more-likely-than-not that the fair value of a reporting unit is impaired. less than its carrying amount. If we do not perform a qualitative assessment, or if we determine that it is more likely than not that the fair value of the reporting unit exceeds is less than its carrying amount, we perform a quantitative goodwill impairment test test. Prior to 2023, the estimated fair values of reporting units were derived using the only an income approach (implied fair value measured on a non-recurring basis using level 3 inputs). Beginning in 2023, the estimated fair values of our reporting units were derived using a combination of income and market approaches, both of which yielded substantially equivalent indications of fair value. Absent an indication of fair value from a potential buyer or similar specific transactions, we believe that the use of these methods provides a reasonable estimate of a reporting unit’s fair value. Fair value computed by these models is arrived at using a number of factors and inputs. There are inherent uncertainties, however, related to fair value models, the inputs, factors and our judgment in applying them to this analysis. Nonetheless, we believe that the combination of these methods provides a reasonable approach to estimate the fair values of our reporting units.

Under the income approach, the fair value of a reporting unit is based on a discounted cash flow analysis of management's short-term and long-term forecast of operating performance. This analysis contains significant assumptions and estimates including revenue growth rates, expected EBITDA margins, discount rates, capital expenditures, and terminal growth rates. Changes in assumptions or estimates used in our goodwill impairment testing could materially affect the determination of the fair value of a reporting unit, and therefore, could eliminate any the excess of fair value over carrying value amount of a reporting unit and, in some cases, could result in impairment. Such changes in assumptions could be caused by items such as a loss of one or more significant customers, decline in the demand for our products due to changing economic conditions, or failure to control cost increases above what can be recouped in sale price increases. These types of changes would negatively affect our profits, revenues, and growth over the long term and such a decline could significantly affect the fair value assessment of our reporting units and cause our goodwill to become impaired.

We identified three two reporting units for the purpose of conducting our goodwill impairment review: North America Europe and Australasia, Europe and applied a quantitative approach to our North America and Europe both reporting units while applying a qualitative approach to our Australasia reporting unit. units. In determining our reporting units, we considered (i) whether an operating segment or a component of an operating segment was a business, (ii) whether discrete financial information was available, and (iii) whether the financial information is regularly reviewed by management of the operating segment.

Deferred Revenue – We record deferred revenue when we collect pre-payments from customers for performance obligations we expect to fulfill through future performance of a service or delivery of a product. We classify our deferred revenue based on our estimate as to when we expect to satisfy the related performance obligations. Deferred revenues are included in accrued expenses and other current liabilities in the accompanying consolidated balance sheets.

Warranty Accrual – Warranty terms range primarily from one year to lifetime on certain window and door components. Warranties are normally limited to replacement or service of defective components for the original customer. Some warranties are transferable to subsequent owners and are generally limited to ten years from the date of manufacture or require pro-rata payments from the customer. A provision for estimated warranty costs is recorded at the time of sale based on historical experience and we periodically adjust these provisions to reflect actual experience.

Restructuring – Costs to exit or restructure certain activities of an acquired company or our internal operations are accounted for as one-time termination and exit costs as required by the provisions of FASB ASC 420, *Exit or Disposal Cost Obligations*, and are accounted for separately from any business combination. A liability for costs associated with an exit or disposal activity is recognized and measured at its fair value in our consolidated statements of operations in the period in which the liability is incurred. When estimating the fair value of restructuring activities, assumptions are applied, which can differ materially from actual results. This may require us to revise our initial estimates, which may materially affect our results of operations and financial position in the period the revision is made.

Derivative Financial Instruments – Derivative financial instruments are used to manage interest rate risk associated with our borrowings and foreign currency exposures related to transactions denominated in currencies other than the U.S. dollar, or in the case of our non-U.S. companies, transactions denominated in a currency other than their functional currency. All

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derivatives are recorded as assets or liabilities in the consolidated balance sheets at their respective fair values. As of December 31, 2022 December 31, 2023, December 31, 2021 December 31, 2022 and December 31, 2020 December 31, 2021, we had netting provisions in certain agreements with our counterparties. We have elected to not offset the fair values of derivative assets and liabilities executed with the same counterparty that are generally subject to enforceable netting agreements. Changes in a derivative's fair value are recognized in earnings unless specific hedge criteria are met, and we elect hedge accounting prior to entering into the

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hedge. If a derivative is designated as a fair value hedge, the changes in fair value of both the derivative and the hedged item attributable to the hedged risks are recognized in the same line item in the results of operations. If the derivative is designated as a cash flow or net investment hedge, changes in the fair value related to the derivatives considered highly effective are initially recorded in accumulated other comprehensive income (loss) and subsequently classified to the consolidated statements of operations when the hedged item impacts earnings, and in the same line item on the consolidated statements of operations as the impact of the hedge transaction. Cash flows from all derivative instruments, including those not designated as hedging instruments, are classified in the same category as the cash flows from the item being hedged.

At the inception of a fair value, or cash flow hedge or net investment hedge we formally document the hedge relationship and the risk management objective for undertaking the hedge. In addition, for derivatives that qualify for hedge accounting, we assess, both at inception of the hedge and on an ongoing basis, whether the derivative financial instrument is and will continue to be highly effective in offsetting cash flows or fair value of the hedged item and whether it is probable that the hedged forecasted transaction will occur. Changes in the fair value of derivatives that do not qualify for hedge accounting, or fail to meet the criteria, thereafter, are also recognized in the consolidated statements of operations. See Note 23 24 - *Fair Value of Financial Instruments* for additional information on the fair value of our derivative assets and liabilities.

Revenue Recognition – Revenue is recognized when obligations under the terms of a contract with our customer are satisfied. Generally, this occurs with the transfer of control of our products or services. The transfer of control to the customer occurs at a point in time, usually upon satisfaction of the shipping terms within the contract. Revenue is measured as the amount of consideration we expect to receive in exchange for transferring goods or providing services. The taxes we collect concurrent with revenue-producing activities (e.g., sales tax, value-added tax, and other taxes) are excluded from revenue.

Shipping and handling costs are treated as fulfillment costs and are not considered a separate performance obligation. Shipping and handling costs charged to customers and the related expenses are reported in revenues and cost of sales for all customers. The expected costs associated with our base warranties and field service actions continue to be recognized as expense when the products are sold (see Note 10 11 - *Warranty Liability*). Since payment is due at or shortly after the point of sale, the contract asset is classified as a receivable.

We do not adjust the promised amount of consideration for the effects of a significant financing component when we expect, at contract inception, that the period between our transfer of a promised product or service to a customer and when the customer pays for that product or service will be one year or less. We do not typically include extended payment terms in our contracts with customers. Incidental items that are immaterial in the context of the contract are recognized as expense.

We disaggregate revenues based on geographical location. See Note 14 - *Segment Information* for further information on disaggregated revenue.

Advertising Costs – All costs of advertising our products and services are charged to expense as incurred. Advertising and promotion expenses included in SG&A expenses were $32.5 million $30.1 million in 2023, $27.1 million in 2022, $31.4 million and $25.8 million in 2021, and $31.7 million in 2020. 2021.

Net Interest Expense and Extinguishment of Debt Costs – We record debt extinguishment costs separately from interest expense, net within other income, net in the consolidated statements of operations.

Foreign Currency Translation and Adjustments – Typically, our foreign subsidiaries maintain their accounting records in their local currency. All of the assets and liabilities of these subsidiaries (including long-term assets, such as goodwill) are converted to U.S. dollars at the exchange rate in effect at the balance sheet date, income and expense accounts are translated at average rates for the period, and shareholder's equity accounts are translated at historical rates. The effects of translating financial statements of foreign operations into our reporting currency are recognized as a cumulative translation adjustment in consolidated other comprehensive income (loss). This balance is net of tax, where applicable.

The effects of translating financial statements of foreign operations in which the U.S. dollar is their functional currency are included in the consolidated statements of operations. The effects of translating intercompany debt are recorded in the consolidated statements of operations unless the debt is of a long-term investment nature in which case gains and losses are recorded in consolidated other comprehensive income (loss).

Foreign currency transaction gains or losses are credited or charged to income as incurred.

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Income Taxes – Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those

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temporary differences are expected to be recovered or settled. The effect on the deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. We evaluate both the positive and negative evidence that is relevant in assessing whether we will realize the deferred tax assets. A valuation allowance is recorded when it is more likely than not that some of the deferred tax assets will not be realized. The tax effects from an uncertain tax position can be recognized in the consolidated financial statements, only if the position is more likely than not to be sustained, based on the technical merits of the position and the jurisdiction taxes of the Company. We recognize the financial statement benefit of a tax position only after determining that the relevant tax authority would more likely than not sustain the position following an audit and the tax related to the position would be due to the entity and not the owners. For tax positions meeting the more likely than not threshold, the amount recognized in the consolidated financial statements is the largest benefit that has a greater than 50 percent likelihood of being realized, upon ultimate settlement with the relevant tax authority. We apply this accounting standard to all tax positions for which the statute of limitations remains open. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs.

We file a consolidated federal income tax return in the U.S. and various states. For financial statement purposes, we calculate the provision for federal income taxes using the separate return method. Certain subsidiaries file separate tax returns in certain countries and states. Any U.S. federal, state, and foreign income taxes refundable and payable are reported in other current assets and accrued expenses and other current liabilities in our consolidated balance sheet. We do not have any non-current taxes receivable or payable at December 31, 2022 December 31, 2023 or December 31, 2021 December 31, 2022.

We record interest and penalties on amounts due to tax authorities as a component of income tax expense in the consolidated statements of operations. We have elected to account for the impact of GILTI in the period in which it is incurred.

Contingent Liabilities – Contingent liabilities arising from claims, assessments, litigation, fines, penalties, and other sources require significant judgment in determining the probability of loss and the amount of the potential loss. Each quarter, we review significant new claims and litigation for the probability of an adverse outcome. Estimates are recorded as liabilities when it is probable that a liability has been incurred and the amount of the loss is reasonably estimable. Disclosure is required when there is a reasonable possibility that the ultimate loss will materially exceed the recorded provision. Contingent liabilities are often resolved over long time periods. Estimating probable losses requires analysis of multiple forecasts that often depend on judgments about potential actions by third parties, such as regulators, and the estimated loss can change materially as individual claims develop. Legal costs incurred in connection with loss contingencies are expensed as incurred.

Employee Retirement and Pension Benefits – We have a defined benefit plan available to certain U.S. hourly employees and several other defined benefit plans located outside of the U.S. that are country specific. The most significant of these plans is in the U.S., which is no longer open to new employees. Amounts relating to these plans are recorded based on actuarial calculations, which use various assumptions, such as discount rates and expected return on assets. See Note 25 26 - *Employee Retirement and Pension Benefits*.

Recently Adopted Accounting Standards – In December 2019, the FASB issued ASU No. 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*, which removes certain exceptions to the general principles of ASC 740, including, but not limited to, accounting relating to intraperiod tax allocations, deferred tax liabilities related to outside basis differences, and year to date losses in interim periods. This guidance is effective for fiscal years beginning after December 15, 2020. We adopted this standard in the first quarter of 2021 and the adoption did not have an impact on our consolidated financial statements.

In March 2020, the FASB issued ASU No. 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting*, which provides optional expedients and exceptions for applying U.S. GAAP to contracts, hedging relationships, and other transactions affected by the discontinuation of LIBOR or by another reference rate expected to be discontinued. In January 2021, the FASB issued ASU No. 2021-01, *Reference Rate Reform (Topic 848): Scope*, to clarify the scope of ASU No. 2020-04. In December 2022, the FASB issued ASU No. 2022-06, *Deferral of the Sunset Date of Topic 848,* which extended the relief provisions under Topic 848 through December 31, 2024. In May 2020, we elected the expedient within ASC 848 which allows allowed us to assume that our hedged interest payments are were probable of occurring regardless of any expected modifications in their terms related to reference rate reform. In addition, ASC 848 allows allowed for the option to change the method of assessing effectiveness upon a change in critical terms of the derivative or the hedged transactions and upon the end of relief under ASC 848. At this time, we have We elected to continue the method of assessing assess effectiveness as documented in the original hedge documentation and apply the practical expedients related to probability to assume that the reference rate on the a hypothetical derivative matches matched the reference rate on the hedging instrument. In June 2023, we executed amendments to our Term Loan Facility, ABL Facility and interest rate derivative agreements to replace LIBOR with a Term SOFR based rate. These contract amendments did not have a material impact on our consolidated

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on the hedging instrument. We plan to evaluate the remaining expedients for adoption, as applicable, when contracts are modified. We currently do not expect this guidance to have a significant impact on our consolidated financial statements. Refer to Note 22 12 - *Long-Term Debt* and Note 23 - *Derivative Financial Instruments* for additional disclosure information relating to our hedging activity. further information.

Recent Accounting Standards Not Yet Adopted – In June 2016, November 2023, the FASB issued ASU No. 2016-13, 2023-07, *Financial Instruments-Credit Losses (Topic 326): Measurement Improvements to Reportable Segment Disclosures*. ASU 2023-07 requires disclosure of Credit Losses significant segment expenses that are regularly provided to the CODM and included within the segment measure of profit or loss, an amount and description of its composition for other segment items to reconcile to segment profit or loss, and the title and position of the entity's CODM. ASU 2023-07 will be applied retrospectively and is effective for annual reporting periods in fiscal years beginning after December 15, 2023, and interim reporting periods in fiscal years beginning after December 31, 2024. The guidance will not have an impact on Financial Instruments. The standard requires our financial positions and results of operations. We are currently evaluating the measurement and recognition impact of expected credit losses for financial assets held at amortized cost and adds an impairment model that is based this guidance on expected losses rather than incurred losses. the Company's disclosures.

In April 2019, December 2023, the FASB issued ASU No. 2019-04, 2023-09, *Codification Income Taxes (Topic 740): Improvements to (Topic 326), Financial Instruments-Credit Losses, (Topic 815), Derivatives Income Tax Disclosures*. ASU 2023-09 expands disclosures in an entity's income tax rate reconciliation table and Hedging, and (Topic 825), Financial Instruments, to clarify and address certain items related to the amendments of ASU No. 2016-13. We adopted this standard regarding cash taxes paid both in the first quarter U.S. and foreign jurisdictions. The guidance is effective for annual periods beginning after December 15, 2024, with early adoption permitted, and should be applied either prospectively or retrospectively. We have not elected to early adopt this standard. The guidance will not have an impact on our financial positions and results of 2020 using operations. We are currently evaluating the modified retrospective approach, which primarily impacted our allowance for credit losses as a result impact of our analysis of customer historical credit and collections data. Additionally, we recognized a $5.7 million cumulative effect adjustment, net of tax, to retained earnings, which includes a $7.6 million increase to this guidance on the allowance for credit losses and a $1.9 million net impact to deferred tax assets. Company's disclosures.

We have considered the applicability and impact of all ASUs. We have assessed ASUs not listed above and have determined that they were either not applicable or were not expected to have a material impact on our financial statements.

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Note 2. Discontinued Operations

On April 17, 2023, we entered into a Share Sale Agreement with Aristotle Holding III Pty Limited, a subsidiary of Platinum Equity Advisors, LLC, to sell our Australasia business ("JW Australia"), for a purchase price of approximately AUD $688 million. On July 2, 2023, we completed the sale, receiving net cash proceeds of approximately $446 million, including $3.3 million of cash received from the settlement of certain forward contracts (refer to Note 23 - *Derivative Financial Instruments* for further information). We recorded a net gain on the sale of JW Australia of $15.7 million, net of taxes. The net gain on sale includes $30.3 million of cumulative translation adjustments losses and $1.0 million of accumulated net actuarial pension losses reclassified from other comprehensive income. The net gain on sale also includes a $10.2 million loss recorded in the fourth quarter of 2023 in estimated taxes directly related to the sale transaction and return to provision true ups for the period in which we owned JW Australia.

This divestiture qualified as a discontinued operation as of April 17, 2023 since it represents a strategic shift for us and has a major effect on our consolidated results of operations. Accordingly, the results of operations for the JW Australia reportable segment, together with certain costs related to the sale, have been classified as discontinued operations within the consolidated statements of operations for all periods presented.

Subsequent to the completion of the sale, we entered into an agreement to provide certain transition services to JW Australia, including providing information technology post-closing services, purchases under a supply agreement, and reimbursement for certain costs to upgrade specific IT systems up to a capped amount. As of December 31, 2023, we had a liability of approximately $8.2 million relating to these matters, of which $6.1 million is included in accrued expenses and other current liabilities and the remaining is included in deferred credits and other liabilities in our consolidated balance sheet. The Company has determined the impact of the continuing involvement is insignificant to our consolidated financial statements.

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The following is a summary of the major categories of assets and liabilities of JW Australia that had been reflected as held for sale in the period preceding the divestiture at:

(amounts in thousands)		December 31, 2022
ASSETS		
Cash and cash equivalents	$	54,930
Accounts receivable, net		72,516
Inventories		71,984
Other current assets		5,302
Current assets of discontinued operations	$	204,732
Property and equipment, net	$	120,482
Deferred tax assets		13,019
Goodwill		78,552
Intangible assets, net		43,999
Operating lease assets, net		38,887
Other assets		1,821
Non-current assets of discontinued operations	$	296,760
LIABILITIES		
Accounts payable	$	33,704
Accrued payroll and benefits		26,635
Accrued expenses and other current liabilities		43,975
Current maturities of long-term debt		298
Current liabilities of discontinued operations	$	104,612
Long-term debt	$	448
Unfunded pension liability		4,396
Operating lease liability		30,754
Deferred credits and other liabilities		1,962
Deferred tax liabilities		862
Non-current liabilities of discontinued operations	$	38,422

The balances of the assets and liabilities of JW Australia as of the divestiture date of July 2, 2023 did not materially change from the balances as of July 1, 2023 disclosed in our Form 10-Q for the second quarter of 2023.

Components of amounts reflected in the consolidated statements of operations related to discontinued operations for the years ended December 31 were as follows:

(amounts in thousands)		2023		2022		2021
Net revenues	$	301,876	$	611,048	$	610,737
Cost of sales		211,575		451,542		458,387
Gross margin		90,301		159,506		152,350
Selling, general and administrative		62,263		112,015		100,378
Restructuring and asset related charges		—		611		394
Operating income		28,038		46,880		51,578
Interest (income) expense, net		(685)		(445)		778
Other income, net		(2,274)		(1,448)		(2,604)
Income from discontinued operations before taxes		30,997		48,773		53,404
Income tax expense		9,486		15,269		15,904
Income from discontinued operations, net of tax	$	21,511	$	33,504	$	37,500

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The cash flows related to discontinued operations have not been segregated and are included in the consolidated statements of cash flows through the divestiture date of July 2, 2023. The following table presents cash flow and non-cash information related to discontinued operations:

	For the Years Ended December 31,

(amounts in thousands)	2023	2022	2021
Depreciation and amortization	$ 5,196	$ 18,622	$ 20,892
Capital expenditures	6,229	7,746	5,492
Share-based incentive compensation	926	1,591	221
Provision for bad debt	5,062	392	86

Note 2. 3. Accounts Receivable

We sell our manufactured products to a large number of customers, primarily in the residential housing construction and remodel sectors, broadly dispersed across many domestic and foreign geographic regions. We assess the credit risk relating to our accounts receivable based on quantitative and qualitative factors, including historical credit collections within each region where we have operations. We perform ongoing credit evaluations of our customers to minimize credit risk. We do not usually require collateral for accounts receivable, but will do require advance payment, guarantees, a security interest in the products sold to a customer, and/or letters of credit in certain situations. Customer accounts receivable converted to notes receivable are collateralized by inventory or other collateral. One window Two customers, The Home Depot and door customer from our North America segment represents 13.9%, 15.0%, Lowe's Companies, each accounted for more than 10% of the consolidated accounts receivable, net balance as of December 31, 2023 and 15.4% of net revenues in 2022, 2021, 2020, respectively.

As of January 1, 2020, we adopted ASC 326 - *Measurement of Credit Losses on Financial Instruments* on a modified retrospective basis, which increased the allowance for credit losses by $7.6 million on the date of adoption. December 31, 2022.

The following is a roll forward of our allowance for credit losses as of December 31:

(amounts in thousands)	(amounts in thousands)	2022	2021	2020	(amounts in thousands)	2023	2022	2021
Balance as of January 1,	Balance as of January 1,	$(10,177)	$(12,934)	$ (5,967)				
Charges to income (expense)	Charges to income (expense)	(7,697)	765	(649)				
Write-offs	Write-offs	1,089	1,694	1,898				
Additions related to adoption of 2016-09		—	—	(7,635)				
Currency translation								
Currency translation								
Currency translation	Currency translation	455	298	(581)				
Balance at period end	Balance at period end	$(16,330)	$(10,177)	$(12,934)				

The decrease in the allowance for credit losses during 2023 was primarily due to improved collections experience and an improved portfolio of aged receivables.

Note 3. 4. Inventories

Inventories are stated at the lower of cost or net realizable value. Finished goods and work-in-process inventories include material, labor, and manufacturing overhead costs.

(amounts in thousands)	(amounts in thousands)	2022	2021	(amounts in thousands)	2023	2022
Raw materials	Raw materials	$511,681	$478,566			
Work in process	Work in process	31,310	36,065			
Finished goods	Finished goods	123,464	101,340			
Provision for obsolete or excess inventory						
Total inventories	Total inventories	$666,455	$615,971			

To conform with current period presentation, certain amounts in prior period information have been reclassified.

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Note 4. 5. Property and Equipment, Net

(amounts in thousands)	(amounts in thousands)	2022	2021	(amounts in thousands)	2023	2022
Land improvements	Land improvements	$ 31,853	$ 31,808			
Buildings	Buildings	516,495	519,008			
Machinery and equipment	Machinery and equipment	1,472,469	1,461,884			
Total depreciable assets	Total depreciable assets	2,020,817	2,012,700			
Accumulated depreciation	Accumulated depreciation	(1,373,362)	(1,339,057)			
		647,455	673,643			
	554,556					
Land	Land	62,537	65,641			
Construction in progress	Construction in progress	52,494	59,520			
Total property and equipment, net	Total property and equipment, net	$ 762,486	$ 798,804			

In the fourth quarter of 2021, we reclassified $35.9 million of property, plant and equipment, net, to assets held for sale. Refer to Note 18 -*Held for Sale* for additional information.

We recorded accelerated depreciation of our property, plant and equipment of $0.7 million, $2.0 million, $7.4 million, $0.7 million and $2.0 million $2.0 million during the years ended December 31, 2022 December 31, 2023, December 31, 2021, December 31, 2022 and December 31, 2020 December 31, 2021, respectively, within restructuring and asset related charges net in the accompanying consolidated statements of operations. For more information, refer to Note 19 - *Restructuring and Asset Related Charges.*

During the twelve months ended December 31, 2023, we recorded $9.1 million of accelerated depreciation resulting from reviews of our North America equipment capacity optimization. These charges were recorded within cost of sales in the accompanying consolidated statements of operations.

The effect on our carrying value of property and equipment due to currency translations for foreign property and equipment, net, was an increase of $7.9 million and a decrease of $23.0 million and $21.9 million $14.1 million for the years ended December 31, 2022 December 31, 2023 and December 31, 2021 December 31, 2022, respectively.

Depreciation expense was recorded as follows:

(amounts in thousands)

(amounts in thousands)

(amounts in thousands)	(amounts in thousands)	2022	2021	2020	2023	2022	2021
Cost of sales	Cost of sales	$90,950	$ 93,244	$88,551			
Selling, general and administrative	Selling, general and administrative	6,675	7,872	9,594			
Total depreciation expense	Total depreciation expense	$97,625	$101,116	$98,145			

Note 5. 6. Goodwill

The following table summarizes the changes in goodwill by reportable segment:

(amounts in thousands)	North America	Europe	Australasia	Total Reportable Segments
Balance as of December 31, 2020	$ 247,650	$ 303,397	$ 88,820	$ 639,867
Transfers to assets held for sale *(Note 18)*	(65,000)	—	—	(65,000)
Currency translation	(5)	(24,729)	(4,920)	(29,654)

Balance as of December 31, 2021	$	182,645	$	278,668	$	83,900	$	545,213
Impairment		—		(54,885)		—		(54,885)
Currency translation		(376)		(24,099)		(5,348)		(29,823)
Balance as of December 31, 2022	$	182,269	$	199,684	$	78,552	$	460,505

We have identified three reporting units for the purpose of conducting our goodwill impairment review. In determining our reportable units, we considered (i) whether an operating segment or a component of an operating segment was a business, (ii) whether discrete financial information was available, and (iii) whether the financial information is regularly reviewed by management of the operating segment.

(amounts in thousands)		North America		Europe		Total Reportable Segments
Balance as of December 31, 2021	$	182,645	$	278,668	$	461,313
Impairment		—		(54,885)		(54,885)
Currency translation		(376)		(24,099)		(24,475)
Balance as of December 31, 2022	$	182,269	$	199,684	$	381,953
Currency translation		143		8,074		8,217
Balance as of December 31, 2023	$	182,412	$	207,758	$	390,170

During the third quarter ended September 24, 2022, of 2022, management identified various qualitative and quantitative factors which collectively indicated a triggering event had occurred within our North America and Europe reporting units. These factors included the macroeconomic environment in each region including increasing interest rates, persistent inflation, and operational inefficiencies attributable to ongoing global supply chain disruptions, the continuing geopolitical environment in Europe associated with the war in conflict between Russia and Ukraine, and foreign exchange fluctuations. These factors have negatively impacted our business performance. Based upon the results of our interim impairment analysis, we concluded that the carrying value

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amount of our Europe reporting unit exceeded its fair value, and we recorded a goodwill impairment charge of $54.9 million, for the year ended December 31, 2022, representing a partial impairment of goodwill assigned to the Europe reporting unit. In addition, we determined our North America reporting unit was not impaired.

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We performed our annual impairment assessment as assessments during the fourth quarter of the beginning each period presented in our accompanying consolidated statement of our December fiscal month of 2022. operations. At the each respective assessment date, our qualitative analysis of Australasia supported a conclusion that there is more than a 50% likelihood that its fair value exceeded its carrying value. Quantitatively, we quantitatively determined that the fair value values of our North America and Europe reporting units exceeded their net carrying value amounts and no additional goodwill impairment was recorded. For the years ended 2021 and 2020, each reporting unit's fair value was in excess of its carrying value, and therefore, no goodwill impairment charge was recorded. As of the fourth quarter of 2023, we determined that the fair value of our North America reporting unit would have to decline significantly to be considered for potential impairment, and determined the fair value of our Europe reporting unit would have to decline by approximately 3% to be considered for potential impairment.

Note 6. 7. Intangible Assets, Net

The cost and accumulated amortization values of our intangible assets were as follows:

		December 31, 2022						
	December 31, 2023							December 31, 2023
(amounts in thousands)	(amounts in thousands)	Cost	Accumulated Amortization	Net Book Value	(amounts in thousands)	Cost	Accumulated Amortization	Net Book Value
Customer relationships and agreements	Customer relationships and agreements	$137,914	$ (79,761)	$ 58,153				
Software	Software	119,239	(43,208)	76,031				
Trademarks and trade names	Trademarks and trade names	53,481	(12,563)	40,918				
Patents, licenses and rights	Patents, licenses and rights	42,821	(25,818)	17,003				

Total amortizable intangibles	Total amortizable intangibles	$353,455	$ (161,350)	$192,105

		December 31, 2021						
	December 31, 2022						December 31, 2022	
(amounts in thousands)	(amounts in thousands)	Cost	Accumulated Amortization	Net Book Value	(amounts in thousands)	Cost	Accumulated Amortization	Net Book Value
Customer relationships and agreements	Customer relationships and agreements	$145,940	$ (73,635)	$ 72,305				
Software	Software	118,114	(35,816)	82,298				
Trademarks and trade names	Trademarks and trade names	55,806	(10,771)	45,035				
Patents, licenses and rights	Patents, licenses and rights	46,353	(23,810)	22,543				
Total amortizable intangibles	Total amortizable intangibles	$366,213	$ (144,032)	$222,181				

Through December 31, 2022, we have capitalized software costs We recorded accelerated amortization of $91.5 million related to the application development stage of our global ERP system and global finance implementations, including $1.4 million $14.1 million during the year ended December 31, 2022. In March 2020, due December 31, 2023 related to delays in implementation an ERP system that we intend to not utilize upon completion of certain ERP modules and the uncertainty of their future use, we JW Australia Transition Services Agreement period. The expense was recorded $3.4 million of within accelerated amortization SG&A of our capitalized software within restructuring and asset related charges, net expense in the accompanying consolidated statements of operations. In We expect to record an additional $14.1 million of accelerated amortization related to this ERP through the third second quarter of 2020, we reduced the estimated useful life of our ERP instance from 15 years to 10 years to align with our current plans for our future global ERP and global finance systems. In the fourth quarter of 2020, we placed in service and began amortizing our global finance instance over its estimated useful life of 10 years. As of December 31, 2022, we have placed $87.9 million in service and are amortizing the cost of our global systems over their estimated useful lives. 2024.

The effect on our carrying value of intangible assets due to currency translations for foreign intangible assets was an increase of $0.7 million and a decrease of $5.4 million and $6.3 million $2.1 million for the years year ended December 31, 2022 December 31, 2023 and December 31, 2021 December 31, 2022, respectively.

Intangible assets that become fully amortized are removed from the accounts in the period that they become fully amortized. Amortization expense was recorded as follows:

(amounts in thousands)							
(amounts in thousands)							
(amounts in thousands)	(amounts in thousands)	2022	2021	2020	2023	2022	2021
Amortization expense	Amortization expense	$32,749	$33,130	$28,541			

Estimated future amortization expense:

(amounts in thousands)	
2024	$ 34,383
2025	15,662
2026	14,222
2027	13,806
2028	12,484
Thereafter	33,353
	$ 123,910

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(amounts in thousands)

2023	$	30,274
2024		29,635
2025		27,790
2026		25,291
2027		22,481
Thereafter		56,634
	$	192,105

Note 7. 8. Leases

We lease certain warehouses, distribution centers, office spaces, land, vehicles, and equipment.

Lease ROU assets and liabilities at December 31 were as follows:

(amounts in thousands)	(amounts in thousands)	Balance Sheet Location		2022		2021
(amounts in thousands)						
(amounts in thousands)						
Assets:						
Assets:						
Assets:	Assets:					
Operating	Operating	Operating lease assets, net	$	167,880	$	201,781
Operating						
Operating						
Finance						
Finance						
Finance	Finance	Property and equipment, net (1)		4,361		5,327
Total lease assets	Total lease assets		$	172,241	$	207,108
Total lease assets						
Total lease assets						
Liabilities:						
Liabilities:						
Liabilities:	Liabilities:					
Current:	Current:					
Current:						
Current:						
Operating						
Operating						
Operating	Operating	Accrued expense and other current liabilities	$	42,494	$	43,880
Finance	Finance	Current maturities of long-term debt		1,784		1,702
Finance						
Finance						
Noncurrent:						
Noncurrent:						
Noncurrent:	Noncurrent:					
Operating	Operating	Operating lease liability		135,822		166,318
Operating						
Operating						
Finance						
Finance						

Finance	Finance	Long-term debt	2,615	3,671
Total lease liability	Total lease liability		$ 182,715	$ 215,571
Total lease liability				
Total lease liability				

(1) Finance lease assets are recorded net of accumulated depreciation of $4.5 million $5.1 million and $3.4 million $3.7 million as of December 31, 2022 December 31, 2023 and December 31, 2021 December 31, 2022, respectively.

During the years ended December 31, 2022 December 31, 2023 and December 31, 2021 December 31, 2022, we obtained $19.7 million $52.5 million and $41.9 million $13.3 million in right-of-use assets, respectively, in exchange for operating lease liabilities, primarily relating to manufacturing equipment.

During the years ended December 31, 2022 December 31, 2023 and December 31, 2021 December 31, 2022, we obtained $0.9 million $5.4 million and $1.7 million $0.6 million in right-of-use assets, respectively, in exchange for finance lease liabilities.

The components of lease expense for the years ended December 31 were as follows:

(amounts in thousands)	(amounts in thousands)	2022	2021	2020
(amounts in thousands)				
(amounts in thousands)				
Operating				
Operating				
Operating	Operating	$ 56,685	$ 57,455	$ 56,066
Short term	Short term	15,162	15,070	12,803
Short term				
Short term				
Variable				
Variable				
Variable	Variable	7,132	6,396	4,989
Low value	Low value	1,845	1,810	1,714
Low value				
Low value				
Finance				
Finance				
Finance	Finance	161	205	193
Total lease costs	Total lease costs	$ 80,985	$ 80,936	$ 75,765
Total lease costs				
Total lease costs				

	2023	2022
Weighted average remaining lease terms (years):		
Operating	5.7	6.1
Finance	4.1	2.9
Weighted average discount rate:		
Operating	5.6%	4.8%
Finance	6.4%	3.5%

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	2022	2021
Weighted average remaining lease terms (years):		
Operating	5.7	6.2
Finance	3.0	3.4
Weighted average discount rate:		
Operating	4.6%	4.2%
Finance	3.5%	3.1%

Future minimum lease payment obligations under operating and finance leases are as follows:

		December 31, 2022		
		December 31, 2023		
(amounts in thousands)	(amounts in thousands)	Operating Leases (1)	Finance Leases	Total
2023		$ 51,462	$ 1,934	$ 53,396
2024	2024	42,036	1,609	43,645
2025	2025	33,280	559	33,839
2026	2026	21,717	298	22,015
2027	2027	14,895	205	15,100
2028				
Thereafter	Thereafter	44,104	80	44,184
Total lease payments	Total lease payments	207,494	4,685	212,179
Less: Interest	Less: Interest	29,178	286	29,464
Present value of lease liability	Present value of lease liability	$ 178,316	$ 4,399	$ 182,715

	December 31, 2023		
(amounts in thousands)	Operating Leases (1)	Finance Leases	Total

(1) Operating lease payments include $1.4 million $5.8 million related to options to extend lease terms that are reasonably certain of being exercised.

Note 8. 9. Accrued Payroll and Benefits

(amounts in thousands)	2022	2021
Accrued vacation	$ 52,026	$ 52,776
Accrued payroll	30,656	31,544
Accrued bonuses and commissions	20,628	9,416
Other accrued benefits	13,900	11,720
Accrued payroll taxes	13,213	27,127
Non-U.S. defined contributions and other accrued benefits	3,214	3,406
Total accrued payroll and benefits	$ 133,637	$ 135,989

Accrued payroll taxes for the year ended December 31, 2021 consisted of the deferral of payroll taxes pursuant to provisions included within the CARES Act. Additional information is disclosed within Note 1 - *Summary of Significant Accounting Policies* within COVID-19.

Prior period balances in the table above have been reclassified to conform to current period presentation.

(amounts in thousands)	2023	2022
Accrued bonuses and commissions	$ 45,742	$ 18,911
Accrued vacation	31,510	31,921
Accrued payroll	30,018	30,304
Accrued payroll taxes	13,898	11,560
Other accrued benefits	10,072	13,052
Non-U.S. defined contributions and other accrued benefits	1,310	1,254
Total accrued payroll and benefits	$ 132,550	$ 107,002

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Note 9. 10. Accrued Expenses and Other Current Liabilities

(amounts in thousands)	2022	2021
Accrued sales and advertising rebates	$ 93,337	$ 90,623
Current portion of operating lease liability	42,494	43,880
Non-income related taxes	25,700	25,030
Deferred revenue and customer deposits	24,753	25,568
Current portion of warranty liability *(Note 10)*	23,079	23,523

Accrued expenses	18,423	18,636
Current portion of accrued claim costs relating to self-insurance programs	17,932	14,352
Accrued freight	17,398	19,020
Accrued income taxes payable	12,848	16,237
Current portion of restructuring accrual (*Note 19*)	5,038	171
Accrued interest payable	4,038	3,633
Legal claims provision	3,490	3,476
Current portion of derivative liability *(Note 22)*	3,346	5,527
Total accrued expenses and other current liabilities	$ 291,876	$ 289,676

The legal claims provision relates primarily to contingencies associated with the ongoing legal matters disclosed in Note 24 - *Commitments and Contingencies*.

(amounts in thousands)	December 31, 2023	December 31, 2022
Accrued sales and advertising rebates	$ 82,732	$ 90,461
Current portion of operating lease liability	32,477	31,152
Current portion of warranty liability *(Note 11)*	22,819	21,215
Non-income related taxes	20,072	22,615
Accrued freight	18,963	17,377
Accrued expenses	15,758	13,505
Current portion of accrued claim costs relating to self-insurance programs	14,079	16,231
Accrued income taxes payable	9,252	9,368
Deferred revenue and customer deposits	7,189	10,084
Current portion of restructuring accrual (*Note 19*)	3,375	5,021
Current portion of derivative liability *(Note 23)*	2,996	3,346
Accrued interest payable	1,401	4,036
Legal claims provision (*Note 25*)	2,683	3,490
Total accrued expenses and other current liabilities	$ 233,796	$ 247,901

The accrued sales and advertising rebates, accrued interest payable, accrued freight, and non-income related taxes can fluctuate significantly period-over-period due to timing of payments.

Prior period balances in the table above have been reclassified

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Note 10. 11. Warranty Liability

Warranty terms vary from one year to lifetime on certain window and door components. Warranties are normally limited to servicing or replacing defective components for the original customer. Product defects arising within six months of sale are classified as manufacturing defects and are not included in the current period expense below. Some warranties are transferable to subsequent owners and are either limited to 10 years from the date of manufacture or require pro-rata payments from the customer. A provision for estimated warranty costs is recorded at the time of sale based on historical experience and is periodically adjusted to reflect actual experience.

An analysis of our warranty liability is as follows:

(amounts in thousands)							
(amounts in thousands)							
(amounts in thousands)	(amounts in thousands)	2022	2021	2020	2023	2022	2021
Balance as of January 1	Balance as of January 1	$54,860	$52,296	$49,716			
Current period charges	Current period charges	29,656	27,928	23,906			
Experience adjustments	Experience adjustments	772	4,105	3,213			
Experience adjustments							
Experience adjustments							
Payments	Payments	(29,977)	(28,558)	(25,113)			
Transfers to liabilities held for sale *(Note 18)*		—	(518)	—			

Transfers to liabilities held for sale *(Note 20)*				
Currency translation	Currency translation	(974)	(393)	574
Balance at period end	Balance at period end	54,337	54,860	52,296
Current portion	Current portion	(23,079)	(23,523)	(21,766)
Long-term portion	Long-term portion	$31,258	$31,337	$30,530

The most significant component of our warranty liability is was in the North America segment. As of December 31, 2023, the warranty liability in the North America segment which totaled $46.1 million at December 31, 2022 $46.5 million, after discounting future estimated cash flows at rates between 0.53% and 2.78% 4.01%. Without discounting, the liability would have been higher increased by approximately $2.9 million $3.8 million.

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Note 11. 12. Long-Term Debt

Our long-term debt, net of original issue discount and unamortized debt issuance costs, consisted of the following:

		December 31, 2022	December 31, 2022	December 31, 2021			
		December 31, 2023	December 31, 2022	December 31, 2021	December 31, 2023		
(amounts in thousands)	(amounts in thousands)	Interest Rate	December 31, 2022	December 31, 2021		December 31, 2023	December 31, 2022
Senior Secured Notes and Senior Notes		4.63% - 6.25%	$1,050,000	$1,050,000			
Term loans		1.30% - 6.63%	541,970	547,598			
Revolving credit facilities		5.54% - 5.63%	55,000	—			
Senior Notes							
Senior Notes							
Senior Notes							
Senior Secured Notes							
Term Loan Facility							
Revolving credit facility							
Finance leases and other financing arrangements	Finance leases and other financing arrangements	1.25% - 7.16%	89,784	97,874			
Mortgage notes	Mortgage notes	2.22% - 2.72%	22,472	25,411			
Total Debt	Total Debt		1,759,226	1,720,883			
Unamortized debt issuance costs and original issue discounts	Unamortized debt issuance costs and original issue discounts		(11,597)	(14,626)			

Current maturities of long-term debt	Current maturities of long-term debt		(34,391)	(38,561)
Long-term debt	Long-term debt		$1,713,238	$1,667,696

Maturities by year, excluding unamortized debt issuance costs and original issue discounts:		
2023	$	34,391
2024		25,817
2025		674,246
2026		76,009
2027		415,902

(1) Term Loan B, mortgage notes and certain finance leases and other financing arrangements are subject to variable interest rates.

To conform with current period presentation, certain amounts in prior period information have been reclassified.

Maturities by year, excluding unamortized debt issuance costs and original issue discounts:		
2024	$	36,177
2025		221,749
2026		19,243
2027		415,025
2028		522,809

Summaries of our significant changes to outstanding debt agreements as of December 31, 2022 December 31, 2023 are as follows:

Senior Secured Notes and Senior Notes

In December 2017, we issued $800.0 million of unsecured Senior Notes in two tranches: $400.0 million bearing interest at 4.63% and maturing in December 2025 (“4.63% Senior Notes”), and $400.0 million bearing interest at 4.88% and maturing in December 2027 in a private placement for resale to qualified institutional buyers pursuant to Rule 144A under the Securities Act.

In May 2020, we issued $250.0 million $250.0 million of Senior Secured Notes bearing interest at 6.25% and maturing in May 2025 (“6.25% Senior Secured Notes”) in a private placement for resale to qualified institutional buyers pursuant to Rule 144A under the Securities Act. The proceeds were net of fees and expenses associated with debt issuance, including an underwriting fee of 1.25%. Interest is payable semiannually, in arrears, each May and November.

In December 2017, On August 3, 2023, we issued $800.0 million redeemed all $250.0 million of unsecured our 6.25% Senior Secured Notes and $200.0 million of our 4.63% Senior Notes. The Company recognized a pre-tax loss of $6.5 million on the redemption in two tranches: $400.0 million bearing interest at 4.63% year ended December 31, 2023, consisting of $3.9 million in call premium and maturing $2.6 million in December 2025, and $400.0 million bearing interest at 4.88% and maturing in December 2027 in a private placement for resale to qualified institutional buyers pursuant to Rule 144A under the Securities Act. accelerated amortization of debt issuance costs.

Term Loans Loan Facility

U.S. Facility - Initially executed in October 2014, we amended the Term Loan Facility in July 2021 to, among other things, extend the maturity date from December 2024 to July 2028 and provide additional covenant flexibility. Pursuant to the amendment, certain existing and new lenders advanced $550.0 million of replacement term loans, the proceeds of which were used to prepay in full the amount outstanding under the previously existing term loans. The replacement term loans bear originally bore interest at LIBOR (subject to a floor of 0.00%) plus a margin of 2.00% to 2.25% depending on JWI’s corporate credit ratings. In addition, the amendment also modifies modified certain other terms and provisions of the Term Loan Facility. Facility, and adds language to address the replacement of LIBOR with a SOFR basis upon the June 30, 2023 cessation of the publication of LIBOR. Voluntary prepayments of the replacement term loans are permitted at any time, in certain minimum principal amounts, but were subject to a 1.00% premium during the first six months. The amendment requires 0.25% of the initial principal to be repaid quarterly until maturity. As a result of this amendment, we recognized debt

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extinguishment costs of $1.3 million, which included $1.0 million of unamortized debt issuance costs and original discount fees. As of the date of the amendment, the outstanding principal balance, net of original issue discount, was $548.6 million.

In June 2023, we amended the Term Loan Facility to replace LIBOR with a Term SOFR based rate as the successor benchmark rate and made certain other technical amendments and related conforming changes. All other material terms and conditions were unchanged.

In January 2024, we amended the Term Loan Facility to lower the applicable margin for replacement term loans, remove certain provisions no longer relevant to the parties, and make certain other technical amendments and related to conforming changes. Pursuant to the amendment, replacement term loans bear interest at SOFR plus a margin of 1.75% to 2.00% depending on JWI’s corporate credit ratings, compared to a margin of 2.00% to 2.25% under the previous amendment. All other material terms and conditions of the Term Loan Agreement were unchanged.

As of December 31, 2022 December 31, 2023, the outstanding principal balance, net of original issue discount, was $540.6 million $535.3 million.

In February 2019, we purchased interest rate caps in order to effectively fix a 3.0% per annum ceiling on the LIBOR component of an aggregate $150.0 million of our term loans. The caps became effective March 2019 and expired in December 2021.

In May 2020, we entered into interest rate swap agreements with a weighted average fixed rate of 0.395% paid against one-month LIBOR floored at 0.00% with outstanding notional amounts aggregating to $370.0 million corresponding to that

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amount of the debt outstanding under our Term Loan Facility. In June 2023, the interest rate swap agreements were amended to convert to a SOFR basis on June 30, 2023, resulting in a weighted average fixed rate of 0.317% paid against one-month USD-SOFR CME Term floored at (0.10)%. The interest rate swap agreements are were designated as cash flow hedges of a portion of the interest obligations on our Term Loan Facility borrowings and mature matured in December 2023. See Note 22 23 - *Derivative Financial Instruments* for additional information on our derivative assets and liabilities.

Australia Facility - In June 2019, we reallocated AUD $5.0 million from the term loan commitment to the interchangeable commitment of the Australia Senior Secured Credit Facility. The amended AUD 50.0 million floating rate term loan facility bore interest at a base rate of BBSY plus a margin ranging from 1.00% to 1.10%, included a line fee of 1.25% on the commitment amount, and was set to mature on February 2023. During the second quarter of 2021, we repaid the outstanding principal balance of AUD 50.0 million ($38.4 million) and terminated the term loan commitment.

Both the term loan and non-term loan portions of the Australia Senior Secured Revolving Credit Facility are or were secured by guarantees of JWA and its subsidiaries, fixed and floating charges on the assets of JWA group, and mortgages on certain real properties owned by the JWA group. The combined agreement requires that JWA maintain certain financial ratios, including a minimum consolidated interest coverage ratio and a maximum consolidated debt to EBITDA ratio. The agreement limits dividends and repayments of intercompany loans where the JWA group is the borrower and limits loans or other financial accommodations to non-obligor entities.

Revolving Credit Facilities

ABL Facility - Initially executed in 2014, extensions of credit under our ABL Facility are limited by a borrowing base calculated based on specified percentages of the value of eligible accounts receivable and inventory, subject to certain reserves and other adjustments. We pay a fee of 0.25% on the unused portion of the commitments. The ABL Facility has a minimum fixed charge coverage ratio that we are obligated to comply with under certain circumstances. The ABL Facility has various non-financial covenants, including restrictions on liens, indebtedness, dividends, customary representations and warranties, and customary events of defaults and remedies.

In March 2020, we drew $100.0 million under our ABL Facility as a precautionary measure to ensure funding of our seasonal working capital cash requirements given the significant impact of the COVID-19 pandemic on global financial markets and economies. In May 2020, we utilized a portion of the proceeds received from our issuance of the $250.0 million of Senior Secured Notes to repay the outstanding balance on our ABL Facility. In the fourth quarter of 2020, we began to include the accounts receivable and inventory balances of certain recently acquired U.S. businesses in determining our availability, which expanded our borrowing base.

In July 2021, we amended the ABL Facility to, among other things, extend the maturity date from December 2022 to July 2026, increase the aggregate commitment to $500.0 million, provide additional covenant flexibility, conform certain terms and provisions to the Term Loan Facility, and amend the interest rate grid applicable to the loans thereunder provide additional covenant flexibility, and conform certain terms and provisions by adding language to address the Term Loan Facility. replacement of LIBOR with a SOFR basis upon the June 30, 2023 cessation of the publication of LIBOR. Pursuant to the amendment, the amount allocated to U.S. borrowers was increased to $465.0 million. The amount allocated to Canadian borrowers was maintained at $35.0 million. Borrowings under the ABL Facility bear, bore, at the borrower's option, interest at either a base rate plus a margin of 0.25% to 0.50% depending on excess availability or LIBOR (subject to a floor of 0.00%) plus a margin of 1.25% to 1.50% depending on excess availability. All other material terms and conditions were unchanged.

In June 2023, we amended the ABL Facility to replace LIBOR with a Term SOFR based rate as the successor benchmark rate and made certain other technical amendments and related conforming changes. All other material terms and conditions were unchanged.

As of December 31, 2022 December 31, 2023, we had $55.0 million of no outstanding borrowings, $31.1 million $10.6 million in letters of credit and $410.7 million $462.3 million available under the ABL Facility.

Australia Senior Secured Credit Facility -In June 2019, we amended the Australia Senior Secured Credit Facility, reallocating availability from the Australia Term Loan Facility and collapsing the floating rate revolving loan facility into an AUD 35.0 million interchangeable facility to be used for guarantees, asset financing, and loans of twelve months or less. The interchangeable facility does not have a set maturity date but is instead subject to an annual review each June.

In May 2020, we amended the Australia Senior Secured Credit Facility to relax certain financial covenants. The amended non-term loan portion of the facility bore line fees of 0.70%, compared to line fees of 0.50% under the previous amendment. The amendment also provided for a supplemental AUD 30.0 million floating rate revolving loan facility.

In December 2021, we amended the Australia Senior Secured Credit Facility to reinstate maintenance financial covenant ratios to pre-pandemic thresholds and renewed the facility through its next annual review. The amended facility includes line fees of 0.50%, compared to line fees of 0.70% under the previous amendment. As of December 31, 2022, we had AUD 22.8 million ($15.4 million) available under this facility.

At December 31, 2022, we had combined borrowing availability of $426.1 million under our revolving credit facilities.

Mortgage Notes – In December 2007, we entered into thirty-year mortgage notes secured by land and buildings in Denmark with principal payments which began in 2018. As of December 31, 2022 December 31, 2023, we had DKK156.7 million 148.6 million ($22.5 22.1 million) outstanding under these notes.

Finance leases and other financing arrangements – In addition to finance leases, we include insurance premium financing arrangements and loans secured by equipment in this category. As of December 31, 2022 December 31, 2023, we had $89.8 million $74.5 million outstanding in this category, with maturities ranging from 2023 2024 to 2029. 2031.

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As of December 31, 2022 December 31, 2023, we were in compliance with the terms of all of our credit facilities Credit Facilities and the indentures governing the Senior Notes and Senior Secured Notes.

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Note 12. 13. Deferred Credits and Other Liabilities

Included in deferred credits and other liabilities is the long-term portion of the following liabilities as of December 31:

(amounts in thousands)	2022		2021	
Uncertain tax positions *(Note 13)*	$	31,828	$	27,951
Warranty liability *(Note 10)*	$	31,258	$	31,337
Workers' compensation claims accrual		20,331		19,165
Environmental contingencies *(Note 24)*		11,800		11,800
Other liabilities		2,604		1,921
Deferred income		77		278
Accrued payroll taxes		—		10,427
Total deferred credits and other liabilities	$	97,898	$	102,879

Accrued payroll taxes for the year ended December 31, 2021 represents the deferral of payroll taxes pursuant to provisions included within the CARES Act. Additional information is disclosed within Note 1 - *Summary of Significant Accounting Policies* within COVID-19.

(amounts in thousands)	2023		2022	
Uncertain tax positions *(Note 15)*	$	36,804	$	31,828
Warranty liability *(Note 11)*	$	30,428	$	31,174
Workers' compensation claims accrual		21,875		20,331
Environmental contingencies *(Note 25)*		11,500		11,800
Other liabilities		4,224		726
Deferred income		—		77
Total deferred credits and other liabilities	$	104,831	$	95,936

Note 13. Income Taxes

Income before taxes, is comprised of the following for the years ended December 31:

(amounts in thousands)	2022		2021		2020	
Domestic income (loss)	$	61,780	$	55,579	$	(8,791)
Foreign income		17,257		148,783		125,466
Total income before taxes	$	79,037	$	204,362	$	116,675

Our foreign income is historically driven by our subsidiaries in Australia, Canada, Germany, and the U.K.

Significant components of the provision for income taxes are as follows for the years ended December 31:

(amounts in thousands)	2022		2021		2020	
Federal	$	465	$	663	$	3,053
State		1,103		480		756
Foreign		36,136		49,370		30,343
Current taxes		37,704		50,513		34,152
Federal		14,068		3,688		(8,134)
State		(4,854)		(5,927)		68
Foreign		(13,608)		(12,734)		(997)
Deferred taxes		(4,394)		(14,973)		(9,063)
Total provision for income taxes	$	33,310	$	35,540	$	25,089

The FASB Staff Q&A, Topic 740, No. 5, *Accounting for Global Intangible Low-Taxed Income*, states that we are permitted to make an accounting policy election to either recognize deferred taxes for temporary basis differences expected to reverse as GILTI in future years or provide for the tax expense related to such income in the year the tax is incurred. We have elected to account for the impact of GILTI in the period in which it is incurred. During 2020, the US Treasury issued final regulations governing the treatment of GILTI under IRC§ 951A. Included in these final regulations was a provision to allow taxpayers to make an annual election to exclude certain foreign income which is subject to a threshold level of tax in their respective foreign jurisdiction from US tax as GILTI (the High Tax Exclusion or “HTE election”). While this HTE election had been outlined in the proposed regulations issued in 2019, the final regulations allowed the election to be applied retroactively. By making this election as well as finalizing other related planning steps in 2021, we were able to

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effectively restore certain tax attributes recorded as deferred tax assets consisting primarily of U.S. NOLs originally impacted by GILTI resulting in net tax benefit of $10.8 million.

The CARES Act, among other things, increased the limitation on the deductibility of business interest to 50% of "adjusted taxable income" for taxable years beginning after December 31, 2018 and before January 1, 2021 and allows taxpayers to elect to compute the limitation on business interest expense for 2020 by using its "adjusted taxable income" from 2019.

The significant components of the deferred income tax benefit for the year ended December 31, 2022 were related to the IRC §174 capitalized costs offset by increase in depreciation and amortization expenses in the current period.

The significant components of the deferred income tax benefit for the year ended December 31, 2021 were the favorable effects of tax planning optimizing the HTE election completed during the year allowing us to further reduce the impact of GILTI. The significant components of the deferred income tax benefit attributed to income from continuing operations for the year ended December 31, 2020, were the net increases in deferred tax assets related to the retroactive HTE election.

Reconciliation of the U.S. federal statutory income tax rate to our effective tax rate is as follows for the years ended December 31:

	2022		2021		2020	
(amounts in thousands)	Amount	%	Amount	%	Amount	%
Statutory rate	$ 16,598	21.0	$ 42,916	21.0	$ 24,502	21.0
State income tax, net of federal benefit	2,239	2.8	2,425	1.2	(444)	(0.4)
Foreign source dividends and deemed inclusions	(237)	(0.3)	(9,822)	(4.8)	11,170	9.6
Valuation allowance	(10,195)	(12.9)	(6,922)	(3.4)	(17,489)	(15.0)
Nondeductible expenses	2,209	2.8	3,172	1.6	1,653	1.4
Equity based compensation	2,486	3.1	(787)	(0.4)	2,185	1.9
Goodwill Impairment	12,735	16.3	—	—	—	—
Foreign tax rate differential	974	1.2	1,176	0.5	1,613	1.4
Tax rate differences and credits	2,949	3.7	(10,796)	(5.3)	26,001	22.3
Uncertain tax positions	2,963	3.7	8,711	4.3	(2,685)	(2.3)
Change in indefinite reversal assertion	—	—	5,016	2.5	—	—
U.S. Tax Reform	—	—	—	—	(21,797)	(18.7)
Other	589	0.7	451	0.2	380	0.3
Effective tax rate	$ 33,310	42.1%	$ 35,540	17.4%	$ 25,089	21.5%

During the year ended December 31, 2022, we recognized a benefit of $9.9 million from the reduction to state NOL and state credits valuation allowance, and $1.9 million of tax benefit attributable to research and development tax credits, partially offset by $12.7 million tax expense attributable to goodwill impairment.

During the year ended December 31, 2021, we recognized $12.2 million of U.S. tax benefits attributed to the effect of tax planning, primarily related to the impact of GILTI, a benefit of $6.7 million from the reduction to state NOL and state credits valuation allowance, and $3.6 million of tax benefit attributable to research and development tax credits, partially offset by $5.0 million tax expense attributable to removing our assertion on certain undistributed foreign earnings.

During the year ended December 31, 2020, we recognized a tax benefit of $10.8 million related the HTE election and related planning. The tax benefit consisted of a benefit of $21.8 million directly related to the HTE election, a benefit of $20.1 million from the reduction of the U.S. valuation allowance, partially offset by tax expense of $28.0 million related to a reduction in U.S. foreign tax credit carryforwards, and $3.1 million of additional state tax expense related to the adjustments above.

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Deferred income taxes are provided for the temporary differences between the financial reporting basis and tax basis of our assets, liabilities, and operating loss carryforwards. Significant deferred tax assets and liabilities are as follows as of December 31:

(amounts in thousands)	2022	2021
Net operating loss and tax credit carryforwards	$ 208,053	$ 217,634
Operating lease liabilities	47,113	55,663
Employee benefits and compensation	39,300	44,660

Accrued liabilities and other	36,323	34,532
Inventory	8,035	6,798
Allowance for credit losses and notes receivable	5,130	3,856
R&D IRC Sec. 174	18,327	—
Gross deferred tax assets	362,281	363,143
Valuation allowance	(34,833)	(45,476)
Deferred tax assets	327,448	317,667
Depreciation and amortization	(88,974)	(63,348)
Operating lease assets	(44,399)	(53,410)
Investments and marketable securities	(3,401)	(1,713)
Investment in subsidiaries	(4,218)	(4,218)
Deferred tax liabilities	(140,992)	(122,689)
Net deferred tax assets	$ 186,456	$ 194,978
Balance sheet presentation:		
Long-term assets	$ 195,180	$ 204,232
Long-term liabilities	(8,724)	(9,254)
Net deferred tax assets	$ 186,456	$ 194,978

Valuation Allowance – The realization of deferred tax assets is based on historical tax positions and estimates of future taxable income. We evaluate both the positive and negative evidence that we believe is relevant in assessing whether we will realize the deferred tax assets. A valuation allowance is recorded when it is more likely than not that some portion of the deferred tax assets will not be realized.

The ultimate realization of deferred tax assets depends on the generation of future taxable income during the periods in which those temporary differences are deductible. We consider the scheduled reversal of deferred tax liabilities (including the effect of available carryback and carryforward periods), and projected taxable income in making this assessment. To fully utilize the NOLs and tax credits carryforwards, we will need to generate sufficient future taxable income in each respective jurisdiction before the expiration of the deferred tax assets governed by the applicable tax code.

We had a valuation allowance of $34.8 million and $45.5 million as of December 31, 2022 and December 31, 2021, respectively. The decrease was primarily driven by a decrease of $9.9 million for state NOL and state credits due to the impact of forecasted taxable income in the carry-forward period.

We had a valuation allowance of $45.5 million and $51.8 million as of December 31, 2021 and December 31, 2020, respectively. The decrease was primarily driven by a decrease of $6.7 million for state NOL and state credits due to the impact of forecasted taxable income in the carry-forward period.

The following is the activity in our valuation allowance:

(amounts in thousands)	2022	2021	2020
Balance as of January 1,	$ (45,476)	$ (51,847)	$ (67,664)
Valuation allowances established	(34)	—	—
Changes to existing valuation allowances	(1,061)	(2,486)	(2,622)
Release of valuation allowances	9,918	7,510	20,111
Currency translation	1,820	1,347	(1,672)
Balance at period end	$ (34,833)	$ (45,476)	$ (51,847)

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Loss Carryforwards – We reduced our income tax payments by utilizing NOL carryforwards of $196.8 million, $10.6 million, and $97.7 million during the years ended December 31, 2022, 2021, and 2020, respectively. We generated net NOL carryforwards of $93.7 million worldwide due to taxable losses incurred during the year ended December 31, 2022. At December 31, 2022, our federal, state and foreign NOL carryforwards totaled $1,449.6 million, of which $331.1 million does not expire; the remainder expires as follows:

(amounts in thousands)	
2023	$ 15,012
2024	42,347
2025	39,402
2026	40,838
Thereafter	980,865
Total loss carryforwards	$ 1,118,464

As of December 31, 2022, our capital loss carryforwards totaled $21.6 million, which are all foreign and do not expire.

Section 382 Net Operating Loss Limitation – On November 20, 2017 and October 3, 2011, we had a change in ownership pursuant to Section 382 of the Code. Under this provision of the Code, the utilization of any of our NOL or tax credit carryforwards, incurred prior to the date of ownership change, may be limited. Analyses of the respective limits for each ownership change indicated no reason to believe the annual limitation would impair our ability to utilize our NOL carryforward or net tax credit carryforwards as provided. We have concluded the limitation under Section 382 should not prevent us from fully utilizing these historical NOLs.

Tax Credit Carryforwards – Our tax credit carryforwards expire as follows:

(amounts in thousands)	EZ Credit	R & D credit	Foreign Tax Credit	Work Opportunity & Welfare to Work Credit	State Investment Tax Credits	Tip Credit	TOTAL
2023	$ —	$ —	$ 5,735	$ —	$ 1,512	$ —	$ 7,247
2024	—	—	3,514	—	36	—	3,550
2025	—	103	4,863	—	30	—	4,996
2026	—	57	3,108	—	18	—	3,183
2027	—	38	—	—	1	—	39
Thereafter	68	19,521	—	8,167	60	102	27,918
	$ 68	$ 19,719	$ 17,220	$ 8,167	$ 1,657	$ 102	$ 46,933

Earnings of Foreign Subsidiaries – The Company continually evaluates its global cash needs. During the third quarter of 2021, the Company removed its indefinite reinvestment assertion on a majority of unremitted earnings and certain other aspects of outside basis differences in its foreign subsidiaries. Deferred tax expense of $5.0 million was recorded for withholding and income taxes which would be owed if earnings were remitted to the U.S. parent. The Company continued to make an indefinite reinvestment assertion on other aspects of the outside basis difference in foreign subsidiaries that would attract a tax cost in excess of the Company's cost of capital.

In 2022, the Company repatriated $132.8 million from certain foreign subsidiaries and does not anticipate any additional remittances to the U.S. parent in the foreseeable future, given the current operating challenges disclosed within Note 5 - *Goodwill* and the need for cash in foreign jurisdictions to support local operations. As a result, the Company is asserting that its future earnings, in excess of previously taxed earnings, are permanently reinvested as of the third quarter of 2022. No additional deferred tax expense is recorded on prospective earnings. The Company continues to make an indefinite reinvestment assertion on other aspects of the outside basis differences in foreign subsidiaries that would attract a significant cost of capital. We hold a combined book-over-tax outside basis difference of $311.7 million and $261.9 million as of December 31, 2022 and December 31, 2021 in our investment in foreign subsidiaries and may incur up to $21.9 million of local country income and withholding taxes in case of distribution of unremitted earnings.

Dual-Rate Jurisdiction – Estonia and Latvia tax the corporate profits of resident corporations at different rates depending upon whether the profits are distributed. The undistributed profits of resident corporations are exempt from taxation while any distributed profits are subject to a 20% corporate income tax rate. The liability for the tax on distributed profits is recorded as an income tax expense in the period in which a dividend is declared. The balance of retained earnings of our Estonian subsidiary which, if distributed, would be subject to this this tax was $82.0 million and $78.7 million as of December 31, 2022 and December 31, 2021, respectively. The balance of retained earnings of our Latvian subsidiary

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which, if distributed, would be subject to this tax was $29.8 million and $27.0 million as of December 31, 2022 and December 31, 2021, respectively.

Tax Payments and Balances – We made tax payments of $46.8 million, $38.6 million, $26.8 million during the years ended December 31, 2022, 2021, and 2020, respectively, primarily for foreign liabilities. We received tax refunds of $1.9 million, $2.1 million, and $6.4 million during the years ended in December 31, 2022, 2021, and 2020, respectively. The primary jurisdictions for which refunds were received in the current year are Indonesia and the U.S. Total receivables for tax refunds are recorded in other current assets in the accompanying balance sheets and totaled $13.7 million and $4.0 million at December 31, 2022 and December 31, 2021, respectively. Foreign payables for taxes are recorded in accrued income taxes payable in the accompanying balance sheets and totaled $12.8 million and $16.2 million at December 31, 2022 and December 31, 2021, respectively. We do not have any non-current taxes receivable or payable as of December 31, 2022 and December 31, 2021.

Accounting for Uncertain Tax Positions – A reconciliation of the beginning and ending amounts of unrecognized tax benefits excluding interest and penalties is as follows:

(amounts in thousands)	2022	2021	2020
Balance as of January 1,	$ 26,825	$ 16,995	$ 16,205
Increase for tax positions taken during the prior period	5,274	10,367	1,105
Decrease for settlements with taxing authorities	(1,527)	—	(34)
Increase for tax positions taken during the current period	—	869	—
Decrease due to statute expiration	(76)	(163)	(1,569)
Currency translation	(1,196)	(1,243)	1,288

Balance at period end - unrecognized tax benefit	29,300	26,825	16,995
Accrued interest and penalties	2,528	7,486	5,567
	$ 31,828	$ 34,311	$ 22,562

Unrecognized tax benefits were $29.3 million, $26.8 million, and $17.0 million at December 31, 2022, 2021, and 2020, respectively. The increase is primarily related to management's assessment of a potential liability as a result of ongoing tax audit discussions in Europe as well as uncertainty on prior years' research and development tax credits in the U.S. The unrecognized tax benefit recorded in the current year for Europe is partially offset by an increase in deferred tax assets expected to be recovered should these liabilities be assessed. Interest and penalties related to uncertain tax positions are reported as a component of tax expense and included in the total uncertain tax position balance within deferred credits and other liabilities in the accompanying consolidated balance sheets.

A significant portion of our uncertain tax positions relates to the implementation of the Capacity Management Agreements within the European business ("CMA") which took place in January 1, 2015. The CMA changed the manner in which we manage our manufacturing capacity and the distribution and sale of our products in Europe. The reorganization of our Europe segment was part of our review of our operations structure and management that began in 2014 and resulted in changes in taxable income for certain of our subsidiaries within that reportable segment. Effective January 1, 2015, our subsidiary JELD-WEN U.K. Limited (the "Managing Subsidiary") entered into an agreement (the "Managing Agreement") with several of our other subsidiaries in Europe (collectively, the "Operating Subsidiaries"). The Managing Agreement provides that the Managing Subsidiary will receive a fee from the Operating Subsidiaries in exchange for performing various management and decision-making services for the Operating Subsidiaries. As a result, the Managing Agreement shifts certain risks (and correlated benefits) from the Operating Subsidiaries to the Managing Subsidiary. In exchange, the Managing Subsidiary guarantees a specific return to each Operating Subsidiary on a before interest and taxes basis, commensurate with such Operating Subsidiary's functions and risk profile. While there is no impact on the consolidated reporting of the Europe segment due to the Managing Agreement, there may be changes in taxable income of the Operating Subsidiaries. Therefore, we have reserved for a potential loss resulting from such uncertainty.

There were benefits of $20.5 million, $19.3 million, and $14.5 million included in the balance of unrecognized tax benefits as of December 31, 2022, 2021, and 2020, respectively, that would affect the effective tax rate if recognized. We cannot reasonably estimate the conclusion of certain non-US income tax examinations and its outcome at this time.

We operate in multiple foreign tax jurisdictions and are generally open to examination for tax years 2015 and forward. In the U.S., we are open to examination at the federal level for tax years 2013 and forward and at state and local jurisdictions for tax years 2015 and forward. The Company is under examination in Austria, Denmark, Germany, Indonesia, Latvia, Malaysia, Switzerland, and the United Kingdom for tax years 2011 through 2019, and generally remain open to examination for other non-US jurisdictions for tax years 2015 forward.

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Note 14. Segment Information

We report our segment information in the same way management internally organizes the business to assess performance and make decisions regarding allocation of resources in accordance with ASC 280-10- *Segment Reporting*. Management reviews net revenues and Adjusted EBITDA from continuing operations to evaluate segment performance and allocate resources. We define Adjusted EBITDA from continuing operations as income (loss) from continuing operations, net of tax, adjusted for the following items: income tax expense (benefit); depreciation and amortization; interest expense, net; and certain special items consisting of non-recurring net legal and professional expenses and settlements; goodwill impairment; restructuring and asset related charges; other facility closure, consolidation, and related costs and adjustments; M&A related costs; net (gain) loss on sale of property and equipment; loss on extinguishment of debt; share-based compensation expense; pension settlement charges; non-cash foreign exchange transaction/translation (income) loss; and other special items. We use Adjusted EBITDA from continuing operations because we believe this measure assists investors and analysts in comparing our operating performance across reporting periods on a consistent basis by excluding items that we do not believe are indicative of our core operating performance. This non-GAAP financial measure should be viewed in addition to, and not as a substitute for, the Company's reported results prepared in accordance with GAAP.

We have three two reportable segments, organized and managed principally in geographic regions. Our reportable segments are regions: North America Europe, and Australasia. Europe. We report all other business activities in Corporate and unallocated costs. Factors considered in determining the three two reportable segments include the nature of business activities, the management structure accountable directly to the CODM, the discrete financial information available and the information regularly reviewed by the CODM. Management reviews net revenues CODM, and Adjusted EBITDA information presented to evaluate segment performance the Board of Directors and allocate resources. We define Adjusted EBITDA as net income (loss), adjusted investors. No operating segments have been aggregated for the following items: (income) loss from discontinued operations, net our presentation of tax; income tax (benefit) expense; depreciation and amortization; interest expense, net; restructuring and asset related charges, net; net (gain) loss on sale of property and equipment; share-based compensation expense; non-cash foreign exchange transaction/translation (income) loss; and other items. reportable segments.

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The following tables set forth certain information relating to our segments' operations:

(amounts in thousands)	North America	Europe	Total Operating Segments	Corporate and Unallocated Costs	Total Consolidated
Year Ended December 31, 2023					
Total net revenues	$ 3,123,270	$ 1,187,118	$ 4,310,388	$ —	$ 4,310,388

Intersegment net revenues	(214)	(5,840)	(6,054)	—	(6,054)
Net revenues from external customers	$ 3,123,056	$ 1,181,278	$ 4,304,334	$ —	$ 4,304,334
Capital expenditures	72,582	25,630	98,212	6,441	104,653
Segment assets	1,694,201	944,963	2,639,164	340,961	2,980,125
Year Ended December 31, 2022					
Total net revenues	$ 3,260,166	$ 1,284,796	$ 4,544,962	$ —	$ 4,544,962
Intersegment net revenues	(813)	(341)	(1,154)	—	(1,154)
Net revenues from external customers	$ 3,259,353	$ 1,284,455	$ 4,543,808	$ —	$ 4,543,808
Capital expenditures	59,023	19,095	$ 78,118	6,356	84,474
Segment assets	1,718,379	947,974	2,666,353	333,516	2,999,869
Year Ended December 31, 2021					
Total net revenues	$ 2,829,918	$ 1,355,111	$ 4,185,029	$ —	$ 4,185,029
Intersegment net revenues	(678)	(2,661)	(3,339)	—	(3,339)
Net revenues from external customers	$ 2,829,240	$ 1,352,450	$ 4,181,690	$ —	$ 4,181,690
Capital expenditures	49,805	29,611	79,416	14,785	94,201
Segment assets	1,634,937	1,188,024	2,822,961	373,714	3,196,675

(amounts in thousands)	North America	Europe	Australasia	Total Operating Segments	Corporate and Unallocated Costs	Total Consolidated
Year Ended December 31, 2022						
Total net revenues	$ 3,260,166	$ 1,284,796	$ 611,047	$ 5,156,009	$ —	$ 5,156,009
Intersegment net revenues	(813)	(341)	(25,676)	(26,830)	—	(26,830)
Net revenues from external customers	$ 3,259,353	$ 1,284,455	$ 585,371	$ 5,129,179	$ —	$ 5,129,179
Depreciation and amortization	$ 69,427	$ 31,139	$ 18,622	$ 119,188	$ 12,566	$ 131,754
Goodwill impairment	—	54,885	—	54,885	—	54,885
Restructuring and asset related charges, net	7,338	6,042	611	13,991	4,242	18,233
Adjusted EBITDA	352,885	74,325	65,574	492,784	(70,628)	422,156
Capital expenditures	59,023	19,095	7,746	85,864	6,356	92,220
Segment assets	$ 1,718,379	$ 947,974	$ 502,290	$ 3,168,643	$ 332,718	$ 3,501,361
Year Ended December 31, 2021						
Total net revenues	$ 2,829,918	$ 1,355,111	$ 610,737	$ 4,795,766	$ —	$ 4,795,766
Intersegment net revenues	(678)	(2,661)	(20,708)	(24,047)	—	(24,047)
Net revenues from external customers	$ 2,829,240	$ 1,352,450	$ 590,029	$ 4,771,719	$ —	$ 4,771,719
Depreciation and amortization	$ 72,095	$ 32,855	$ 20,892	$ 125,842	$ 11,405	$ 137,247
Restructuring and asset related charges, net	1,200	1,453	394	3,047	(97)	2,950
Adjusted EBITDA	352,881	127,292	71,448	551,621	(86,542)	465,079
Capital expenditures	49,805	29,611	5,492	84,908	14,785	99,693
Segment assets	$ 1,634,937	$ 1,188,024 0	$ 542,793	$ 3,365,754	$ 372,917	$ 3,738,671
Year Ended December 31, 2020						
Total net revenues	$ 2,529,960	$ 1,189,974	$ 529,882	$ 4,249,816	$ —	$ 4,249,816
Intersegment net revenues	(967)	(2,197)	(10,975)	(14,139)	—	(14,139)
Net revenues from external customers	$ 2,528,993	$ 1,187,777	$ 518,907	$ 4,235,677	$ —	$ 4,235,677
Depreciation and amortization	$ 77,361	$ 29,712	$ 19,341	$ 126,414	$ 8,209	$ 134,623
Restructuring and asset related charges, net	3,164	3,682	320	7,166	3,303	10,469
Adjusted EBITDA	315,952	136,363	62,449	514,764	(68,350)	446,414
Capital expenditures	34,815	32,353	10,207	77,375	19,521	96,896
Segment assets	$ 1,498,778	$ 1,152,251	$ 598,411	$ 3,249,440	$ 715,245	$ 3,964,685

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(amounts in thousands)	North America	Europe	Total Operating Segments	Corporate and Unallocated Costs	Total Consolidated
Year Ended December 31, 2023					
Income (loss) from continuing operations, net of tax	$ 175,980	$ (3,335)	$ 172,645	$ (147,410)	$ 25,235
Income tax expense (benefit)(1)	79,210	44,095	123,305	(59,966)	63,339
Depreciation and amortization(2)	79,900	30,185	110,085	24,911	134,996
Interest expense, net	4,713	3,224	7,937	64,321	72,258
Restructuring and asset related charges	29,207	5,738	34,945	796	35,741
Net other special items	13,179	1,548	14,727	34,143	48,870
Adjusted EBITDA from continuing operations	$ 382,189	$ 81,455	$ 463,644	$ (83,205)	$ 380,439
Year Ended December 31, 2022					
Income (loss) from continuing operations, net of tax	$ 260,590	$ (50,796)	$ 209,794	$ (197,571)	$ 12,223
Income tax expense(3)	6,963	3,307	10,270	7,771	18,041
Depreciation and amortization	69,427	31,139	100,566	12,566	113,132
Interest expense, net	4,011	6,193	10,204	72,301	82,505
Goodwill impairment	—	54,885	54,885	—	54,885
Restructuring and asset related charges	7,338	6,042	13,380	4,242	17,622
Net other special items	4,556	23,555	28,111	22,328	50,439
Adjusted EBITDA from continuing operations	$ 352,885	$ 74,325	$ 427,210	$ (78,363)	$ 348,847
Year Ended December 31, 2021					
Income (loss) from continuing operations, net of tax	$ 255,975	$ 66,596	$ 322,571	$ (191,249)	$ 131,322
Income tax expense (benefit)(3)	5,704	16,980	22,684	(3,048)	19,636
Depreciation and amortization	72,095	32,855	104,950	11,405	116,355
Interest expense, net	6,080	9,282	$ 15,362	61,426	76,788
Restructuring and asset related charges, net	1,200	1,453	2,653	(97)	2,556
Net other special items	11,827	126	11,953	34,164	46,117
Adjusted EBITDA from continuing operations	$ 352,881	$ 127,292	$ 480,173	$ (87,399)	$ 392,774

(1) Income tax expense in our Europe segment includes an increase in valuation allowance against our foreign net operating loss carryforwards of $30.0 million.

(2) Corporate and unallocated costs depreciation and amortization expense in the year ended December 31, 2023 includes accelerated amortization of $14.1 million for an ERP system that we intend to not utilize upon completion of the JW Australia Transition Services Agreement period. North America depreciation and amortization expense in the twelve months ended December 31, 2023 includes accelerated depreciation of $9.1 million from reviews of equipment capacity optimization.

(3) Income tax expense (benefit) in Corporate and unallocated costs in the year ended December 31, 2022 and December 31, 2021 includes the tax impact of U.S. Operations.

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Reconciliations of income from continuing operations, net income of tax to Adjusted EBITDA from continuing operations are as follows:

(amounts in thousands)	Year Ended 2022	2021	2020
Net income	$ 45,727	$ 168,822	$ 91,586
Income tax expense	33,310	35,540	25,089
Depreciation and amortization	131,754	137,247	134,623
Interest expense, net	82,060	77,566	74,800
Goodwill impairment	54,885	—	—
Restructuring and asset related charges, net	18,233	2,950	10,469
Net (gain) loss on sale of property and equipment	(8,057)	2,049	(4,153)
Share-based compensation expense	16,168	20,209	16,399
Non-cash foreign exchange transaction/translation loss (income)	14,548	(13,769)	12,904
Other items (1)	33,528	34,465	84,697

Adjusted EBITDA	$ 422,156	$ 465,079	$ 446,414

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(amounts in thousands)	Year Ended 2023	2022	2021
Income from continuing operations, net of tax	$ 25,235	$ 12,223	$ 131,322
Income tax expense(1)	63,339	18,041	19,636
Depreciation and amortization(2)	134,996	113,132	116,355
Interest expense, net	72,258	82,505	76,788
Special items:			
Net legal and professional expenses and settlements(3)	28,184	(287)	15,598
Goodwill impairment(4)	—	54,885	—
Restructuring and asset related charges(5)	35,741	17,622	2,556
Other facility closure, consolidation, and related costs and adjustments(6)	2,237	18,891	2,326
M&A related costs(7)	6,575	9,752	5,206
Net (gain) loss on sale of property and equipment(8)	(10,523)	(8,036)	2,086
Loss on extinguishment of debt(9)	6,487	—	1,342
Share-based compensation expense(10)	17,477	14,577	19,988
Pension settlement charge(11)	4,349	—	—
Non-cash foreign exchange transaction/translation loss (income)(12)	595	12,437	(10,421)
Other special items (13)	(6,511)	3,105	9,992
Adjusted EBITDA from continuing operations	$ 380,439	$ 348,847	$ 392,774

(1) Income tax expense in twelve months ended December 31, 2023 includes an increase in valuation allowance against foreign net operating loss carryforwards of $30.0 million.

(2) Depreciation and amortization expense in the year ended December 31, 2023 includes accelerated amortization of $14.1 million in Corporate and unallocated costs for an ERP system that we intend to not utilize upon completion of the JW Australia Transition Services Agreement period. In addition, the year ended December 31, 2023 includes accelerated depreciation of $9.1 million in North America from reviews of equipment capacity optimization.

(3) Net legal and professional expenses and settlements include: (i) in the year ended December 31, 2023, $26.1 million in strategic transformation expenses; (ii) in the year ended December 31, 2022, ($10.5) million of income resulting from a legal settlement, partially offset by $3.9 million in legal expenses relating primarily to litigation, and $3.8 million in strategic transformation expenses; (iii) in the year ended December 31, 2021, $14.4 million in legal fees and settlements relating primarily to litigation.

(4) Goodwill impairment consists of goodwill impairment charges associated with our Europe reporting unit.

(5) Represents severance, accelerated depreciation, equipment relocation and other expenses directly incurred as a result of restructuring events. The restructuring charges primarily relate to charges incurred to change the operating structure, eliminate certain roles, and close certain manufacturing facilities in our North America and Europe segments.

(6) Other non-recurring facility closure, consolidation, and related costs and adjustments that do not meet the U.S. GAAP definition of restructuring, primarily related to the closure of certain facilities.

(7) M&A related costs consists primarily of legal and professional expenses related to the planned disposition of Towanda.

(8) Represents net (gain) loss on sales of property and equipment, primarily in the United Kingdom, Australia, and Klamath Falls, Oregon in the year ended December 31, 2023, and Phoenix, Arizona in the year ended December 31, 2022.

(9) Loss on extinguishment of debt of $6.5 million is related to the redemption of $250.0 million of our 6.25% Senior Secured Notes and $200.0 million of our 4.63% Senior Notes.

(10) Represents non-cash equity-based compensation expense related to the issuance of share-based awards.

(11) Represents a settlement loss associated with our U.S. defined benefit pension plan resulting from a one-time lump sum payment offered to pension plan participants. Refer to Note 26 -*Employee Retirement and Pension Benefits* for additional information.

(12) Non-cash foreign exchange transaction/translation loss (income) primarily associated with fair value adjustments of foreign currency derivatives and revaluation of intercompany balances.

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(13) Other special items not core to ongoing business activity include: (i) in the year ended December 31, 2022 (1) $20,001 December 31, 2023, ($3.1) million in facility closure, consolidation, income from short-term investments as well as forward contracts related to the JW Australia divestiture in Corporate and other related unallocated costs, and ($2.8) million in adjustments (2) $10,842 in net legal and professional expenses and settlements, primarily relating to litigation, M&A evaluations, and strategic transformation initiatives, including $(10,500) of income resulting from a legal settlement, (3) $3,318 relating primarily to exit costs for executives, and (4) ($1,975) relating to a credit received for overpayments of utility expenses; (ii) in the year ended December 31, 2021 (1) $19,795 in legal and professional expenses relating primarily to litigation, (2) $4,232 in compensation and non-income taxes associated with exercises of legacy equity awards (3) $3,753 in our Europe segment; (ii) in the year ended December 31, 2022, $3.3 million relating primarily to

exit costs for executives in Corporate and unallocated costs, and ($2.0) million relating to a credit received for overpayment of utility expenses in our North America segment; (iii) in the year ended December 31, 2021, $4.2 million in compensation and taxes associated with exercises of legacy equity awards in our Europe segment, and $3.8 million in expenses related to environmental matters (4) $3,617 in facility closure, consolidation, startup, and other related costs, (5) $1,342 in costs relating to debt refinancing and debt restructuring, and (6) $1,267 $1.3 million in expenses related to fire damage and downtime at one of our facilities; (iii) facilities in the year ended December 31, 2020 (1) $67,130 our North America segment.

To conform with current period presentation, certain amounts in legal and professional expenses, relating primarily to litigation, (2) $7,467 in expenses related to environmental matters, (3) $6,987 facility closure, consolidation, startup and other related costs, (4) $1,235 in one-time lease termination charges, and (5) $1,142 of realized losses on hedges of intercompany notes.

Prior prior period information in the table above has have been reclassified to conform to current period presentation. reclassified.

Net revenues by locality are as follows for the years ended December 31,:

(amounts in thousands)	2022	2021	2020
Net revenues by location of external customer			
Canada	$ 258,629	$ 220,962	$ 188,041
U.S.	2,980,770	2,589,900	2,322,079
South America (including Mexico)	22,656	21,371	22,323
Europe	1,303,298	1,378,645	1,212,810
Australia	557,174	556,460	485,852
Africa and other	6,652	4,381	4,572
Total	$ 5,129,179	$ 4,771,719	$ 4,235,677

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(amounts in thousands)	2023	2022	2021
Net revenues by location of external customer			
Canada	$ 260,897	$ 258,629	$ 220,962
U.S.	2,841,921	2,978,492	2,587,536
South America (including Mexico)	20,212	22,656	21,371
Europe	1,180,075	1,280,364	1,350,582
Africa and other	1,229	3,667	1,239
Total	$ 4,304,334	$ 4,543,808	$ 4,181,690

Geographic information regarding property, plant, and equipment which exceed 10% of consolidated property, plant, and equipment is as follows for the years ended December 31,:

(amounts in thousands)	(amounts in thousands)	2022	2021	2020	(amounts in thousands)	2023	2022	2021
North America:	North America:							
U.S.	U.S.	$422,508	$425,761	$469,092				
U.S.								
U.S.								
Other	Other	29,587	29,901	27,722				
	446,031							
Europe								
Europe								
Europe								
		452,095	455,662	496,814				
Europe		170,346	188,100	203,424				
Australasia:								
Australia		96,139	106,037	118,778				
Other		25,060	29,928	32,944				
		121,199	135,965	151,722				
Corporate:	Corporate:							
U.S.		18,846	19,077	20,625				

Corporate:

Corporate:

U.S. and other

U.S. and other

U.S. and other

Total property and equipment, net	Total property and equipment, net	$762,486	$798,804	$872,585

Total property and equipment, net

Total property and equipment, net

Note 15. Income Taxes

Income before taxes, is comprised of the following for the years ended December 31:

(amounts in thousands)	2023	2022	2021
Domestic income	$ 11,217	$ 63,130	$ 54,991
Foreign income (loss)	77,357	(32,866)	95,967
Total income before taxes	$ 88,574	$ 30,264	$ 150,958

Our foreign income is historically driven by our subsidiaries in Canada, Germany, and Denmark.

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Significant components of the provision (benefit) for income taxes are as follows for the years ended December 31:

(amounts in thousands)	2023	2022	2021
Federal	$ (2,464)	$ 407	$ 520
State	1,753	1,103	480
Foreign	40,452	19,558	31,862
Current taxes	39,741	21,068	32,862
Federal	4,220	14,075	3,689
State	7,757	(4,854)	(5,927)
Foreign	11,621	(12,248)	(10,988)
Deferred taxes	23,598	(3,027)	(13,226)
Total provision for income taxes	$ 63,339	$ 18,041	$ 19,636

Reconciliation of the U.S. federal statutory income tax rate to our effective tax rate is as follows for the years ended December 31:

	2023		2022		2021	
(amounts in thousands)	Amount	%	Amount	%	Amount	%
Statutory rate	$ 18,601	21.0	$ 6,355	21.0	$ 31,702	21.0
State income tax, net of federal benefit	1,959	2.2	2,154	7.1	2,339	1.5
Foreign source dividends and deemed inclusions	1,906	2.2	(237)	(0.8)	(9,822)	(6.5)
Valuation allowance	32,666	36.9	(11,256)	(37.2)	(7,331)	(4.9)
Nondeductible expenses	2,661	3.0	2,097	6.9	2,741	1.8
Goodwill impairment	—	—	12,735	42.1	—	—
Equity based compensation	4,086	4.6	2,486	8.2	(787)	(0.5)
Foreign tax rate differential	(488)	(0.6)	(1,365)	(4.5)	(2,759)	(1.8)

Tax rate differences and credits		3,675	4.1		3,469	11.5		(10,264)	(6.8)
Uncertain tax positions		(174)	(0.2)		2,966	9.8		8,711	5.8
Change in indefinite reversal assertion		—	—		—	—		5,016	3.4
Prior year provision to return adjustments		(571)	(0.6)		(789)	(2.6)		210	0.1
Other		(982)	(1.1)		(574)	(1.9)		(120)	(0.1)
Effective tax rate	$	63,339	71.5%	$	18,041	59.6%	$	19,636	13.0%

During the year ended December 31, 2023, we recognized an expense of $32.7 million from the increase to valuation allowances on foreign and state NOL and credit carryforwards, $6.7 million of tax expense attributed to nondeductible expenses, and $7.2 million of tax expense attributed to the expiration of federal and state tax credit carryforwards partially offset by $3.8 million of tax benefit attributable to research and development credits.

During the year ended December 31, 2022, we recognized benefit of $9.9 million from the reduction to state NOL and state credits valuation allowance, and $1.9 million of tax benefit attributable to research and development tax credits, partially offset by $12.7 million tax expense attributable to nondeductible goodwill impairment.

During the year ended December 31, 2021, we recognized $12.2 million of U.S. tax benefits attributed to the effect of tax planning, primarily related to the impact of GILTI, a benefit of $6.7 million from the reduction to state NOL and state credits valuation allowance, and $3.6 million of tax benefit attributable to research and development tax credits, partially offset by $5.0 million tax expense attributable to removing our assertion on certain undistributed foreign earnings.

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Deferred income taxes are provided for the temporary differences between the financial reporting basis and tax basis of our assets, liabilities, and operating loss carryforwards. Significant deferred tax assets and liabilities are as follows as of December 31:

(amounts in thousands)		2023		2022
Net operating loss and tax credit carryforwards	$	157,790		200,343
Operating lease liabilities		24,210		34,709
Employee benefits and compensation		24,894	$	28,161
Accrued liabilities and other		46,944		35,807
Inventory		7,255		7,531
Allowance for credit losses		3,789		4,851
Investments and marketable securities		522		—
Capitalized research and development expenses		31,782		18,327
Gross deferred tax assets		297,186		329,729
Valuation allowance		(54,786)		(21,048)
Deferred tax assets		242,400		308,681
Depreciation and amortization		(74,328)		(93,810)
Operating lease assets		(22,442)		(32,953)
Investments and marketable securities		—		(3,401)
Investment in subsidiaries		(2,347)		(4,218)
Deferred tax liabilities		(99,117)		(134,382)
Net deferred tax assets	$	143,283	$	174,299
Balance sheet presentation:				
Non-current assets	$	150,453	$	182,161
Non-current liabilities		(7,170)		(7,862)
Net deferred tax assets	$	143,283	$	174,299

At December 31, 2023 and 2022 the Company had net operating losses in various federal, state, and foreign jurisdictions of approximately $1,130.2 million and $1,115.0 million, respectively, which begin to expire in 2024. $271.5 million of such NOL carryforwards do not expire. In addition, the Company had tax credit carryforwards of $40.3 million and $46.9 million at December 31, 2023 and 2022, respectively, which begin to expire in 2024.

Valuation Allowance – The realization of deferred tax assets is based on historical tax positions and estimates of future taxable income. We evaluate both the positive and negative evidence that we believe is relevant in assessing whether we will realize the deferred tax assets. We consider historical taxable income, the scheduled reversal of deferred tax liabilities (including the effect in available carry back and carryforward periods), projected taxable income, and tax-planning strategies in making this assessment. A valuation allowance is recorded when it is more likely than not that some portion of the deferred tax assets will not be realized. To fully utilize the NOLs and tax credits carryforwards, we will need to generate sufficient future taxable income in each respective jurisdiction before the expiration of the deferred tax assets governed by the applicable tax code.

Based on the level of historical taxable income and projections for future taxable income over the periods for which the deferred tax assets are deductible, management believes that it is more likely than not that we will realize the benefits of these deductible differences, net of existing valuation allowances at December 31, 2023. The amount of the deferred tax asset considered realizable, however, could be reduced or increased in the near term if estimates of future taxable income during the carryforward periods are reduced or exceeded.

Subsequently recognized tax benefits related to the valuation allowance for deferred tax assets as of December 31, 2023 will be allocated to consolidated statement of operations.

We had a valuation allowance of $54.8 million and $21.0 million as of December 31, 2023 and December 31, 2022, respectively. The increase was primarily driven by an increase of $30.0 million and $2.7 million against our foreign and state net operating loss carryforwards, respectively.

We had a valuation allowance of $21.0 million and $31.8 million as of December 31, 2022 and December 31, 2021, respectively. The decrease was primarily driven by a decrease of $9.9 million for state net operating loss carryforwards and state credit carryforwards.

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The following is the activity in our valuation allowance:

(amounts in thousands)	2023	2022	2021
Balance as of January 1,	$ (21,048)	$ (31,825)	$ (37,786)
Valuation allowances established	11	(28)	—
Changes to existing valuation allowances	(32,830)	(31)	(2,066)
Release of valuation allowances	1	9,918	7,510
Currency translation	(920)	918	517
Balance at period end	$ (54,786)	$ (21,048)	$ (31,825)

Earnings of Foreign Subsidiaries – The Company continually evaluates its global cash needs. During the third quarter of 2021, the Company removed its indefinite reinvestment assertion on a majority of unremitted earnings and certain other aspects of outside basis differences in its foreign subsidiaries. Deferred tax expense of $5.0 million was recorded for withholding and income taxes which would be owed if earnings were remitted to the U.S. parent. In 2023, the Company completed its sale of the Australasia business and correspondingly reduced its deferred tax liability related to the Australasia unremitted earnings in 2023. As of December, 31, 2023 we have $2.3 million of deferred tax liability remaining on our balance sheet. The Company continued to make an indefinite reinvestment assertion on other aspects of the outside basis difference in foreign subsidiaries that would attract a tax cost in excess of the Company's cost of capital.

The Company repatriated $21.8 million and $132.8 million from certain foreign jurisdictions for the years ended December 31, 2023 and 2022, respectively. The Company is asserting that its future earnings, in excess of previously taxed earnings, are permanently reinvested as of December 31, 2023. The Company continues to make an indefinite reinvestment assertion on other aspects of the outside basis differences in foreign subsidiaries that would attract a significant cost of capital. No additional deferred tax expense is recorded on prospective earnings. We hold a combined book-over-tax outside basis difference of $245.1 million and $161.0 million as of December 31, 2023 and December 31, 2022 in our investment in foreign subsidiaries on a continuing operations basis and may incur up to $30.4 million of local country income and withholding taxes in case of distribution of unremitted earnings.

Dual-Rate Jurisdiction – Estonia and Latvia tax the corporate profits of resident corporations at different rates depending upon whether the profits are distributed. The undistributed profits of resident corporations are exempt from taxation while any distributed profits are subject to a 20% corporate income tax rate. The liability for the tax on distributed profits is recorded as an income tax expense in the period in which a dividend is declared. The balance of retained earnings of our Estonian subsidiary which, if distributed, would be subject to this this tax was $85.0 million and $82.0 million as of December 31, 2023 and December 31, 2022, respectively. The balance of retained earnings of our Latvian subsidiary which, if distributed, would be subject to this tax was $32.8 million and $29.8 million as of December 31, 2023 and December 31, 2022, respectively.

Tax Payments and Balances – We made tax payments of $48.8 million, $46.8 million, $38.6 million during the years ended December 31, 2023, 2022, and 2021, respectively, primarily for foreign liabilities. We received tax refunds of $0.7 million, $1.9 million, and $2.1 million during the years ended in December 31, 2023, 2022, and 2021, respectively. Total receivables for tax refunds are recorded in other current assets in the accompanying balance sheets and totaled $14.2 million and $13.3 million at December 31, 2023 and December 31, 2022, respectively. Foreign payables for taxes are recorded in accrued income taxes payable in the accompanying balance sheets and totaled $9.3 million and $9.4 million at December 31, 2023 and December 31, 2022, respectively. We do not have any non-current taxes receivable or payable as of December 31, 2023 and December 31, 2022.

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Accounting for Uncertain Tax Positions – A reconciliation of the beginning and ending amounts of unrecognized tax benefits excluding interest and penalties is as follows:

(amounts in thousands)	2023	2022	2021
Balance as of January 1,	$ 29,300	$ 26,825	$ 16,995
Increase for tax positions taken during the prior period	14,320	4,565	10,367
Decrease for settlements with taxing authorities	(7,347)	(1,527)	—
Increase for tax positions taken during the current period	1,472	709	869
Decrease due to statute expiration	(159)	(75)	(163)

Currency translation	1,314	(1,197)	(1,243)
Balance at period end - unrecognized tax benefit	$ 38,900	$ 29,300	$ 26,825

Unrecognized tax benefits were $38.9 million, $29.3 million, and $26.8 million at December 31, 2023, 2022, and 2021, respectively. The increase is primarily related to management's assessment of a potential liability as a result of ongoing tax audit discussions in Europe as well as uncertainty on prior years' research and development tax credits in the U.S. The unrecognized tax benefit recorded in the current year is partially offset by an increase in deferred tax assets expected to be recovered should these liabilities be assessed. Interest and penalties related to uncertain tax positions are reported as a component of tax expense and included in the total uncertain tax position balance within deferred credits and other liabilities in the accompanying consolidated balance sheets. There were amounts accrued associated with interest and penalties of $6.7 million, $9.8, and $7.5 million at December 31, 2023, 2022, and 2021, respectively.

There were benefits of $12.3 million, $18.1 million, and $19.3 million included in the balance of unrecognized tax benefits as of December 31, 2023, 2022, and 2021, respectively, that would affect the effective tax rate if recognized. We cannot reasonably estimate the conclusion of certain non-U.S. income tax examinations and its outcome at this time.

We operate in numerous U.S., state, and foreign tax jurisdictions and are generally open to examination for tax years 2013 and forward. As of December 31, 2023, the Company has subsidiaries in various state and foreign jurisdictions under audit for tax years 2011 through 2019.

Note 16. Capital Stock

Preferred Stock - Our Board of Directors is authorized to issue Preferred Stock from time to time in one or more series and with such rights, privileges, and preferences as the Board of Directors shall from time to time determine. We have not issued any shares of Preferred Stock.

Common Stock - Common Stock includes the basis of shares outstanding plus amounts recorded as additional paid-in capital. Shares outstanding exclude the shares issued to the Employee Benefit Trust that are considered similar to treasury shares and total 193,941 shares at both December 31, 2022 December 31, 2023 and December 31, 2021 December 31, 2022 with a total original issuance value of $12.4 million.

We record share repurchases on their trade date and reduce shareholders' equity and increase accounts payable. Repurchased shares are retired, and the excess of the repurchase price over the par value of the shares is charged to retained earnings.

On July 27, 2021, our Board of Directors increased our previous repurchase authorization to a total of $400.0 million with no expiration date.

On July 28, 2022, our Board of Directors authorized a new share repurchase program, replacing our previous share repurchase authorization, with an aggregate value of $200.0 million and no expiration date. As of December 31, 2022 December 31, 2023, there have been no share repurchases under this program.

We did not repurchase shares of our Common Stock during the year ended December 31, 2023. During the years ended December 31, 2022, and December 31, 2021, and December 31, 2020, prior to the authorization of our new share repurchase program, we repurchased 6,848,356 and 11,564,009 and 265,589 shares, of our Common Stock, respectively, at an average price of $19.12 $28.09, and $18.83, $28.09, respectively.

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Note 16. 17. Earnings Per Share

The basic and diluted income per share calculations were determined based on the following share data**:**

		2023				
		2022	2021	2020		
		2023				
		2023			2022	2021
Weighted average outstanding shares of Common Stock basic	Weighted average outstanding shares of Common Stock basic	86,374,499	96,563,155	100,633,392		
Restricted stock units, performance share units, and options to purchase Common Stock		700,677	1,807,987	1,048,589		
Weighted average outstanding shares of Common Stock basic						

Weighted average outstanding shares of Common Stock basic				
Restricted stock units, performance share units and options to purchase Common Stock				
Restricted stock units, performance share units and options to purchase Common Stock				
Restricted stock units, performance share units and options to purchase Common Stock				
Weighted average outstanding shares of Common Stock diluted	Weighted average outstanding shares of Common Stock diluted	87,075,176	98,371,142	101,681,981

The following table provides the securities that could potentially dilute basic earnings per share in the future but were not included in the computation of diluted income per share as their inclusion would be anti-dilutive:

		2023		
		2022	2021	2020
		2023		
		2023	2022	2021
Common Stock options				
Common Stock options				
Common Stock options	Common Stock options	1,652,320	1,226,906	1,721,921
Restricted stock units	Restricted stock units	738,528	12,590	367,461
Restricted stock units				
Restricted stock units				
Performance share units	Performance share units	133,467	751	249,084

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Note 17. 18. Stock Compensation

In connection with our IPO, the Board adopted, and our shareholders approved, the JELD-WEN Holding, Inc. 2017 Omnibus Equity Plan, (the “Omnibus Equity Plan”). Under the Omnibus Equity Plan, equity awards may be made in respect of 9,900,000 shares of our Common Stock and may be granted in the form of options, restricted stock, RSUs, stock appreciation rights, dividend equivalent rights, share awards, and performance-based awards (including performance share units and performance-based restricted stock).

Share-based compensation expense included in SG&A expenses totaled $16.2 million $17.5 million, $20.2 million $14.6 million, and $16.4 million $20.0 million in 2023, 2022, and 2021, and 2020, respectively. There were no material related tax benefits for the years ended December 31, 2022, December 31, 2021, and December 31, 2020. As of December 31, 2022 December 31, 2023, there was $15.5 million $14.9 million of total unrecognized compensation expense related to non-vested share-based compensation arrangements. This cost is expected to be recognized over the remaining weighted-average vesting period of 1.5 years.

Stock Options – Generally, stock option awards vest ratably each year on the anniversary date over a three-year period, have an exercise term of 10 years, and any vested options must be exercised within 90 days of the employee leaving the Company. The compensation cost of option awards is charged to expense based upon the graded-vesting method over the vesting periods applicable to the option awards. The graded-vesting method provides for vesting of portions of the overall awards at interim dates and results in greater expense in earlier years than the straight-line method.

When options are granted, we calculate the fair value of common and Class B-1 Common Stock options using multiple Black-Scholes option valuation models. Expected volatilities are based upon a selection of public guideline companies. The risk-free rate was based upon U.S. Treasury rates.

Key assumptions used in the valuation models were as follows for the years ended December 31:

	2022	2021	2020
Expected volatility	51.33% - 60.06%	52.42% - 53.62%	37.52% -37.66%
Expected dividend yield rate	0.00%	0.00%	0.00%
Weighted average term (in years)	5.5 - 6.5	5.5 - 6.5	5.5 - 6.5
Weighted average grant date fair value	$5.69 - $11.96	$14.39	$9.45
Risk free rate	1.91% - 3.51%	0.71% - 0.91%	1.39% - 1.44%

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	2023	2022	2021
Expected volatility	55.06% - 58.73%	51.33% - 60.06%	52.42% -53.62%
Expected dividend yield rate	0.00%	0.00%	0.00%
Weighted average term (in years)	5.5 - 6.5	5.5 - 6.5	5.5 - 6.5
Weighted average grant date fair value	$7.43 - $7.57	$5.69 - $11.96	$14.39
Risk free rate	3.67% - 3.81%	1.91% - 3.51%	0.71% - 0.91%

The following table represents stock option activity:

	Shares	Weighted Average Exercise Price Per Share	Aggregate Intrinsic Value (millions)	Weighted Average Remaining Contract Term in Years
Outstanding as of January 1, 2020	2,832,799	$ 19.55		
Granted	407,607	24.30		
Exercised	(335,553)	12.27		
Forfeited	(273,022)	27.53		
Balance as of December 31, 2020	2,631,831	$ 20.41		

Shares	Shares	Weighted Average Exercise Price Per Share	Aggregate Intrinsic Value (millions)	Weighted Average Remaining Contract Term in Years
Outstanding as of January 1, 2021				
Granted				
Granted				
Granted				
Exercised				
Exercised				
Exercised				
Forfeited				
Forfeited				
Forfeited				
Balance as of December 31, 2021				
Balance as of December 31, 2021				
Balance as of December 31, 2021				
Granted				
Granted				

Granted	Granted	309,902		29.01							
Exercised	Exercised	(699,756)		14.48							
Exercised											
Exercised											
Forfeited	Forfeited	(79,955)		27.22							
Balance as of December 31, 2021		2,162,022	$	23.31							
Forfeited											
Forfeited											
Balance as of December 31, 2022											
Balance as of December 31, 2022											
Balance as of December 31, 2022											
Granted											
Granted											
Granted	Granted	534,631		18.18							
Exercised	Exercised	(157,167)		11.89							
Exercised											
Exercised											
Forfeited	Forfeited	(822,542)		25.99							
Balance as of December 31, 2022		1,716,944	$	21.48	$	0.3	5.7				
Forfeited											
Forfeited											
Balance as of December 31, 2023											
Balance as of December 31, 2023											
Balance as of December 31, 2023								1,452,819	$20.42	4.4	5.2
Exercisable as of December 31, 2022		1,339,630	$	22.96	$	0.3	5.5				
Exercisable as of December 31, 2023											
Exercisable as of December 31, 2023											
Exercisable as of December 31, 2023								1,123,326	$22.84	2.1	4.1

RSUs – RSUs are subject to the continued service of the recipient through the vesting date, which is generally from issuance. Beginning 2021, RSUs granted vest ratably each year on the anniversary date generally over a three-year period rather than at the end of the three-year period. Once vested, the recipient will receive one share of Common Stock for each restricted stock unit. The grant-date fair value per share used for RSUs was determined using the closing price of our

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Common Stock on the NYSE on the date of the grant. We apply this grant-date fair value per share to the total number of shares that we anticipate will fully vest and amortize the fair value to compensation expense over the vesting period using the straight-line method.

The following table represents RSU activity:

		Shares		**Weighted Average Grant-Date Fair Value Per Share**	
Outstanding as of January 1, 2019		1,239,505	$	22.13	
Shares				**Shares**	**Weighted Average Grant-Date Fair Value Per Share**
Outstanding as of January 1, 2021					
Granted	Granted	865,091		19.62	

Vested		(138,245)		26.22
Forfeited		(179,554)		23.63
Balance as of December 31, 2020		1,786,797	$	21.43
Granted				
Granted	Granted	652,579		29.09
Vested	Vested	(311,683)		22.65
Forfeited	Forfeited	(301,301)		24.99
Balance as of December 31, 2021	**Balance as of December 31, 2021**	1,826,392	$	23.37
Granted	Granted	1,540,246		20.32
Granted				
Granted				
Vested	Vested	(768,341)		22.31
Forfeited	Forfeited	(600,785)		23.14
Balance as of December 31, 2022	**Balance as of December 31, 2022**	1,997,512	$	21.50
Granted				
Granted				
Granted				
Vested				
Forfeited				
Balance as of December 31, 2023				

PSUs – PSUs are subject to continued employment of the recipient through the vesting date, which is on the third anniversary of the grant. Once vested, the recipient will receive one share of Common Stock for each vested PSU.

For PSUs issued prior to 2021, the number of PSUs that vest is determined by a payout factor consisting of equally weighted performance measures of Adjusted EBITDA and free cash flow, Free Cash Flow, each as reported over the applicable three-year

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performance period and is adjusted based upon a market condition measured by our relative total shareholder return ("TSR") over the applicable three-year performance period as compared to the TSR of the Russell 3000 index. For PSUs issued in 2021 and thereafter, the number of PSUs that vest is determined by a payout factor consisting of equally weighted pre-set three year performance targets on return on invested capital ("ROIC") and TSR. The fair value of the award is estimated using a Monte Carlo simulation approach in a risk-neutral framework to model future stock price movements based on historical volatility, risk free rates of return, and correlation matrix.

The following table represents PSU activity for the awarded shares at target performance measures:

	Shares	Shares		Weighted Average Grant-Date Fair Value Per Share
Outstanding as of January 1, 2021				
		Shares		**Weighted Average Grant-Date Fair Value Per Share**
Outstanding as of January 1, 2019		510,773	$	24.97
Granted				
Granted				
Granted	Granted	311,275		25.50
Forfeited	Forfeited	(77,585)		25.96

Balance as of December 31, 2020		744,463	$	25.09
Forfeited				
Forfeited				
Balance as of December 31, 2021				
Granted	Granted	165,749		30.70
Forfeited		(205,949)		28.58
Balance as of December 31, 2021		704,263	$	25.39
Granted				
Granted	Granted	158,587		29.24
Vested	Vested	(202,673)		22.20
Forfeited	Forfeited	(380,361)		27.79
Balance as of December 31, 2022	**Balance as of December 31, 2022**	279,816	$	26.61
Granted				
Forfeited				
Forfeited				
Forfeited				
Balance as of December 31, 2023				

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Note 18. 19. Restructuring and Asset Related Charges

We engage in restructuring activities focused on improving productivity and operating margins. Restructuring costs primarily relate to costs associated with workforce reductions, plant consolidations and closures, and changes to the management structure to align with our operations. Other restructuring associated costs for the year ended December 31, 2023, primarily consisted of equipment relocation costs. Other restructuring associated costs for the year ended December 31, 2022 primarily consisted of lease termination costs. Asset related charges consist of accelerated depreciation and amortization of assets due to changes in asset useful lives.

The following table summarizes the restructuring and asset related charges for the periods indicated:

(amounts in thousands)	North America	Europe	Corporate and Unallocated Costs	Total Consolidated
Year Ended December 31, 2023				
Restructuring severance and termination charges	$ 11,156	$ 6,074	$ 796	$ 18,026
Other restructuring associated costs, net	10,189	(684)	—	9,505
Asset related charges	7,862	348	—	8,210
Other restructuring associated costs and asset related charges, net	18,051	(336)	—	17,715
Total restructuring and asset related charges	$ 29,207	$ 5,738	$ 796	$ 35,741
Year Ended December 31, 2022				
Restructuring severance and termination charges	$ 6,842	$ 3,773	$ 3,223	$ 13,838
Other restructuring associated costs	—	1,253	156	1,409
Asset related charges	496	1,016	863	2,375
Other restructuring associated costs and asset related charges	496	2,269	1,019	3,784
Total restructuring and asset related charges	$ 7,338	$ 6,042	$ 4,242	$ 17,622
Year Ended December 31, 2021				
Restructuring severance and termination charges	$ (4)	$ 701	$ —	$ 697

Other restructuring associated costs, net	(28)	—	(97)	(125)
Asset related charges	1,232	752	—	1,984
Other restructuring associated costs and asset related charges, net	1,204	752	(97)	1,859
Total restructuring and asset related charges, net	$ 1,200	$ 1,453	$ (97)	$ 2,556

The following is a summary of the restructuring accruals recorded and charges incurred:

(amounts in thousands)	2023	2022	2021
Balance as of January 1	$ 5,021	$ 153	$ 1,358
Current period charges	27,531	15,247	572
Payments	(29,367)	(10,273)	(1,719)
Currency translation	190	(106)	(58)
Balance at period end	$ 3,375	$ 5,021	$ 153

Restructuring accruals are expected to be paid within the next 12 months and are included within accrued expenses and other current liabilities in the consolidated balance sheet.

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During 2023, we announced plans to transform our European operations by changing the operating structure, eliminating certain roles and rationalizing our manufacturing footprint. We plan to close two manufacturing facilities and transfer production to other facilities within Europe. We expect to incur pre-tax restructuring expenses and other closure costs of approximately $20.8 million for the approved actions, consisting of $13.3 million in restructuring severance and termination charges, $4.4 million in equipment relocation costs and $3.1 million of capital expenditures. Through December 31, 2023, approximately $3.5 million has been expensed in connection with these actions, consisting primarily of $3.1 million in restructuring severance and termination charges. We expect to incur a total pre-tax cash outlay of approximately $20.8 million by the end of 2024 in connection with the announced actions, of which, $2.1 million of cash outlay has been incurred as of December 31, 2023.

In the third quarter of 2023, we announced plans to close two manufacturing facilities, located in Tijuana, Mexico and Vista, California as part of our footprint rationalization activities. We expect to incur pre-tax restructuring expenses and other closure costs of approximately $16.1 million, primarily consisting of $8.2 million in restructuring severance and termination charges, $3.7 million of asset related charges and $2.1 million of equipment relocation and facility restoration costs. Through December 31, 2023, approximately $12.1 million has been expensed in connection with the announced closures, consisting of $7.8 million in restructuring severance and termination charges, $3.7 million in asset related charges and $0.6 million in equipment relocation and facility restoration costs. Additionally, $1.5 million in other non-cash inventory charges were recorded against Cost of Sales and were detrimental to Adjusted EBITDA. We expect to incur a total pre-tax cash outlay of approximately $10.3 million by the end of 2024 in connection with the announced closures, of which, $6.6 million of cash outlay has been incurred as of December 31, 2023.

On January 26, 2023, we announced to employees a restructuring plan to close a manufacturing facility in Atlanta, Georgia. We substantially completed the plant closure during the year ended December 31, 2023, with total cash outlays of $12.9 million. We incurred pre-tax restructuring expenses and other closure costs of approximately $17.7 million, which included $1.1 million of capital expenditures. The primary expenses incurred were accelerated depreciation and amortization, equipment relocation costs, and restructuring severance costs. We expect to incur the remaining cash expenses of approximately $0.5 million to $1.0 million, related to equipment relocation costs, during 2024.

Note 20. Held for Sale

During 2021, the Company ceased the appeal process for its litigation with Steves & Sons, Inc. (“Steves”) further described in Note 24 25 - *Commitments Commitments and Contingencies.* As a result, we are required to divest the Company’s Towanda, PA operations (“Towanda”). As of December 31, 2022 December 31, 2023 and December 31, 2021 December 31, 2022, the assets and liabilities associated with the sale of Towanda qualify as held for sale. Since the Company will continue manufacturing door skins for its internal needs, the divestiture decision did not represent a strategic shift thereby precluding the divestiture as qualifying as a discontinued operation.

In addition We will continue to report the Towanda which we have immaterial assets held for sale at points in time, primarily relating to property, plant and equipment from restructuring efforts, which have been classified as held for sale in results within our North America operations until the accompanying consolidated balance sheet as of December 31, 2021. divestiture is finalized.

The assets and liabilities included within the summary below are expected to be disposed of within the next twelve months and are included in assets held for sale and liabilities held for sale in the accompanying consolidated balance sheet. As of December 31, 2022, the assets and liabilities classified as held for sale are those of Towanda. The results of Towanda will continue to be reported within our North America operations until the divestiture is finalized. sheets.

(amounts in thousands)	2022	2021
Assets		
Inventory	$ 16,592	$ 15,520
Other current assets	110	105
Property and equipment	41,600	35,870
Intangible assets	1,471	1,471
Goodwill	65,000	65,000

Operating lease assets	975	1,458
Assets held for sale	$ 125,748	$ 119,424
Liabilities		
Accrued payroll and benefits	$ 852	$ 907
Accrued expenses and other current liabilities	4,707	3,945
Current maturities of long term debt	1	10
Long-term debt	—	2
Operating lease liability	480	1,004
Liabilities held for sale	$ 6,040	$ 5,868

Note 19. Restructuring and Asset Related Charges, Net

We engage in restructuring activities focused on improving productivity and operating margins. Restructuring costs primarily relate to costs associated with workforce reductions, plant consolidations and closure, and changes to the management structure to align with our operations.

Asset related charges, consisting of accelerated depreciation and amortization, were recorded in addition to our restructuring costs. For the years ended December 31, 2022 and December 31, 2021 there were no material asset related charges. For the year ended December 31, 2020, asset related charges primarily consisted of accelerated amortization of capitalized costs of certain ERP modules due to delays in implementation and uncertainty of their future use.

Other exit costs for the year ended December 31, 2022 primarily consisted of lease termination charges.

(amounts in thousands)	December 31, 2023	December 31, 2022
Assets		
Inventory	$ 17,337	$ 16,592
Other current assets	108	110
Property and equipment	50,672	41,600
Intangible assets	1,471	1,471
Goodwill	65,000	65,000
Operating lease assets	975	975
Assets held for sale	$ 135,563	$ 125,748
Liabilities		
Accrued payroll and benefits	$ 901	$ 852
Accrued expenses and other current liabilities	6,126	4,707
Current maturities of long term debt	—	1
Operating lease liability	37	480
Liabilities held for sale	$ 7,064	$ 6,040

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The following table summarizes the restructuring and asset related charges, net for the periods indicated:

(amounts in thousands)	North America	Europe	Australasia	Corporate and Unallocated Costs	Total Consolidated
Year Ended December 31, 2022					
Severance costs	$ 6,842	$ 3,773	$ 576	$ 3,223	$ 14,414
Other exit costs	—	1,253	35	156	1,444
Total restructuring charges, net	6,842	5,026	611	3,379	15,858
Asset related charges	496	1,016	—	863	2,375
Total restructuring and asset related charges, net	$ 7,338	$ 6,042	$ 611	$ 4,242	$ 18,233
Year Ended December 31, 2021					
Severance costs	$ (4)	$ 701	$ 123	$ —	$ 820
Other exit costs	(28)	—	179	(97)	54

Total restructuring charges, net	(32)	701	302	(97)	874
Asset related charges	1,232	752	92	—	2,076
Total restructuring and asset related charges, net	$ 1,200	$ 1,453	$ 394	$ (97)	$ 2,950
Year Ended December 31, 2020					
Severance costs	$ 2,057	$ 2,503	$ 564	$ (10)	$ 5,114
Other exit costs	(1)	235	(370)	(46)	(182)
Total restructuring charges, net	2,056	2,738	194	(56)	4,932
Asset related charges	1,108	944	126	3,359	5,537
Total impairment and asset related charges, net	$ 3,164	$ 3,682	$ 320	$ 3,303	$ 10,469

The following is a summary of the restructuring accruals recorded and charges incurred:

(amounts in thousands)	2022	2021	2020
Balance as of January 1	$ 171	$ 1,377	$ 7,043
Current period charges	15,858	874	4,932
Payments	(10,885)	(2,020)	(10,801)
Currency translation	(106)	(60)	203
Balance at period end	$ 5,038	$ 171	$ 1,377

Restructuring accruals are expected to be paid within the next 12 months and are included within accrued expenses and other current liabilities in the consolidated balance sheet.

Note 20. 21. Interest Expense, Net

Interest expense, net is net of capitalized interest and interest income. Capitalized interest incurred during the construction phase of significant property and equipment additions totaled $0.9 million $1.1 million, $0.4 million $0.9 million, and $1.0 million $0.4 million for the years ended December 31, 2022 December 31, 2023, 2022, and 2021, and 2020, respectively. During the year ended December 31, 2022, we We recognized interest income of $6.3 million $19.0 million and $5.8 million in the years ended December 31, 2023 and December 31, 2022, respectively, primarily from gains on our interest rate swap agreements reclassified to interest income, refer income. Refer to Note 22 23 - *Derivative Financial Instruments* for further information. Interest income recorded during the years year ended December 31, 2021 and December 31, 2020 was not significant. For the years ended December 31, 2022, 2021 and 2020, interest payments totaled $80.6 million, $75.0 million, and $71.7 million, respectively. Interest expense, net also includes amortization of debt issuance costs that are amortized using the effective interest method and amortization of original issue discounts.

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Note 21. 22. Other Income, Net

The table below summarizes the amounts included in other income, net in the accompanying consolidated statements of operations:

(amounts in thousands)	(amounts in thousands)	2022	2021	2020
	Foreign currency (gains) losses, net	$ (2,285)	$ (9,886)	$11,858

(amounts in thousands)

(amounts in thousands)	2023	2022	2021
JW Australia Transition Services Agreement cost recovery			
Income from refund of deposits for China antidumping duties(1)			
Pension expense (gain)			
U.S. Employee Retention Credit(2)			

Pension plan settlement expense(3)				
Recovery of cost from interest received on impaired notes				
Income from short-term investments and forward contracts related to the JW Australia divestiture				
Insurance reimbursement	Insurance reimbursement	(6,343)	(1,619)	(1,388)
Pension (income) expense		(4,473)	(464)	1,646
Recovery of cost from interest received on impaired notes		(13,953)	—	—
Net (gain) loss on sale or disposal of property and equipment		(8,057)	1,979	(4,122)
Governmental assistance		(1,699)	(1,732)	(8,281)
Loss on extinguishment of debt		—	1,342	—
Foreign currency gains, net				
Governmental assistance(4)				
Legal settlement income	Legal settlement income	(10,500)	—	—
Credit for overpayments of utility expenses	Credit for overpayments of utility expenses	(1,975)	—	—
Other items		(5,596)	(4,123)	(2,465)
Other items, net				
Total other income, net	Total other income, net	$(54,881)	$(14,503)	$ (2,752)

(1) Represents estimated income from the refund of deposits for antidumping duties on wood moldings and millwork products purchased from China between 2020 through 2022.

(2) Represents an ERC from the U.S. government during the year ended December 31, 2023. The ERC is a refundable tax credit to partially refund qualified wages paid to employees that were unable to work during the years ended December 31, 2020 and December 31, 2021 due to COVID-related government restrictions.

(3) Represents a settlement loss associated with our U.S. defined benefit pension plan resulting from a one-time lump sum payment offered to pension plan participants. Refer to Note 26 - *Employee Retirement and Pension Benefits* for additional information.

(4) Governmental assistance for the year ended December 31, 2023 consisted primarily of energy subsidies received by our European businesses. Governmental assistance for years ended December 31, 2022, December 31, 2021, and December 31, 2020 December 31, 2021 consisted primarily consisted of cash received from government pandemic assistance programs in Europe and North America as a result of COVID-19. During the year ended December 31, 2022, we recognized $0.6 million of government pandemic assistance of $0.6 million was recognized within our Europe segment. During the years year ended December 31, 2021 and December 31, 2020, we recognized $1.6 million and $7.4 million, respectively, of government pandemic assistance within our Europe and North America segments.

The To conform with current period presentation, certain amounts in prior period information has have been reclassified to conform to current period presentation. reclassified.

Note 22. 23. Derivative Financial Instruments

Foreign currency derivatives – As a multinational corporation, we are exposed to the impact of foreign currency fluctuations. To the extent borrowings, sales, purchases, or other transactions are not executed in the local currency of the operating unit, we are exposed to foreign currency risk. In most of the countries in which we operate, the exposure to foreign currency movements is limited because the operating revenues and expenses of our business units are substantially denominated in the local currency. To mitigate the exposure, we may enter into a variety of foreign currency derivative contracts. To manage the effect of exchange fluctuations on forecasted sales, purchases, acquisitions, capital expenditures, and certain intercompany transactions that are denominated in foreign currencies, we have foreign currency derivative contracts with a total notional amount of $80.0 million $95.9 million as of December 31, 2022 December 31, 2023. We have foreign currency derivative

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contracts, with a total notional amount of $140.1 million, to manage the risks of foreign currency gains and losses on intercompany loans and interest. We also are subject to currency translation risk associated with converting our foreign operations' financial statements into U.S. dollars. To mitigate the impact to the consolidated earnings of the Company from the effect of the translation of certain subsidiaries' local currency results into U.S. dollars, we have foreign currency derivative contracts with a total notional amount of $85.1 million $28.9 million as of December 31, 2022 December 31, 2023. We do not use derivative financial instruments for trading or speculative purposes. We As of December 31, 2023, we have not elected hedge accounting for any foreign currency derivative contracts. We record mark-to-market changes in the values of these derivatives in other income, net. We recorded nominal mark-to-market gains losses of $2.7 million relating to foreign currency derivatives in the year ended December 31, 2022, December 31, 2023 and gains of $9.0 million $1.1 million and $6.3 million in the years ended December 31, 2022 and December 31, 2021, respectively.

On April 18, 2023 we entered into forward contracts to sell a total of AUD 420.0 million and receive USD at exchange rates ranging from 0.6751 USD to 0.6759 USD to 1.0 AUD to mitigate the impact of the Australian dollar currency fluctuations on our net investment in JELD-WEN Australia Pty. Ltd. We designated the forward contracts as net investment hedges. The contracts matured during the third quarter of 2023 and the gain, net of forward points, was included in the gain on the sale of JW Australia. The proceeds are included in the proceeds (payments) related to the sale of JW Australia within our consolidated statements of cash flows. No portion of these contracts were deemed ineffective during the year ended December 31, 2021, and losses of $5.4 million in the year ended December 31, 2020 December 31, 2023.

Interest rate derivatives – We are exposed to interest rate risk in connection with our variable rate long-term debt and we partially mitigate this risk through interest rate derivatives such as swaps and caps. debt. In May 2020, we entered into interest rate swap agreements with notional amounts aggregating to $370.0 million to manage this risk. The interest rate swap agreements have outstanding notional amounts aggregating to $370.0 million and mature matured in December 2023 with 2023. Initially, the agreements had a weighted average fixed rate of 0.395% swapped against one-month USD LIBOR floored at 0.00%. In June 2023, we amended the agreements to replace LIBOR with a Term SOFR based rate. The amended agreements had a weighted average fixed rate of 0.317% swapped against one-month USD-SOFR CME Term floored at (0.10)%. All other terms and conditions were unchanged. We designated the interest rate swap agreements are designated as cash flow hedges and they effectively fix fixed the interest rate on a corresponding portion of the aggregate debt outstanding under our Term Loan Facility.

No portion of these interest rate contracts were deemed ineffective during the year ended December 31, 2022 December 31, 2023. We recorded pre-tax mark-to-market gains of $17.9 million $1.2 million, $17.9 million, and $4.1 million during the years ended December 31, 2022 December 31, 2023, 2022, and December 31, 2021, 2021, respectively, and losses of $2.3 million during the year ended December 31, 2020 in other comprehensive income. We reclassified gains of $17.4 million and $5.0 million previously recorded in other comprehensive income to interest income of $5.0 million during

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the year years ended December 31, 2023 and December 31, 2022, respectively, and losses of $1.1 million to interest expense of $1.1 million and $0.5 million during the years ended December 31, 2021 and December 31, 2020, respectively.

As of December 31, 2022, approximately $16.2 million is expected to be reclassified to interest income over the next twelve months.

The derivative agreements each contain a provision whereby we could be declared in default on our derivative obligations if we either default or, in certain cases, are capable of being declared in default of any of our indebtedness greater than specified thresholds. These agreements also contain a provision where we could be declared in default subsequent to a merger or restructuring type event if the creditworthiness of the resulting entity is materially weaker. .

During the first quarter of 2019, we entered into two interest rate cap contracts against three-month USD LIBOR, each with a cap rate of 3%. These caps had a combined notional amount of $150.0 million, became effective in March 2019, and expired matured in December 31, 2021. We did not elect hedge accounting and recorded insignificant mark-to-market adjustments in the years year ended December 31, 2021 and December 31, 2020.

Other derivative instruments – From time to time, we may enter into other types of derivative instruments immaterial to the business. consolidated financial statements. Unless otherwise disclosed, these instruments are not designated as hedging instruments and mark-to-market adjustments are recorded in the statement of operations each period.

The fair values of derivative instruments held are as follows:

Derivative assets								
Derivative assets								Derivative assets
(amounts in thousands)	(amounts in thousands)	Balance Sheet Location	2022	2021	(amounts in thousands)	Balance Sheet Location	December 31, 2023	December 31, 2022
Derivatives designated as hedging instruments:	Derivatives designated as hedging instruments:							
Interest rate contracts	Interest rate contracts	Other current assets	$16,235	$ 263				

Interest rate contracts	Interest rate contracts	Other assets	—	3,036
Interest rate contracts				
Derivatives not designated as hedging instruments:	Derivatives not designated as hedging instruments:			
Derivatives not designated as hedging instruments:				
Derivatives not designated as hedging instruments:				
Foreign currency forward contracts				
Foreign currency forward contracts				
Foreign currency forward contracts	Foreign currency forward contracts	Other current assets	$ 3,809	$6,297
Other derivative instruments	Other derivative instruments	Other current assets	73	—

Derivatives liabilities

Derivative liabilities

(amounts in thousands)	(amounts in thousands)	Balance Sheet Location	2022	2021	(amounts in thousands)	Balance Sheet Location	December 31, 2023	December 31, 2022
Derivatives not designated as hedging instruments:	Derivatives not designated as hedging instruments:							
Derivatives not designated as hedging instruments:								
Derivatives not designated as hedging instruments:								
Foreign currency forward contracts								
Foreign currency forward contracts								
Foreign currency forward contracts	Foreign currency forward contracts	Accrued expenses and other current liabilities	$3,058	$5,527				
Other derivative instruments	Other derivative instruments	Accrued expenses and other current liabilities	288	—				

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Note 23. 24. Fair Value of Financial Instruments

We record financial assets and liabilities at fair value based on FASB guidance related to fair value measurements. The guidance requires fair value to be determined based on the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants at the measurement date. Three levels of inputs may be used to measure fair value:

Level 1 – Quoted prices in active markets for identical assets or liabilities.

Level 2 – Quoted market-based inputs or unobservable inputs that are corroborated by market data.

Level 3 – Unobservable inputs that are not corroborated by market data.

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The recorded carrying amounts and fair values of these instruments were as follows:

		December 31, 2022					
		December 31, 2023					
(amounts in thousands)	(amounts in thousands)	Carrying Amount	Total Fair Value	Level 1	Level 2	Level 3	Assets measured at NAV (1)
Assets:	Assets:						
Cash equivalents							
Cash equivalents							
Cash equivalents	Cash equivalents	$ 6,078	$ 6,078	$ —	$ 6,078	$ —	$ —
Derivative assets, recorded in other current assets	Derivative assets, recorded in other current assets	20,117	20,117	—	20,117	—	—
Deferred compensation plan assets, recorded in other assets	Deferred compensation plan assets, recorded in other assets	725	725	—	725	—	—
Deferred compensation plan assets, recorded in other assets							
Deferred compensation plan assets, recorded in other assets							
Pension plan assets:	Pension plan assets:						
Cash and short-term investments							
Cash and short-term investments							
Cash and short-term investments	Cash and short-term investments	10,314	10,314	—	10,314	—	—
U.S. Government and agency obligations	U.S. Government and agency obligations	35,657	35,657	35,657	—	—	—
Corporate and foreign bonds	Corporate and foreign bonds	127,618	127,618	—	127,618	—	—

	December 31, 2023					
(amounts in thousands)	Carrying Amount	Total Fair Value	Level 1	Level 2	Level 3	Assets measured at NAV (1)

Asset-backed securities							
Equity securities		18,971	18,971	18,971	—	—	—
Mutual funds							
Mutual funds							
Mutual funds	Mutual funds	70,801	70,801	—	70,801	—	—
Common and collective funds	Common and collective funds	60,297	60,297	—	—	—	60,297
Liabilities:	**Liabilities:**						
Debt, recorded in long-term debt and current maturities of long-term debt							
Debt, recorded in long-term debt and current maturities of long-term debt							
Debt, recorded in long-term debt and current maturities of long-term debt	Debt, recorded in long-term debt and current maturities of long-term debt	$1,759,226	$1,555,367	$ —	$1,555,367	$ —	$ —
Derivative liabilities, recorded in accrued expenses and other current liabilities	Derivative liabilities, recorded in accrued expenses and other current liabilities	3,346	3,346	—	3,346	—	—
Derivative liabilities, recorded in accrued expenses and other current liabilities							
Derivative liabilities, recorded in accrued expenses and other current liabilities							

	December 31, 2021					
(amounts in thousands)	Carrying Amount	Total Fair Value	Level 1	Level 2	Level 3	Assets measured at NAV (1)
Assets:						
Cash equivalents	$ 33,143	$ 33,143	$ —	$ 33,143	$ —	$ —
Derivative assets, recorded in other current assets	6,560	6,560	—	6,560	—	—
Derivative assets, recorded in other assets	3,036	3,036	—	3,036	—	—
Pension plan assets:						
Cash and short-term investments	18,053	18,053	—	18,053	—	—
U.S. Government and agency obligations	41,617	41,617	41,617	—	—	—
Corporate and foreign bonds	134,214	134,214	—	134,214	—	—
Equity securities	37,384	37,384	37,384	—	—	—
Mutual funds	71,183	71,183	—	71,183	—	—
Common and collective funds	127,840	127,840	—	—	—	127,840
Liabilities:						

Debt, recorded in long-term debt and current maturities of long-term debt	$ 1,720,883	$ 1,751,353	$ —	$ 1,751,353	$ —	$ —
Derivative liabilities, recorded in accrued expenses and other current assets	5,527	5,527	—	5,527	—	—

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	December 31, 2022					
(amounts in thousands)	Carrying Amount	Total Fair Value	Level 1	Level 2	Level 3	Assets measured at NAV (1)
Assets:						
Cash equivalents	$ 6,078	$ 6,078	$ 6,078	$ —	$ —	$ —
Derivative assets, recorded in other current assets	20,117	20,117	—	20,117	—	—
Deferred compensation plan assets, recorded in other assets	725	725	—	725	—	—
Pension plan assets:						
Cash and short-term investments	10,184	10,184	10,184	—	—	—
U.S. Government and agency obligations	35,657	35,657	35,657	—	—	—
Corporate and foreign bonds	127,618	127,618	—	127,618	—	—
Equity securities	18,971	18,971	18,971	—	—	—
Mutual funds	61,750	61,750	—	61,750	—	—
Common and collective funds	60,297	60,297	—	—	—	60,297
Liabilities:						
Debt, recorded in long-term debt and current maturities of long-term debt	$ 1,758,480	$ 1,554,621	$ —	$ 1,554,621	$ —	$ —
Derivative liabilities, recorded in accrued expenses and other current assets	3,346	3,346	—	3,346	—	—

(1) Certain pension assets that are measured at fair value using the NAV per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. These include investments in large cap equity and commingled real estate funds, which are valued using the NAV provided by the administrator of the funds. Redemption of these funds is not subject to restriction.

Derivative assets and liabilities reported in level 2 primarily include include: (1) as of December 31, 2023, foreign currency derivative contracts; (2) as of December 31, 2022, foreign currency derivative contracts and interest rate swap agreements. See Note 22- 23 - *Derivative Financial Instruments* for additional information about our derivative assets and liabilities.

Deferred compensation plan assets reported in level 2 consist of mutual funds.

There are no material non-financial assets or liabilities as of December 31, 2022 December 31, 2023 or December 31, 2021 December 31, 2022.

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Note 24. 25. Commitments and Contingencies

Litigation – We are involved in various legal proceedings, claims, and government audits arising in the ordinary course of business. We record our best estimate of a loss when the loss is considered probable and the amount of such loss can be reasonably estimated. When a loss is probable and there is a range of estimated loss with no best estimate within the range, we record the minimum estimated liability related to the lawsuit or claim. As additional information becomes available, we reassess the potential liability and revise our accruals, if necessary. Because of uncertainties related to the resolution of lawsuits and claims, the ultimate outcome may differ materially from our estimates.

Other than the matters described below, there were no proceedings or litigation matters involving the Company or its property as of December 31, 2022 December 31, 2023 that we believe would have a material adverse effect on our consolidated financial position or cash flows, although they could have a material adverse effect on our operating results for a particular reporting period.

Steves & Sons, Inc. vs JELD-WEN, Inc. – We sell molded door skins to certain customers pursuant to long-term contracts, and these customers in turn use the molded door skins to manufacture interior doors and compete directly against us in the marketplace. We gave notice of termination of one of these contracts and, on June 29, 2016, the counterparty to the agreement, Steves and & Sons, Inc. ("Steves") filed a claim against JWI in the U.S. District Court for the Eastern District of Virginia, Richmond Division (the "Eastern District of Virginia"). The complaint alleged that our acquisition of CMI, a competitor in the molded door skins market, together with subsequent price increases and other alleged acts and omissions, violated antitrust laws, and constituted a breach of contract and breach of warranty. Specifically, the complaint alleged that our acquisition of CMI substantially lessened competition in the molded door skins market. The complaint sought declaratory relief, ordinary and treble damages, and injunctive relief, including divestiture of certain assets acquired in the CMI acquisition.

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In February 2018, a jury in the Eastern District of Virginia returned a verdict that was unfavorable to JWI with respect to Steves' claims that our acquisition of CMI violated Section 7 of the Clayton Act, and found that JWI breached the supply agreement between the parties (the "Original Action"). The verdict awarded Steves $12.2 million for past damages under both the Clayton Act and breach of contract claims and $46.5 million in future lost profits under the Clayton Act claim.

During the course of the proceedings in the Eastern District of Virginia, we discovered certain facts that led us to conclude that Steves, its principals, and certain former employees of the Company had misappropriated Company trade secrets, violated the terms of various agreements between the Company and those parties, and violated other laws. On May 11, 2018, a jury in the Eastern District of Virginia returned a verdict on our trade secrets claims against Steves and awarded damages in the amount of $1.2 million. The presiding judge entered a judgment in our favor for those damages, and the entire amount has been paid by Steves. On August 16, 2019, the presiding judge granted Steves' request for an injunction, prohibiting us from pursuing certain claims against individual defendants pending in Bexar County, Texas (the "Steves Texas Trade Secret Theft Action"). On September 11, 2019, JELD-WEN filed a notice of appeal of the Eastern District of Virginia's injunction to the Fourth Circuit Court of Appeals (the "Fourth Circuit").

On March 13, 2019, the presiding judge entered an Amended Final Judgment Order in the Original Action, awarding $36.5 million in past damages under the Clayton Act (representing a trebling of the jury's verdict) and granting granted divestiture of certain assets acquired in the CMI acquisition, subject to appeal. The judgment also conditionally awarded damages in the event the judgment was overturned on appeal. Specifically, the court awarded $139.4 million as future antitrust damages in the event the divestiture order was overturned on appeal and $9.9 million as past contract damages in the event both the divestiture and antitrust claims were overturned on appeal.

On April 12, 2019, Steves filed a petition requesting an award of its fees and a bill of costs, seeking $28.4 million in attorneys' fees and $1.7 million in costs in connection with the Original Action. On November 19, 2019, the presiding judge entered an order for further relief awarding Steves an additional $7.1 million in damages for pricing differences from the date of the underlying jury verdict through May 31, 2019 (the "Pricing Action"). We also appealed that ruling. On April 14, 2020, Steves filed a motion for further supplemental relief for pricing differences from the date of the prior order and going forward through the end of the parties' current supply agreement (the "Future Pricing Action"). We opposed that request for further relief.

JELD-WEN filed a supersedeas bond and notice of appeal of the judgment, which was heard by the Fourth Circuit on May 29, 2020. On February 18, 2021, the Fourth Circuit issued its decision on appeal in the Original Action, affirming the Amended Final Judgment Order in part and vacating and remanding in part. The Fourth Circuit vacated the Eastern District of Virginia's alternative $139.4 million lost-profits award, holding that award was premature because Steves has not suffered the purported injury on which its claim for future lost profits rests. The Fourth Circuit also vacated the Eastern District of Virginia's judgment for Sam Steves, Edward Steves, and John Pierce on JELD-WEN's trade secrets claims. The Fourth Circuit affirmed the Eastern District of Virginia's finding of antitrust injury and its award of $36.5 million in past antitrust damages. It also affirmed the Eastern District of Virginia's divestiture order, while clarifying that JELD-WEN

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retains the right to challenge the terms of any divestiture, including whether a sale to any particular buyer will serve the public interest, and made clear that the Eastern District of Virginia may need to revisit its divestiture order if the special master who has been appointed by the presiding judge cannot locate a satisfactory buyer. JELD-WEN then filed a motion for rehearing en banc with the Fourth Circuit that was denied on March 22, 2021.

Following a thorough review, and consistent with our practice, we concluded that it is in the best interest of the Company and its stakeholders to move forward with the divestiture of Towanda and certain related assets. Although the Company did not seek Supreme Court review of the Fourth Circuit's February 18, 2021 decision, the Company retains the legal right to challenge the divestiture process and the final divestiture order. We made estimates related to the divestiture in the preparation of our financial statements; however, there can be no guarantee that the divestiture will be consummated. The divestiture process is ongoing, and the special master is overseeing this process. Although the Company has decided to divest, we continue to believe that Steves' claims lacked merit and that it was not entitled to the extraordinary remedy of divestiture. We continue to believe that the judgment in accordance with the verdict was improper under applicable law.

During the pendency of the Original Action, on February 14, 2020, Steves filed a complaint and motion for preliminary injunction in the Eastern District of Virginia alleging that we breached the long-term supply agreement between the parties, including, among other claims, by incorrectly calculating the allocation of door skins owed to Steves (the "Allocation Action"). Steves sought an additional allotment of door skins and damages for violation of antitrust laws, tortious interference, and breach of contract. On April 10, 2020, the presiding judge granted Steves' motion for preliminary injunction, and the parties settled the issues underlying the preliminary injunction on April 30, 2020 and the Company reserved the right to appeal the ruling in the Fourth Circuit. The Company believed all the claims lacked merit and moved to dismiss the antitrust and tortious interference claims.

On June 2, 2020, we entered into a settlement agreement with Steves to resolve the Pricing Action, the Future Pricing Action, and the Allocation Action. As a result of the settlement, Steves filed a notice of satisfaction of judgment in the

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Pricing Action, withdrew its Future Pricing Action with prejudice, and filed a stipulated dismissal with prejudice in the Allocation Action. The Company also withdrew its appeal of the Pricing Action. The parties agreed to bear their own respective attorneys' fees and costs in these actions. In partial consideration of the settlement, JWI and Steves entered into an amended supply agreement satisfactory to both parties that, by its terms, ended on September 10, 2021. This settlement had no effect on the Original Action between the parties except to agree that certain specific terms of the Amended Final Judgment Order in the Original Action would apply to the amended supply agreement during the pendency of the appeal of the Original Action. On April 2, 2021, JWI and Steves filed a stipulation regarding the amended supply agreement in the Original Action, stating that regardless of whether the case remains on appeal as of September 10, 2021, and absent further order of the court, the amended supply agreement would be extended until the divestiture of Towanda and certain related assets is complete and Steves' new supply agreement with the company that acquires Towanda is in effect.

We continue to believe the claims in the settled actions lacked merit and made no admission of liability in these matters.

On October 7, 2021, we entered into a settlement agreement with Steves to resolve the following: (i) Steves' past and any future claims for attorneys' fees, expenses, and costs in connection with the Original Action, except that Steves and JWI each reserved the right to seek attorneys' fees arising out of any challenge of the divestiture process or the final divestiture order; (ii) the Steves Texas Trade Secret Theft Action and the related Fourth Circuit appeal of the Eastern District of Virginia's injunction in the Original Action; (iii) the past damages award in the Original Action; and (iv) any and all claims and counterclaims, known or unknown, that were asserted or could have been asserted against each other from the beginning of time through the date of the settlement agreement. As a result of the settlement, the parties filed a stipulated notice of satisfaction of the past antitrust damages judgment and a stipulated notice of settlement of Steves' claim for attorneys' fees, expenses, and costs against JWI in the Original Action, and Steves filed a notice of withdrawal of its motion for attorneys' fees and expenses and bill of costs in the Original Action. The Company also filed a notice of dismissal with prejudice and agreed to take no judgment in the Steves Texas Trade Secret Theft Action, and the parties filed a joint agreement for dismissal of the injunction appeal in the Fourth Circuit. On November 3, 2021, we paid $66.4 million to Steves under the settlement agreement.

Cambridge Retirement System v. JELD-WEN Holding, Inc., et al. – On February 19, 2020, Cambridge Retirement System filed a putative class action lawsuit in the Eastern District of Virginia against the Company, current and former Company executives, and various Onex-related entities alleging violations of Section 10(b) and Rule 10b-5 of the Exchange Act, as well as violations of Section 20(a) of the Exchange Act against the individual defendants and Onex-related entities ("Cambridge"). The lawsuit sought compensatory damages, equitable relief, and an award of attorneys' fees and costs. On May 8, 2020, the Public Employees Retirement System of Mississippi and the Plumbers and Pipefitters National Pension Fund were named as co-lead plaintiffs and filed an amended complaint on June 22, 2020.

On April 20, 2021, the parties reached an agreement in principle to resolve this securities class action. The agreement contemplated a full release of claims through the date of preliminary court approval of the settlement in exchange for a payment of $39.5 million, primarily funded by the Company's D&O insurance carriers, except $5.0 million $5.0 million which was

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provisionally funded by the Company and remains subject to dispute with insurance carriers. On November 22, 2021, the Court granted final approval of the settlement agreement. The deadline to appeal the entry of the final approval order and judgment was December 22, 2021, and no party or class member filed an appeal. The Company continues to believe that the plaintiffs' claims lacked merit and has denied any liability or wrongdoing for the claims made against the Company.

In re JELD-WEN Holding, Inc. Derivative Litigation – On February 2, 2021, Jason Aldridge, on behalf of the Company, filed a derivative action in the U.S. District Court for the District of Delaware against certain current and former executives and directors of the Company, alleging that the individual defendants breached their fiduciary duties by allowing the wrongful acts alleged in the Steves and Cambridge actions, as well as violations of Section 14(a) and 20(a) of the Exchange Act, unjust enrichment, and waste of corporate assets among other allegations (the "Aldridge Action"). The lawsuit sought compensatory damages, equitable relief, and an award of attorneys' fees and costs. The plaintiff filed an amended complaint on May 10, 2021.

On June 21, 2021, prior to a response from the Company in the Aldridge Action, Shieta Black and the Board of Trustees of the City of Miami General Employees' & Sanitation Employees' Retirement Trust, on behalf of the Company, filed a derivative action in the U.S. District Court for the District of Delaware against certain current and former executives and directors of the Company and Onex Corporation ("Onex"), alleging that the defendants breached their fiduciary duties by allowing the wrongful acts alleged in the Steves and Cambridge actions, as well as insider trading, and unjust enrichment among other allegations (the "Black Action"). The lawsuit sought compensatory damages, corporate governance reforms, restitution, equitable relief, and an award of attorneys' fees and costs. The court granted the Black and Aldridge plaintiffs in motion to consolidate the lawsuits on July 16, 2021.

On June 20, 2022, the parties entered into a settlement agreement of the consolidated matters, which was approved by the Court on approval of the December 20, 2022, and the cases were dismissed with prejudice. As part of In January 2023, the settlement, the Company,

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as putative plaintiff, received approximately $10.5 million after attorneys' fees and costs were deducted in January 2023. as part of the settlement.

In re Interior Molded Doors Antitrust Litigation – On October 19, 2018, Grubb Lumber Company, on behalf of itself and others similarly situated, filed a putative class action lawsuit against us and one of our competitors in the doors market, Masonite Corporation ("Masonite"), in the Eastern District of Virginia. We subsequently received additional complaints from and on behalf of direct and indirect purchasers of interior molded doors. The suits were consolidated into two separate actions, a Direct Purchaser Action and an Indirect Purchaser Action. The suits alleged that Masonite and JELD-WEN violated Section 1 of the Sherman Act, and in the Indirect Purchaser Action, related state law antitrust and consumer protection laws, by engaging in a scheme to artificially raise, fix, maintain, or stabilize the prices of interior molded doors in the United States. The complaints sought ordinary and treble damages, declaratory relief, interest, costs, and attorneys' fees.

On August 31, 2020, JELD-WEN and Masonite entered into a settlement agreement with the putative Direct Purchaser class to resolve the Direct Purchaser Action. Each defendant agreed to pay a total of $30.8 million $30.8 million to the named plaintiffs and the settlement class in exchange for a full release of claims through the date of preliminary approval of the revised settlement, which the court granted on February 5, 2021. In addition, on September 4, 2020, JELD-WEN and Masonite entered into a separate settlement agreement with the putative Indirect Purchaser class to resolve the Indirect Purchaser Action. Each defendant agreed to pay $9.75 million to the named plaintiffs and the settlement class in exchange for a full release of claims through the execution date of the settlement agreement. The final fairness hearing in the Direct Purchaser Action was held on June 2, 2021, and the court entered a final approval order and judgment on June 3, 2021. On June 17, 2021, the Company made the settlement payment to the named plaintiffs and the settlement class in the Direct Purchaser Action. The deadline to appeal the entry of the final approval order and judgment was July 7, 2021, and no party or class member filed an appeal. The final fairness hearing in the Indirect Purchaser Action was held on July 26, 2021 and the court issued a final approval order and judgment on July 27, 2021. On August 10, 2021, the Company made the settlement payment to the named plaintiffs and the settlement class in the Indirect Purchaser Action. The deadline to appeal the entry of the final approval order and judgment was August 26, 2021, and no party or class member filed an appeal. The Company continues to believe that the plaintiffs' claims lacked merit and has denied any liability or wrongdoing for the claims made against the Company.

Canadian Antitrust Litigation– On May 15, 2020, Développement Émeraude Inc., on behalf of itself and others similarly situated, filed a putative class action lawsuit against the Company and Masonite in the Superior Court of the Province of Quebec, Canada, which was served on us on September 18, 2020 ("the Quebec Action"). The putative class consists of any person in Canada who, since October 2012, purchased one or more interior molded doors from the Company or Masonite. The suit alleges an illegal conspiracy between the Company and Masonite to agree on prices, the distribution of market shares and/or the production levels of interior molded doors and that the plaintiffs suffered damages in that they were charged and paid higher prices for interior molded doors than they would have had to pay but for the alleged anti-competitive conduct. The plaintiffs are seeking compensatory and punitive damages, attorneys' fees and costs. On September 9, 2020, Kate O'Leary Swinkels, on behalf of herself and others similarly situated, filed a putative class action against the Company and Masonite in the Federal Court of Canada, which was served on us on September 29, 2020 (the

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"Federal "Federal Court Action"). The Federal Court Action makes substantially similar allegations to the Quebec Action and the putative class is represented by the same counsel. In February 2021, the plaintiff in the Federal Court Action issued a proposed Amended Statement of Claim that replaced the named plaintiff, Kate O'Leary Swinkels, with David Regan. The plaintiff has sought a stay of the Quebec Action while the Federal Court Action proceeds. We anticipate a hearing on the certification of the Federal Court Action in 2023. The Company believes both the Quebec Action and the Federal Court Action lack merit and intends to vigorously defend against them. On July 14, 2023, the Company entered into a preliminary agreement with class counsel to resolve both actions for an immaterial amount, which the Company recorded in the second quarter of 2023. The proposed settlement remains subject to final documentation and court approval. The Company continues to believe the plaintiffs' claims lack merit and denies any liability or wrongdoing for the claims made against the Company.

We have evaluated the claims against us and recorded provisions based on management's judgment about the probable outcome of the litigation and have included our estimates in accrued expenses in the accompanying balance sheets. See Note 9 10 - *Accrued Expenses and Other Current Liabilities*. While we expect a favorable resolution to these matters, the dispute resolution process could be lengthy, and if the plaintiffs were to prevail completely or substantially in the respective matters described above, such an outcome could have a material adverse effect on our operating results, consolidated financial position, or cash flows.

Self-Insured Risk – We self-insure substantially all of our domestic business liability risks including general liability, product liability, warranty, personal injury, auto liability, workers' compensation, and employee medical benefits. Excess insurance policies from independent insurance companies generally cover exposures between $5.0 million and $200.0 million for domestic product liability risk and exposures between $3.0 million and $200.0 million for auto, general liability, personal injury, and workers' compensation. We have no stop loss insurance covering our self-insured employee medical

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plan and are responsible for all claims thereunder. We estimate our provision for self-insured losses based upon an evaluation of current claim exposure and historical loss experience. Actual self-insurance losses may vary significantly from these estimates. At December 31, 2022 December 31, 2023 and December 31, 2021 December 31, 2022, our accrued liability for self-insured risks was $92.6 million $89.2 million and $88.4 million $89.0 million, respectively.

Indemnifications – At December 31, 2022 December 31, 2023, we had commitments related to certain representations made in contracts for the purchase or sale of businesses or property. property, including the divestiture of JW Australia. Our indemnity obligations under the relevant agreements may be limited in terms of time, amount or scope. These representations primarily relate to past actions such as responsibility for transfer taxes if they should be claimed, and the adequacy of recorded liabilities, warranty matters, employment benefit plans, income tax matters, or environmental exposures. These guarantees or indemnification responsibilities typically expire within oneAs it relates to three years. certain income tax related liabilities, the relevant agreements may not provide any cap for such liabilities, and the period in which we would be liable would lapse upon expiration of the statute of limitation for assessment of the underlying taxes. Because of the conditional nature of these obligations and the unique facts and circumstances involved in each particular agreement, we are unable to reasonably estimate the potential maximum exposure associated with these items. We are not aware of any material amounts claimed or expected to be claimed under these indemnities.

From time to time and in limited geographic areas, we have entered into agreements for the sale of our products to certain customers that provide additional indemnifications for liabilities arising from construction or product defects. We cannot estimate the potential magnitude of such exposures, but to the extent specific liabilities have been identified related to product sales, liabilities have been provided in the warranty accrual in the accompanying consolidated balance sheets.

Other Financing Arrangements – At times we are required to provide letters of credit, surety bonds, or guarantees to meet various performance, legal, warranty, environmental, workers compensation, licensing, utility, and governmental requirements. Stand-by letters of credit are provided to certain customers and counterparties in the ordinary course of business as credit support for contractual performance guarantees, advanced payments received from customers, and future funding commitments. The stated values of these letters of credit agreements, surety bonds, and guarantees were $67.6 million and $116.9 $68.7 million at December 31, 2022 December 31, 2023 and December 31, 2021 $60.0 million at December 31, 2022, respectively. The decrease is primarily due to the cancellation of bonds related to the Steves' legal matter.

Environmental Contingencies – We periodically incur environmental liabilities associated with remediating our current and former manufacturing sites as well as penalties for not complying with environmental rules and regulations. We record a liability for remediation costs when it is probable that we will be responsible for such costs and the costs can be reasonably estimated. These environmental liabilities are estimated based on current available facts and current laws and regulations. Accordingly, it is likely that adjustments to the estimated liabilities will be necessary as additional information becomes available. Short-term environmental liabilities and settlements are recorded in accrued expenses and other current liabilities in the accompanying consolidated balance sheets and totaled $0.5 million at December 31, 2022 December 31, 2023 and $0.5 million at December 31, 2021. December 31, 2022, respectively. Long-term environmental liabilities are recorded in deferred credits and other liabilities in the accompanying consolidated balance sheets and totaled $11.8 million $11.5 million and $11.8 million at December 31, 2022 December 31, 2023 and December 31, 2021 December 31, 2022, respectively.

Everett, Washington WADOE Action – In 2007, we were identified by the WADOE as a PLP with respect to our former manufacturing site in Everett, Washington. In 2008, we entered into an Agreed Order with the WADOE to assess historic environmental contamination and remediation feasibility at the site. As part of the order, we agreed to develop a CAP, arising from the feasibility assessment. In December 2020, we submitted to the WADOE a draft feasibility assessment with an array of remedial alternatives, which we considered substantially complete. During 2021, several comment rounds were completed as well as the identification of the Port of Everett and W&W Everett Investment LLC as additional PLPs, with respect to this matter with each PLP being jointly and severally liable for the cleanup costs. The WADOE received the final feasibility assessment on December 31, 2021, containing various remedial alternatives with its preferred remedial alternatives totaling $23.4 million. Based on this study, we have determined our range of possible outcomes to be

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$11.8 $11.8 million to $33.4 million. On March 1, 2022, we delivered a draft CAP to the WADOE consistent with its the preferred alternatives and on May 16, 2022, we received the WADOE's initial comments on the draft CAP. On June 13, 2022, we responded to the WADOE's comments, and on October 19, 2022, the which was approved by WADOE identified Wick Family Properties as another PLP. On December 19, 2022, the WADOE provided the draft CAP to the Company and other PLPs. After further negotiation, the final CAP will ultimately be formalized in an August 2023. The existing Agreed Order or Consent Decree of 2008 was also modified with WADOE in July 2023 to support the WADOE, development of the Company, associated CAP investigation, sampling and the other PLPs. design components. We have made provisions within our financial statements within the range of possible outcomes; however, the contents and cost of the final CAP and allocation of the responsibility between the identified PLPs could vary materially from our estimates.

Towanda, Pennsylvania Consent Order – In December 2020, we entered into a COA with the PaDEP to remove a pile of wood fiber waste from our site in Towanda, Pennsylvania, which we acquired in connection with our acquisition of CMI in 2012, by using it as fuel for a boiler at that site. The COA replaced a 2018 Consent Decree between PaDEP the Company and us. PaDEP. Under the COA, we are required to achieve certain periodic removal objectives and ultimately remove the entire pile by August 31, 2025. There are currently $2.3 million As of December 31, 2023 and December, 31, 2022 there was $1.4 million and $2.3 million, respectively in bonds posted in connection with these obligations. If we are unable to remove this pile by August 31, 2025, then the bonds will be forfeited, and we may be subject to penalties by PaDEP. We currently anticipate meeting all applicable removal deadlines; however, if our operations should change, additional alternatives would be evaluated to meet the prescribed removal timeline.

Employee Stock Ownership Plan – We have historically provided cashBack to our U.S. ESOP in order to fund required distributions to participants through the repurchase of shares of our Common Stock. Following our February 2017 IPO, the value of a share of Common Stock held through the ESOP is now based on our public share price. We do not anticipate that we will fund future distributions. top

Purchase Obligations - As of December 31, 2022 December 31, 2023, we have purchase obligations of $29.2 million $26.7 million due in 2023 2024 and $14.4 million $28.1 million due in 2024 2025 and thereafter. These purchase obligations are primarily relating to software hosting services and in-bound freight. equipment purchase agreements. Purchase obligations are defined as purchase agreements that are enforceable and legally binding and that specify all significant terms, including quantity, price, and the approximate timing of the transaction.

Note 25. 26. Employee Retirement and Pension Benefits

U.S. Defined Benefit Pension Plan

Certain U.S. hourly employees participate in our defined benefit pension plan. The plan is not open to new employees.

In 2020, we elected to utilize the alternative method when calculating the Pension Benefit Guarantee Corporation premiums for 2020 and the succeeding four years. We use a spot rate yield curve to estimate the pension benefit obligation and net periodic benefits costs.

During the fourth quarter of 2023, we completed a balance sheet risk mitigation action related to the U.S. defined benefit pension plan by offering a one-time lump sum election option to terminated vested participants and active participants over the age of 59 1/2. As a result of lump sum elections made by participants, we settled $49.5 million of future obligations and recognized a pre-tax pension settlement charge of $4.3 million in the fourth quarter of 2023. The settlement charge, primarily comprised of the recognition of past actuarial losses, is recorded within other income, net in the consolidated statements of operations.

The components of net periodic benefit cost are summarized as follows for the years ended December 31:

(amounts in thousands)	(amounts in thousands)						
(amounts in thousands)							
(amounts in thousands)							
Components of pension benefit expense - U.S. benefit plan							
Components of pension benefit expense - U.S. benefit plan							
Components of pension benefit expense - U.S. benefit plan	**Components of pension benefit expense - U.S. benefit plan**	**2022**	**2021**	**2020**	**2023**	**2022**	**2021**
Service cost	Service cost	$ 3,470	$ 2,690	$ 3,090			
Interest cost	Interest cost	10,556	8,870	12,236			

Expected return on plan assets	Expected return on plan assets	(21,424)	(22,234)	(21,860)				
Amortization of net actuarial pension loss	Amortization of net actuarial pension loss	1,798	9,092	6,852				
Pension benefit (income) expense		$(5,600)	$(1,582)	$ 318				
Settlement loss								
Pension benefit expense (income)								
Discount rate used to determine benefit costs								
Discount rate used to determine benefit costs								
Discount rate used to determine benefit costs	Discount rate used to determine benefit costs	2.88%	2.55%	3.31%		5.39%	2.88%	2.55%
Expected long-term rate of return on assets	Expected long-term rate of return on assets	5.25%	5.75%	6.25%	Expected long-term rate of return on assets	6.20%	5.25%	5.75%
Compensation increase rate	Compensation increase rate	N/A	N/A	N/A	Compensation increase rate	N/A		N/A

In October 2019, the Society of Actuaries released the PRI-2012 Mortality Tables (update to RP-2014 mortality tables), which were adopted in 2019 and represent our best estimate of future experience for the base mortality table. The Society of Actuaries has released annual updates to the mortality improvement projection scale that was first released in 2014, with the most recent annual update being Scale MP-2020. We adopted the use of Scale MP-2020 as of December 31, 2020 as it represents our best estimate of future mortality improvement projection experience as of the measurement dates.

We developed the discount rate based on the plan's expected benefit payments using the Willis Towers Watson WTW RATE:Link 10:90 Yield Curve. Based on this analysis, we selected a 5.39% 5.05% discount rate for our projected benefit

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obligation. As the discount rate is reduced or increased, the pension obligation would increase or decrease, respectively, and future pension expense would increase or decrease, respectively.

We maintain policies for investment of pension plan assets. The policies set forth stated objectives and a structure for managing assets, which includes various asset classes and investment management styles that, in the aggregate, are expected to produce a sufficient level of diversification and investment return over time and provide for the availability of funds for benefits as they become due. The policies also provide guidelines for each investment portfolio that control the level of risk assumed in the portfolio and ensure that assets are managed in accordance with stated objectives. The plan invests primarily in publicly traded equity and debt securities as directed by the plan's investment committee. The target asset allocation is determined by reference to the plan's funded status percentage. The target allocation of plan assets was 76.0% fixed income securities, 17.7% equity securities and 6.3% other investments, as of December 31, 2023 and 52.2% fixed income securities, 39.8% equity securities and 8.0% other investments, as of December 31, 2022 and December 31, 2021, respectively. . The pension plan's expected return assumption is based on the weighted average aggregate long-term expected returns of various actively managed asset classes corresponding to the plan's asset allocation. We have selected an expected return on plan assets based on a historical analysis of rates of return, our investment mix, market conditions and other factors. The fair value of plan assets decreased in 2023 due primarily to the plan settlements and benefit payments, partially offset by investment returns. The fair value of plan assets decreased in 2022 due primarily to investment returns and benefit payments. The fair value of plan assets increased in 2021 due primarily

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(amounts in thousands) **(amounts in thousands)**

Change in fair value of plan assets - U.S. benefit plan

Change in fair value of plan assets - U.S. benefit plan

Change in fair value of plan assets - U.S. benefit plan	Change in fair value of plan assets - U.S. benefit plan	2022	2021	2023	2022
Balance as of January 1,	Balance as of January 1,	$418,947	$396,853		
Actual return on plan assets	Actual return on plan assets	(80,997)	43,242		
Benefits paid	Benefits paid	(20,060)	(18,312)		
Benefits paid					
Benefits paid					
Administrative expenses paid	Administrative expenses paid	(3,413)	(2,836)		
Plan settlements					
Balance at period end	Balance at period end	$314,477	$418,947		

The plan's projected benefit obligation is determined by using weighted-average assumptions made on as of December 31 of each year, as summarized below:

(amounts in thousands)	(amounts in thousands)					
Change in projected benefit obligation - U.S. benefit plan						
Change in projected benefit obligation - U.S. benefit plan						
Change in projected benefit obligation - U.S. benefit plan	Change in projected benefit obligation - U.S. benefit plan	2022	2021		2023	2022
Balance as of January 1,	Balance as of January 1,	$445,268	$474,085			
Service cost	Service cost	3,470	2,690			
Interest cost	Interest cost	10,556	8,870			
Actuarial gain		(110,342)	(19,229)			
Actuarial loss (gain)						
Benefits paid	Benefits paid	(20,060)	(18,312)			
Administrative expenses paid	Administrative expenses paid	(3,413)	(2,836)			
Plan Settlements						
Balance at period end	Balance at period end	$325,479	$445,268			
Discount rate	Discount rate	5.39%	2.88%	Discount rate	5.05%	5.39%
Compensation increase rate	Compensation increase rate	N/A	N/A	Compensation increase rate	N/A	N/A

As of December 31, 2022 December 31, 2023, the plan's estimated benefit payments for the next ten years are as follows (amounts in thousands):

2023		$	19,065
2024	2024		20,417
2025	2025		21,099
2026	2026		21,672
2027	2027		22,193
2028-2032			114,943
2028			
2029-2033			

The company Company made no cash contributions to the plan for the years ended December 31, 2022 December 31, 2023 and December 31, 2021 December 31, 2022. During fiscal year 2023, 2024, no cash contributions are required to be made to the plan.

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The plan’s accumulated benefit obligation of $325.5 million $283.9 million is determined by taking the projected benefit obligation and removing the impact of the assumed compensation increases.

The plan’s funded status as of December 31 is as follows:

(amounts in thousands)	(amounts in thousands)				
Unfunded pension liability - U.S. benefit plan		**2022**	**2021**		
Long-term unfunded pension liability - U.S. benefit plan					
Long-term unfunded pension liability - U.S. benefit plan					
Long-term unfunded pension liability - U.S. benefit plan				**2023**	**2022**
Projected benefit obligation at end of period	Projected benefit obligation at end of period	$325,479	$445,268		
Fair value of plan assets at end of period	Fair value of plan assets at end of period	(314,477)	(418,947)		
Unfunded pension liability		$ 11,002	$ 26,321		
Long-term unfunded pension liability					

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Net actuarial pension losses are recorded in consolidated other comprehensive income (loss) for the years ended December 31 are as follows:

(amounts in thousands)	(amounts in thousands)						
Accumulated other comprehensive loss - U.S. benefit plan	**Accumulated other comprehensive loss - U.S. benefit plan**	**2022**	**2021**	**2020**			
Accumulated other comprehensive loss - U.S. benefit plan							
Accumulated other comprehensive loss - U.S. benefit plan					**2023**	**2022**	**2021**
Net actuarial pension loss beginning of period	Net actuarial pension loss beginning of period	$52,832	$102,161	$87,459			
Amortization of net actuarial loss	Amortization of net actuarial loss	(1,798)	(9,092)	(6,852)			
Net (gain) loss occurring during year		(7,921)	(40,237)	21,554			
Net gain occurring during year							

	Settlement recognition of net actuarial loss			
Net actuarial pension loss at end of period	Net actuarial pension loss at end of period	43,113	52,832	102,161
	Tax expense (benefit)	8,059	5,603	(6,860)
	Tax expense			
Net actuarial pension loss at end of period, net of tax	Net actuarial pension loss at end of period, net of tax	$51,172	$ 58,435	$95,301

Non-U.S. Defined Benefit Plans – We have several other unfunded defined benefit plans located outside the U.S. that are country specific. Some of these plans remain open to participants and others are closed. We maintain policies for investment of the assets of our funded pension plans. The target allocation of plan assets was approximately 36% fixed income securities, 32% equity securities and 32% other investments, as of December 31, 2022 and December 31, 2021, respectively. The expenses related to these plans are recorded in the consolidated statements of operations and are determined by using weighted-average assumptions made on January 1 of each year as summarized below for the years ended December 31.

(amounts in thousands)			
Components of pension benefit expense - Non-U.S. benefit plans	**2022**	**2021**	**2020**
Service cost	$ 2,402	$ 2,728	$ 2,548
Interest cost	880	714	908
Curtailment gain	(1,742)	—	—
Expected return on plan assets	(306)	(453)	(435)
Amortization of net actuarial pension loss	532	857	849
Pension benefit expense	$ 1,766	$ 3,846	$ 3,870
Discount rate	1.9% - 7.6%	0.8% - 7.6%	0.2% - 7.8%
Expected long-term rate of return on assets	0.0% - 5.5%	0.0% - 5.5%	0.0% - 4.6%
Compensation increase rate	0.0% - 7.0%	0.5% - 7.0%	0.5% - 7.0%

(amounts in thousands)		
Change in fair value of plan assets - Non-U.S. benefit plans	**2022**	**2021**
Balance as of January 1,	$ 11,344	$ 11,471
Actual (loss) gain return on plan assets	(553)	837
Company contribution	143	197
Benefits paid	(849)	(542)
Administrative expenses paid	(843)	(41)
Cumulative translation adjustment	(61)	(578)
Balance at period end	$ 9,181	$ 11,344

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(amounts in thousands)			
Components of pension benefit expense - Non-U.S. benefit plans	**2023**	**2022**	**2021**
Service cost	$ 1,275	$ 1,842	$ 2,035
Interest cost	879	349	205
Amortization of net actuarial pension loss	45	311	645
Pension benefit expense	$ 2,199	$ 2,502	$ 2,885
Discount rate	3.1% - 3.8%	3.3% - 3.7%	0.8% - 1.6%

Compensation increase rate	0.0% - 3.5%	0.0% - 3.5%	0.5% - 2.5%

The projected benefit obligation for the non-US non-U.S. plans is determined by using weighted-average assumptions made on December 31, 2022 as of December 31 each year, as summarized below:

(amounts in thousands)	**(amounts in thousands)**				
Change in projected benefit obligation - Non-U.S. benefit plans					
Change in projected benefit obligation - Non-U.S. benefit plans					
Change in projected benefit obligation - Non-U.S. benefit plans	**Change in projected benefit obligation - Non-U.S. benefit plans**	**2022**	**2021**	**2023**	**2022**
Balance as of January 1,	Balance as of January 1,	$49,903	$53,871		
Service cost	Service cost	2,402	2,728		
Service cost					
Service cost					
Interest cost	Interest cost	880	714		
Actuarial gain	Actuarial gain	(7,029)	(769)		
Curtailment gain		(1,958)	—		
Benefits paid	Benefits paid	(3,155)	(2,753)		
Administrative expenses paid		(61)	(41)		
Benefits paid					
Benefits paid					
Cumulative translation adjustment					
Cumulative translation adjustment					
Cumulative translation adjustment	Cumulative translation adjustment	(4,499)	(3,847)		
Balance at period end	Balance at period end	$36,483	$49,903		
Discount rate	Discount rate	3.3% - 7.3%	0.5% - 7.6%		
Discount rate					
Discount rate				3.1% - 3.8%	3.3% - 3.7%
Compensation increase rate	Compensation increase rate	0.0% - 7.0%	0.5% - 7.0%	Compensation increase rate 0.0% - 3.5%	0.0% - 3.5%

As of December 31, 2022 December 31, 2023, the estimated benefit payments for the non-U.S. plans over the next ten years are as follows (amounts in thousands):

2023	$	2,475
2024		2,656
2025		2,780
2026		2,934
2027		2,975
2028-2032		15,121

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2024	$	1,370
2025		1,279
2026		1,377
2027		1,696
2028		1,956
2029-2033		9,550

The accumulated benefit obligations of $31.0 million $23.6 million for the non-U.S. plans are determined by taking the projected benefit obligation and removing the impact of the assumed compensation increases. We expect to contribute $1.5 million $1.4 million to the non-U.S. plans in 2023. 2024.

The funded status of these plans as of December 31 are as follows:

(amounts in thousands) Unfunded pension liability - Non-U.S. benefit plans	(amounts in thousands) Unfunded pension liability - Non-U.S. benefit plans	2022	2021
Projected benefit obligation at end of period		$36,483	$49,903
Fair value of plan assets at end of period		(9,181)	(11,344)
Net pension liability		$27,302	$38,559

Unfunded pension liability - Non-U.S. benefit plans

Unfunded pension liability - Non-U.S. benefit plans			2023	2022
Long-term unfunded pension liability				
Long-term unfunded pension liability				
Long-term unfunded pension liability	Long-term unfunded pension liability	$24,503	$35,117	
Current portion	Current portion	4,592	5,545	
Total unfunded pension liability	Total unfunded pension liability	$29,095	$40,662	
Total overfunded pension liability		$ 1,793	$ 2,103	

The current portion of the unfunded pension liability is recorded in accrued payroll and benefits in the accompanying consolidated balance sheets. The overfunded pension liability is recorded in long-term other assets in the accompanying consolidated balance sheets.

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Net actuarial pension losses are recorded in consolidated other comprehensive income (loss) for the years ended December 31 are as follows:

(amounts in thousands) (amounts in thousands)

Accumulated other comprehensive loss - Non-U.S. benefit plans

Accumulated other comprehensive loss - Non-U.S. benefit plans

Accumulated other comprehensive loss - Non-U.S. benefit plans	Accumulated other comprehensive loss - Non-U.S. benefit plans	2022	2021	2020	2023	2022	2021

Net actuarial pension loss beginning of period	Net actuarial pension loss beginning of period	$9,913	$12,811	$12,237
Amortization of net actuarial loss	Amortization of net actuarial loss	(532)	(857)	(849)
Net (gain) loss occurring during year	Net (gain) loss occurring during year	(6,457)	(931)	1,339
Effect of curtailment	Effect of curtailment	(167)	—	—
Divestiture of JW Australia benefit plans				
Cumulative translation adjustment	Cumulative translation adjustment	(484)	(1,110)	84
Net actuarial pension loss at end of period	Net actuarial pension loss at end of period	2,273	9,913	12,811
Tax benefit	Tax benefit	(632)	(2,280)	(3,043)
Net actuarial pension loss at end of period, net of tax	Net actuarial pension loss at end of period, net of tax	$1,641	$ 7,633	$ 9,768

Other Non-U.S. Defined Contribution Benefit Plans –We – We have several other defined contribution benefit plans located outside the covering certain U.S. that are country specific. Other plans that are characteristically defined contribution plans have accrued liabilities of $2.4 million and $2.4 million, respectively, at December 31, 2022 and December 31, 2021. non-U.S. subsidiary employees, subject to eligibility requirements established in accordance with local statutory requirements. The total compensation expense for non-U.S. defined contribution cost of these plans was $29.9 million $36.4 million, $39.0 million and $35.9 million in 2023, 2022 $29.5 million in and 2021, and $21.1 million in 2020. respectively.

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Note 26. 27. Supplemental Cash Flow Information

		Year Ended				Year Ended		
(amounts in thousands)	(amounts in thousands)	December 31, 2022	December 31, 2021	December 31, 2020	(amounts in thousands)	December 31, 2023	December 31, 2022	December 31, 2021
Cash Operating Activities:	**Cash Operating Activities:**							
Operating leases								
Operating leases								
Operating leases	Operating leases	$ 58,575	$ 59,190	$ 58,235				
Interest payments on financing lease obligations	Interest payments on financing lease obligations	161	205	193				

Cash paid for amounts included in the measurement of lease liabilities	Cash paid for amounts included in the measurement of lease liabilities	$ 58,736	$ 59,395	$ 58,428
Cash Investing Activities:	**Cash Investing Activities:**			
Cash Investing Activities:				
Cash Investing Activities:				
Purchases of securities for deferred compensation plan				
Purchases of securities for deferred compensation plan				
Purchases of securities for deferred compensation plan	Purchases of securities for deferred compensation plan	$ (834)	$ —	$ —
Sale of securities for deferred compensation plan	Sale of securities for deferred compensation plan	106	—	—
Change in securities for deferred compensation plan	Change in securities for deferred compensation plan	$ (728)	$ —	$ —
Issuances of notes receivable	Issuances of notes receivable	$ (55)	$ (52)	$ (57)
Issuances of notes receivable				
Issuances of notes receivable				
Cash received on notes receivable	Cash received on notes receivable	149	4,218	642
Change in notes receivable	Change in notes receivable	$ 94	$ 4,166	$ 585
Non-cash Investing Activities:	**Non-cash Investing Activities:**			
Non-cash Investing Activities:				
Non-cash Investing Activities:				
Property, equipment, and intangibles purchased in accounts payable				
Property, equipment, and intangibles purchased in accounts payable				
Property, equipment, and intangibles purchased in accounts payable	Property, equipment, and intangibles purchased in accounts payable	$ 4,987	$ 6,753	$ 5,862
Property, equipment, and intangibles purchased with debt	Property, equipment, and intangibles purchased with debt	9,779	8,839	18,813

Customer accounts receivable converted to notes receivable	Customer accounts receivable converted to notes receivable	49	141	843

Customer accounts receivable converted to notes receivable

Customer accounts receivable converted to notes receivable

Cash Financing Activities:	**Cash Financing Activities:**			

Cash Financing Activities:

Cash Financing Activities:

Proceeds from issuance of new debt

Proceeds from issuance of new debt

Proceeds from issuance of new debt	Proceeds from issuance of new debt	$ —	$ 548,625	$ 250,000
Borrowings on long-term debt	Borrowings on long-term debt	779,977	37,306	100,941
Payments of long-term debt	Payments of long-term debt	(767,248)	(666,534)	(135,250)
Payments of debt issuance and extinguishment costs, including underwriting fees	Payments of debt issuance and extinguishment costs, including underwriting fees	—	(5,448)	(4,833)
Change in long-term debt		$ 12,729	$ (86,051)	$ 210,858

Change in long-term debt and payments of debt extinguishment costs

Cash paid for amounts included in the measurement of finance lease liabilities	Cash paid for amounts included in the measurement of finance lease liabilities	$ 1,792	$ 2,090	$ 1,721

Cash paid for amounts included in the measurement of finance lease liabilities

Cash paid for amounts included in the measurement of finance lease liabilities

Non-cash Financing Activities:

Non-cash Financing Activities:

Non-cash Financing Activities:	**Non-cash Financing Activities:**			
Prepaid insurance funded through short-term debt borrowings	Prepaid insurance funded through short-term debt borrowings	$ 16,486	$ 13,048	$ 10,785

Prepaid insurance funded through short-term debt borrowings

Prepaid insurance funded through short-term debt borrowings

Shares repurchased in accounts payable

Shares repurchased in accounts payable

Shares repurchased in accounts payable	Shares repurchased in accounts payable	—	1,066	—
Accounts payable converted to installment notes	Accounts payable converted to installment notes	1,279	69	914
Other Supplemental Cash Flow Information:	**Other Supplemental Cash Flow Information:**			

Other Supplemental Cash Flow Information:

Other Supplemental Cash Flow Information:

Cash taxes paid, net of refunds

Cash taxes paid, net of refunds

Cash taxes paid, net of refunds	Cash taxes paid, net of refunds	$ 44,723	$ 36,513	$ 20,443
Cash interest paid	Cash interest paid	80,613	74,953	71,659

Prior period information in the table above have been reclassified

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Note 28. Summarized Quarterly Financial Information (Unaudited)

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	2023			
(amounts in thousands)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Net revenues	$ 1,080,522	$ 1,125,767	$ 1,076,980	$ 1,021,065
Gross margin	$ 191,787	$ 225,555	$ 223,596	$ 191,683
Income (loss) from continuing operations, net of tax	8,465	22,502	16,908	(22,640)
Gain (loss) on sale of discontinued operations, net of tax	—	—	26,076	(10,377)
Income (loss) from discontinued operations, net of tax	6,669	15,779	801	(1,738)
Net income (loss)	15,134	38,281	43,785	(34,755)
Diluted Net income (loss) per share from continuing operations	$ 0.10	$ 0.26	$ 0.20	$ (0.27)
Diluted Net income (loss) per share from discontinued operations	0.08	0.18	0.31	(0.14)
Diluted Net income (loss) per share	$ 0.18	$ 0.45	$ 0.51	$ (0.41)

	2022			
(amounts in thousands)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Net revenues	$ 1,045,615	$ 1,179,154	$ 1,140,025	$ 1,179,014
Gross margin	$ 171,666	$ 206,614	$ 206,389	$ 201,251
Income (loss) from continuing operations, net of tax	(3,575)	34,958	(45,064)	25,904
Income from discontinued operations, net of tax	3,047	10,868	11,872	7,717
Net income (loss)	$ (528)	$ 45,826	$ (33,192)	$ 33,621
Diluted Net income (loss) per share from continuing operations	$ (0.04)	$ 0.40	$ (0.53)	$ 0.31
Diluted Net income per share from discontinued operations	0.03	0.12	0.14	0.09
Diluted Net income (loss) per share	$ (0.01)	$ 0.52	$ (0.39)	$ 0.40

Diluted Net income (loss) per share may not sum due to current period presentation. rounding.

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Exhibit 4.1 DESCRIPTION OF THE REGISTRANT'S SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934 Our common stock, par value $0.01 per share ("common stock"), NONQUALIFIED STOCK OPTION AGREEMENT THIS AGREEMENT registered under Section 12 made as Securities Exchange Act of 1934, as amended, and listed date (the "Grant Date") stated New York Stock Exchange last page hereto (the "Grant Award") between JELD-WEN Holding, Inc., a Delaware corporation (the "Company"), and the individual named on the Grant Award (the "Optionee"). WHEREAS, the Company desires to grant to the Optionee an option to purchase Shares symbol "JELD". The following is a description of our capital stock and certain material provisions of our amended and restated certificate of incorporation (our "Certificate of Incorporation") and second amended and restated bylaws (our "Bylaws"). The following is only a summary and is qualified by applicable law and by the provisions of our Certificate of Incorporation and our Bylaws. General Our authorized capital stock consists of 900,000,000 shares of common stock and 90,000,000 shares of undesignated preferred stock, the rights, preferences, and privileges of which Company's 2017 Omnibus Equity Plan, as designated amended by our board of directors. The rights (the "Plan"); privileges of holders of our common stock are subject to WHEREAS, the Company and the Optionee understand and agree that series of preferred stock that we may issue capitalized terms used herein, if not otherwise defined, shall have the same meanings as future. The outstanding shares Plan (the Optionee being referred to in the Plan as a Participant). NOW, THEREFORE, in consideration common stock are legally issued, fully paid the following mutual covenants nonassessable. There are no shares for other good and valuable consideration, including specifically, Optionee's acknowledgement and agreement preferred stock outstanding. Common Stock Voting Rights. Each outstanding share the terms contained in Section 7, the parties agree as follows: 1. Grant common stock is entitled to one vote on all matters with respect to which the holders of our common stock are entitled to vote. Dividend Rights. Option. preferences that may apply Optionee's acknowledgement and agreement with Section 7, the Company grants shares of preferred stock outstanding at time, holders of our outstanding common stock are entitled to any dividend declared by Optionee board of directors out of funds legally available for this purpose. However, provisions of the agreements governing our indebtedness from time to time may impose restrictions on our ability to declare dividends on our common stock. Dividends paid in shares of our common stock must be paid, with respect to a particular class of common stock, in shares of that class. Conversion Rights. Our common stock is not convertible. Other Rights. The holders of our common stock will not have any preemptive or other similar rights right and option (the "Option") all or part our securities, cumulative voting, subscription, redemption or sinking fund rights. Right to Receive Liquidation Distributions. Upon our voluntary or involuntary liquidation, dissolution or winding up, an aggregate number of shares (the "Option Shares") on holders of our common stock are entitled to receive, on a pro rata basis, our assets which are legally available for distribution, after payment of all debts and other liabilities terms all conditions and limitations set forth herein and in rights Plan, which is incorporated herein by reference. The Optionee acknowledges receipt any holders a copy preferred stock then outstanding, the Plan and acknowledges that the definitive records pertaining holders grant common stock. Assessability. All shares this Option, and exercises common stock outstanding are fully paid and nonassessable. Preferred Stock The preferred stock, if issued, would have priority over the common stock with respect to dividends and other distributions, including the distribution of our assets upon liquidation. Unless required by law or rights hereunder, shall be retained rules Company. The Option granted herein is intended to be a Nonqualified Stock Option as defined in the Plan. 2. Purchase Price. The purchase price New York Stock Exchange, our board Option Shares shall be the per share stock price (the "Exercise Price") stated in the Grant Award, which is not less than the Fair Market Value directors will have a Share as of authority without further shareholder authorization

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to issue from time to time shares of preferred stock in one or more series Grant Date. 3. Vesting to fix the terms, limitations, relative rights, and preferences and variations of each series. Although we have no present plans to issue any shares of preferred stock, the issuance of shares of preferred stock, or the issuance of rights to purchase such shares, could decrease the amount of earnings and assets available for distribution Exercisability. (a) Vesting. Subject holders of common stock, could adversely affect Plan and this Agreement, rights Option shall become vested powers, including voting rights, of exercisable (to common stock, extent vested could have exercisable, effect of delaying, deterring or preventing a change "Vested Options") control of us or an unsolicited acquisition proposal. Provisions of Our Certificate of Incorporation, Bylaws and Delaware Law that May Have an Anti-Takeover Effect Delaware law, our Certificate of Incorporation, and our Bylaws contain provisions that could have the effect of delaying, deferring, or discouraging another party from acquiring control of us. These provisions, which are summarized below, are expected to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors. Certificate of Incorporation and Bylaws Certain provisions in our Certificate of Incorporation and Bylaws summarized below may be deemed to have an anti-takeover effect and may delay, deter or prevent a tender offer or takeover attempt that a shareholder might consider to be in its best interests, including attempts that might result in a premium being paid over the market price for the shares held by shareholders. Among other things, our Certificate of Incorporation and Bylaws: • authorize the issuance of blank check preferred stock that our board of directors could issue to increase outstanding shares and potentially discourage a takeover attempt; • provide that installments stated in board of directors is expressly authorized to adopt, amend, or repeal our Bylaws; and • establish advance notice requirements for nominations for election to our board of directors or for proposing matters that can be acted upon by shareholders at shareholder meetings. Delaware Takeover Statute Subject to certain exceptions, Section 203 Grant Award on the specified anniversary Delaware General Corporation Law ("DGCL") prohibits Grant Date (each Delaware corporation "Vesting Date"), so long as the Optionee continues to be an Eligible Individual at all times engaging in any "business combination" (as defined below) with any "interested stockholder" (as defined below) for a period of three years following the Grant Date through the relevant Vesting Date (subject to Section 4(g)), and all vesting shall cease upon that such stockholder became an interested stockholder, unless: (i) prior to such date, board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder; (ii) on consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding those shares owned (x) by persons who are directors and also officers and (y) by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or (iii) on or subsequent to such date, the business combination Optionee approved by the board of directors of the corporation and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder. Section 203 of the DGCL defines "business combination" to include: (i) any merger or consolidation involving the corporation and the interested stockholder; (ii) any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder; (iii) subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder; (iv) any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or (v) the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation. In general, Section 203 defines an "interested stockholder" as any entity or person

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beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by such entity or person. We have elected not to be governed by Section 203 of the DGCL, as permitted under and pursuant to subsection (b)(3) of Section 203. Choice of Forum Our Certificate of Incorporation provides that the Court of Chancery of the State of Delaware will be the exclusive forum Terminated derivative action reason other than Disability, death proceeding brought on our behalf, any action or proceeding asserting a breach of fiduciary duty owed by any director or officer to us or our shareholders, any action or proceeding asserting a claim against us arising pursuant to the DGCL or our Certificate of Incorporation or Bylaws, or any action or proceeding asserting a claim against us that is governed by the internal affairs doctrine. Although we believe this provision benefits us by providing increased consistency in the application of Delaware law in the types of claims to which it applies, the provision may have the effect of discouraging lawsuits against our directors and officers and may limit our shareholders' ability to obtain a favorable judicial forum for disputes with us.

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1 JELD-WEN HOLDING, INC. 2017 OMNIBUS EQUITY PLAN 1. Purpose. The purpose of the Plan is to assist the Company with attracting, retaining, incentivizing and motivating officers and employees of, consultants to, and non-employee directors providing services to, the Company and its Subsidiaries and Affiliates and to promote the success of the Company's business by providing participating individuals with a proprietary interest in the performance of the Company. The Company believes that this incentive program will cause participating officers, employees, consultants and non-employee directors to increase their interest in the welfare of the Company, its Subsidiaries and Affiliates and to align their interests with those of the stockholders of the Company, its Subsidiaries and Affiliates. 2. Definitions, For purposes of the Plan: 2.1. “Adjustment Event” shall have the meaning ascribed to such term in Section 12.1. 2.2. “Affiliate” shall mean any entity that the Company, either directly or indirectly through one or more intermediaries, is in common control with, is controlled by or controls, each within the meaning of the Securities Act. 2.3. “Award” means, individually or collectively, a grant of an Option, Restricted Stock, a Restricted Stock Unit, a Stock Appreciation Right, a Performance Award, a Dividend Equivalent Right, a Share Award or any or all of them. 2.4. “Award Agreement” means a written or electronic agreement between the Company and a Participant evidencing the grant of an Award and setting forth the terms and conditions thereof. 2.5. “Board” means the Board of Directors of the Company. 2.6. “Change in Control” means the occurrence of any of the following: (a) An acquisition (other than directly from the Company) of any voting securities of the Company (the “Voting Securities”) by any Person, immediately after which such Person first acquires “Beneficial Ownership” (within the meaning of Rule 13d-3 Exhibit 10.26

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promulgated Retirement. Upon the Termination of an Optionee by reason of Disability or death, the Option shall continue to become vested and exercisable on each Vesting Date following the Termination as if the Optionee had continued to be an Eligible Individual on such Vesting Dates. Upon the Termination of an Optionee by reason of Retirement, the Option shall be prorated based on the percentage of time between the Grant Date and the Vesting Dates in which the Optionee was considered an Eligible Individual. For purposes of this Agreement, unless otherwise expressly defined by an applicable jurisdiction, an employee is eligible for "Retirement" at any time on or after (i) attaining age fifty-five (55) with ten (10) years of service with the Company and its subsidiaries or (ii) attaining age sixty (60) with five (5) years of service with the Company and its subsidiaries. In no event does Retirement include any termination for cause (as described below). Human Resources shall have sole discretion to determine and record Optionee's "years of service" this section. (b) Exercise. The Option may be exercised only with respect to Option Shares issuable upon Exchange Act) exercise fifty percent (50%) any Vested Options. (c) Termination. Except as provided in Sections 4(c)-(f) and subject to Sections 4(b) and 5, the Options may be exercised only prior to the Optionee's Termination. (d) Limitations. For the avoidance of doubt, the limitations on the Optionee's ability to exercise the Option contained in this Agreement are independent, and the Option shall be exercisable only to the extent that none of such limitations apply. 4. Exercisability Upon and After Termination. (a) Unvested Options. All Option Shares which have not vested in accordance with Section 3(a) of this Agreement prior to the Optionee's Termination for any reason other than Disability, death more Retirement shall be cancelled, forfeited and terminated upon such Termination. (b) For Cause. If the Optionee is Terminated for cause, as determined in the sole discretion combined voting power Board or any committee Company's then-outstanding Voting Securities; provided, however, Board, the Option shall terminate as of immediately prior to such Termination, including with respect to Vested Options, and the Optionee shall thereafter cease to have any right to exercise any Option. Furthermore, if the Board or any committee of the Board, prior to or following the date the Optionee is Terminated, and after full consideration of the facts, finds by majority vote the Optionee has engaged determining whether fraud, embezzlement, theft, commission of Change in Control has occurred pursuant felony, dishonesty, or any other conduct inimical this Section 2.6(a), the acquisition of Voting Securities in a Non-Control Acquisition (as hereinafter defined) shall not constitute a Change in Control. A "Non-Control Acquisition" shall mean an acquisition by (i) an employee benefit plan (or a trust forming a part thereof) maintained by (A) (B) any corporation a Subsidiary, the Optionee shall forfeit all unexercised Option Shares, whether other Person the majority of the voting power, voting equity securities or equity interest of which is owned, directly or indirectly, by not vested, and shall return to (for purposes any gain on Option Shares previously exercised since the earlier this definition, a "Related Entity"), (ii) (x) Company or any Related Entity or (iii) any Person in connection with a Non-Control Transaction (as hereinafter defined); (b) date the inimical conduct occurred and (y) the date that is one year prior to the date of Termination. individuals who, as of the Effective Date of this Plan, are members decision (the "Incumbent Board") cease for or reason to constitute at least a majority committee members of the Board; provided, however, that if the election, or nomination for election by the Company's common stockholders, of any new director was approved by a vote of at least two-thirds of the Incumbent such new director shall, for purposes of this Plan, be considered as a member of the Incumbent Board; provided further, however, that no individual considered a member of final. (c) Disability. If Incumbent Board if such individual initially assumed office as a result of either an actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board (a "Proxy Contest") including Optionee is Terminated any agreement intended Disability, the Option may be exercised by the Optionee's estate or personal representative avoid or settle any Proxy Contest; (c) The consummation of: (i) A merger, consolidation or reorganization (x) with or into Company or (y) in which securities of the Company are issued (a "Merger"), unless such Merger extent it Non-Control Transaction. A "Non-Control Transaction" Vested Option (including in respect of Option Shares that continue to vest after Disability by reason of Section 3(a) above) on the date of exercise until the earlier of twelve (12) months after the final Vesting Date and the Expiration Date (as hereinafter defined), following which the Option mean a Merger in which: (a) the stockholders of the Company immediately before such Merger own directly or indirectly immediately following such Merger at least a majority of the combined voting power of the outstanding voting securities of (1) the corporation resulting from such Merger (the "Surviving Corporation"), fifty percent (50%) or more of the combined voting power of the then outstanding voting securities of the Surviving Corporation is Beneficially Owned, directly or indirectly, by another Person (a "Parent Corporation"), or (2) if there is one or more than one Parent Corporation, the ultimate Parent Corporation; exercised, terminate

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(b) (d) Death. If individuals who were members of the Board immediately prior to the execution of the agreement providing for such Merger constitute at least a majority of the members of the board of directors of (1) the Surviving Corporation, if there Optionee no Parent Corporation, or (2) if there is one or more than one Parent Corporation, the ultimate Parent Corporation; and (c) no Person other than (1) the Company or another corporation that is a party to the agreement of Merger, (2) any Related Entity, (3) any employee benefit plan (or any trust forming a part thereof) that, immediately prior to the Merger, was maintained by the Company or any Related Entity or (4) any Person who, immediately prior to the Merger, had Beneficial Ownership of Voting Securities representing more than fifty percent (50%) of the combined voting power of the Company's then- outstanding Voting Securities, has Beneficial Ownership, directly or indirectly, of fifty percent (50%) or more of the combined voting power of the outstanding voting securities of (x) the Surviving Corporation, if there is no Parent Corporation, or (y) if there is one or more than one Parent Corporation, the ultimate Parent Corporation; (ii) A complete liquidation or dissolution of the Company; or (iii) The sale or other disposition of all or substantially all of the assets of the Company and its Subsidiaries taken as a whole to any Person (other than (x) a transfer to a Related Entity or (y) the distribution to the Company's stockholders of the stock of a Related Entity or any other assets). Notwithstanding the foregoing, a Change in Control shall not be deemed to occur solely because any Person (the "Subject Person") acquired Beneficial Ownership of more than the permitted amount of the then outstanding Voting Securities as a result of the acquisition of Voting Securities by the Company which, by reducing the number of Voting Securities then outstanding, increases the proportional number of shares Beneficially Owned by the Subject Person; provided that if a Change in Control would occur (but for the operation of this sentence) as a result of the acquisition of Voting Securities by the Company and, after such acquisition by the Company, the Subject Person becomes the Beneficial Owner of any additional Voting Securities and such Beneficial Ownership increases the percentage of the then outstanding Voting Securities Beneficially Owned by the Subject Person, then a Change in Control shall occur. 2.7. "Code" means the Internal Revenue Code of 1986, as amended.

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4 2.8. “Committee” means the Committee which administers the Plan as provided in Section 3. 2.9. “Company” means JELD-WEN Holding, Inc., a Delaware corporation, or any successor thereto. 2.10. “Consultant” means any consultant or advisor, other than an Employee or Director, who is a natural person and who renders services to the Company or a Subsidiary that (a) are not in connection with the offer and sale of the Company's securities in a capital raising transaction and (b) do not directly or indirectly promote or maintain a market for the Company's securities. 2.11. “Corporate Transaction” means (a) a merger, consolidation, reorganization, recapitalization or other transaction or event having a similar effect on the Company's capital stock or (b) a liquidation or dissolution of the Company. For the avoidance of doubt, a Corporate Transaction may be a transaction that is also a Change in Control. 2.12. “Director” means a member of the Board. 2.13. “Disability” means, with respect to a Participant, a permanent and total disability as defined in Code Section 22(e)(3). A determination of Disability may be made by a physician selected or approved by the Committee and, in this respect, the Participant shall submit to any reasonable examination(s) required by such physician upon request. Notwithstanding the foregoing provisions of this Section 2.13, in the event any Award is considered to be “deferred compensation” as that term is defined under Section 409A and the terms of the Award are such that the definition of “disability” is required to comply with the requirements of Section 409A then, in lieu of the foregoing definition, the definition of “Disability” for purposes of such Award shall mean, with respect to a Participant, that the Participant is unable to engage in any substantial gainful activity Terminated any medically determinable physical his mental impairment that can her death, the Option may expected to result in death or can be expected to last for a continuous period of not less than twelve (12) months. 2.14. “Division” means any of the operating units or divisions of the Company designated as a Division exercised Committee. 2.15. “Dividend Equivalent Right” means Optionee's estate or personal representative to the extent it is right Vested Option (including in respect of Option Shares that continue receive cash or Shares based on the value vest after death by reason dividends that are paid with respect to Shares. 2.16. “Effective Date” means the date of the Plan's approval by the Company's stockholders.

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5 2.17. “Eligible Individual” means any Employee, Director or Consultant. 2.18. “Employee” means any individual performing services for the Company or a Subsidiary and designated as an employee of the Company or the Subsidiary on its payroll records. An Employee shall not include any individual during any period he or she is classified or treated by the Company or Subsidiary as an independent contractor, a consultant or an employee of an employment, consulting or temporary agency or any other entity other than the Company or Subsidiary, without regard to whether such individual is subsequently determined to have been, or is subsequently retroactively reclassified, as a common-law employee of the Company or Subsidiary during such period. An individual shall not cease to be an Employee in the case of (i) any leave of absence approved by the Company or (ii) transfers between locations of the Company or any Subsidiary, or between the Company and any Subsidiaries. 2.19. “Exchange Act” means the Securities Exchange Act of 1934, as amended. 2.20. “Fair Market Value” on any date means: (a) if the Shares are listed for trading on a national securities

exchange, the closing price at the close of the primary trading session of the Shares Section 3(a) above) determination exercise until the earlier of twelve (12) months after the final Vesting Date and the Expiration Date, following which the Option shall, if not exercised, terminate. (e) Retirement. If the Optionee is Terminated by reason of Retirement, the Option may be exercised by the Optionee to the extent it is a Vested Option (including in respect of Option Shares that continue to vest after Retirement by reason of Section 3(a) above) principal national securities exchange on date of exercise until the earlier of twelve (12) months after the final Vesting Date and the Expiration Date, following common stock Option shall, if not exercised, terminate. (f) Other. If the Optionee listed Terminated for any reason other than death, Disability, Retirement, admitted termination for cause, the Option may be exercised by the Optionee trading as officially quoted in consolidated tape of transactions on such exchange or such other source as the Committee deems reliable for the applicable date, or if there has been no such closing price of the Shares on such date, extent it was a Vested Option next preceding on which there was such a closing price; or (b) if of Termination until Shares are not listed for trading on a national securities exchange, the fair market value earlier the Shares as determined in good faith by the Committee, and, if applicable, in accordance with Sections 409A and 422 of the Code. Notwithstanding the foregoing, with respect to Awards granted in connection with an Initial Public Offering, if any, unless the Committee determines otherwise, Fair Market Value shall mean the price at which Shares are offered to the public by the underwriters in the Initial Public Offering. 2.21. “Incentive Stock Option” means an Option satisfying the requirements of Section 422 of the Code and designated by the Committee as an Incentive Stock Option. 2.22. “Nonemployee Director” means a Director of the Board who is a “nonemployee director” within the meaning of Rule 16b-3 promulgated under the Exchange Act.

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6 2.23. “Nonqualified Stock Option” means an Option which is not an Incentive Stock Option. 2.24. “Option” means a Nonqualified Stock Option or an Incentive Stock Option. 2.25. “Option Price” means the price at which a Share may be purchased pursuant to an Option. 2.26. “Parent” means any corporation which is a “parent corporation” (within the meaning of Section 424(e) of the Code) with respect to the Company. 2.27. “Participant” means an Eligible Individual to whom an Award has been granted under the Plan. 2.28. “Performance Awards” means Performance Share Units, Performance-Based Restricted Stock or any or all of them. 2.29. “Performance-Based Restricted Stock” means Shares issued or transferred to an Eligible Individual under Section 9.2. 2.30. “Performance Cycle” means the time period specified by the Committee at the time Performance Awards are granted during which the performance of the Company, a Subsidiary or a Division will be measured. 2.31. “Performance Objectives” means the objectives set forth in Section 9.3 for the purpose of determining, either alone or together with other conditions, the degree of payout and/or vesting of Performance Awards. 2.32. “Performance Share Units” means Performance Share Units granted to an Eligible Individual under Section 9.1(b). 2.33. “Person” shall have the meaning ascribed to such term in Section 3(a)(9) of the Exchange Act and used in Sections 13(d) and 14(d) of the Exchange Act. 2.34. “Plan” means this JELD-WEN Holding, Inc. 2017 Equity Incentive Plan, as amended from time to time.

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7 2.35. “Plan Termination Date” means ten (10) years ninety (90) days Effective date of such Termination and the Expiration unless the Plan is earlier terminated by the Board pursuant to Section 15 hereof. 2.36. “Restricted Stock” means Shares issued or transferred to an Eligible Individual pursuant to Section 8.1. 2.37. “Restricted Stock Units” means rights granted to an Eligible Individual under Section 8.2 representing a number of hypothetical Shares. 2.38. “Section 409A” means Section 409A of Code, and all regulations, guidance, and other interpretative authority issued thereunder. 2.39. “Securities Act” means the Securities Act of 1933, as amended. 2.40. “Share Award” means an Award of Shares granted pursuant to Section 10. 2.41. “Shares” means the common stock, par value $0.01 per share, of the Company and any other securities into which such shares are changed or for which such shares are exchanged. 2.42. “Stock Appreciation Right” means a right to receive all or some portion of the increase, if any, in the value of the Shares as provided in Section 6 hereof. 2.43. “Subsidiary” means (a) except as provided in subsection (b) below, any corporation which is a subsidiary corporation within the meaning of Section 424(f) of the Code with respect to the Company and (b) in relation to the eligibility to receive Awards other than Incentive Stock Options and continued employment or the provision of services for purposes of Awards (unless the Committee determines otherwise), any entity, whether or not incorporated, in following Company directly or indirectly owns at least twenty-five percent (25%) Option shall, if not exercised, terminate. (g) Leaves the outstanding equity or other ownership interests. 2.44. “Ten-Percent Shareholder” means an Employee who, at the time an Incentive Stock Option is to be granted to him or her, owns (within the meaning of Section 422(b)(6) of the Code) stock possessing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company, a Parent or a Subsidiary. 2.45. “Termination”, “Terminated” or “Terminates” shall mean (a) with respect to a Participant who is an Employee, the date such Participant ceases to be employed by the Company and its Subsidiaries, (b) with respect to a Participant who is a Consultant, the date such Participant ceases

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8 to provide services to the Company and its Subsidiaries or (c) with respect to a Participant who is a Director, the date such Participant ceases to be a Director, in each case, for any reason whatsoever (including by reason of death, Disability or adjudicated incompetency). Unless otherwise set forth in an Award Agreement, (a) if a Participant is both an Employee and a Director and terminates as an Employee but remains as a Director, the Participant will be deemed to have continued in employment without interruption and shall be deemed to have Terminated upon ceasing to be a Director and (b) if a Participant who is an Employee or a Director ceases to provide services in such capacity and becomes a Consultant, the Participant will be deemed to have continued in employment without interruption and shall be deemed to have Terminated upon ceasing to be a Consultant. 3. Administration. 3.1. Committee. The Plan shall be administered by a Committee appointed by the Board. The Committee shall consist of at least two (2) Directors of the Board and may consist of the entire Board; provided, however, that if the Committee consists of less than the entire Board, then, with respect to any Award granted to an Eligible Individual who is subject to Section 16 of the Exchange Act, the Committee shall consist only of Nonemployee Directors. For purposes of the preceding sentence, if one or more voting with respect to a particular action taken by the Committee, then the Committee, with respect to that action, shall be deemed to consist only of the members of the Committee who have not recused themselves or abstained from voting. The acts of a majority of the total membership of the Committee at any meeting, or the acts approved in writing by all of its members, shall be the acts of the Committee. All decisions and determinations by the Committee in the exercise of its powers hereunder shall be final, binding and conclusive upon the Company, its Subsidiaries, the Participants and all other Persons having any interest therein. 3.2. Board Reservation and Delegation. (a) The Board may, in its discretion, reserve to itself or exercise any or all of the authority and responsibility of the Committee hereunder. To the extent the Board has reserved to itself or exercises the authority and responsibility of the Committee, the Board shall be deemed to be acting as the Committee for purposes of the Plan and references to the Committee in the Plan shall be to the Board. (b) Subject to applicable law, the Board may delegate, in whole or in part, any of the authority of the Committee hereunder (subject to such limits as may be determined by the Board) to any individual or committee of individuals (who need not be Directors), including without limitation the authority to make Awards to Eligible Individuals who are not officers or Directors of the Company or any of its Subsidiaries and who are not subject to Section 16 of the Exchange Act. To the extent that the Board delegates any such authority to

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9 make Awards as provided by this Section 3.2(b), all references in the Plan to the Committee's authority to make Awards and determinations with respect thereto shall be deemed to include the Board's delegate. 3.3. Committee Powers. Subject to the express terms and conditions set forth herein, the Committee shall have all of the powers necessary to enable it to carry out its duties under the Plan, including, without limitation, the power from time to time to: (a) determine those Eligible Individuals to whom Awards shall be granted under the Plan and determine the number or value of Shares in respect of which each Award is granted, prescribe the terms and conditions (which need not be identical) of each such Award, including, (i) in the case of Options, the exercise price per Share and the duration of the Option and (ii) in the case of Stock Appreciation Rights, the Base Price per Share and the duration of the Stock Appreciation Right, accelerate the vesting or lapsing of restrictions of any Award in the event of death or Disability, and make any amendment or modification to any Award Agreement, in each case, consistent with the terms of the Plan and make any amendment or modification to any Agreement consistent with the terms of the Plan; (b) construe and interpret the Plan and the Awards granted hereunder, establish, amend and revoke rules, regulations and guidelines as it deems are necessary or appropriate for the administration of the Plan, including, but not limited to, correcting any defect, supplying any omission or reconciling any inconsistency in the Plan or in any Award Agreement in the manner and to the extent it shall deem necessary or advisable, including so that the Plan and the operation of the Plan comply with Rule 16b-3 under the Exchange Act, the Code to the extent applicable and other applicable law, and otherwise make the Plan fully effective; (c) permit a Participant to defer such Participant's receipt of the payment of cash or the delivery of Shares that would otherwise be due to such Participant by virtue of the lapse or waiver of restrictions with respect to Restricted Stock Units and Performance Share Units, or the satisfaction of any requirements or objectives with respect to such Awards; provided that if any such deferral election is permitted or required, the Committee shall, in its sole discretion, establish rules and procedures for such payment deferrals, which rules and procedures shall comply with Section 409A; and provided further that the deferral of Option and Stock Appreciation Right gains is prohibited; (d) determine the duration and purposes for leaves of absence which may be granted to a Participant on an individual basis without constituting a Termination for purposes of the Plan;

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10 (e) cancel, with the consent of the Participant, outstanding Awards or as otherwise permitted under the terms of the Plan; (f) exercise its discretion with respect to the powers and rights granted to it as set forth in the plan (g) generally, exercise such powers and perform such acts as are deemed necessary or advisable to promote the best interests of the Company with respect to the Plan. 3.4. Non-Uniform Determinations. The Committee's determinations under the Plan need not be uniform and may be made by it selectively among Persons who receive, or are eligible to receive, Awards (whether or not such Persons are similarly situated). Without limiting the generality of the foregoing, the Committee shall be entitled, among other things, to make non-uniform and selective determinations, and to enter into non-uniform and selective Award Agreements, as to the Eligible Individuals to receive Awards under the Plan and the terms and provision of Awards under the Plan. 3.5. Non-U.S. Employees. Notwithstanding anything herein to the contrary, with respect to Participants working outside the United States, the Committee may establish subplans, determine the terms and conditions of Awards, and make such adjustments to the terms thereof as are necessary or advisable to fulfill the purposes of the Plan taking into account matters of local law or practice, including tax and securities laws of jurisdictions outside the United States. 3.6. Indemnification. No member of the Committee shall be liable for any action, failure to act, determination or interpretation made in good faith with respect to the Plan or any transaction hereunder. The Company hereby agrees to indemnify each member of the Committee for all costs and expenses and, to the extent permitted by applicable law, any liability incurred in connection with defending against, responding to, negotiating for the settlement of or otherwise dealing with any claim, cause of action or dispute of any kind arising in connection with any actions in administering the Plan or in authorizing or denying authorization to any transaction hereunder. 3.7. No Repricing of Options or Stock Appreciation Rights. The Committee shall have no authority to (i) make any adjustment (other than in connection with an Adjustment Event, a Corporate Transaction or other transaction where an adjustment is permitted or required under the terms of the Plan) or amendment, and no such adjustment or amendment shall be made, that reduces or would have the effect of reducing the exercise price of an Option or Base Price of a Stock Appreciation Right previously granted under the Plan, whether through amendment, cancellation or replacement grants or other means, or (ii) cancel for cash or other consideration any Option whose Option Price is greater than the then Fair Market Value of a Share or Stock Appreciation Right whose

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11 Base Price is greater than the then Fair Market Value of a Share unless, in either case the Company's stockholders shall have approved such adjustment, amendment or cancellation. 4. Stock Subject to the Plan: Grant Limitations; Vesting. 4.1. Aggregate Number of Shares Authorized for Issuance. Subject to any adjustment as provided in the Plan, the maximum number of Shares that may be issued pursuant to Awards granted under the Plan shall not exceed 9,900,000 Shares, all of which may granted pursuant to Incentive Stock Options. The Shares to be issued under the Plan may be, in whole or in part, authorized but unissued Shares or issued Shares which shall have been reacquired by the Company and held by it as treasury shares. The grant of any Award that may be settled only in cash shall not reduce the number of Shares with respect to which Awards may be granted pursuant to the Plan. 4.2. Individual Participant Limit. The aggregate number of Shares that may be issued pursuant to Awards granted under the Plan in any calendar year (or in respect of the calendar year during which the Transition Period expires, the remainder of such calendar year) may not exceed 2,000,000 Shares in the case of an Eligible Individual who is an Employee or Consultant or 250.000 Shares in the case of a Director who is not an Employee or Consultant. 4.3. Calculating Shares Available. Shares shall be deemed to have been issued under the Plan only to the extent actually issued and delivered pursuant to an Award. To the extent that (i) an Award expires or is otherwise canceled, terminated or forfeited without the issuance of Shares or (ii) an Award will be mandatorily settled solely in cash without the delivery of Shares, then the Shares covered by such Awards will become available for issuance in connection with future Awards granted under the Plan. Absence. and subject to applicable law, with respect to following Shares Option, the Committee may, in its sole discretion, determine whether the Optionee is considered to be an Eligible Individual if the Optionee is on a leave of absence that has been approved by the Company's head of Human Resources, for any reason, provided that rights to the Option during certain long-term leaves of absence (as determined by the Committee) not become available for issuance be limited to the extent to which those rights were earned or vested when the leave of absence began. For clarity and subject to applicable law, any limitations on rights to the Option during such leaves of absence will cease as of the date such leave of absence has ended. (h) Not a Contract of Employment. Nothing connection with future Awards granted under (A) Shares withheld from payment or this Agreement shall confer upon the Optionee any right to be continued in the employment an Award by surrendered any Affiliate, tendered by to interfere in any way with Participant, in satisfaction right any federal, state or local income tax and applicable employment tax withholding requirements, (B) Shares withheld from the payment of an Award by surrendered any parent tendered Subsidiary whom Participant in payment Optionee is employed to terminate the Optionee's employment at any time or for any reason, with or without cause, or to decrease the Optionee's compensation or benefits. 5. Prohibited Conduct; Restatements. (a) Consequences the exercise price or purchase price of an Award, (C) Shares covered by Awards that discretionarily settled in cash, (D) Shares covered by a Stock Appreciation Right that are not issued in connection with its settlement in Shares upon exercise and (E) Shares reacquired by Prohibited Conduct. If determines that the Optionee has engaged in any Prohibited Conduct (as defined in Section 5(b)), then: (i) The Option shall immediately terminate, including with respect to Vested Options; and (ii) If the Company determines that Prohibited Conduct occurred the open market otherwise using cash proceeds from the exercise of Options. 4.4. Vesting. The Committee shall determine and set forth in the applicable Award Agreement the time or times at which, and/or the conditions required for, an Award to vest, become exercisable or have restrictions lapse; provided that no Award granted to an Eligible Individual shall vest, become exercisable or have restrictions lapse earlier than before (1st) grant date the Option was exercised for any Option Shares, the Optionee shall repay and transfer to the Company (A) the number of Option Shares issued to the Optionee under this Agreement within such one year period (the "Forfeited Shares"), plus (B) the amount of cash equal to the withholding taxes paid by withholding shares (if any) from the

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12 date; provided, however, up 4 Optionee with respect a maximum of five percent (5%) such exercise maximum aggregate number Option (including through broker-assisted “cashless” exercise). If any Forfeited Shares have been sold by the Optionee prior to the Company’s demand for repayment, the Optionee shall repay to the Company (A) 100% the proceeds of such sale or sales, plus (B) the amount of cash equal to the withholding taxes paid by withholding that (if any) from the Optionee with respect to such exercise of the Option (including through broker- assisted “cashless” exercise). The Company may, in its sole discretion, reduce the amount to be repaid by the Optionee to take into account the tax consequences of such repayment for the Optionee. (b) Prohibited Conduct. Each of the following constitutes “Prohibited Conduct”: (i) the conviction or entry of a plea of guilty or nolo contendere to (A) any felony or (B) any crime (whether or not a felony) involving moral turpitude, fraud, theft, breach of trust or other similar acts, whether under the laws of the United States or any state thereof or any similar foreign law to which the person issued under subject; (ii) being engaged or having engaged in conduct constituting breach of fiduciary duty, dishonesty, willful misconduct or material neglect relating to Plan pursuant to Section 4.1 may be issued pursuant to Awards granted under Company or any of its subsidiaries or Plan without regard for any limitations or other requirements for vesting or transferability under the Plan. 5. Stock Option. 5.1. Authority performance Committee. The Committee may grant Options to Eligible Individuals in accordance with the Plan, the terms and conditions a person’s duties; (iii) appropriation (or an overt act attempting appropriation) the grant of which shall be set forth in an Award Agreement. Incentive Stock Options may be granted only to Eligible Individuals who are Employees a material business opportunity Subsidiaries subsidiaries; (iv) misappropriation (or an overt act attempting misappropriation) of any funds of the Company or any of its subsidiaries; (v) the willful failure to: (A) follow a reasonable and lawful directive of the Company or any of its subsidiaries at which a person is employed or provides services, or the Board of Directors or (B) comply with any written rules, regulations, policies or procedures of the Company or a subsidiary at which a person is employed or to which he or she provides services which, if not complied with, would reasonably be expected to have more than a de minimis adverse effect date business or financial condition of Incentive Stock Option is granted. Options shall be subject Company; (vi) violation of a person’s employment, consulting, separation or similar agreement with the Company or any non-disclosure, non-solicitation or non-competition covenant in any other agreement the following terms and provisions: 5.2. Option Price. The Option Price or the manner in exercise price person to be determined subject; (vii) during the Optionee’s employment or service with the Company or at any time after Termination Shares under each Option shall be determined by any reason, Committee and set forth Optionee, violation of any Company policies or agreements with Award Agreement; provided, however, that the exercise price per Share under each Option shall not be less than the greater of (i) the par value of a Share and (ii) 100% Company, discloses or misuses any Fair Market Value of a Share on the date the Option is granted (110% in the case of an Incentive Stock Option granted to a Ten- Percent Shareholder). 5.3. Maximum Duration. Options granted hereunder shall be for such term as the Committee shall determine; provided that an Incentive Stock Option shall not be exercisable after the expiration of ten (10) years from the date it is granted (five (5) years in the case of an Incentive Stock Option granted to a Ten-Percent Shareholder) and a Nonqualified Stock Option shall not be exercisable after the expiration of ten (10) years from the date it is granted; provided, further, however, that (i) unless the Committee provides otherwise, an Option (other than an Incentive Stock Option) may, upon the death of the Participant prior to the expiration of the Option, be exercised for up to one (1) year following the date of the Participant's death (but in no event beyond the date on which the Option otherwise would expire by its terms), and (ii) if, at the time an Option (other than an Incentive Stock Option) would otherwise expire at the end of its term, the exercise of the Option is prohibited by applicable law Company’s trade secrets the Company's insider trading policy, the term shall be extended until thirty (30) days after the prohibition no longer applies. The Committee may, subsequent to the granting of any Option, extend the period within which the Option may be exercised (including following a Participant's Termination), but in no event shall the period be extended to a date that is later than the earlier of the latest date on which the Option could have been exercised and the 10th anniversary of the date of grant of the Option, except as otherwise provided herein in this Section 5.3. other

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13 5.4. Vesting. To 5 confidential information regarding the Company, including without limitation, matters relating to cost data, formulas, patterns, compilations, programs, devices, methods, techniques, processes, manufacturing processes, business strategy and plans, customer information, pricing information, supplier information, the Company's policies and procedures and other financial data of the Company; (viii) deliberate and continued failure to perform material duties to the Company or any of its subsidiaries; (ix) violation of the Company's Code of Business Conduct and Ethics, as it may be amended from time to time; or (x) during the Optionee's employment or service with the Company or at any time during the two-year period following Termination for any reason, the Optionee: (A) directly or indirectly competes with the Company, accepts employment with any entity that directly or indirectly competes with the Company or otherwise approaches, solicits or accepts business from any customer, supplier or vendor of the Company in direct or indirect competition with the Company; (B) approaches, counsels or attempts to induce any person who is then in the employ of the Company to leave his or her employ; or employs or attempts to employ any such person or any person who at any time during the preceding twelve (12) months was in the employ of the Company; or (C) aids, assists or counsels any other person, firm or corporation to do any of the above. (c) Restatement of Financial Statements; Clawback Policy. In addition to the other provisions in this Section 5, this Agreement or the Plan, any amounts of compensation paid or awarded to you under this Agreement, including the Option and any Shares issued upon exercise of the Option shall be subject to compensation recovery (clawback) pursuant to the terms and conditions of any Company policy in effect on the Grant Date or adopted by the Company at any time thereafter, including the Company's Incentive Compensation Clawback Policy, as may be in effect from time to time or to not required by applicable law, regulations or applicable listing standards of a national securities exchange. You acknowledge and agree that you (i) have received a copy of the Company's Incentive Compensation Clawback Policy, (ii) have had an opportunity to review Company's Incentive Compensation Clawback Policy, (iii) are currently bound by or may hereafter become bound by all the terms and conditions of the Company's Incentive Compensation Clawback Policy and (iv) will comply with any Company request or demand for such recoupment or clawback. (d) Determinations. The Committee shall, in its sole discretion, make all determinations regarding this Section 5, including whether any Prohibited Conduct has occurred, and the determinations by the Committee shall be final and binding on all parties. (e) Company and its Affiliates. All references in this Section 5 to the Company shall include the Company and any of its Subsidiaries and Affiliates.

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6 6. Issuance of Stock. The Option may be vested installments shall accumulate and be exercisable, at any time after becoming exercisable, but not later than the date the Option expires. 5.5. Limitations on
Incentive Stock Options. To (to it is exercisable in accordance with aggregate Fair Market Value (determined as terms hereof) by giving written notice (or any other approved form notice) to date Company in
accordance with procedures established by the Company from time to time. Such written notice shall be signed by the person exercising the Option, shall state the number the grant) of Option Incentive
Stock Options granted under the Option is being exercised and shall otherwise comply with the terms and conditions of this Agreement and the Plan. No Option Shares shall be issued until full payment for the Option Shares has been
made by the Optionee, including all amounts owed for tax withholding. Upon compliance with the terms and conditions of this Agreement and and "incentive stock options" (within the meaning of Section 422 of the Code) granted
under all other plans of or its Subsidiaries (in either case determined without regard to this Section 5.5) are exercisable by a Participant shall accept payment first time during any calendar year exceeds $100,000,
such Incentive Stock Options Option Shares and the amount necessary to satisfy applicable federal, state and local tax withholding and be treated as Nonqualified Stock Options. In applying the limitation in the preceding sentence in
the case of multiple Option grants, unless otherwise required by applicable law, Options which were intended to be Incentive Stock Options shall be treated as Nonqualified Stock Options according deliver order Optionee as soon as
practicable thereafter an appropriate certificate or certificates (which may be which they were granted such that the most recently granted Options are first treated electronic form) for Option Shares Nonqualified Stock Options. 5.6.
Method of Exercise. The exercise of an Option shall be made only by giving notice in the form and to the Person designated by the Company, specifying the number of Shares to be exercised and, to the extent applicable, accompanied by
payment therefor and otherwise in accordance with the Award Agreement pursuant granted. exercised. Exercise Price of any Price for any purchased pursuant to the exercise of an Option and
tax withholding amounts paid in any payable at the time or any combination of, the following forms: (a) cash or its equivalent (e.g., a check) or (b) if permitted by the Committee, the transfer, either actually or by attestation, to the
Company of Shares that have been held by the Participant for at least six (6) months (or such lesser period as may be permitted by the Committee) prior to the of the Option, such transfer to be upon such terms and conditions
Committee Optionee either: (a) in cash, by certified check (c) in the form of other property as determined bank check, or the Committee. In addition, (i) the Committee may provide for the payment of the Option
Price wire transfer; (b) Price and (ii) an
Option may be exercised Price; (c) to whom the Optionee has submitted notice of exercise or otherwise indicated an intent to exercise an Option such that are,
from time to time, deemed acceptable (a so-called "cashless" exercise); or (d) in any combination of (a), (b) or (c) above. The Company shall pay all fees and expenses necessarily incurred Committee. No fractional Shares (or
cash Company lieu thereof) shall be issued upon exercise connection with the issuance an the and the number Shares. The holder Shares that may be purchased upon exercise shall be rounded down to the nearest number
of whole Shares. 5.7. Rights of Participants. No Participant shall be deemed for any purpose to be the owner of any Shares subject to any Option unless and until (a) the this been exercised the rights of a stockholder
only such those Option pursuant covered by the Option which have been registered in the holder's name in the share register of the Company upon the due exercise of the Option. 7. Restrictive Covenants. As a
condition to receipt of the Option and/or delivery of the Shares, which the Optionee acknowledges to be good and valuable consideration for the Optionee's obligations hereunder, the Company and the Optionee agrees as follows: (a)
Confidential Information. The Optionee understands and acknowledges that during the course of employment by the Company and its subsidiaries, and other corporate affiliates, and their successors or assigns (collectively referred to
herein as, the "Employer Group"), the Optionee will have access to and learn about Confidential Information, as defined below. (i) For purposes of this Agreement, "Confidential Information" includes, but is not limited to, all information not
generally known terms of the applicable Award Agreement, (b) the Company shall have issued and delivered Shares (whether or not certificated) to the Participant, a securities broker acting on behalf of the Participant or such other
nominee of the Participant and (c) the Participant's name, or the name of his or her broker or other nominee, shall have been entered as a public, in spoken, printed,

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14 shareholder 7 electronic, or any other form or medium, relating directly or indirectly to: business processes, practices, methods, policies, plans, documents, research, operations, strategies, techniques, agreements, contracts, terms record agreements, transactions, potential transactions, negotiations, pending negotiations, know-how, trade secrets, operating systems, work-in-process, databases, manuals, records, systems, material, sources of material, supplier information, vendor information, financial information, results, accounting information, accounting records, legal information, marketing information, advertising information, pricing information, credit information, design information, payroll information, staffing information, personnel information, associate lists, supplier lists, vendor lists, developments, internal controls, security procedures, drawings, sketches, market studies, sales information, revenue, costs, formulae, notes, communications, algorithms, product plans, designs, styles, models, ideas, inventions, unpublished patent applications, discoveries, experimental processes, experimental results, specifications, customer information, customer lists, client information, client lists, manufacturing information, distributor lists, and buyer lists of the Employer Group or its businesses or any existing or prospective customer, supplier, investor, or other associated third party, or of any other person or entity that has entrusted information to the Employer Group in confidence. The Optionee understands that the above list is not exhaustive, and that Confidential Information also includes other information that is marked or otherwise identified or treated as confidential or proprietary, or that would otherwise appear to a reasonable person to be confidential or proprietary in the context and circumstances in which the information is known or used. The Optionee understands and agrees that Confidential Information includes information developed by the Optionee in the course of the Optionee's employment by the Company as if the Company furnished the same Confidential Information to the Optionee in the first instance. Confidential Information shall not include information that is generally available to and known by the public at the time of disclosure to the Optionee, provided that the disclosure is through no direct or indirect fault of the Optionee or person(s) acting books Optionee's behalf. (ii) Employer Group Creation and Use of Confidential Information. The Optionee understands and acknowledges that the Employer Group has invested, and continues to invest, substantial time, money, and specialized knowledge into developing its resources, creating a customer base, generating customer and potential customer lists, training its associates, and improving its offerings in the field of door, window, trim, and building supplies manufacturing and distribution. The Optionee understands and acknowledges that as a result of these efforts, Employer Group has created, and continues to use and create, Confidential Information. This Confidential Information provides Employer Group with a competitive advantage over others in the marketplace. (iii) Disclosure and Use Restrictions. Nothing herein voids, alters, or modifies the Optionee's obligations under the Company's Code of Business Conduct and Ethics, Optionee's employment agreement, or any other confidentiality agreement entered into by Optionee and the Company. (b) Acknowledgement. The Optionee understands that the nature of Optionee's position gives the Optionee access to and knowledge of Confidential Information and places the Optionee in a position of trust and confidence with the Employer Group. The Optionee understands

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8 and acknowledges that the intellectual services the Optionee provides to the Employer Group are unique, special, or extraordinary. The Optionee further understands and acknowledges that the Employer Group's ability to reserve these for the exclusive knowledge and use of the Employer Group is of great competitive importance and commercial value to the Employer Group, and that improper use or disclosure by the Optionee is likely to result in unfair or unlawful competitive activity. (c) Non-Competition. Because of the Employer Group's legitimate business interest as described in this Agreement and the good and valuable consideration offered to the Optionee, the receipt and sufficiency of which is acknowledged, during the term of Optionee's employment and for the one year beginning on the last day of the Optionee's employment with the Company, whether terminated for any reason or no reason, by the Optionee or the Company, (the "Restricted Period"), the Optionee agrees and covenants not to engage in Prohibited Activity (as defined below) within the United States, or the geographical regions for which the Optionee provides services during the course of employment, whichever is larger. (i) For purposes of this non-compete clause, "Prohibited Activity" is activity in which the Optionee contributes the Optionee's knowledge, directly or indirectly, in whole or in part, as an associate, employer, owner, operator, manager, advisor, consultant, contractor, agent, partner, director, stockholder, officer, volunteer, intern, or any other similar capacity to an entity engaged in the same or similar business as the Employer Group, including those engaged in the business of manufacturing and distribution of doors, windows, trim, and other building supplies manufactured or distributed by the Employer Group. Prohibited Activity also includes activity that may require or inevitably require disclosure of trade secrets, proprietary information, or Confidential Information. (ii) Nothing herein shall prohibit the Optionee from purchasing or owning less than five percent (5%) of the publicly traded securities of any corporation, provided that such ownership represents a passive investment and that the Optionee is not a controlling person of, or a member of a group that controls, such corporation. (iii) This Section 7(c) does not, in any way, restrict or impede the Optionee from exercising protected rights to the extent that such rights cannot be waived by agreement or from complying with any applicable law or regulation or a valid order of a court of competent jurisdiction or an authorized government agency, provided that such compliance does not exceed that required by the law, regulation, or order. (d) Non-Solicitation of Associates. The Optionee agrees and covenants not to directly or indirectly solicit, hire, recruit, or attempt to solicit, hire, or recruit, any associate of the Employer Group ("Covered Associate"), or induce the termination of employment of any Covered Associate for a period of two years, beginning on the last day of the Optionee's employment with the Company, regardless of the reason for the employment termination. (e) Non-Solicitation of Customers. The Optionee understands and acknowledges that because of the Optionee's experience with and relationship to the Employer Group, the Optionee will have access to, and will learn about, much or all of the Employer Group's customer information. "Customer Information" includes, but is not limited to, names, phone

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9 numbers, addresses, email addresses, order history, order preferences, chain of command, pricing information, and other information identifying facts and circumstances specific to the customer and relevant to sales/services. The Optionee understands and acknowledges that loss of any such customer relationship or goodwill will cause significant and irreparable harm to the Employer Group. The Optionee agrees and covenants, for a period of two years, beginning on the last day of the Optionee's employment with the Company, whether terminated for any reason or no reason, by the Optionee or the Company, not to directly or indirectly solicit, contact, or attempt to solicit or contact, using any other form of oral, written, or electronic communication, including, but not limited to, email, regular mail, express mail, telephone, fax, instant message, or social media, including but not limited to Facebook, LinkedIn, Instagram or X (formally known as Twitter), or any other social media platform, whether or not in existence at the time of entering into this agreement, or meet with the Employer Group's current customers for purposes of offering or accepting goods or services similar to or competitive with those offered by the Employer Group. This restriction shall only apply to: (i) Customers or prospective customers the Optionee contacted in any way during the two years prior to the Optionee's termination of employment; (ii) Customers about whom the Optionee has trade secret or Confidential Information; or (iii) Customers about whom the Optionee has information that is not available publicly. (f) Remedies. In the event of a breach or threatened breach by the Optionee of any of the provisions of this Section 7, the Optionee hereby consents and agrees that the Employer Group shall be entitled to, in addition to other available remedies, a temporary or permanent injunction or other equitable relief against such breach or threatened breach from any court of competent jurisdiction, without the necessity of showing any actual damages or that money damages would not afford an adequate remedy, and without the necessity of posting any bond or other security. The aforementioned equitable relief shall be in addition to, not in lieu of, legal remedies, monetary damages, or other available forms of relief. (g) No Preparation for Competition. During the term of the Optionee's employment, Optionee agrees not to undertake preparations for competitive activity prohibited by this Section 7. (h) Notwithstanding anything herein to the contrary, nothing in this Section 7 shall (i) prohibit Optionee from making reports of possible violations of federal law or regulation to any governmental agency or entity in accordance with the provisions of and rules promulgated under Section 21F of the Securities Exchange Act of 1934, as amended, or Section 806 of the Sarbanes-Oxley Act of 2002, or of any other whistleblower protection provisions of federal law or regulation, or (ii) require notification or prior approval by Company of any such report; provided that, Optionee is not authorized to disclose communications with counsel that were made for the purpose of receiving legal advice or that contain legal advice or that are protected by the attorney work product or similar privilege. Furthermore, Optionee shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that is made

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10 (A) in confidence to a federal, state or local government official, either directly or indirectly, or to an attorney, in each case, solely for the purpose of reporting or investigating a suspected violation of law or (B) in a complaint or other document filed in a lawsuit or proceeding, if such filings are made under seal. 8. Non-Assignability. To the extent permitted by state law, the Company may assign this Agreement to any subsidiary or corporate affiliate in the Employer Group or otherwise, or to any successor or assign (whether direct or indirect, by purchase, merger, consolidation, or otherwise) to all or substantially all of the business or assets Thereupon, This Agreement shall inure to Participant benefit of the Employer Group and permitted successors and assigns. The Recipient may not assign this Agreement or any part hereof. Any purported assignment by the Recipient have full voting, dividend be null and void from the initial date of purported assignment. This Option shall not be transferable by the Optionee and shall be exercisable only by the Optionee, except as the Plan or this Agreement may otherwise provide. 9. Expiration. Unless otherwise earlier terminated as provided herein, the Option will expire and terminate as to all Option Shares on the date stated in the Grant Award (the "Expiration Date"). 10. Notices. All notices, consents ownership rights communications required or permitted to be given under or by reason of this Agreement shall be in writing and shall be delivered personally or by e-mail or reputable overnight courier. If to the Company, notice shall be made at its principal corporate headquarters, addressed to the attention of the Corporate Secretary. If to the Optionee, notice shall be made at the Optionee's address on file with the Company. Either party may designate at any time hereafter in writing some other address for notice. 11. Governing Law. This Agreement shall be construed and enforced in accordance with the laws of the State of Delaware. Any litigation against any party to this Agreement arising out of or in any way relating to this Agreement shall be brought in any federal or state court located in the State of Delaware in New Castle County and each of the parties hereby submits to the exclusive jurisdiction of such courts for the purpose of any such litigation; provided, that a final judgment in any such litigation shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. Each party irrevocably and unconditionally agrees not to assert (a) any objection which it may ever have to the laying of venue of any such litigation in any federal or state court located in the State of Delaware in New Castle County, (b) any claim that any such litigation brought in any such court has been brought in an inconvenient forum and (c) any claim that such court does not have jurisdiction litigation. To the extent that service of process by mail is permitted by applicable law, each party irrevocably consents to the service of process in any such litigation in such courts by the mailing of such process by registered or certified mail, postage prepaid, at its address for notices provided for herein.

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11 12. Binding Effect; Entire Agreement. This Agreement, together with the Plan, contains the entire agreement between the parties with respect to the subject matter hereof and supersedes any and all prior understandings, agreements or correspondence between the parties, and shall be binding upon the heirs, executors, administrators, successors and assigns of the parties hereto. 13. Severability. Each provision of this Agreement will be treated as a separate and independent clause and unenforceability of any one clause will in no way impact the enforceability of any other clause. Should any of the provisions of this Agreement be found to be unreasonable or invalid by a court of competent jurisdiction, such provision will be enforceable to the maximum extent enforceable by the law of that jurisdiction. The parties hereby further agree that any such court is expressly authorized to modify any unenforceable provision of this Agreement instead of severing the unenforceable provision from this Agreement in its entirety, whether by rewriting the offending provision, deleting any or all of the offending provision, adding additional language to this Agreement, or by making any other modifications it deems warranted to carry out the intent and agreement of the parties hereby as embodied in this Agreement to the maximum extent permitted by law. The parties hereby expressly agree that this Agreement as so modified by the court shall be binding upon and enforceable against each of them. Should one or more of the provisions of this Agreement be held to be invalid, illegal, or unenforceable in any respect, that invalidity, illegality, or unenforceability shall not affect any other provisions of this Agreement, and if such provision or provisions are not modified as provided above, this Agreement shall be construed as if such invalid, illegal, or unenforceable provisions had not been set forth in this Agreement. 14. Modification and Waiver. No provision of this Agreement may be amended or modified unless the amendment or modification is agreed to in writing and signed by the Recipient and by a duly authorized representative of the Company. No waiver by either party hereto of any breach of any condition or provision of this Agreement to be performed by the other party hereto shall be deemed a waiver of any similar or dissimilar provision or condition at the same or any prior or subsequent time, nor shall the failure of or delay by either party hereto in exercising any right, power, or privilege under this Agreement operate as a waiver to preclude any other or further exercise of any right, power, or privilege. IN WITNESS WHEREOF, the Company and the Optionee have caused this Agreement to be executed on their behalf, by their duly authorized representatives, all on the day and year stated in the Grant Award.

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12 Notice of Non-Qualified Stock Option of JELD-WEN Holding, Inc. Company Name ###COMPANY_NAME### Plan NSO 2017 Plan Participant Id ###EMPLOYEE_NUMBER### Participant Name ###PARTICIPANT_NAME### Participant Address ###HOME_ADDRESS### Grant/Award Type Non-Qualified Stock Option Share Amount ###TOTAL_AWARDS### Grant/Award Date ###GRANT_DATE### VESTING SCHEDULE ###VEST_SCHEDULE_TABLE###

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RESTRICTED STOCK UNIT AWARD AGREEMENT THIS AGREEMENT is made as of the date (the “Grant Date”) stated on the last page hereto (the “Grant Award”) between JELD-WEN Holding, Inc., a Delaware corporation (the “Company”), and the individual named on the Grant Award (the “Recipient”). WHEREAS, the Company desires to grant to the Recipient an award of restricted stock units pursuant to the Company’s 2017 Omnibus Equity Plan, as may be amended from time to time (the “Plan”); and WHEREAS, the Company and the Recipient understand and agree that any capitalized terms used herein, if not otherwise defined, shall have the same meanings as in the Plan (the Recipient being referred to in the Plan as Participant). NOW, THEREFORE, in consideration of the following mutual covenants and for other good and valuable consideration, including specifically, Recipient’s acknowledgement and agreement of the terms contained in Section 3, the parties agree as follows: 1. Award and Terms of Restricted Stock Units. The Company awards to the Recipient under the Plan an aggregate number of Restricted Stock Units (the “Award”), subject to the restrictions, conditions and limitations set forth in this Agreement and in the Plan, which is incorporated herein by reference. The Recipient acknowledges receipt of a copy of the Plan and acknowledges that the definitive records pertaining to the grant of this Award, and settlement of rights hereunder, shall be retained by the Company. (a) Rights under Restricted Stock Units. A Restricted Stock Unit (“RSU”) obligates the Company, upon vesting and in accordance with this Agreement, to issue to the Recipient one Share. (b) Vesting Dates. The RSUs awarded under this Agreement shall initially be 100% unvested and subject to forfeiture. Subject to Sections 1(c), 1 (e), 2 and 3, the RSUs shall vest in the number of installments stated in the Grant Award on the specified anniversary of the Grant Date (each, a “Vesting Date”), so long as the Recipient continues to be an Eligible Individual at all times from the Grant Date through the relevant Vesting Date, except as provided below. (c) Forfeiture of RSUs on Termination. If the Recipient’s employment with the Company or any of its subsidiaries is terminated for any reason other than Disability, death or Retirement, all outstanding but unvested RSUs awarded pursuant to this Agreement shall be immediately and automatically forfeited to the Company, and the Recipient shall have no right to receive the underlying Shares. (d) Disability, Death and Retirement. Upon the termination of the Recipient’s employment with the Company or any of its subsidiaries by reason of Disability or death, all Exhibit 10.27

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2 outstanding but unvested RSUs awarded pursuant to this Agreement shall continue to vest on each Vesting Date following such termination as if the Recipient had continued to be an Eligible Individual on such Vesting Dates. Upon termination of the Recipient's employment with the Company or any of its subsidiaries by reason of Retirement, the outstanding but unvested RSUs awarded shall be prorated based on the percentage of time between the Grant Date and the Vesting Dates in which the Recipient was considered an Eligible Individual. For purposes of this Agreement, unless otherwise expressly defined by an applicable jurisdiction, an employee is eligible for "Retirement" at any time on or after (i) attaining age fifty-five (55) with ten (10) years of service with the Company and its subsidiaries or (ii) attaining age sixty (60) with five (5) years of service with the Company and its subsidiaries. In no event does Retirement include any termination for cause as determined in the sole discretion of the Board or any committee of the Board. Human Resources shall have sole discretion to determine and record Recipient's "years of service" under this section. (e) Leaves of Absence. Notwithstanding anything to the contrary in the Plan and subject to applicable law, with respect to the RSUs, the Committee may, in its sole discretion, determine whether the Recipient is considered to be an Eligible Individual if the Recipient is on a leave of absence that has been approved by the Company's head of Human Resources, for any reason, provided that rights to the RSUs during certain long-term leaves of absence (as determined by the Committee) will be limited to the extent to which those rights were earned or vested when the leave of absence began. For clarity and subject to applicable law, any limitations on rights to the RSUs during such leaves of absence will cease as of the date such leave of absence has ended. (f) Restrictions on Transfer. The Recipient may not sell, transfer, assign, pledge or otherwise encumber or dispose of the RSUs. (g) No Stockholder Rights. The Recipient shall have no rights as a stockholder with respect to the RSUs or the underlying the RSUs until the underlying Shares are issued to the Recipient. (h) Delivery Date for the Shares Underlying the Vested RSU. As soon as practicable, but in no event later than 30 days following a date on which any RSU vests, subject to the Recipient's deferral election, if any, the Company will issue to the Recipient the Share underlying the then-vested RSU, subject to Section 1(i). The Shares will be issued in the Recipient's name or in the event of the Recipient's (i) death, in the name of either (1) the beneficiary designated by the Recipient on a form supplied by the Company or (2) if the Recipient has not designated a beneficiary, the person or persons establishing rights of ownership by will or under the laws of descent and distribution and (ii) Disability, in the name of the Recipient's estate or personal representative. (i) Taxes and Tax Withholding. The Recipient acknowledges and agrees that no election under Section 83(b) of the Internal Revenue Code of 1986, as amended, can or will be made with respect to the RSUs. The Recipient acknowledges that on each date that Shares underlying the RSUs are issued to the Recipient (the "Payment Date"), the Fair Market Value on that date of the Shares so issued will be treated as ordinary compensation income for federal and state income and FICA tax purposes, and that the Company will be required to withhold taxes on these income amounts. To satisfy the required minimum withholding amount, the Company shall withhold from the Shares otherwise issuable the number of Shares having a Fair Market Value equal to the minimum withholding amount. Alternatively, the Company may, at its option, permit the Recipient to pay such withholding amount in cash under procedures established by the

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3 Company. (j) Dividend Equivalent Distributions. If a dividend or other distribution is made in respect of Shares before a Payment Date, for each RSU that is settled on such applicable Payment Date, a Recipient will be entitled to receive (on the applicable Payment Date) the per Share amount received by other stockholders in respect of a Share in connection with such dividend or distribution (such dividends or distributions, the "Dividend Equivalent Distributions"). For the sake of clarity, Dividend Equivalent Distributions that relate to RSUs that are not settled on a Payment Date will be made if and when the Payment Date related to such RSUs occurs. To the extent any such RSUs are forfeited, any Dividend Equivalent Distributions associated with such RSUs shall similarly be forfeited. (k) Not a Contract of Employment. Nothing in the Plan or this Agreement shall confer upon the Recipient any right to be continued in the employment of the Company or any Affiliate, or to interfere in any way with the right of the Company or any parent or subsidiary by whom the Recipient is employed to terminate the Recipient's employment at any time or for any reason, with or without cause, or to decrease the Recipient's compensation or benefits. 2. Prohibited Conduct; Restatements. (a) Consequences of Prohibited Conduct. If the Company determines that the Recipient has engaged in any Prohibited Conduct (as defined in Section 2(b)), then: (i) The Recipient shall immediately forfeit all outstanding RSUs awarded pursuant to this Agreement and shall have no right to receive the underlying Shares; and (ii) If the Payment Date for any RSUs has occurred, and the Company determines that Prohibited Conduct occurred on or before the first anniversary of the Vesting Date for those RSUs, the Recipient shall repay and transfer to the Company (A) the number of Shares issued to the Recipient under this Agreement on that Payment Date (the "Forfeited Shares"), plus (B) the amount of cash equal to the withholding taxes paid by withholding Shares (if any) from the Recipient on the respective Payment Date. If any Forfeited Shares have been sold by the Recipient prior to the Company's demand for repayment, the Recipient shall repay to the Company (A) 100% of the proceeds of such sale or sales, plus (B) the amount of cash equal to the withholding taxes paid by withholding Shares (if any) from the Recipient on the respective Payment Date. (b) Prohibited Conduct. Each of the following constitutes "Prohibited Conduct": (i) the conviction or entry of a plea of guilty or nolo contendere to (A) any felony or (B) any crime (whether or not a felony) involving moral turpitude, fraud, theft, breach of trust or other similar acts, whether under the laws of the United States or any state thereof or any similar foreign law to which the person may be subject; (ii) being engaged or having engaged in conduct constituting breach of fiduciary duty, dishonesty, willful misconduct or material neglect relating to the Company or any of its subsidiaries or the performance of a person's duties;

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4 (iii) appropriation (or an overt act attempting appropriation) of a material business opportunity of the Company or any of its subsidiaries; (iv) misappropriation (or an overt act attempting misappropriation) of any funds of the Company or any of its subsidiaries; (v) the willful failure to: (A) follow a reasonable and lawful directive of the Company or any of its subsidiaries at which a person is employed or provides services, or the Board of Directors or (B) comply with any written rules, regulations, policies or procedures of the Company or a subsidiary at which a person is employed or to which he or she provides services which, if not complied with, would reasonably be expected to have more than a de

minimis adverse effect on the business or financial condition of the Company; (vi) violation of a person's employment, consulting, separation or similar agreement with the Company or any non-disclosure, non-solicitation or non-competition covenant in any other agreement to which the person is subject; (vii) during the Recipient's employment or service with the Company or at any time after termination for any reason, the Recipient, in violation of any Company policies or agreements with the Company, discloses or misuses any of the Company's trade secrets or other confidential information regarding the Company, including without limitation, matters relating to cost data, formulas, patterns, compilations, programs, devices, methods, techniques, processes, manufacturing processes, business strategy and plans, customer information, pricing information, supplier information, the Company's policies and procedures and other financial data of the Company; (viii) deliberate and continued failure to perform material duties to the Company or any of its subsidiaries; (ix) violation of the Company's Code of Business Conduct and Ethics, as it may be amended from time to time; or (x) during the Recipient's employment or service with the Company or at any time during the two-year period following termination for any reason, the Recipient: (A) directly or indirectly competes with the Company, accepts employment with any entity that directly or indirectly competes with the Company or otherwise approaches, solicits or accepts business from any customer, supplier or vendor of the Company in direct or indirect competition with the Company; (B) approaches, counsels or attempts to induce any person who is then in the employ of the Company to leave his or her employ; or employs or attempts to employ any such person or any person who at any time during the preceding twelve (12) months was in the employ of the Company; or

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5 (C) aids, assists or counsels any other person, firm or corporation to do any of the above. (c) Restatement of Financial Statements; Clawback Policy. In addition to the other provisions in this Section 2, this Agreement, or the Plan, any amounts of compensation paid or awarded to you under this Agreement, including the RSUs and any Shares issued in connection with the RSUs, shall be subject to compensation recovery (clawback) pursuant to the terms and conditions of any Company policy in effect on the Grant Date or adopted by the Company at any time thereafter, including the Company's Incentive Compensation Clawback Policy, as may be in effect from time to time or to the extent required by applicable law, regulations or applicable listing standards of a national securities exchange. You acknowledge and agree that you (i) have received a copy of the Company's Incentive Compensation Clawback Policy, (ii) have had an opportunity to review Company's Incentive Compensation Clawback Policy, (iii) are currently bound by or may hereafter become bound by all the terms and conditions of the Company's Incentive Compensation Clawback Policy and (iv) will comply with any Company request or demand for such recoupment or clawback. (d) Determinations. The Committee shall, in its sole discretion, make all determinations regarding this Section 2, including whether any Prohibited Conduct has occurred, and the determinations by the Committee shall be final and binding on all parties. (e) Company and its Affiliates. All references in this Section 2 to the Company shall include the Company and any of its Subsidiaries and Affiliates. 3. Restrictive Covenants. As a condition to receipt of the RSUs and/or delivery of the Shares, which the Recipient acknowledges to be good and valuable consideration for the Recipient's obligations hereunder, the Company and the Recipient agrees as follows: (a) Confidential Information. The Recipient understands and acknowledges that during the course of employment by the Company and its subsidiaries, and other corporate affiliates, and their successors or assigns (collectively referred to herein as, the "Employer Group"), the Recipient will have access to and learn about Confidential Information, as defined below. (i) For purposes of this Agreement, "Confidential Information" includes, but is not limited to, all information not generally known to the public, in spoken, printed, electronic, or any other form or medium, relating directly or indirectly to: business processes, practices, methods, policies, plans, documents, research, operations, strategies, techniques, agreements, contracts, terms of agreements, transactions, potential transactions, negotiations, pending negotiations, know-how, trade secrets, operating systems, work-in-process, databases, manuals, records, systems, material, sources of material, supplier information, vendor information, financial information, results, accounting information, accounting records, legal information, marketing information, advertising information, pricing information, credit information, design information, payroll information, staffing information, personnel information, associate lists, supplier lists, vendor lists, developments, internal controls, security procedures, drawings, sketches, market studies, sales information, revenue, costs, formulae, notes, communications, algorithms, product plans, designs, styles, models, ideas, inventions, unpublished patent applications, discoveries, experimental processes, experimental results, specifications, customer information.

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6 customer lists, client information, client lists, manufacturing information, distributor lists, and buyer lists of the Employer Group or its businesses or any existing or prospective customer, supplier, investor, or other associated third party, or of any other person or entity that has entrusted information to the Employer Group in confidence. The Recipient understands that the above list is not exhaustive, and that Confidential Information also includes other information that is marked or otherwise identified or treated as confidential or proprietary, or that would otherwise appear to a reasonable person to be confidential or proprietary in the context and circumstances in which the information is known or used. The Recipient understands and agrees that Confidential Information includes information developed by the Recipient in the course of the Recipient's employment by the Company as if the Company furnished the same Confidential Information to the Recipient in the first instance. Confidential Information shall not include information that is generally available to and known by the public at the time of disclosure to the Recipient, provided that the disclosure is through no direct or indirect fault of the Recipient or person(s) acting on the Recipient's behalf. (ii) Employer Group Creation and Use of Confidential Information. The Recipient understands and acknowledges that the Employer Group has invested, and continues to invest, substantial time, money, and specialized knowledge into developing its resources, creating a customer base, generating customer and potential customer lists, training its associates, and improving its offerings in the field of door, window, trim, and building supplies manufacturing and distribution. The Recipient understands and acknowledges that as a result of these efforts, Employer Group has created, and continues to use and create, Confidential Information. This Confidential Information provides Employer Group with a competitive advantage over others in the marketplace. (iii) Disclosure and Use Restrictions. Nothing herein voids, alters, or modifies the Recipient's obligations under the Company's Code of Business Conduct and Ethics, Recipient's employment agreement, or any other confidentiality agreement entered into by Recipient and the Company. (b) Acknowledgement. The Recipient understands that the nature of Recipient's position gives the Recipient access to and knowledge of Confidential Information and places the Recipient in a position of trust and confidence with the Employer Group. The Recipient understands and acknowledges that the intellectual services the Recipient provides to the Employer Group are unique, special, or extraordinary. The Recipient further understands and acknowledges that the Employer Group's ability to reserve these for the exclusive knowledge and use of the Employer Group is of great competitive importance and commercial value to the Employer Group, and that improper use or disclosure by the Recipient is likely to result in unfair or unlawful competitive activity. (c) Non-Competition. Because of the Employer Group's legitimate business interest as described in this Agreement and the good and valuable consideration offered to the Recipient, the receipt and sufficiency of which is acknowledged, during the term of Recipient's employment and for the one year beginning on the last day of the Recipient's employment with the Company, whether terminated for any reason or no reason, by the Recipient or the Company, (the "Restricted Period"), the Recipient agrees and covenants not to engage in Prohibited Activity (as defined below) within the United States, or the geographical regions for which the Recipient

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7 provides services during the course of employment, whichever is larger. (i) For purposes of this non-compete clause, "Prohibited Activity" is activity in which the Recipient contributes the Recipient's knowledge, directly or indirectly, in whole or in part, as an associate, employer, owner, operator, manager, advisor, consultant, contractor, agent, partner, director, stockholder, officer, volunteer, intern, or any other similar capacity to an entity engaged in the same or similar business as the Employer Group, including those engaged in the business of manufacturing and distribution of doors, windows, trim, and other building supplies manufactured or distributed by the Employer Group. Prohibited Activity also includes activity that may require or inevitably require disclosure of trade secrets, proprietary information, or Confidential Information. (ii) Nothing herein shall prohibit the Recipient from purchasing or owning less than five percent (5%) of the publicly traded securities of any corporation, provided that such ownership represents a passive investment and that the Recipient is not a controlling person of, or a member of a group that controls, such corporation. (iii) This Section 3(c) does not, in any way, restrict or impede the Recipient from exercising protected rights to the extent that such rights cannot be waived by agreement or from complying with any applicable law or regulation or a valid order of a court of competent jurisdiction or an authorized government agency, provided that such compliance does not exceed that required by the law, regulation, or order. (d) Non-Solicitation of Associates. The Recipient agrees and covenants not to directly or indirectly solicit, hire, recruit, or attempt to solicit, hire, or recruit, any associate of the Employer Group ("Covered Associate"), or induce the termination of employment of any Covered Associate for a period of two years, beginning on the last day of the Recipient's employment with the Company, regardless of the reason for the employment termination. (e) Non-Solicitation of Customers. The Recipient understands and acknowledges that because of the Recipient's experience with and relationship to the Employer Group, the Recipient will have access to, and will learn about, much or all of the Employer Group's customer information. "Customer Information" includes, but is not limited to, names, phone numbers, addresses, email addresses, order history, order preferences, chain of command, pricing information, and other information identifying facts and circumstances specific to the customer and relevant to sales/services. The Recipient understands and acknowledges that loss of any such customer relationship or goodwill will cause significant and irreparable harm to the Employer Group. The Recipient agrees and covenants, for a period of two years, beginning on the last day of the Recipient's employment with the Company, whether terminated for any reason or no reason, by the Recipient or the Company, not to directly or indirectly solicit, contact, or attempt to solicit or contact, using any other form of oral, written, or electronic communication, including, but not limited to, email, regular mail, express mail, telephone, fax, instant message, or social media, including but not limited to Facebook, LinkedIn, Instagram or X (formally known as Twitter), or any other social media platform, whether or not in existence at the time of entering into this agreement, or meet with the Employer Group's current customers for purposes of offering or accepting goods or services similar to or competitive with those offered by the Employer Group. This restriction shall only apply to:

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8 (i) Customers or prospective customers the Recipient contacted in any way during the two years prior to the Recipient's termination of employment; (ii) Customers about whom the Recipient has trade secret or Confidential Information; or (iii) Customers about whom the Recipient has information that is not available publicly. (f) Remedies. In the event of a breach or threatened breach by the Recipient of any of the provisions of this Section 3, the Recipient hereby consents and agrees that the Employer Group shall be entitled to, in addition to other available remedies, a temporary or permanent injunction or other equitable relief against such breach or threatened breach from any court of competent jurisdiction, without the necessity of showing any actual damages or that money damages would not afford an adequate remedy, and without the necessity of posting any bond or other security. The aforementioned equitable relief shall be in addition to, not in lieu of, legal remedies, monetary damages, or other available forms of relief. (g) No Preparation for Competition. During the term of the Recipient's employment, Recipient agrees not to undertake preparations for competitive activity prohibited by this Section 3. (h) Notwithstanding anything herein to the contrary, nothing in this Section 3 shall (i) prohibit Recipient from making reports of possible violations of federal law or regulation to any governmental agency or entity in accordance with the provisions of and rules promulgated under Section 21F of the Securities Exchange Act of 1934, as amended, or Section 806 of the Sarbanes-Oxley Act of 2002, or of any other whistleblower protection provisions of federal law or regulation, or (ii) require notification or prior approval by Company of any such report; provided that, Recipient is not authorized to disclose communications with counsel that were made for the purpose of receiving legal advice or that contain legal advice or that are protected by the attorney work product or similar privilege. Furthermore, Recipient shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that is made (A) in confidence to a federal, state or local government official, either directly or indirectly, or to an attorney, in each case, solely for the purpose of reporting or investigating a suspected violation of law or (B) in a complaint or other document filed in a lawsuit or proceeding, if such filings are made under seal. 4. Notices. All notices, consents and other communications required or permitted to be given under or by reason of this Agreement shall be in writing and shall be delivered personally or by e-mail or reputable overnight courier. If to the Company, notice shall be made at its principal corporate headquarters, addressed to the attention of the Corporate Secretary. If to the Recipient, notice shall be made at Recipient's address on file with the Company. Either party may designate at any time hereafter in writing some other address for notice. 5. Governing Law. This Agreement shall be construed and enforced in accordance with the laws of the State of Delaware. Any litigation against any party to this Agreement arising out of or in any way relating to this Agreement shall be brought in any federal or state court located in the

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9 State of Delaware in New Castle County and each of the parties hereby submits to the exclusive jurisdiction of such courts for the purpose of any such litigation; provided, that a final judgment in any such litigation shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. Each party irrevocably and unconditionally agrees not to assert (a) any objection which it may ever have to the laying of venue of any such litigation in any federal or state court located in the State of Delaware in New Castle County, (b) any claim that any such litigation brought in any such court has been brought in an inconvenient forum and (c) any claim that such court does not have jurisdiction with respect to such litigation. To the extent that service of process by mail is permitted by applicable law, each party irrevocably consents to the service of process in any such litigation in such courts by the mailing of such process by registered or certified mail, postage prepaid, at its address for notices provided for herein. 6. Binding Effect; Entire Agreement. This Agreement, together with the Plan and any written employment agreement, contains the entire agreement between the parties with respect to the subject matter hereof and supersedes any and all prior understandings, agreements or correspondence between the parties, and shall be binding upon the heirs, executors, administrators, successors and assigns of the parties hereto. 7. Severability. Each provision of this Agreement will be treated as a separate and independent clause and unenforceability of any one clause will in no way impact the enforceability of any other clause. Should any of the provisions of this Agreement be found to be unreasonable or invalid by a court of competent jurisdiction, such provision will be enforceable to the maximum extent enforceable by the law of that jurisdiction. The parties hereby further agree that any such court is expressly authorized to modify any unenforceable provision of this Agreement instead of severing the unenforceable provision from this Agreement in its entirety, whether by rewriting the offending provision, deleting any or all of the offending provision, adding additional language to this Agreement, or by making any other modifications it deems warranted to carry out the intent and agreement of the parties hereby as embodied in this Agreement to the maximum extent permitted by law. The parties hereby expressly agree that this Agreement as so modified by the court shall be binding upon and enforceable against each of them. Should one or more of the provisions of this Agreement be held to be invalid, illegal, or unenforceable in any respect, that invalidity, illegality, or unenforceability shall not affect any other provisions of this Agreement, and if such provision or provisions are not modified as provided above, this Agreement shall be construed as if such invalid, illegal, or unenforceable provisions had not been set forth in this Agreement. 8. Successors and Assigns. To the extent permitted by state law, the Company may assign this Agreement to any subsidiary or corporate affiliate in the Employer Group or otherwise, or to any successor or assign (whether direct or indirect, by purchase, merger, consolidation, or otherwise) to all or substantially all of the business or assets of the Company. This Agreement shall inure to the benefit of the Employer Group and permitted successors and assigns. The Recipient may not assign this Agreement or any part hereof. Any purported assignment by the Recipient shall be null and void from the initial date of purported assignment. 9. Modification and Waiver. No provision of this Agreement may be amended or modified unless the amendment or modification is agreed to in writing and signed by the Recipient and by a duly authorized representative of the Company. No waiver by either party hereto of any breach of any condition or provision of this Agreement to be performed by the other party hereto

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10 shall be deemed a waiver of any similar or dissimilar provision or condition at the same or any prior or subsequent time, nor shall the failure of or delay by either party hereto in exercising any right, power, or privilege under this Agreement operate as a waiver to preclude any other or further exercise of any right, power, or privilege. IN WITNESS WHEREOF, the Company and the Recipient have caused this Agreement to be executed on their behalf, by their duly authorized representatives, all on the day and year stated in the Grant Award.

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11 Notice of Restricted Stock Units of JELD-WEN Holding, Inc. Company Name JELD-WEN Holding, Inc. Plan RSU 2017 Participant Id Participant Name Participant Address Grant/Award Type Restricted Stock Units Share Amount Grant/Award Date VESTING SCHEDULE Vesting Date No. of Shares Percent

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PERFORMANCE SHARE UNIT AWARD AGREEMENT THIS AGREEMENT is made as of the date (the "Grant Date") stated on the last page hereto (the "Grant Award") between JELD-WEN Holding, Inc., a Delaware corporation (the "Company"), the individual named on the Grant Award (the "Recipient"). WHEREAS, the Company desires to grant to the Recipient an award of performance share units pursuant to the Company's 2017 Omnibus Equity Plan, as may be amended from time to time (the "Plan"); and WHEREAS, the Company and the Recipient understand and agree that any capitalized terms used herein, if not otherwise defined, shall have the same meanings as in the Plan (the Recipient being referred to in the Plan as Participant). NOW, THEREFORE, in consideration of the following mutual covenants and for other good and valuable consideration, including specifically, Recipient's acknowledgement and agreement of the terms contained in Section 4, the parties agree as follows: 1. Award and Terms of Performance Share Units. The Company awards to the Recipient under the Plan (the "Award") a target of ________ Performance Share Units (the "Target Award"), for the three-year period of January 1, ____ to December 31, ____ (the "Award Period"), subject to the restrictions, conditions and limitations set forth in this Agreement and in the Plan, which is incorporated herein by reference. The Recipient acknowledges receipt of a copy of the Plan and acknowledges that the definitive records pertaining to the grant of this Award, and settlement of rights hereunder, shall be retained by the Company. (a) Rights under Performance Share Units. A Performance Share Unit ("PSU") obligates the Company, following the Award Period, to issue to the Recipient one Share, subject to the provisions of this Agreement, including but in no way limited to the Performance Objectives set forth in Section 2 of this Agreement. (b) Award Period. The PSUs awarded under this Agreement shall initially be 100% unvested and subject to forfeiture. Subject to Sections 1(c), 1(e), 2, 3 and 4, the PSUs shall vest and be released from the forfeiture provisions on the third anniversary of the Grant Date (the "Vesting Date"), subject to verification of the satisfaction of the Performance Objectives in accordance with this Agreement and the Plan and so long as the Recipient continues to be an Eligible Individual at all times from the Grant Date through the relevant Vesting Date, except as provided below. (c) Forfeiture of PSUs on Termination. If the Recipient's employment with the Company or any of its subsidiaries is terminated for cause as determined in the sole discretion of the Board or any committee of the Board, all outstanding but unvested PSUs awarded pursuant to this Agreement shall be immediately and automatically forfeited to the Company, and the Recipient shall have no right to receive the underlying Shares. Exhibit 10.28

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2 (d) Disability, Death and Retirement. Upon the termination of the Recipient's employment with the Company or any of its subsidiaries by reason of Disability, death or Retirement prior to the Vesting Date, a number of the PSUs shall vest and be released from the forfeiture provisions on the Vesting Date equal to the (i) the Payout (as defined below) that the Recipient would have received under this Agreement had the Recipient continued to be an Eligible Individual on such Vesting Date multiplied by (ii) a fraction the numerator of which is the number of days during the Award Period prior to the Recipient's termination of employment and the denominator of which is the number of days during the Award Period. For purposes of this Agreement, unless otherwise expressly defined by an applicable jurisdiction, an employee is eligible for "Retirement" at any time on or after (i) attaining age fifty-five (55) with ten (10) years of service with the Company and its subsidiaries or (ii) attaining age sixty (60) with five (5) years of service with the Company and its subsidiaries. In no event does Retirement include any termination for cause as determined in the sole discretion of the Board or any committee of the Board. Human Resources shall have sole discretion to determine and record Recipient's "years of service" under this section. (e) Leaves of Absence. Notwithstanding anything to the contrary in the Plan and subject to applicable law, with respect to the PSUs, the Committee may, in its sole discretion, determine whether the Recipient is considered to be an Eligible Individual if the Recipient is on a leave of absence that has been approved by the Company's head of Human Resources, for any reason, provided that rights to the PSUs during certain long-term leaves of absence (as determined by the Committee) will be limited to the extent to which those rights were earned or vested when the leave of absence began. For clarity and subject to applicable law, any limitations on rights to the PSUs during such leaves of absence will cease as of the date such leave of absence has ended. (f) Restrictions on Transfer. The Recipient may not sell, transfer, assign, pledge or otherwise encumber or dispose of the PSUs. (g) No Stockholder Rights. The Recipient shall have no rights as a stockholder with respect to the PSUs or the Shares underlying the PSUs until the underlying Shares are issued to the Recipient. (h) Delivery Date for the Shares Underlying the Vested PSU. As soon as practicable, but in no event later than 30 days following the publication of the Annual Report for the final year of the Award Period, the Company will determine the portion of the Award that has vested and, subject to the Recipient's deferral election, if any, shall issue to the Recipient the Shares underlying the vested PSUs, subject to Section 1(i). The Shares will be issued in the Recipient's name or, in the event of the Recipient's (i) death, in the name of either (1) the beneficiary designated by the Recipient on a form supplied by the Company or (2) if the Recipient has not designated a beneficiary, the person or persons establishing rights of ownership by will or under the laws of descent and distribution and (ii) Disability, in the name of the Recipient's estate or personal representative. (i) Taxes and Tax Withholding. The Recipient acknowledges and agrees that no election under Section 83(b) of the Internal Revenue Code of 1986, as amended, can or will be made with respect to the PSUs. The Recipient acknowledges that on the date that Shares underlying the PSUs are issued to the Recipient (the "Payment Date"), the Fair Market Value on that date of the Shares so issued will be treated as ordinary compensation income for federal and state income and FICA tax purposes, and that the Company will be required to withhold taxes on these income amounts. To satisfy the required minimum withholding amount, the Company shall withhold from

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3 the Shares otherwise issuable the number of Shares having a Fair Market Value equal to the minimum withholding amount. Alternatively, the Company may, at its option, permit the Recipient to pay such withholding amount in cash under procedures established by the Company. (j) Dividend Equivalent Distributions. If a dividend or other distribution is made in respect of Shares before the Payment Date, for each PSU that is delivered on the Payment Date, Recipient will be entitled to receive (on the applicable Payment Date) the per Share amount received by other stockholders in respect of a Share in connection with such dividend or distribution (such dividends or distributions, the "Dividend Equivalent Distributions"). For the sake of clarity, Dividend Equivalent Distributions that relate to PSUs that are not settled on a Payment Date will be made if and when the Payment Date related to such PSUs occurs. To the extent any PSUs are forfeited or do not vest, any Dividend Equivalent Distributions associated with such PSUs shall similarly be forfeited. (k) Not a Contract of Employment. Nothing in the Plan or this Agreement shall confer upon the Recipient any right to be continued in the employment of the Company or any Affiliate, or to interfere in any way with the right of the Company or any parent or subsidiary by whom the Recipient is employed to terminate the Recipient's employment at any time or for any reason, with or without cause, or to decrease the Recipient's compensation or benefits. 2. Performance Objectives. 2.1 Payout. Subject to possible enhancement or reduction under Section 2.5, or reduction under Section 3, the number of PSUs that vest (the "Payout") shall be determined by multiplying the Payout Factor (as defined below) by the Target Award, rounded down to the nearest whole number (the "Target Share Amount"). The Payout Factor shall be determined pursuant to Section 2.2; provided, however, that the Payout Factor shall not be greater than 150% and the Payout Factor shall be 0% if the Performance Measure Result (as defined below) for all Performance Objectives is less than Threshold. 2.2 Payout Factor. (a) The "Payout Factor" shall be the weighted average of the Performance Measure Payout Factor (as defined below) for each Performance Objective during the Award Period. The Performance Measure Payout Factor achieved by the Company for each Performance Objective during the Award Period shall be determined as follows: If the Performance Measure Result for a Performance Objective is: Then the "Performance Measure Payout Factor" for that Performance Objective shall be: Less than Threshold 0% Threshold 50% Target 100% Maximum 150%

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4 If the result achieved by the Company during the Award Period for the Performance Measure ("Performance Measure Result") is between any two Performance Measure data points set forth in the below table, the Performance Measure Payout Factor shall be interpolated as follows: The excess of the Performance Measure Result over the Performance Measure of the lower data point shall be divided by the difference between the Performance Measure of the higher data point and the Performance Measure of the lower data point. The resulting fraction shall be multiplied by the difference between the Performance Measure Payout Factors in the above table corresponding to the two data points. The product of that calculation shall be rounded to the nearest hundredth of a percentage point and then added to the Performance Measure Payout Factor corresponding to the lower data point, and the resulting sum shall be the Performance Measure Payout Factor for that Performance Objective. (b) The "Performance Measures" for each Performance Objective, together with the weight attributed to the Performance Measure Payout Factor for each Performance Objective for purposes of calculating the Payout Factor is as follows: Performance Objective Weight Performance Measure Threshold Target Maximum Adjusted Return on Invested Capital 50% __% __% __% Total Shareholder Return 50% 25th Percentile 50th Percentile >= 75th Percentile 2.3 Adjusted Return on Invested Capital ("ROIC"). For purposes of this Agreement, Adjusted ROIC is defined as the average of the annual ROIC as announced by the Company over the three years of the Award Period, as may be adjusted pursuant to Section 2.5. 2.4 Total Shareholder Return ("TSR"). For purposes of this Agreement, the TSR based on share price for the Award Period will be determined by the Committee. Should the relative TSR to our peer group be at the 25th percentile of the Russell 3000 index, as determined in the sole discretion of the Committee, the Payout Factor will be 50%. Should the relative TSR to our peer group be at the 50th percentile of the Russell 3000 index, as determined in the sole discretion of the Committee, the Payout Factor will be 100%. Should the relative TSR to our peer group be at the 75th percentile of the Russell 3000 index, as determined in the sole discretion of the Committee, the Payout Factor will be 150%. Should the Russell 3000 index be unavailable or inappropriate for use as determined by the Committee, as determined in its sole discretion, the Committee shall determine and use a comparable index for purposes of calculating TSR under this

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5 Section. 2.5 Adjustments. The Committee may, at any time, approve adjustments to the calculation of a Performance Measure, Performance Measure Result, or the component parts thereof to take into account such unanticipated circumstances or significant, non-recurring or unplanned events as the Committee may determine in its sole discretion, and such adjustments may increase or decrease the Performance Measure, Performance Measure Results, or the component parts thereof. Circumstances that may be the basis for such adjustments include, but shall not be limited to, any change in applicable accounting rules or principles; any gain or loss on the disposition of a business; impairment of assets; dilution caused by acquiring a business; tax changes and tax impacts of other changes; changes in applicable laws and regulations; changes in rate case timing; changes in the Company's structure; and any other circumstances outside of management's control or the ordinary course of business. 3. Prohibited Conduct; Restatements. (a) Consequences of Prohibited Conduct. If the Company determines that the Recipient has engaged in any Prohibited Conduct (as defined in Section 3(b)), then: (i) The Recipient shall immediately forfeit all outstanding PSUs awarded pursuant to this Agreement and shall have no right to receive the underlying Shares; and (ii) If the Payment Date for any PSUs has occurred, and the Company determines that Prohibited Conduct occurred on or before the first anniversary of the Payment Date for those PSUs, the Recipient shall repay and transfer to the Company (A) the number of Shares issued to the Recipient under this Agreement on that Payment Date (the "Forfeited Shares"), plus (B) the amount of cash equal to the withholding taxes paid by withholding Shares (if any) from the Recipient on the respective Payment Date. If any Forfeited Shares have been sold by the Recipient prior to the Company's demand for repayment, the Recipient shall repay to the Company (A) 100% of the proceeds of such sale or sales, plus (B) the amount of cash equal to the withholding taxes paid by withholding Shares (if any) from the Recipient on the respective Payment Date. (b) Prohibited Conduct. Each of the following constitutes "Prohibited Conduct": (i) the conviction or

entry of a plea of guilty or nolo contendere to (A) any felony or (B) any crime (whether or not a felony) involving moral turpitude, fraud, theft, breach of trust or other similar acts, whether under the laws of the United States or any state thereof or any similar foreign law to which the person may be subject; (ii) being engaged or having engaged in conduct constituting breach of fiduciary duty, dishonesty, willful misconduct or material neglect relating to the Company or any of its subsidiaries or the performance of a person's duties; (iii) appropriation (or an overt act attempting appropriation) of a material

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6 business opportunity of the Company or any of its subsidiaries; (iv) misappropriation (or an overt act attempting misappropriation) of any funds of the Company or any of its subsidiaries; (v) the willful failure to: (A) follow a reasonable and lawful directive of the Company or any of its subsidiaries at which a person is employed or provides services, or the Board of Directors or (B) comply with any written rules, regulations, policies or procedures of the Company or a subsidiary at which a person is employed or to which he or she provides services which, if not complied with, would reasonably be expected to have more than a de minimis adverse effect on the business or financial condition of the Company; (vi) violation of a person's employment, consulting, separation or similar agreement with the Company or any non-disclosure, non-solicitation or non-competition covenant in any other agreement to which the person is subject; (vii) during the Recipient's employment or service with the Company or at any time after termination for any reason, the Recipient, in violation of any Company policies or agreements with the Company, discloses or misuses any of the Company's trade secrets or other confidential information regarding the Company, including without limitation, matters relating to cost data, formulas, patterns, compilations, programs, devices, methods, techniques, processes, manufacturing processes, business strategy and plans, customer information, pricing information, supplier information, the Company's policies and procedures and other financial data of the Company; (viii) deliberate and continued failure to perform material duties to the Company or any of its subsidiaries; (ix) violation of the Company's Code of Business Conduct and Ethics, as it may be amended from time to time; or (x) during the Recipient's employment or service with the Company or at any time during the two-year period following termination for any reason, the Recipient: (A) directly or indirectly competes with the Company, accepts employment with any entity that directly or indirectly competes with the Company or otherwise approaches, solicits or accepts business from any customer, supplier or vendor of the Company in direct or indirect competition with the Company; (B) approaches, counsels or attempts to induce any person who is then in the employ of the Company to leave his or her employ; or employs or attempts to employ any such person or any person who at any time during the preceding twelve (12) months was in the employ of the Company; or (C) aids, assists or counsels any other person, firm or corporation

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7 to do any of the above. (c) Restatement of Financial Statements; Clawback Policy. In addition to the other provisions in this Section 3, this Agreement, or the Plan, any amounts of compensation paid or awarded to you under this Agreement, including the PSUs and any Shares issued in connection with the PSUs, shall be subject to compensation recovery (clawback) pursuant to the terms and conditions of any Company policy in effect on the Grant Date or adopted by the Company at any time thereafter, including the Company's Incentive Compensation Clawback Policy, as may be in effect from time to time or to the extent required by applicable law, regulations or applicable listing standards of a national securities exchange. You acknowledge and agree that you (i) have received a copy of the Company's Incentive Compensation Clawback Policy, (ii) have had an opportunity to review Company's Incentive Compensation Clawback Policy, (iii) are currently bound by or may hereafter become bound by all the terms and conditions of the Company's Incentive Compensation Clawback Policy and (iv) will comply with any Company request or demand for such recoupment or clawback. (d) Determinations. The Committee shall, in its sole discretion, make all determinations regarding this Section 3, including whether any Prohibited Conduct has occurred, and the determinations by the Committee shall be final and binding on all parties. (e) Company and its Affiliates. All references in this Section 3 to the Company shall include the Company and any of its Subsidiaries and Affiliates. 4. Restrictive Covenants. As a condition to receipt of the PSUs and/or delivery of the Shares, which the Recipient acknowledges to be good and valuable consideration for the Recipient's obligations hereunder, the Company and the Recipient agrees as follows: (a) Confidential Information. The Recipient understands and acknowledges that during the course of employment by the Company and its subsidiaries, and other corporate affiliates, and their successors or assigns (collectively referred to herein as, the "Employer Group"), the Recipient will have access to and learn about Confidential Information, as defined below. (i) For purposes of this Agreement, "Confidential Information" includes, but is not limited to, all information not generally known to the public, in spoken, printed, electronic, or any other form or medium, relating directly or indirectly to: business processes, practices, methods, policies, plans, documents, research, operations, strategies, techniques, agreements, contracts, terms of agreements, transactions, potential transactions, negotiations, pending negotiations, know-how, trade secrets, operating systems, work-in-process, databases, manuals, records, systems, material, sources of material, supplier information, vendor information, financial information, results, accounting information, accounting records, legal information, marketing information, advertising information, pricing information, credit information, design information, payroll information, staffing information, personnel information, associate lists, supplier lists, vendor lists, developments, internal controls, security procedures, drawings, sketches, market studies, sales information, revenue, costs, formulae, notes, communications, algorithms, product plans, designs, styles, models, ideas, inventions, unpublished patent applications, discoveries, experimental processes, experimental results, specifications, customer information, customer lists, client information, client lists, manufacturing information, distributor lists, and buyer

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8 lists of the Employer Group or its businesses or any existing or prospective customer, supplier, investor, or other associated third party, or of any other person or entity that has entrusted information to the Employer Group in confidence. The Recipient understands that the above list is not exhaustive, and that Confidential Information also includes other information that is marked or otherwise identified or treated as confidential or proprietary, or that would otherwise appear to a reasonable person to be confidential or proprietary in the context and circumstances in which the information is known or used. The Recipient understands and agrees that Confidential Information includes information developed by the Recipient in the course of the Recipient's employment by the Company as if the Company furnished the same Confidential Information to the Recipient in the first instance. Confidential Information shall not include information that is generally available to and known by the public at the time of disclosure to the Recipient, provided that the disclosure is through no direct or indirect fault of the Recipient or person(s) acting on the Recipient's behalf. (ii) Employer Group Creation and Use of Confidential Information. The Recipient understands and acknowledges that the Employer Group has invested, and continues to invest, substantial time, money, and specialized knowledge into developing its resources, creating a customer base, generating customer and potential customer lists, training its associates, and improving its offerings in the field of door, window, trim, and building supplies manufacturing and distribution. The Recipient understands and acknowledges that as a result of these efforts, Employer Group has created, and continues to use and create, Confidential Information. This Confidential Information provides Employer Group with a competitive advantage over others in the marketplace. (iii) Disclosure and Use Restrictions. Nothing herein voids, alters, or modifies the Recipient's obligations under the Company's Code of Business Conduct and Ethics, Recipient's employment agreement, or any other confidentiality agreement entered into by Recipient and the Company. (b) Acknowledgement. The Recipient understands that the nature of Recipient's position gives the Recipient access to and knowledge of Confidential Information and places the Recipient in a position of trust and confidence with the Employer Group. The Recipient understands and acknowledges that the intellectual services the Recipient provides to the Employer Group are unique, special, or extraordinary. The Recipient further understands and acknowledges that the Employer Group's ability to reserve these for the exclusive knowledge and use of the Employer Group is of great competitive importance and commercial value to the Employer Group, and that improper use or disclosure by the Recipient is likely to result in unfair or unlawful competitive activity. (c) Non-Competition. Because of the Employer Group's legitimate business interest as described in this Agreement and the good and valuable consideration offered to the Recipient, the receipt and sufficiency of which is acknowledged, during the term of Recipient's employment and for the one year beginning on the last day of the Recipient's employment with the Company, whether terminated for any reason or no reason, by the Recipient or the Company, (the "Restricted Period"), the Recipient agrees and covenants not to engage in Prohibited Activity (as defined below) within the United States, or the geographical regions for which the Recipient provides services during the course of employment, whichever is larger.

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9 (i) For purposes of this non-compete clause, “Prohibited Activity” is activity in which the Recipient contributes the Recipient’s knowledge, directly or indirectly, in whole or in part, as an associate, employer, owner, operator, manager, advisor, consultant, contractor, agent, partner, director, stockholder, officer, volunteer, intern, or any other similar capacity to an entity engaged in the same or similar business as the Employer Group, including those engaged in the business of manufacturing and distribution of doors, windows, trim, and other building supplies manufactured or distributed by the Employer Group. Prohibited Activity also includes activity that may require or inevitably require disclosure of trade secrets, proprietary information, or Confidential Information. (ii) Nothing herein shall prohibit the Recipient from purchasing or owning less than five percent (5%) of the publicly traded securities of any corporation, provided that such ownership represents a passive investment and that the Recipient is not a controlling person of, or a member of a group that controls, such corporation. (iii) This Section 4(c) does not, in any way, restrict or impede the Recipient from exercising protected rights to the extent that such rights cannot be waived by agreement or from complying with any applicable law or regulation or a valid order of a court of competent jurisdiction or an authorized government agency,

provided that such compliance does not exceed that required by the law, regulation, or order. (d) Non-Solicitation of Associates. The Recipient agrees and covenants not to directly or indirectly solicit, hire, recruit, or attempt to solicit, hire, or recruit, any associate of the Employer Group (“Covered Associate”), or induce the termination of employment of any Covered Associate for a period of two years, beginning on the last day of the Recipient’s employment with the Company, regardless of the reason for the employment termination. (e) Non-Solicitation of Customers. The Recipient understands and acknowledges that because of the Recipient’s experience with and relationship to the Employer Group, the Recipient will have access to, and will learn about, much or all of the Employer Group’s customer information. “Customer Information” includes, but is not limited to, names, phone numbers, addresses, email addresses, order history, order preferences, chain of command, pricing information, and other information identifying facts and circumstances specific to the customer and relevant to sales/services. The Recipient understands and acknowledges that loss of any such customer relationship or goodwill will cause significant and irreparable harm to the Employer Group. The Recipient agrees and covenants, for a period of two years, beginning on the last day of the Recipient’s employment with the Company, whether terminated for any reason or no reason, by the Recipient or the Company, not to directly or indirectly solicit, contact, or attempt to solicit or contact, using any other form of oral, written, or electronic communication, including, but not limited to, email, regular mail, express mail, telephone, fax, instant message, or social media, including but not limited to Facebook, LinkedIn, Instagram or X (formally known as Twitter), or any other social media platform, whether or not in existence at the time of entering into this agreement, or meet with the Employer Group’s current customers for purposes of offering or accepting goods or services similar to or competitive with those offered by the Employer Group. This restriction shall only apply to: (i) Customers or prospective customers the Recipient contacted in any way

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10 during the two years prior to the Recipient's termination of employment; (ii) Customers about whom the Recipient has trade secret or Confidential Information; or (iii) Customers about whom the Recipient has information that is not available publicly. (f) Remedies. In the event of a breach or threatened breach by the Recipient of any of the provisions of this Section 4, the Recipient hereby consents and agrees that the Employer Group shall be entitled to, in addition to other available remedies, a temporary or permanent injunction or other equitable relief against such breach or threatened breach from any court of competent jurisdiction, without the necessity of showing any actual damages or that money damages would not afford an adequate remedy, and without the necessity of posting any bond or other security. The aforementioned equitable relief shall be in addition to, not in lieu of, legal remedies, monetary damages, or other available forms of relief. (g) No Preparation for Competition. During the term of the Recipient's employment, Recipient agrees not to undertake preparations for competitive activity prohibited by this Section 4. (h) Notwithstanding anything herein to the contrary, nothing in this Section 4 shall (i) prohibit Recipient from making reports of possible violations of federal law or regulation to any governmental agency or entity in accordance with the provisions of and rules promulgated under Section 21F of the Securities Exchange Act of 1934, as amended, or Section 806 of the Sarbanes-Oxley Act of 2002, or of any other whistleblower protection provisions of federal law or regulation, or (ii) require notification or prior approval by Company of any such report; provided that, Recipient is not authorized to disclose communications with counsel that were made for the purpose of receiving legal advice or that contain legal advice or that are protected by the attorney work product or similar privilege. Furthermore, Recipient shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that is made (A) in confidence to a federal, state or local government official, either directly or indirectly, or to an attorney, in each case, solely for the purpose of reporting or investigating a suspected violation of law or (B) in a complaint or other document filed in a lawsuit or proceeding, if such filings are made under seal. 5. Notices. All notices, consents and other communications required or permitted to be given under or by reason of this Agreement shall be in writing and shall be delivered personally or by e-mail or reputable overnight courier. If to the Company, notice shall be made at its principal corporate headquarters, addressed to the attention of the Corporate Secretary. If to the Recipient, notice shall be made at Recipient's address on file with the Company. Either party may designate at any time hereafter in writing some other address for notice. 6. Governing Law. This Agreement shall be construed and enforced in accordance with the laws of the State of Delaware. Any litigation against any party to this Agreement arising out of or in any way relating to this Agreement shall be brought in any federal or state court located in the State of Delaware in New Castle County and each of the parties hereby submits to the exclusive jurisdiction of such courts for the purpose of any such litigation; provided, that a final judgment in

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11 any such litigation shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. Each party irrevocably and unconditionally agrees not to assert (a) any objection which it may ever have to the laying of venue of any such litigation in any federal or state court located in the State of Delaware in New Castle County, (b) any claim that any such litigation brought in any such court has been brought in an inconvenient forum and (c) any claim that such court does not have jurisdiction with respect to such litigation. To the extent that service of process by mail is permitted by applicable law, each party irrevocably consents to the service of process in any such litigation in such courts by the mailing of such process by registered or certified mail, postage prepaid, at its address for notices provided for herein. 7. Binding Effect; Entire Agreement. This Agreement, together with the Plan and any written employment agreement, contains the entire agreement between the parties with respect to the subject matter hereof and supersedes any and all prior understandings, agreements or correspondence between the parties, and shall be binding upon the heirs, executors, administrators, successors and assigns of the parties hereto. 8. Severability. Each provision of this Agreement will be treated as a separate and independent clause and unenforceability of any one clause will in no way impact the enforceability of any other clause. Should any of the provisions of this Agreement be found to be unreasonable or invalid by a court of competent jurisdiction, such provision will be enforceable to the maximum extent enforceable by the law of that jurisdiction. The parties hereby further agree that any such court is expressly authorized to modify any unenforceable provision of this Agreement instead of severing the unenforceable provision from this Agreement in its entirety, whether by rewriting the offending provision, deleting any or all of the offending provision, adding additional language to this Agreement, or by making any other modifications it deems warranted to carry out the intent and agreement of the parties hereby as embodied in this Agreement to the maximum extent permitted by law. The parties hereby expressly agree that this Agreement as so modified by the court shall be binding upon and enforceable against each of them. Should one or more of the provisions of this Agreement be held to be invalid, illegal, or unenforceable in any respect, that invalidity, illegality, or unenforceability shall not affect any other provisions of this Agreement, and if such provision or provisions are not modified as provided above, this Agreement shall be construed as if such invalid, illegal, or unenforceable provisions had not been set forth in this Agreement. 9. Successors and Assigns. To the extent permitted by state law, the Company may assign this Agreement to any subsidiary or corporate affiliate in the Employer Group or otherwise, or to any successor or assign (whether direct or indirect, by purchase, merger, consolidation, or otherwise) to all or substantially all of the business or assets of the Company. This Agreement shall inure to the benefit of the Employer Group and permitted successors and assigns. The Recipient may not assign this Agreement or any part hereof. Any purported assignment by the Recipient shall be null and void from the initial date of purported assignment. 10. Modification and Waiver. No provision of this Agreement may be amended or modified unless the amendment or modification is agreed to in writing and signed by the Recipient and by a duly authorized representative of the Company. No waiver by either party hereto of any breach of any condition or provision of this Agreement to be performed by the other party hereto shall be deemed a waiver of any similar or dissimilar provision or condition at the same or any prior or subsequent time, nor shall the failure of or delay by either party hereto in exercising any

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12 right, power, or privilege under this Agreement operate as a waiver to preclude any other or further exercise of any right, power, or privilege. IN WITNESS WHEREOF, the Company and the Recipient have caused this Agreement to be executed on their behalf, by their duly authorized representatives, all on the day and year stated in the Grant Award.

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JELD-WEN HOLDING, INC. 2024 MANAGEMENT INCENTIVE PLAN 1. Purpose. The purpose of this JELD-WEN Holding, Inc. Management Incentive Plan is to promote the interests of the Company and its shareholders by motivating superior performance by executive officers and other key personnel with annual bonus opportunities based upon corporate and individual performance. 2. Definitions. (a) “Award” means an award granted to a Participant under the Plan
the Plan Administrator be establish under the terms of the Plan. (b) “Base Salary” means a Participant’s annual base salary determined as of the last day of a Plan Year. (c) “Board” means the Board of Directors of the Company. (d) “Company” means JELD-WEN Holding, Inc. and its subsidiaries. (e) “Participant” means an officer, key employee or consultant of the Company who is in a position to make contributions to the growth and financial success of the Company and who has been granted an Award under the Plan. (f) “Performance Criteria” shall have the meaning Section 5(b) hereof. (g) “Performance Goals” shall have applicable
Award Agreement. 5.8. Effect meaning set forth in Section 5(c) hereof. (h) “Plan” means this JELD-WEN Holding, Inc. Management Incentive Plan, as it may be amended and restated from time to time. (i) “Plan Administrator” means the
Compensation Committee Change in Control. Any specific terms applicable the Board, or such other committee of the Board that the Board shall designate from time an Option in time to administer event of a Change in
Control Plan. (j) “Plan Year” means the twelve consecutive month period beginning each January 1 not otherwise provided in ending on following December 31. 3. Plan Administration. (a) General. The set

forth administered by the Plan Administrator. The Plan Administrator shall have such powers and authority as may be necessary or appropriate for the Plan Administrator to carry out its functions as described applicable Plan. No member of the Plan Administrator shall be liable for any action or determination made in good faith by the Plan Administrator with respect to the Plan or any Agreement. 6. Stock Appreciation Rights. 6.1. Grant. hereunder. Committee Plan Administrator grant Stock Appreciation Rights delegate, Eligible Individuals in accordance with any appropriate officer or employee of the Company, responsibility for performing certain ministerial functions under this Plan. (b) Discretionary Authority. Subject to the express limitations of terms and conditions of Plan Administrator shall have authority in its discretion to determine the time or times at shall be set forth in an Award Agreement. A Stock Appreciation Right Awards (a) at any time if unrelated the recipients of Awards, the Performance Criteria, the Performance Goals and all other terms of an Award. The Plan Administrator shall also have discretionary authority an Option or (b) if related interpret the Plan, an Option, either at the time of grant or at any time thereafter during the term of the Option. Awards of Stock Appreciation Rights shall be subject to the following terms and provisions. 6.2. Terms: Duration. Stock Appreciation Rights shall contain such terms and conditions as to exercisability, vesting and duration as the Committee shall determine, but in no event shall they have a term of greater than ten (10) years; provided, however, that unless the Committee provides otherwise, a Stock Appreciation Right may, upon the death of the Participant prior to the expiration of the Award, be exercised for up to one (1) year following the date of the Participant's death (but in no event beyond the date on which the Stock Appreciation Right otherwise would expire by its terms) and (ii) if, at the time a Stock Appreciation Right would otherwise expire at the end of its term, the exercise of the Stock Appreciation Right is prohibited by applicable law or the Company's insider trading policy, the term shall be extended until thirty (30) days after the prohibition no longer applies. The Committee may, subsequent to the granting of any Stock Appreciation Right, extend the period within which the Stock Appreciation Right may be exercised (including following a Participant's Termination), but in no event shall the period be extended to a date that is later than the earlier of the latest date on which the Stock Appreciation Right could have been exercised and the 10th anniversary of the date of grant of the Stock Appreciation Right, except as otherwise provided herein in this Section 6.2. 6.3. Vesting. To the extent not exercised, vested installments shall accumulate and be exercisable, in whole or in part, at any time after becoming exercisable, but not later than the date the Stock Appreciation Right expires. 6.4. Amount Payable. Upon exercise of a Stock Appreciation Right, the Participant shall be entitled to receive an amount determined by multiplying (i) the excess of the Fair Market Value of a Share on the last business day preceding the date of exercise of such Stock Appreciation Right over make all Exhibit 10.29

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15 factual determinations under Fair Market Value Plan, and to make all other determinations necessary or advisable for the administration a Share on date Plan. The Plan Administrator may prescribe, amend, and rescind rules and regulations relating to Stock Appreciation Right was granted (the “Base Price”) Plan. All interpretations, determinations, and actions (ii) number of Shares as to which the Stock Appreciation Right is being exercised (the “SAR Payment Amount”). Notwithstanding the foregoing, the Committee may limit in any manner the amount payable with respect to any Stock Appreciation Right by including such a limit in the Award Agreement evidencing the Stock Appreciation Right at the time it is granted. 6.5. Method of Exercise. Stock Appreciation Rights Plan Administrator exercised by a Participant only by giving notice in the form final, conclusive, to the Person designated by binding upon all parties. 4. Eligibility and Participation. Employees of specifying the number of Shares with respect to which the Stock Appreciation Right is being exercised. 6.6. Form of Payment. Payment who hold a position as an executive officer SAR Payment Amount may be made in the discretion of the Committee solely in whole Shares having an aggregate Fair Market Value equal to the SAR Payment Amount, solely in cash or in a combination of cash and Shares. If the Committee decides to make full payment in Shares and the amount payable results in a fractional Share, payment Company rounded down eligible the nearest whole Share. 6.7. Effect of Change in Control. Any specific terms applicable to a Stock Appreciation Right in the event of a Change in Control and not otherwise provided participate shall be set forth in the applicable Award Agreement. 7. Dividend Equivalent Rights. The Committee may grant Dividend Equivalent Rights, either in tandem with an Award or as for separate Award, to Eligible Individuals in accordance with the Plan. The Plan Year on such basis and on such applicable to each Dividend Equivalent Right shall be specified in the Award Agreement evidencing the Award. Amounts payable in respect of Dividend Equivalent Rights will be deferred until the vesting of or lapsing of restrictions on such Dividend Equivalent Rights or until the vesting, payment or settlement of or other lapse of restrictions on the Award to which the Dividend Equivalent Rights relate and will in any event be subject to any restrictions and risks of forfeiture to the same extent as the Awards with respect to which such dividends are payable. The Committee shall determine whether such amount is to be held in cash or reinvested in Shares or deemed (notionally) to be reinvested in Shares. Dividend Equivalent Rights may be settled in cash or Shares or a combination thereof, in a single installment or multiple installments, Committee. 8. Restricted Stock; Restricted Stock Units. 8.1. Restricted Stock. The Committee may grant Awards of Restricted Stock to Eligible Individuals in accordance with the the terms Administrator. In addition, any other employees conditions of which shall be set forth in an Award Agreement. Each Award Agreement shall contain such restrictions, terms and conditions as

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16 the Committee may, in its discretion, determine and (without limiting the generality consultants foregoing) such Award Agreements may require that an appropriate legend be placed on Share certificates. With respect to Shares in a book entry account in a Participant's name, the Committee may cause appropriate stop transfer instructions to be delivered to the account custodian, administrator or the Company's corporate secretary as determined by the Committee in its sole discretion. Awards of Restricted Stock shall be subject to the following terms and provisions: (a) Rights of Participant. Shares of Restricted Stock granted pursuant to an Award hereunder shall be issued in the name of the Participant as soon as reasonably practicable after the Award is granted provided that the Participant has executed an Award Agreement evidencing the Award (which, in the case of an electronically distributed Award Agreement, shall be deemed to have been executed by an acknowledgement of receipt or in such other manner as the Committee may prescribe) and any other documents which the Committee may require as a condition to the issuance of such Shares. At the discretion of the Committee, Shares issued in connection with an Award of Restricted Stock may be held in escrow by an agent (which may be the Company) Company Committee. Unless the Committee determines otherwise and as set forth Plan Administrator to receive an Award for a Plan Year shall become a Participant Award Agreement, upon the issuance of the Shares, the Participant shall have all of the rights of a shareholder Plan Shares, including Plan Year. 5. Awards. (a) Amount of Awards. The Plan Administrator will determine in its discretion right to vote amount of an Award. Shares and, subject to and in accordance with Section 8.1(d), to receive all dividends or other distributions paid or made with respect Performance Criteria, the applicable Performance Goals relating Shares. (b) Terms and Conditions. Each Award Agreement shall specify the number of Shares of Restricted Stock to which it relates, the conditions which must be satisfied in order for the restrictions on transferability set forth in this paragraph (b) to lapse, Performance Criteria, circumstances under which amount and terms of payment to be made upon achievement of Award Performance Goals for each Plan Year. All Awards forfeited. During such period paid in cash; in no event may any Award payable to any Participant under the Plan for any Plan Year exceed two hundred percent (200%) of the Participant's Base Salary. (b) Performance Criteria. For purposes of Awards granted under the Plan, the "Performance Criteria" for a given Plan Year shall be one or any combination of the following, for an identified subsidiary or business unit, set selected Administrator in the Award Agreement (the "Vesting Period"), the Participant shall not be permitted to sell, transfer, pledge, hypothecate or assign Shares of Restricted Stock awarded under the except by will or the laws of descent and distribution. The may also impose such other restrictions and conditions, including the attainment of pre-established Performance Objectives or other corporate or individual performance goals, on Restricted Stock as it determines discretion. The Vesting Period shall be not less than three years, provided that the Vesting Period may be shorter (but not less than one year) if vesting of the Restricted Stock is conditioned upon the attainment of pre-established Performance Objectives or other corporate or individual performance goals. Any attempt to dispose of any Restricted Stock in contravention of any such restrictions shall be null and void and without effect. (c) Delivery of Shares. Upon the lapse of the restrictions on Shares of Restricted Stock, the Committee shall cause a stock certificate or evidence of book entry

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17 Shares to be delivered to the Participant with respect to such Shares of Restricted Stock, free of all restrictions hereunder. (d) Treatment of Dividends. The payment to the Participant of dividends, or a specified portion thereof, declared or paid on such Shares by the Company shall be (i) deferred until the lapsing of the restrictions imposed upon such Shares and (ii) held by the Company for the account of the Participant until such time and shall be subject to restrictions and risk of forfeiture to the same extent as the Restricted Stock with respect to which such dividends are payable. The Committee shall determine whether such dividends are to be reinvested in Shares (which shall be held as additional Shares of Restricted Stock) or held in cash. Payment of deferred dividends in respect of Shares of Restricted Stock (whether held in cash or as additional Shares of Restricted Stock), shall be made upon the lapsing of restrictions imposed on the Shares in respect of which the deferred dividends were paid, and any dividends deferred in respect of any Shares of Restricted Stock shall be forfeited upon the forfeiture of such Shares. (e) Effect of Change in Control. Any specific terms applicable to Restricted Stock in the event of a Change in Control and not otherwise provided in the Plan shall be set forth in the applicable Award Agreement. 8.2. Restricted Stock Unit Awards. The Committee may grant Awards of Restricted Stock Units to Eligible Individuals in accordance with the Plan, the terms and conditions of which shall be set forth in an Award Agreement. Each such Award Agreement shall contain such restrictions, terms and conditions as the Committee may, in its determine. Awards of Restricted Stock Units shall be subject to the following terms and provisions: (a) Payment of Awards. Each Restricted Stock Unit shall represent the right of the Participant to receive one Share, together with such dividends as may have accrued with respect to such Share from at the grant of the Award until the time of vesting, upon vesting of the Restricted Stock Unit or on any later date specified by the Committee, subject to a Participant's deferral election, if any; provided, however, that the Committee may provide for the settlement of Restricted Stock Units in cash equal to the Fair Market Value of the Shares that would otherwise be delivered to the Participant (determined as of the date of the Shares would have been delivered), or a combination of cash and Shares. The Committee may, at the time a Restricted Stock Unit is granted, provide a limitation on the amount payable in respect of each Restricted Stock Unit. (b) Vesting. No Restricted Stock Units may vest more quickly than one-third annually over three years; provided that the vesting period may be shorter (but not less than

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18 one year) if vesting of the Restricted Stock Unit is conditioned upon the attainment of pre- established Performance Objectives or other corporate or individual performance goals, or for Restricted Stock Units awarded to Directors who are not Employees. (c) Effect of Change in Control. Any specific terms applicable to Restricted Stock Units in the event of a Change in Control and not otherwise provided in the Plan shall be set forth in the applicable Award Agreement. 9. Performance Awards. 9.1. Performance Share Units. The Committee may grant Awards of Performance Share Units to Eligible Individuals in accordance with the Plan, the terms and conditions of which shall be set forth in Agreement. Performance Share Units shall be denominated in Shares and, contingent upon the attainment of specified Performance Objectives within the Performance Cycle and such other vesting conditions as may be determined by the Committee (including without limitation, a continued employment requirement following the end of the applicable Performance Cycle), represent the right to receive payment as provided in Sections 9.1(a) and (b) of the Fair Market Value of a Share on the date the Performance Share Unit becomes vested or any other date specified by the Committee, subject to a Participant's deferral election, if any. The Committee may at the time a Performance Share Unit is granted specify a maximum amount payable in respect of a vested Performance Share Unit. (a) Terms and Conditions: Vesting and Forfeiture. Each Award Agreement shall specify the number of Performance Share Units to which it relates, the Performance Objectives and other conditions which must be satisfied in order for the Performance Share Units to vest and the Performance Cycle within which such Performance Objectives must be satisfied and the circumstances under which the Award will be forfeited. (b) Payment of Awards. Subject to Section 9.3(c), payment to Participants in respect of vested Performance Share Units shall be made as soon as practicable after the last day of the Performance Cycle to which such Award relates or at such other time or times as the Committee may determine that the Award has become vested. Such payments may be made entirely in Shares valued at their Fair Market Value, entirely in cash or in such combination of Shares and cash as the Committee in its discretion shall determine at any time prior to such payment. 9.2. Performance-Based Restricted Stock. The Committee may grant Awards of Performance-Based Restricted Stock to Eligible Individuals in accordance with the Plan, the terms and conditions of which shall be set forth in an Award Agreement. Each Award Agreement may require that an appropriate legend be placed on Share certificates. With respect to Shares in a book entry

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19 account in a Participant's name, the Committee may cause appropriate stop transfer instructions to be delivered to the account custodian, administrator or the Company's corporate secretary as determined by the Committee in its sole discretion. Awards of Performance-Based Restricted Stock shall be subject to the following terms and provisions: (a) Rights of Participant. Performance-Based Restricted Stock shall be issued in the name of the Participant as soon as reasonably practicable after the Award is granted or at such other time or times as the Committee may determine; provided, however, that no Performance- Based Restricted Stock shall be issued until the Participant has executed an Award Agreement evidencing the Award (which, in the case of an electronically distributed Award Agreement, shall be deemed to have been executed by an acknowledgement of receipt or in such other manner as the Committee may prescribe), and any other documents which the Committee may require as a condition to the issuance of such Performance-Based Restricted Stock. At the discretion of the Committee, Shares issued in connection with an Award of Performance-Based Restricted Stock may be held in escrow by an agent (which may be the Company) designated by the Committee. Unless the Committee determines otherwise and as set forth in the Award Agreement, upon issuance of the Shares, the Participant shall have all of the rights of a shareholder with respect to such Shares, including the right to vote the Shares and to receive all dividends or other distributions paid or made with respect to the Shares. (b) Terms and Conditions. Each Award Agreement shall specify the number of Shares of Performance-Based Restricted Stock to which it relates, the Performance Objectives and other conditions which must be satisfied in order for the Performance-Based Restricted Stock to vest, the Performance Cycle within which such Performance Objectives must be satisfied and the circumstances under which the Award will be forfeited; provided, however, that no Performance Cycle for Performance-Based Restricted Stock shall be less than one (1) year. (c) Treatment of Dividends. The payment to the Participant of dividends, or a specified portion thereof, declared or paid on Shares represented by such Award which have been issued by the Company to the Participant shall be (i) deferred until the lapsing of the restrictions imposed upon such Performance-Based Restricted Stock and (ii) held by the Company for the account of the Participant until such time and shall be subject to restrictions and risk of forfeiture to the same extent as the Performance-Based Restricted Stock with respect to which such dividends are payable. The Committee shall determine whether such dividends are to be reinvested in Shares (which shall be held as additional Shares of Performance-Based Restricted Stock) or held in cash. Payment of deferred dividends in respect of Shares of Performance-Based Restricted Stock (whether held in cash or in

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20 additional Shares of Performance-Based Restricted Stock) shall be made upon the lapsing of restrictions imposed on the Performance-Based Restricted Stock in respect of which the deferred dividends were paid, and any dividends deferred in respect of any Performance- Based Restricted Stock shall be forfeited upon the forfeiture of such Performance-Based Restricted Stock. (d) Delivery of Shares. Upon the lapse of the restrictions on Shares of Performance-Based Restricted Stock awarded hereunder, the Committee shall cause a stock certificate or evidence of book entry Shares to be delivered to the Participant with respect to such Shares, free of all restrictions hereunder. 9.3. Performance Objectives. (a) Establishment. Performance Objectives for Performance Awards may be expressed in terms of :

transactions; transactions ;

transactions; transactions net revenue; or a specified increase in any of foregoing; foregoing, (xxxiii) any such determined to be appropriate by the Plan Administrator in its sole discretion. (c) Performance Goals. For purposes of Awards granted under the Plan, the "Performance Goals" for a given Plan Year shall be the levels of achievement relating to the Performance Criteria established selected Committee. Plan Administrator for the Award. Objectives Goals shall be established for each Participant each Plan Year. The Plan Administrator be in respect of the performance of the Company, any of its Subsidiaries, any of its Divisions or any combination thereof. establish such Objectives may be absolute or Goals (to prior performance of the Company or performance of one or more other entities or external indices) and may be expressed applicable Performance Criteria as it determines terms of a progression within a specified range. (b) Effect of Certain Events. The Committee may, its sole discretion of an Award. The Performance Goals for the Global MIP pool calculation are applied individually to each Performance Criteria. The Award issued for each Plan Year shall specify Objectives in respect Goal threshold, target, and attainment levels. The Performance Goals may be applied by the Plan Administrator after excluding charges for restructurings, discontinued operations, extraordinary items and other unusual or non-recurring items, and the cumulative effects a Performance accounting changes, and without regard to realized capital gains. The are established, provide for made to an individual Participant may be less (including no Award) than manner in which performance will be measured against the Performance Objectives to reflect the impact of specified events, including any one or more percentage following with respect Target Award determined based on the level of achievement of applicable Performance Goals. The Committee shall be precluded from increasing the Target Award but may apply its discretion the Performance Cycle: (i) the gain, loss, income increase, reduce expense resulting from changes in accounting eliminate

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21 principles or tax laws that become effective during the Performance Cycle; (ii) the gain, loss, income or expense reported publicly by the Company with respect to the Performance Cycle that are extraordinary or unusual in nature or infrequent in occurrence; (iii) the gains or losses resulting from and the direct expenses incurred in connection with, the disposition of a business, or the sale of investments or non-core assets; (iv) the gain or loss from all or certain claims and/or litigation and all or certain insurance recoveries relating to claims or litigation; or (v) the impact of investments or acquisitions made during the year or, to the extent provided by the Committee, any prior year. The events may relate to the Company as a whole or to any part of the Company's business or operations, as determined by the Committee at the time the Performance Objectives are established. Any adjustments based on the effect of certain events are to be determined in accordance with generally accepted accounting principles and standards, unless another objective method of measurement is designated by the Committee. (c) Determination of Performance. In respect of a Performance Award, the Committee may, in its sole discretion, (i) reduce the amount of cash paid or number of Shares to be issued or that have been issued and that become vested or on which restrictions lapse, and/or (ii) establish rules and

procedures that have the effect of limiting the amount payable to any Participant to an amount that is less than the amount that otherwise would be payable under an Award granted under this Section 9. The Committee may exercise discretion in a non-uniform manner among Participants. (d) Effect of Change in Control. Any specific terms applicable to a Performance Award in the event of a Change in Control and not otherwise provided in the Plan shall be set forth in the applicable Award Agreement. 10. Share Awards. The Committee may grant a Share Award to any Eligible Individual on such terms and conditions as the Committee may determine in its sole discretion. Share Awards may be made as additional compensation for services rendered by the Eligible Individual or may be in lieu of cash or other compensation to which the Eligible Individual is entitled from the Company. Any dividend payable in respect of a Share Award shall be subject to vesting, restrictions and risk of forfeiture to the same extent as the Share Award with respect to which such dividends are payable. 11. Effect of Termination of Employment: Transferability. 11.1. Termination. The Award Agreement evidencing the grant of each Award shall set forth the terms and conditions applicable to such Award upon Termination, which shall be as the Committee may, in its discretion, determine at the time the Award is granted or at anytime thereafter.

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22 11.2. Transferability of Awards and Shares. (a) Non-Transferability of Awards. Except as set forth in Section 11.2(c) or (d) or as otherwise permitted by the Committee and as set forth in the applicable Award Agreement, either at the time of grant or at any time thereafter, no Award (other than Restricted Stock, Performance-Based Restricted Stock, and Share Awards with respect to which the restrictions have lapsed) shall be (i) sold, transferred or otherwise disposed of, (ii) pledged or otherwise hypothecated or (ii) subject to attachment, execution or levy of any kind; and any purported transfer, pledge, hypothecation, attachment, execution or levy in violation of this Section 11.2 shall be null and void. (b) Restrictions on Shares. The Committee may impose such restrictions on any Shares acquired by a Participant under the Plan as it may deem advisable, including, without limitation, minimum holding period requirements, restrictions under applicable federal securities laws, restrictions under the requirements of any stock exchange or market upon which such Shares are then listed or traded and restrictions under any blue sky or state securities laws applicable to such Shares. (c) Transfers By Will or by Laws of Descent or Distribution. Any Award may be transferred by will or by the laws of descent or distribution; provided, however, that (i) any transferred Award will be subject to all of the same terms and conditions as provided in the Plan and the applicable Award Agreement; and (ii) the Participant's estate or beneficiary appointed in accordance with this Section 11.2(c) will remain liable for any withholding tax that may be imposed by any federal, state or local tax authority. (d) Beneficiary Designation. To the extent permitted by applicable law, the Company may from time to time permit each Participant to name one or more individuals (each, a "Beneficiary") to whom any benefit under the Plan is to be paid or who may exercise any rights of the Participant under any Award granted under the Plan in the event of the Participant's death before he or she receives any or all of such benefit or exercises such Award. Each such designation shall revoke all prior designations by the same Participant, shall be in a form prescribed by the Company, and will be effective only when filed by the Participant in writing with the Company during the Participant's lifetime. In the absence of any such designation or if any such designation is not effective under applicable law as determined by the Committee, benefits under Awards remaining unpaid at the Participant's death and rights to be exercised following the Participant's death shall be paid to or exercised by the Participant's estate.

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23 12. Adjustment upon Changes in Capitalization. 12.1. In the event that (a) the outstanding Shares are changed into or exchanged for a different number or kind of Shares or other stock or securities or other equity interests of the Company or another corporation or entity, whether through merger, consolidation, reorganization, recapitalization, reclassification, stock dividend, stock split, reverse stock split, substitution or other similar corporate event or transaction or (b) there is an extraordinary dividend or distribution by the Company in respect of its Shares or other capital stock or securities convertible into capital stock in cash, securities or other property (any event described in (a) or (b), an "Adjustment Event"), the Committee shall determine the appropriate adjustments to (i) the maximum number and kind of shares of stock or other securities or other equity interests as to which Awards may be granted under the Plan, (ii) the maximum number and class of Shares or other stock or securities that may be issued upon exercise of Incentive Stock Options, (iii) the number and kind of Shares or other securities covered by any or all outstanding Awards that have been granted under the Plan, (iv) the Option Price of outstanding Options and the Base Price of outstanding Stock Appreciation Rights, and (v) the Performance Objectives applicable to outstanding Performance Awards. 12.2. Any such adjustment in the Shares or other stock or securities (a) subject to outstanding Incentive Stock Options (including any adjustments in the exercise price) shall be made in a manner intended not to constitute a modification as defined by Section 424(h)(3) of the Code and only to the extent otherwise permitted by Sections 422 and 424 of the Code and (b) with respect to any Award that is not subject to Section 409A, in a manner intended not to subject the Award to Section 409A and, with respect to any Award that is subject to Section 409A, in a manner intended to comply with Section 409A. 12.3. If, by reason of an Adjustment Event, pursuant to an Award, a Participant shall be entitled to, or shall be entitled to exercise an Award with respect to, new, additional or different shares of stock or securities of the Company or any other corporation, such new, additional or different shares shall thereupon be subject to all of the conditions, restrictions and performance criteria which were applicable to the Shares subject to the Award prior to such Adjustment Event, as may be adjusted in connection with such Adjustment Event in accordance with this Section 12. 13. Effect of Certain Transactions. Except as otherwise provided in the applicable Award Agreement, in connection with a Corporate Transaction, either: (a) outstanding Awards shall, unless otherwise provided in connection with the Corporate Transaction, continue following the Corporate Transaction and shall be adjusted if

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24 and as provided for in the agreement or plan (in the case of a liquidation or dissolution) entered into or adopted in connection with the Corporate Transaction (the "Transaction Agreement"), which may include, in the sole discretion of the Committee or the parties to the Corporate Transaction, the assumption or continuation of such Awards by, or the substitution for such Awards of new awards of, the surviving, successor or resulting entity, or a parent or subsidiary thereof, with such adjustments as to the number and kind of shares or other securities or property subject to such new awards, exercise prices and other terms of such new awards as the Committee or the parties to the Corporate Transaction shall agree, or (b) outstanding Awards shall terminate upon the consummation of the Corporate Transaction; provided, however, that vested Awards shall not be terminated without: (i) in the case of vested Options and Stock Appreciation Rights (including those Options and Stock Appreciation Rights that would become vested upon the consummation of the Corporate Transaction), (1) providing the holders of affected Options and Stock Appreciation Rights a period of at least fifteen (15) calendar days prior to the date of the consummation of the Corporate Transaction to exercise the Options and Stock Appreciation Rights, or (2) providing the holders of affected Options and Stock Appreciation Rights payment (in cash or other consideration upon or immediately following the consummation of the Corporate Transaction, or, to the extent permitted by Section 409A, on a deferred basis) in respect of each Share covered by the Option or Stock Appreciation Rights being cancelled an amount equal to the excess, if any, of the per Share price to be paid or distributed to stockholders in the Corporate Transaction (the value of any non-cash consideration to be determined by the Committee in good faith) over the Option Price of the Option or the Base Price of the Stock Appreciation Rights, or (ii) in the case of vested Awards other than Options or Stock Appreciation Rights (including those Awards that would become vested upon the consummation of the Corporate Transaction), providing the holders of affected Awards payment (in cash or other consideration upon or immediately following the consummation of the Corporate Transaction, or, to the extent permitted by Section 409A, on a deferred basis) in respect of each Share covered by the Award being cancelled of the per Share price to be paid or distributed to stockholders in the Corporate Transaction, in each case with the value of any non-cash consideration to be determined by the Committee in good faith.

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25 For the avoidance of doubt, if the amount determined pursuant to clause (b)(i)(2) above is zero or less, the affected Option or Stock Appreciation Rights may be terminated without any payment therefor. Without limiting the generality of the foregoing or being construed as requiring any such action, in connection with any such Corporate Transaction the Committee may, in its sole and absolute discretion, cause any of the following actions to be taken effective upon or at any time prior to any Corporate Transaction (and any such action may be made contingent upon the occurrence of the Corporate Transaction): (a) cause any or all unvested Options and Stock Appreciation Rights to become fully vested and immediately exercisable (as applicable) and/or provide the holders of such Options and Stock Appreciation Rights a reasonable period of time prior to the date of the consummation of the Corporate Transaction to exercise the Options and Stock Appreciation Rights; (b) with respect to unvested Options and Stock Appreciation Rights that are terminated in connection with the Corporate Transaction, provide to the holders thereof a payment (in cash and/or other consideration) in respect of each Share covered by the Option or Stock Appreciation Right being terminated in an amount equal to all or a portion of the excess, if any, of the per Share price to be paid or distributed to stockholders in the Corporate Transaction (the value of any non-cash consideration to be determined by the Committee in good faith) over the exercise price of the Option or the Base Price of the Stock Appreciation Right, which may be paid in accordance with the vesting schedule of the Award as set forth in the applicable Award Agreement, upon the consummation of the Corporate Transaction or, to the extent permitted by Section 409A, at such other time or times as the Committee may determine; (c) with respect to unvested Awards (other than Options or Stock Appreciation Rights) that are terminated in connection with the Corporate Transaction, provide to the holders thereof a payment (in cash and/or other

consideration) in respect of each Share covered by the Award being terminated in an amount equal to all or a portion of the per Share price to be paid or distributed to stockholders in the Corporate Transaction (the value of any non-cash consideration to be determined by the Committee in good faith), which may be paid in accordance with the vesting schedule of the Award as set forth in the applicable Award Agreement, upon the consummation of the Corporate Transaction or, to the extent permitted by Section 409A, at such other time or times as the Committee may determine. (d) For the avoidance of doubt, if the amount determined pursuant to clause (b) above is zero or less, the affected Option or Stock Appreciation Rights may be terminated without any payment therefor.

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26 Notwithstanding anything to the contrary in this Plan or any Agreement, (a) the Committee may, in its sole discretion, provide in the Transaction Agreement or otherwise for different treatment for different Awards or Awards held by different Participants and, where alternative treatment is available for a Participant's Awards, may allow the Participant to choose which treatment shall apply to such Participant's Awards; (b) any action permitted under this Section 13 may be taken without the need for the consent of any Participant. To the extent a Corporate Transaction also constitutes an Adjustment Event and action is taken pursuant to this Section 13 with respect to an outstanding Award, such action shall conclusively determine the treatment of such Award in connection with such Corporate Transaction notwithstanding any provision of the Plan to the contrary (including Section 12). (c) to the extent the Committee chooses to make payments to affected Participants pursuant to Section 13.1(b)(i)(2) or (ii) or Section 13.2(b) or (c) above, any Participant who has not returned any letter of transmittal or similar acknowledgment that the Committee requires be signed in connection with such payment within the time period established by the Committee for returning any such letter or similar acknowledgement shall forfeit his or her right to any payment and his or her associated Awards may be cancelled without any payment therefor. 14. Interpretation. 14.1. Section 16 Compliance. The Plan is intended to comply with Rule 16b-3 promulgated under the Exchange Act and the Committee shall interpret and administer the provisions of the Plan or any Award Agreement in a manner consistent therewith. Any provisions inconsistent with such Rule shall be inoperative and shall not affect the validity of the Plan. 14.2. Compliance with Section 409A. (a) All Awards granted under the Plan are intended either not to be subject to Section 409A or, if subject to Section 409A, to be administered, operated and construed in compliance with Section 409A. Notwithstanding this or any other provision of the Plan or any Award Agreement to the contrary, the Committee may amend the Plan or any Award granted hereunder in any manner or take any other action that it determines, in its sole discretion, is necessary, appropriate or advisable (including replacing any Award) to cause the Plan or any Award granted hereunder to comply with Section 409A and all regulations and other guidance issued thereunder or to not be subject to Section 409A. Any such action,

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27 once taken, shall be deemed to be effective from the earliest date necessary to avoid a violation of Section 409A and shall be final, binding and conclusive on all Eligible Individuals and other individuals having or claiming any right or interest under the Plan. (b) The Plan and each Award Agreement will be interpreted to the greatest extent possible in a manner that makes the Plan and the Awards granted hereunder exempt from Section 409A, and, to the extent not so exempt, in compliance with Section 409A. If the Committee determines that any Award granted hereunder is not exempt from and is therefore subject to Section 409A, the Award Agreement evidencing such Award will incorporate the terms and conditions necessary to avoid the consequences specified in Section 409A(a)(I) of the Code, and to the extent an Award Agreement is silent on terms necessary for compliance, such terms are hereby incorporated by reference into the Award Agreement. Notwithstanding anything to the contrary in the Plan, if the Shares are publicly traded, and if a Participant holding an Award that constitutes "deferred compensation" under Section 409A of the Code is a "specified employee" for purposes of Section 409A, no distribution or payment of any amount that is due because of a "separation from service" (as defined in Section 409A without regard to alternative definitions thereunder) will be issued or paid before the date that is six (6) months following the date of such Participant's "separation from service" (as defined in Section 409A of the Code without regard to alternative definitions thereunder) or, if earlier, the date of the Participant's death, unless such distribution or payment can be made in a manner that complies with Section 409A, and any amounts so deferred will be paid in a lump sum on the day after such six (6) month period elapses, with the balance paid thereafter on the original schedule. Each payment provided to any Participant in connection with an Award granted hereunder shall be considered a separate payment for purposes of Section 409A. (c) With respect to any Award that constitutes nonqualified deferred compensation within the meaning of Section 409A, Termination shall mean a separation from service within the meaning of Section 409A. A Participant shall be deemed to have terminated for all purposes of the Plan if such person is employed by or provides services to a Subsidiary and such Subsidiary ceases to be a Subsidiary, unless the Committee determines otherwise. (d) Notwithstanding the foregoing, neither the Company nor the Committee shall have any obligation to take any action to prevent the assessment of any additional tax or penalty on any Participant under Section 409A and neither the Company nor the Committee will have any liability to any Participant for such tax or penalty.

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28 15. Term; Plan Termination and Amendment of the Plan; Modification of Awards. 15.1. Term. The Plan shall terminate on the Plan Termination Date and no Award shall be granted after that date. The applicable terms of the Plan and any terms and conditions applicable to Awards granted prior to the Plan Termination Date shall survive the termination of the Plan and continue to apply to such Awards. 15.2. Plan Amendment or Plan Termination. The Board may earlier terminate the Plan and the Board may at any time and from time to time amend, modify or suspend the Plan; provided, however, that: (a) except as otherwise provided in Section 14.2, no such amendment, modification, suspension or termination shall materially and adversely alter any Awards theretofore granted under the Plan, except with the consent of the Participant, nor shall any amendment, modification, suspension or termination deprive any Participant of any Shares which he or she may have acquired through or as a result of the Plan; and (b) to the extent necessary under any applicable law, regulation or exchange requirement or as provided in Section 3.7, no other amendment shall be effective unless approved by the stockholders of the Company in accordance with applicable law, regulation or exchange requirement. 15.3. Modification of Awards. No modification of an Award shall materially and adversely alter or impair any rights or obligations under the Participant, which determination shall be final and binding on the 16. Non-Exclusivity (d) Payment the Plan. The adoption of the Plan Awards. An Award shall be earned prior to any claimed obligation to pay Board shall not be construed as amending, modifying or rescinding any previously approved incentive arrangement or as creating any limitations on the power Company. The payment the Board to adopt such other incentive arrangements as it may deem desirable, including, without limitation, the granting of stock options otherwise than under the Plan, and such arrangements may be either applicable generally or only in specific cases. 17. Limitation of Liability. As illustrative of the limitations of liability of the Company, but not intended to be exhaustive thereof, nothing in the Plan shall be construed to:

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29 (a) give any person any right to be granted an Award other than at the sole discretion of the Committee; (b) limit in any way the right of the Company or any of its Subsidiaries to terminate the employment of or the provision of services by any person at any time; (c) be evidence of any agreement or understanding, express or implied, that the Company will pay any person at any particular rate of compensation or for any particular period of time; or (d) be evidence of any agreement or understanding, express or implied, that the Company will employ any person at any particular rate of compensation or for any particular period of time. 18. Regulations and Other Approvals: Governing Law. 18.1. Governing Law. Except as to matters of federal law, the Plan and the rights of all persons claiming hereunder shall be construed and determined in accordance with the laws of the State of Delaware without giving effect to conflicts of laws principles thereof. 18.2. Compliance with Law. (a) The obligation of the Company to sell or deliver Shares with respect to Awards granted awards subject to all made during the calendar year following the laws, rules Plan Year regulations, including all within thirty days following the Committee's certification of the achievement of federal Performance Goals, which generally shall be within two state securities laws, one half months following the end of the applicable Plan Year. (e) Awards upon Leave of Absence. For purposes of the application of this Section under the Plan, a Participant's "Leave of Absence" obtaining of all such approvals by governmental agencies as may be deemed necessary or appropriate b y the Committee. (b) The Board may make such changes as may be necessary or appropriate to comply with the rules and regulations of any government authority or to obtain for Eligible Individuals granted Incentive Stock Options the tax benefits under the applicable provisions of the Code and regulations promulgated thereunder. (c) Each grant of an Award and the issuance of Shares or other settlement of the Award is subject to compliance with all applicable federal, state and foreign law. Further, if at any time the Committee determines, in its discretion, that the listing, registration or qualification of Shares issuable pursuant to the Plan is required by any securities exchange or under any federal, state or foreign law, or that the consent or approval of any governmental

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30 regulatory body is necessary or desirable as a condition of, or in connection with, the grant of an Award or the issuance of Shares, no Awards shall be or duration thereof to be granted or payment made or Shares issued, in whole or in part, unless listing, registration, qualification, consent or approval has been effected or obtained free of any conditions that are not acceptable to the Committee. Any person exercising an Option or receiving Shares in connection with any other Award shall make such representations and agreements and furnish such information the Board or Committee may request to assure compliance with the foregoing or any other applicable legal requirements. 18.3. Transfers of Plan Acquired Shares. Notwithstanding anything contained recorded Plan regular business records of the Company's Human Resources. If a Participant has a Leave of Absence that is six (6) months any Award Agreement to the contrary, in the event that the disposition of Shares acquired pursuant to less during is not covered by a then current registration statement under Year. Securities Act and is not otherwise exempt from such registration, such Shares shall Participant will restricted against transfer to the extent required by the Securities Act and Rule 144 or other regulations promulgated thereunder. The Committee may require any individual receiving Shares pursuant to an Award granted considered as active as for the entire Plan Year. As condition precedent to receipt of such Shares, to represent and warrant to the Company in writing that the Shares acquired by such individual are acquired without a view to result, distribution thereof and earned Award sold or transferred other than pursuant to an effective registration thereof prorated for the Plan Year. If a Participant has a Leave of Absence that exceeds six (6) months during the Plan Year, the Leave of Absence time in excess of six (6) months will be deemed inactive time Securities Act or pursuant Plan. As a result, any earned Award will be prorated in accordance with the time (if any) deemed active in the Plan. Human Resources shall have sole discretion an exemption applicable determine and record Participant's "active employment" the Securities Act or the rules and regulations promulgated thereunder. The certificates evidencing any this Section. (f) Form such Shares shall be appropriately amended or have an appropriate legend placed thereon to reflect their status as restricted securities as aforesaid. 19. Miscellaneous. 19.1. Award Agreements. Each Award Agreement shall either be (a) in writing in a form approved by the Committee and executed on behalf of the Company by an officer duly authorized to act on its behalf, or (b) an electronic notice in a form approved by the Committee and recorded by the Company (or its designee) in an electronic recordkeeping system used for the purpose of tracking Payment. as the Committee may provide. If required by the Committee, an Award Agreement shall be executed or otherwise electronically accepted by the recipient of the Award in such form and manner as the Committee may require. The Committee may authorize any officer of the Company to execute any or all Award Agreements on behalf of the Company. 19.2. Forfeiture Events; Clawback. The Committee may specify in an Award Agreement that the Participant's rights, payments, and benefits with respect to an Award shall be subject to reduction, cancellation, forfeiture, clawback or recoupment upon the occurrence of certain specified events or as required by law, in addition to any otherwise applicable forfeiture provisions that apply to the Award. Without limiting the generality of the foregoing, any Award subject

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31 paid in cash Participant's banking account of record with terms of the Company's Incentive Compensation Clawback Policy, as it may Company's Human Resources. (g) Tax Withholding. Any payment under this Plan shall
amended from time to time. 19.3. Multiple Agreements. The terms of each Award may differ from other Awards granted under the Plan at the same time or at some other time. The Committee may also grant more than one Award to a
given Eligible Individual during the term of the Plan, either in addition to or, Section 3.7, in substitution for one or more Awards previously granted applicable income and employment taxes and any other amounts that the
Company is required by law that Eligible Individual. 19.4. Withholding of Taxes. The Company or any of its Subsidiaries may deduct and any payment of cash or Shares to a Participant or other Person under the Plan an
amount sufficient to cover any withholding taxes which may become required with respect to payment or take any other action it deems necessary to satisfy any income or other tax withholding requirements as a result of the grant,
exercise, vesting or settlement of any Award under the Plan. The Company or any of its Subsidiaries shall have the right to require the payment of any such taxes or to withhold from wages or other amounts otherwise payable to a
Participant or other Person, and require that the Participant or other Person furnish all information deemed necessary by the Company or any of its Subsidiaries to meet any tax reporting obligation as a condition to exercise or before
making any payment or the issuance or release of any Shares pursuant to an Award. If the Participant or other Person shall fail to make such tax payments as are required, the Company or its Subsidiaries shall, to the extent permitted by
law, have the right to deduct any such taxes from any payment of any kind otherwise due to such Participant or other Person or to take such other action as may be necessary to satisfy such withholding obligations. If specified in an Award
Agreement at the time of grant or otherwise approved by the Committee in its sole discretion, a Participant may, in satisfaction of his or her obligation to pay withholding taxes in connection with the exercise, vesting or other settlement of
an Award, elect to (i) make a cash payment to the Company, (ii) have withheld a portion of the Shares then issuable to him or her or (iii) deliver Shares owned by the Participant prior to the exercise, vesting or other settlement of an
Award, in each case having an aggregate Fair Market Value equal to the withholding taxes. payment. Shares shares of Company stock pursuant to this Section
19.4 Shares shares Shares shares an Award) a stock award) only only
19.5. Disposition (h) Award Deductions. Any Award under the Plan may be reduced by a Participant's outstanding debts owed to the Company at the time payment ISO
Shares. If the Award is made and shall be subject to the terms of the Company's Clawback Policy, as it may be amended from time to time. 6. Termination of Employment. (a) General Rule. Subject to the provisions of Section 6(b), and
6(c) below, the obligation of the Company to satisfy payment of an Award to makes hereunder is conditioned upon the continued employment of the Participant with the Company at the time determined by the Plan
Administrator for payment of an Award. If the employment of disposition, Participant with the Company is terminated for any reason, at any time prior to the time determined by the Plan Administrator for payment of an Award hereunder,
the Award shall be forfeited and automatically be cancelled without further action of the Company, unless otherwise provided by the Plan Administrator. (b) Termination Due to Retirement. For purposes of the application of this section
under the Plan, unless otherwise expressly defined by an applicable jurisdiction, "Retirement" shall refer to a Participant's voluntary cessation of employment marked by a Human Resources record of Participant's intent to retire and (1)
the Participant's attainment of age 55 with a minimum of ten completed years of service to Company, or (2) attainment of age 60 with a minimum of five completed years of service to the Company. In the event of a Retirement, a
Participant's Award shall be prorated based on the percentage of time during the Plan Year the Participant was employed with the Company and eligible to participate with

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the Plan. Human Resources shall have sole discretion to determine and record Participant's "years of service" under this section. (c) Termination Due to Death. In the event of a Participant's death during the Plan Year, the Participant's Award shall be paid to Participant's estate and the Award shall be equivalent to the target award amount applicable to Participant under the Plan. For clarity, such target award amount shall not be prorated and shall be determined assuming Participant's full participation under the Plan through the end of the Plan Year. (d) Consideration for Terminations Excepted from General Rule. As determined by the Company in its sole discretion, payment of a prorated Award under this Section may be conditioned on the Participant (or the Participant's estate in the case of Death) executing, delivering and not timely revoking a general release of claims against the Company and its affiliates (in the form and manner to be provided by the Company) prior to the Award payment date. 7. General Provisions. (a) Effective Date. The Plan shall be effective commencing January 1, 2024. (b) Amendment and Termination. The Company may, from time to time, by action of the Board, amend, suspend or terminate any or all of the provisions of the Plan with respect to the then current Plan Year and any future Plan Year, without the requirement of obtaining the consent of the affected Participants. The Board shall not, without approval of a majority of the votes cast by the stockholders of the Company at a meeting of stockholders at which a proposal to amend the Plan is voted upon, (i) increase the maximum amount of compensation which may be awarded under the Plan to any individual, (ii) alter the Performance Goals, or (iii) extend the term of the Plan. Subject to the above provisions, the Board and the Committee shall have authority to amend the Plan to make changes that are consistent with the purpose of the Plan or to take into account changes in law and tax and accounting rules, as well as other developments and to make Awards which qualify for beneficial treatment under such rules without shareholder approval. (c) No Right to Employment. Nothing in the Plan shall be deemed to give any Participant the right to remain employed by the Company or to limit, in any way, the right of the Company to terminate, or to change the terms of, a Participant's employment at any time. (d) Governing Law. The Plan shall be governed by and construed in accordance with the laws of Delaware, without regard to the choice-of-law rules thereof. (e) Section 409A. The Company intends that that payments and benefits under this Plan will either comply with or be exempt from Section 409A of the Internal Revenue Code of 1986, as amended (the "Code") and the regulations and guidance promulgated thereunder (collectively "Section 409A") and, accordingly, to the maximum extent permitted, this Plan shall be interpreted to be exempt from Section 409A or in compliance therewith, as applicable. Nothing contained herein shall constitute any representation or warranty by the Company regarding compliance with Section 409A. The Company shall have no obligation to take any action to prevent the assessment of any additional income tax, interest or penalties under Section 409A on any person and the Company, its subsidiaries and affiliates, and each of their respective employees or representatives, shall have no liability to any person with respect thereto. A termination of employment shall not be deemed to have occurred for purposes of any provision of the Plan providing for the payment of any amounts or benefits that are considered nonqualified deferred compensation under Section 409A upon or following a termination of employment, unless such termination is also a "separation from service" 424(c) 409A and the payment thereof prior to a

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"separation from service" would violate Section 409A. For purposes of any such provision Code Plan or relating to any such payments or benefits, references to a "termination," "termination of employment," or like terms shall mean "separation from service." If an amount is paid in two or more installments, for purposes of Section 409A, each installment shall be treated as a separate payment. Notwithstanding any contrary provision in the Plan, any payment(s) of nonqualified deferred compensation (within the meaning of Section 409A) that are otherwise required to be made under the Plan to a "specified employee" (as defined under Section 409A) as a result of his or her separation from service (other than a payment that is not subject to Section 409A) shall be delayed for the first six months following such separation from service (or, if earlier, until the date of death of the specified employee) regulations promulgated thereunder, of any Share or Shares issued to such Participant pursuant to the exercise of an Incentive Stock Option within the two-year period commencing shall instead be paid after that immediately follows date end of such six-month period.

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POLICY Adopted: January 3, 2017 Revised: November 1, 2023 Page 1 of 10 Securities Trading and Disclosure Policy I. Scope: This policy sets forth trading and disclosure guidelines applicable to JELD-WEN Holding, Inc., all of its subsidiaries and controlled affiliates and their respective officers, directors and employees (collectively, the "Company" or "JELD-WEN"), and addresses the following matters: • insider trading and the use of material non-public information; • restrictions on trading in Company securities for designated individuals, including blackout periods and pre-clearance trading procedures; • prohibitions on hedging or pledging Company securities for designated individuals; and • compliance with Regulation Fair Disclosure ("Regulation FD") promulgated by the U.S. Securities and Exchange Commission ("SEC"). Other Company policies place additional requirements on the confidentiality of Company information. This document does not replace those policies. II. Definitions: A. "Designated Persons" include the following: 1. Section 16 Officers and members grant Board of Directors of JELD-WEN Holding, Inc. ("JELD-WEN Directors"), and their administrative assistants; 2. all persons who assist in the preparation of, receive have access to, the Company's: i. consolidated and operating segments financial results; ii. liquidity or long-term forecasts; iii. drafts of quarterly and annual filings with the SEC; iv. drafts of quarterly and annual earnings releases; or v. drafts of presentations to debt and equity securities analysts; and 3. any other person that the General Counsel designates from time to time to be a Designated Person for purposes of this policy, such as contractors or consultants who have access to material non-public information. B. "Immediate Family" means your spouse, parents (including step-parents), children (including step-children), siblings, mothers- and fathers-in-law, sons- and daughters- in-law and brothers- and sisters-in-law and any other individual (other than a tenant or employee) who shares your home and any other relative who might control or influence you. Exhibit 19.1

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Adopted: January 3, 2017 Revised: November 1, 2023 Page 2 of 10 C. “Insiders” include Designated Persons as well as any other person who has material non-public information about the Company. D. Information is “material” if there is a substantial likelihood that a reasonable investor would consider the information to be important in deciding whether to buy, sell or hold securities. Any information that could reasonably be expected to have a substantial effect on the Company's stock price, whether it is positive or negative, is considered material. There is no bright-line standard for assessing materiality; rather, materiality is based on an assessment of all of the facts and circumstances. Enforcement authorities often evaluate materiality with the benefit of hindsight. While it is not possible to define all categories of material information, some examples of information that ordinarily are regarded as material include: 1. Consolidated and operating segments financial results and forecasts, including earnings or losses and liquidity; 2. a pending or proposed investment, joint venture, merger, acquisition, disposition or tender offer; 3. significant related party transactions; 4. significant events concerning the Company's assets; 5. a change in dividend policy, the declaration of a stock split, an offering of additional securities or the establishment of a repurchase program for Company securities; 6. bank borrowings or other financing transactions out of the ordinary course; 7. a significant change in the Company's pricing or cost structure; 8. a senior management change; 9. a change in auditors; 10. pending or threatened significant litigation, or the resolution of any such litigation; 11. the existence of severe liquidity problems; 12. a significant cybersecurity incident; and 13. the gain or loss of a significant customer or supplier. E. Information is “non-public” when it is not generally available to the investing public. Information is public if it is generally available through the media via a press release or disclosed in public documents such as filings with the SEC. If the information is not

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Adopted: January 3, 2017 Revised: November 1, 2023 Page 3 of 10 available in the general media or in a public filing, you should consider it to be non- public. F. "Section 16 Officers" means the officers of the Company who are subject to the reporting requirements of Section 16(a) of the United States Securities Exchange Act of 1934, as amended (the "Exchange Act"). G. "Securities" of the Company include any securities of the Company or its subsidiaries, including common stock, preferred stock, restricted stock, share units, options, warrants, convertible debentures, derivative securities (such as publicly traded options, including puts and calls), and debt securities. H. "Trading" (or "trade") includes buying or selling (long or short) securities; writing options, puts or calls; pledging securities; exercising options or converting convertible securities; making an election to purchase or transfer under any employee stock purchase plan or dividend reinvestment plan, or deciding to invest in or divest of Company securities in 401(k), IRA, ESOP, KSOP, or other retirement accounts. I. "You" includes any Insider and any entity (e.g., partnership, trust, etc.) that an Insider has majority control of or the ability to direct investments. III. Policy: PROHIBITION ON TRADING ON MATERIAL NON-PUBLIC INFORMATION U.S. federal laws and the laws of most jurisdictions establish strict guidelines regarding the use of material non-public information. It is illegal to buy or sell a security of a publicly traded company on the basis of material non-public information relating to those companies. This practice is often referred to as "insider trading." It is also illegal to "tip" others about insider information – meaning to pass material non-public information on to others or recommend to anyone the purchase or sale of any securities on the basis of material non-public information. The SEC and the United States Department of Justice (as well as authorities in other countries) pursue vigorously both insider trading and "tipping" violations. U.S. federal securities laws discourage insider trading by providing a wide range of potential punishments. In addition to requiring the return of profits gained or losses avoided, the SEC may impose a penalty of up to three times the unlawful windfall in a particular case. In addition, the government may impose a criminal fine of up to five million dollars ($5,000,000) for an individual (and up to twenty-five million dollars ($25,000,000) for corporations or other

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Adopted: January 3, 2017 Revised: November 1, 2023 Page 4 of 10 legal entities) or twenty (20) years imprisonment. The government may hold employers liable if they know, or recklessly disregard, employee conduct leading to an insider trading violation. Under these circumstances, employers may face treble damages and exposure to plaintiffs with an ability to claim enhanced private remedies. A Company employee who trades on material non-public information cannot expect the Company to protect his or her interests. Accordingly, the Company's policy is that no one with knowledge of material non-public information regarding the Company may: • purchase, sell, or otherwise transact in any Company securities; • other than as necessary to conduct Company business, disclose such material non-public information to anyone, even one-year period commencing Company; or • advise, recommend or suggest to anyone that they purchase, sell, hold or exchange any Company securities based on material non-public information. Generally, trading in the Company's securities is prohibited until forty-eight (48) hours following the public disclosure of material non-public information. If you are uncertain as to whether information is material or non-public, you should consult your manager or the General Counsel. This policy also precludes you from trading in the securities of another publicly traded company with which the Company does business, including a customer or supplier of JELD- WEN, if you are in possession of material non-public information about that other company. RESTRICTIONS ON TRADING IN THE COMPANY'S SECURITIES To ensure compliance with this policy and applicable U.S. federal securities laws, and to avoid even the appearance of trading day after basis of inside information, date Company places certain restrictions upon trading in the Company's securities generally or by specific individuals. A. Trading by Immediate Family. Even if your Immediate Family trades independently transfer you in a legal transaction without the benefit such Share material non-public information, government authorities will judge your and their actions in hindsight. Accordingly, you should advise your Immediate Family to abide by the same trading restrictions imposed upon you under this policy and you should exercise caution not to provide your Immediate Family with material non-public information Shares suggest that they trade in Company securities on your recommendation. Defense costs for you and/or your Immediate Family often exceed any gain that most people would have otherwise derived from trading in the Company's securities.

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Adopted: January 3, 2017 Revised: November 1, 2023 Page 5 of 10 B. Trading by Designated Persons. Designated Persons are required to pre-clear any trading in Company securities with the General Counsel (or their designee), and the General Counsel is required to pre-clear any trading in Company securities with the Chief Executive Officer. Pre- clearance is based upon whether the individual is in possession (or might be deemed in hindsight to be in possession) of material non- public information, whether the individual has complied with the individual's SEC reporting obligations, whether the individual would be subject to disgorgement of short-swing profits under Section 16 of the Exchange Act and whether all other legal requirements have been met from the Company's point of view. Pre-clearance also serves to ensure that any trades are properly reported Participant pursuant SEC where required. 1. Blackout Periods. The Company prohibits Designated Persons, and their controlled entities, from trading in Company securities during quarterly "blackout" periods because of their access the Company's internal financial statements or other material non-public information regarding the Company's performance during annual and quarterly fiscal periods. i. Quarterly Blackout Periods. The blackout period for each fiscal quarter begins on the twentieth (20) calendar day of the third fiscal month of each fiscal quarter and continues until forty-eight (48) hours following the public release of that quarter's earnings (for example, if earnings is publicly released at 4:30 p.m. ET on a Monday, you may commence trading in Company securities, provided you are not in possession of any material non-public information, when the New York Stock Exchange opens on Thursday). ii. Special Blackout Periods. From time to time, the General Counsel may prohibit specific groups of directors, officers or employees of the Company in possession of material non-public information from trading in Company securities until exercise, information is disclosed publicly. 2. Procedure for Pre-Clearance of Trades. A request for pre-clearance should be submitted to the General Counsel (or their designee) at least two (2) business days in advance of the proposed transaction and should include any pertinent information as needed by the Company. The General Counsel (or their designee) is under no obligation to approve a transaction submitted for pre- clearance and may determine, in their sole discretion, not to approve the transaction. If a person seeks pre-clearance and approval to engage in

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32 Participant shall, Adopted: January 3, 2017 Revised: November 1, 2023 Page 6 of 10 transaction is denied, then he or she should refrain from initiating any transaction in Company securities and should not inform any other person of the restriction. Once pre-clearance is granted, (i) JELD-WEN Directors, Section 16 Officers and Designated Persons who are also members of the senior leadership team must complete the pre-cleared transaction ten (10) days 24 hours the approval and (ii) all other Designated Persons must complete the pre- cleared transaction within 48 hours of the approval or disposition, notify later date given in the approval. If the transaction is not completed within the required time period, pre-clearance of the transaction must be re-requested. 3. Disclaimer of Liability. When a request for pre-clearance is made, the requestor should carefully consider whether he or she may be aware of any material non- public information about thereof, and should describe fully those circumstances to the General Counsel. Even if a proposed transaction receives pre-clearance approval, you still may not enter into the transaction if you are aware of material non-public information. Neither the General Counsel, his or her designee nor the Company shall be liable for clearing a trade when you are aware of material non-public information, nor for lost profits or opportunities as a result of a failure to pre-clear a trade or plan or timely pre-clear a trade or plan. The Company may place stock transfer restrictions within the third-party platform utilized delivery the Company to manage its equity grants to prevent transfers until any pre-clearance obligations are met. C. Trading by the Company. Trades by the Company in its own securities, such as stock repurchases, are subject to the same blackout periods as trades by Insiders. Except for trades in Company securities made pursuant to a compliant Rule 10b5-1 plan as described below, employees shall not cause the Company to trade in its own securities without prior clearance from the General Counsel. D. Exceptions. Transactions that may be necessary or justifiable for independent reasons (such as the need to raise money for an emergency expenditure), or small transactions, are not excepted from this policy. The securities laws do not recognize any mitigating circumstances. Even the appearance an improper transaction must be avoided to preserve the Company's reputation for adhering to the highest standards of conduct. Any exception to this policy may be granted only by the General Counsel.

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Adopted: January 3, 2017 Revised: November 1, 2023 Page 7 of 10 PROHIBITION ON HEDGING OR PLEDGING COMPANY SECURITIES Because the Company believes it is improper and inappropriate for Designated Persons to engage in short-term or speculative transactions involving Company securities, the Company prohibits the purchase or sale of financial instruments (including options, puts, calls, straddles, equity swaps or other derivative securities that are directly linked to Company stock) or other transactions (such as short sales) that are designed to, or that have the effect of, hedging or offsetting any decrease in the market value of Company securities, by Designated Persons. In addition, the Company prohibits pledging of Company stock as collateral by Designated Persons. These prohibitions do not apply to transactions entered prior to the adoption of this policy. TRADING PLANS The U.S. securities laws allow for specific safe harbors from insider trading liability, such as trades pursuant to a notice trading plan adopted pursuant to Rule 10b5-1(c) of the Exchange Act. Any JELD-WEN Director, Section 16 Officer or member of the senior leadership team who wishes to implement a Rule 10b5-1 trading plan must first pre-clear the plan with the General Counsel (or their designee). Modifications or amendments to existing Rule 10b5-1 trading plans must also be pre-cleared with the General Counsel (or their designee). As required by Rule 10b5-1, a person may enter into a trading plan only when he or she is not in possession of material non-public information. In addition, a Rule 10b5- 1 trading plan may not be entered into during a blackout period. Any Rule 10b5-1 plan (including modifications or amendments) adopted by a JELD-WEN Director or Section 16 Officer must comply with federal securities laws, including: A. Cooling Off Period. A cooling off period the later of (1) 90 days following plan adoption or modification or (2) two (2) business days after filing of the Company's Form 10-Q or 10-K for the fiscal quarter in which the plan was adopted or modified. B. Affirmative Statement. A representation that at the time of adoption or modification of a plan you (1) are not aware of any material non-public information of the Company and (2) adopted or modified the plan in good faith and not to evade Rule 10b5-1 prohibitions. C. No Overlapping Plans. Only one trading plan is permitted at a time. Multiple trading plans are not permitted even if the plans cover different time periods.

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Adopted: January 3, 2017 Revised: November 1, 2023 Page 8 of 10 TRANSACTIONS WITH THE COMPANY This policy does not apply in the case of the following transactions, except as specifically noted: A. Stock Option Exercises. This policy does not apply to the exercise of an employee or director stock option acquired pursuant to the Company's compensation plans, or to the exercise of a tax withholding right pursuant to which a person has elected to have the Company withhold or sell shares subject to an option to satisfy tax withholding requirements, provided that, in the case of selling shares, such election was made during an open trading window. This policy does apply, however, to any other sale of stock as part of a broker- assisted cashless exercise of an option, or any other market sale for the purpose of generating the cash needed to pay the exercise price of an option. B. Restricted Stock Awards. This policy does not apply to the vesting of restricted stock or restricted stock units, or the exercise of a tax withholding right pursuant to which you elect to have the Company withhold shares of stock to satisfy tax withholding requirements upon the vesting of any restricted stock. C. Other Similar Transactions. Any other purchase of Company securities from the Company or sales of Company securities at its principal executive office. 19.6. Plan Unfunded. The Plan shall be unfunded. Except for reserving a sufficient number of authorized Shares are not subject to this policy. DISCLOSURE OF MATERIAL NON-PUBLIC INFORMATION; PROHIBITION AGAINST SELECTIVE DISCLOSURE JELD-WEN is committed extent required by law full, fair, accurate, timely and understandable disclosure of information regarding its historical performance and future prospects meet investors in compliance with all applicable securities laws, including requirements SEC's Regulation FD, which mandates that public companies avoid selectively disclosing market-sensitive information to participants in the securities markets, and the rules Plan, New York Stock Exchange. The Company provides public disclosure of information through various means, including publicly noticed webcasts, filed or furnished SEC reports, press releases, social media and other methods of disclosure that are reasonably designed to provide broad, non-exclusionary and non-selective distribution of information to the public. A. Authorized Representatives. Only the Chief Executive Officer, Chief Financial Officer, head of Investor Relations, head of Corporate Communications and in certain circumstances their designees, are authorized to communicate financial or material non-public information regarding shall not to anyone outside of the Company.

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Adopted: January 3, 2017 Revised: November 1, 2023 Page 9 of 10 B. Required Approvals. Any communication of financial or material non-public information (or information that may required considered as such) establish any special or separate fund or to make any other segregation anyone outside assets to assure payment of any Award granted under Plan. Omnibus Equity Plan originally adopted by the Board of Directors on January 3, 2017, approved by the Shareholders on January 20, 2017, amended Company, including through planned webcasts, SEC reports restated by the Compensation Committee on February 23, 2021, amended and restated by the Board of Directors on

February 16, 2022, press releases, must be reviewed Shareholders head of Investor Relations, head of Corporate Communications, the Chief Financial Officer and the General Counsel in advance. C. Inadvertent or Other Disclosures Outside this Policy. To avoid serious violations of law, any inadvertent disclosure of material non-public information or any disclosure in violation of this policy must be reported immediately to the General Counsel and the head of Investor Relations. The General Counsel and head of Investor Relations will determine any corrective action necessary to comply with Regulation FD and other federal securities laws. D. Quiet Period. The Company will observe a "quiet period," during which communications with analysts and investors April 28, 2022 financial information regarding the quarter (and regarding the full fiscal year during the fourth quarter) will be restricted. The quiet period will begin at the end of the business day on the last business day of the fiscal quarter or year and continue until the Company's earnings information for the applicable period is made public. However, answers to fact-based questions may be answered via email by a member of Investor Relations, the Chief Financial Officer or the Chief Executive Officer to analysts and investors upon request. Subject to approval by the General Counsel, exceptions may occur based on the need to discuss breaking news or otherwise. E. Analyst Reports. Analyst reports may only be reviewed to correct errors that can be corrected by referring to publicly available, historical factual information or to correct any mathematical errors. F. Media Communications. Any inquiries from the media or press should be referred to Corporate Communications. G. Marketplace Rumors. The Company typically will not comment on marketplace rumors regarding the Company's operations or potential transactions involving the Company. Examples of such rumors include speculation that the Company is in discussions to acquire another company or that the Company's quarterly operating results will exceed projections made by securities analysts. Employees who become aware of rumors that they expect could impact the market for the Company's securities should advise the General Counsel and the Authorized Representatives described above.

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Adopted: January 3, 2017 Revised: November 1, 2023 Page 10 of 10 SEC REPORTING U.S. federal securities laws require JELD-WEN directors and Section 16 Officers to make certain filings with the SEC upon becoming a director or Section 16 Officer and in connection with any trading in Company securities (including the grant of equity interests). Under U.S. federal law and Company policy, it is the responsibility of each JELD-WEN director and Section 16 Officer to make all required filings timely. Directors and Section 16 Officers must report all transactions immediately to the General Counsel, who will assist in making these filings. RESPONSIBILITY AND CONSEQUENCES OF VIOLATIONS A. Individual Responsibility. In all cases, the responsibility for determining whether an individual is in possession of material non-public information rests with that individual, and any action on the part of the Company, the General Counsel or any other employee or JELD-WEN director pursuant to this policy (or otherwise) does not in any way constitute legal advice or insulate an individual from liability under applicable securities laws. B. Consequences of Violations. In addition to civil and criminal penalties that may be imposed by governmental authorities, such as those described in Section III, an individual's failure to comply with this policy may subject the individual to disciplinary action by the Company, including termination of employment or service (with or without cause), whether or not the employee's failure to comply results in a violation of law. IV. Management and Administration: The Company's General Counsel shall administer this policy. All interpretations and decisions by the General Counsel or their designee shall be final and not subject to further review. The Legal Department will be responsible for the management of this policy. The General Counsel has final authority over this policy. Any requests for changes to the policy should be made to the policy owner. Any changes shall be reviewed and approved in accordance with JELD-WEN's policy review process then in effect.

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Harbor Isles, LLC

Oregon

Builders Paradise Grand Cayman

Vännäs Dörr AB Sweden

Ltd. Limited

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JELD-WEN Australia Pty, Ltd. Australia Corinthian Industries (Australia) Pty. Ltd. Australia Stegbar Pty. Ltd. Australia Regency (Showerscreens & Wardrobes) Pty. Ltd. Australia JELD-WEN Glass Australia Pty. Ltd. Australia Corinthian Industries (Asia) SDN BHD Malaysia Aneeta Window Systems (Vic) Pty Ltd Australia Trend Windows & Doors Pty Ltd Australia Fenestra Hardware Specialists Pty Ltd Australia Breezway Australia Pty Ltd Australia Breezway Malaysia SND BHD Malaysia Breezway North America Inc. California Kolder Pty Ltd Australia Kolder Installations Pty Ltd Australia A&L Windows Pty Ltd Australia A&L Windows (QLD) Pty Ltd Australia A&L Services, Pty Ltd Australia List as of December 31, 2023.

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February 21, 2023 February 20, 2024

February 21, 2023 February 20, 2024

Exhibit 31.1

CERTIFICATION OF PERIODIC REPORT UNDER SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, William J. Christensen, certify that:

1. I have reviewed this Annual Report on Form 10-K for the fiscal period ended December 31, 2022 December 31, 2023 of JELD-WEN Holding, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 21, 2023 February 20, 2024

/s/ William J. Christensen
William J. Christensen
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF PERIODIC REPORT UNDER SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Julie Albrecht, certify that:

1. I have reviewed this Annual Report on Form 10-K for the fiscal period ended December 31, 2022 December 31, 2023 of JELD-WEN Holding, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles; and

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: February 21, 2023 February 20, 2024

/s/ Julie Albrecht
Julie Albrecht
Executive Vice President and Chief Financial Officer (Principal Financial Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to 18 U.S.C. §1350, we, the undersigned officers of JELD-WEN Holding, Inc. (the “Company”), do hereby certify that the Company's Annual Report on Form 10-K for the fiscal period ended December 31, 2022 December 31, 2023 (the “Report”) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 21, 2023 February 20, 2024

/s/ William J. Christensen
William J. Christensen
President and Chief Executive Officer
(Principal Executive Officer)

/s/ Julie Albrecht
Julie Albrecht
Executive Vice President and Chief Financial Officer (Principal Financial Officer)

The foregoing certification is being furnished solely pursuant to 18 U.S.C. §1350 and is not being filed as part of the Report or as a separate disclosure document.

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Page 1 of 7 Revised: 10/31/2023 POLICY JELD-WEN Holding, Inc. Incentive Compensation Clawback Policy I. Purpose: The purpose of this Incentive Compensation Clawback Policy (the “Policy”) is to define the events that may require Covered Employees or Officers to repay or return to JELD-WEN Holding, Inc. (the “Company”) certain cash and equity Incentive-based Compensation. II. Scope: The Compensation Committee (the “Committee”) of the Company’s Board of Directors adopts this “clawback” policy under which, upon the occurrence of certain events, Covered Employees or Officers may be required to repay or return to the Company certain cash and equity Incentive-based Compensation in the event of that the Company is required to prepare a Restatement (a “Restatement Triggering Event”) or a Misconduct Triggering Event. III. Mandatory Recovery for a Restatement Triggering Event In the event of a Restatement Triggering Event, the Committee shall reasonably promptly (in accordance with the Applicable Rules): 1. Determine the amount of Recoverable Incentive for each Officer in connection with the Restatement; a. For Restatement Eligible Incentive Compensation based on stock price or total shareholder return where the amount of Recoverable Incentive is not subject to mathematical recalculation directly from the information in the applicable Restatement, the amount shall be determined by the Committee (or its designee) based on a reasonable estimate of the effect of the Restatement on the stock price or total shareholder return upon which the Restatement Eligible Incentive Compensation was Received (in which case, the Company shall maintain documentation of such determination of that reasonable estimate and provide such documentation to the Listing Exchange). 2. Provide each Officer with written notice containing the amount of

Recoverable Incentive and a demand for repayment or return, as applicable; and 3. Recover the amount of Recoverable Incentive through any Method of Recovery it deems reasonable and appropriate in its discretion based on all applicable facts and circumstances and taking into account the time value of money and the cost to shareholders of delaying recovery paid to an individual during the Applicable Period, unless recovery would be Impracticable. Exhibit 97.1

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Page 2 of 7 . Revised: 10/31/2023 IV. Discretionary Recovery for a Misconduct Triggering Event Upon the occurrence of a Misconduct Triggering Event, the Committee may, in its sole discretion, after evaluating the associated costs and benefits, recover all or any portion of the Recoverable Incentive paid to an individual during the Applicable Period. In addition, the Committee may, in its sole discretion and in the reasonable exercise of its business judgment, determine whether and to what extent additional action is appropriate to address the circumstances surrounding such Misconduct Triggering Event so as to minimize the likelihood of any recurrence and to impose such other discipline as it deems appropriate. In exercising the discretion afforded to it under this Policy, the Committee may consider any and all facts it considers relevant under all of the circumstances, including without limitation (i) the likelihood of success of any recovery under this Policy under governing law as compared to the cost and effort involved, (ii) whether the assertion of a claim may prejudice the interests of the Company, including in any related proceeding or investigation, (iii) the passage of time since the occurrence of the Misconduct Triggering Event and (iv) any pending legal proceeding relating to the Misconduct Triggering Event. Subject to applicable law, the Committee may seek to recoup any Recoverable Incentive by requiring any affected Covered Employee to repay such amount to the Company, by set-off, by reducing future compensation, or by such other means or combination of means as the Committee, in its sole discretion, determines to be appropriate. V. Definitions. For the purposes of this Policy, the following terms have the following meanings: A. “Adverse Effect” means any significant adverse impact on the reputation of, or a significant adverse economic consequence for, the Company or any of its affiliated companies, or any division or segment thereof. B. “Applicable Period” means (i) in the case of any Restatement, the three completed fiscal years of the Company immediately preceding the Restatement Date and (ii) in the case of any Improper Conduct, the period commencing one year prior to the date of the Improper Conduct and continuing until the time the Improper Conduct is discovered, as determined by the Committee. C. “Applicable Rules” means Section 10D of the Exchange Act and any applicable rules or standards adopted by the SEC thereunder (including Rule 10D-1 under the Exchange Act) or the Listing Exchange pursuant to Rule 10D-1 under the Exchange Act (including Section 303A.14 of the New York Stock Exchange Listed Company Manual), in each case as may be in effect from time to time.

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Page 3 of 7 . Revised: 10/31/2023 D. "Covered Employee" means any officer or other employee who may from time to time receive Incentive-based Compensation from the Company. E. "Exchange Act" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder. F. "Financial Reporting Measures" means measures that are determined and presented in accordance with the accounting principles used in preparing the Company's financial statements, and any measures that are derived wholly or in part from such measures. Stock price and total shareholder return shall for purposes of this Policy be considered Financial Reporting Measures. For the avoidance of doubt, a Financial Reporting Measure need not be presented within the Company's financial statements or included in a filing with the SEC. G. "Impracticable" means in accordance with the good faith determination of the Committee, or if the Committee does not consist of independent directors, a majority of the independent directors serving on the Board of Directors, that either: (i) the direct expenses paid to a third party to assist in enforcing the Policy against an Officer would exceed the amount to be recovered, after the Company has made a reasonable attempt to recover the applicable Recoverable Incentive, documented such reasonable attempt(s) and provided such documentation to the Listing Exchange; (ii) recovery would violate home country law where that law was adopted prior to November 28, 2022, provided that, before concluding that it would be Impracticable to recover any amount of Recoverable Incentive based on violation of home country law, the Company has obtained an opinion of home country counsel, acceptable to the Listing Exchange, that recovery would result in such a violation and a copy of the opinion is provided to the Listing Exchange; or (iii) recovery would likely cause an otherwise tax-qualified retirement plan, under which benefits are broadly available to employees of the Company, to fail to meet the requirements of 26 U.S.C. § 401(a)(13) or 26 U.S.C. § 411(a) and regulations thereunder. H. "Improper Conduct" means (i) the conviction or entry of a plea of guilty or nolo contendere to (A) any felony or (B) any crime (whether or not a felony) involving moral turpitude, fraud, theft, breach of trust or other similar acts, whether under the laws of the United States or any state thereof or any similar foreign law to which the person may be subject; (ii) being engaged or having engaged in conduct constituting breach of fiduciary duty, dishonesty, willful misconduct or material neglect relating to the Company or any of its subsidiaries or the performance of a person's duties; (iii) appropriation (or an overt act attempting appropriation) of a material business opportunity of the Company or any of its subsidiaries; (iv) misappropriation (or an overt act attempting misappropriation) of any funds of the Company or any of its

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Page 4 of 7 . Revised: 10/31/2023 subsidiaries; (v) the willful failure to (A) follow a reasonable and lawful directive of the Company or any of its subsidiaries at which a person is employed or provides services, or the Committee or (B) comply with any written rules, regulations, policies or procedures of the Company or a subsidiary at which a person is employed or to which he or she provides services which, if not complied with, would reasonably be expected to have more than a de minimis Adverse Effect on the business or financial condition of the Company; (vi) violation of a person's employment, consulting, separation or similar agreement with the Company or any non-disclosure, non-solicitation or non- competition covenant in any other agreement to which the person is subject; (vii) deliberate and continued failure to perform material duties to the Company or any of its subsidiaries; or (viii) violation of the Company's Code of Business Conduct and Ethics, as it may be amended from time to time. I. "Incentive-based Compensation" means any compensation that is granted, earned or vested based wholly or in part upon the attainment of a Financial Reporting Measure. Incentive-based Compensation also includes time-based restricted stock unit awards (vested and unvested) with respect to any Misconduct Triggering Event. For the avoidance of doubt, Incentive-based Compensation includes commissions. J. "Method of Recovery" includes, but is not limited to: (i) requiring reimbursement of any Recoverable Incentive; (ii) seeking recovery of any gain realized on the vesting, exercise, settlement, sale, transfer, or other disposition of any equity-based awards; (iii) offsetting the Recoverable Incentive from any compensation otherwise owed by the Company to an Officer; (iv) cancelling outstanding vested or unvested equity awards; and/or (v) taking any other remedial and recovery action permitted by applicable law, as determined by the Board of Directors or the Committee. K. "Misconduct Triggering Event" means, with respect to any Covered Employee, that person engaging in or having engaged in fraud or willful misconduct that results in a Restatement or otherwise engaging in or having engaged in Improper Conduct. L. "Listing Exchange" means the New York Stock Exchange or such other U.S. national securities exchange or national securities association on which the Company's securities are listed. M. "Officer" has the meaning set forth in Rule 16a-1(f) of the Exchange Act, as applied by the Board of Directors from time to time, and any other senior executive of the Company who may from time to time be deemed subject to the Policy by the Committee.

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Page 5 of 7 . Revised: 10/31/2023 N. "Recoverable Incentive" means (i) with respect to each Officer in connection with a Restatement Triggering Event, the amount of Restatement Eligible Incentive Compensation that exceeds the amount of Restatement Eligible Incentive Compensation that otherwise would have been Received had it been determined based on the restated amounts, computed without regard to any taxes paid and (ii) with respect to any Misconduct Triggering Event, the amount of any Incentive-Based compensation (including stock options and other equity awards (vested and unvested)) paid to or in respect of an individual during the Applicable Period that the Committee determines, in its sole discretion, to be appropriate in light of the scope and nature of the Improper Conduct. With respect to a Misconduct Triggering Event, in no event will the amount of Recoverable Incentive exceed the total amount of Incentive-based Compensation paid or granted during the Applicable Period. O. "Received" shall, with respect to any Incentive-based Compensation, mean deemed receipt and Incentive-based Compensation shall be deemed received in the Company's fiscal period during which the Financial Reporting Measure specified in the Incentive-based Compensation award is attained, even if the payment or grant of the Incentive-based Compensation occurs after the end of that period. For the avoidance of doubt, Incentive-based Compensation that is subject to both a Financial Reporting Measure vesting condition and a service-based vesting condition shall be considered received when the Financial Reporting Measure is achieved, even if the Incentive-based Compensation continues to be subject to the service-based vesting condition. P. "Restatement" means an accounting restatement: (i) due to the material noncompliance of the Company with any financial reporting requirement under the securities laws, including any required accounting restatement to correct an error in previously issued financial statements that is material to the previously issued financial statements (a "Big R" restatement); or (ii) that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period (a "little r" restatement). For the avoidance of doubt, a Restatement will not be deemed to occur in the event of a restatement of the Company's financial statements due to a retrospective (i) application of a change in accounting principles; (ii) revision to reportable segment information due to a change in the structure of the Company's internal organization; (iii) reclassification due to a discontinued operation; (iv) application of a change in reporting entity, such as from a reorganization of entities under common control; or (v) revision for stock splits, reverse stock splits, stock dividends, or other changes in capital structure. Q. "Restatement Date" means the earlier to occur of: (i) the date the Board of Directors, a committee of the Board of Directors or an officer of the Company

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Page 6 of 7 . Revised: 10/31/2023 authorized to take such action if Board of Directors or Committee action is not required, concludes, or reasonably should have concluded, that the Company is required to prepare a Restatement; or (ii) the date a court, regulator or other legally authorized body directs the Company to prepare a Restatement. R. "Restatement Eligible Incentive Compensation" means, with respect to each individual who served as an Officer at any time during the applicable performance period for any Incentive-based Compensation (whether or not such individual is serving as an Officer at the time the Recoverable Incentive is required to be repaid to the Company), all Incentive-based Compensation Received by such individual: (i) on or after October 2, 2023; (ii) after beginning service as an Officer; (iii) while the Company has a class of securities listed on the Listing Exchange; and (iv) during the Applicable Period. S. "SEC" means the U.S. Securities and Exchange Commission. T. "Triggering Event" means either a Restatement Triggering Event or a Misconduct Triggering Event. VI. Indemnification and Disclosure: INDEMNIFICATION PROHIBITION The Company shall not be permitted to indemnify any Officer against the loss of any Recoverable Incentive that is repaid, returned or recovered in connection with a Restatement Triggering Event, pursuant to the terms of this Policy and/or pursuant to the Applicable Rules or to pay or reimburse any Officer for the cost of third-party insurance purchased by an Officer to cover any such loss under this Policy and/or pursuant to the Applicable Rules. Further, the Company shall not enter into any agreement that exempts any Incentive-based Compensation from the application of this Policy relating to a Restatement Triggering Event or that waives the Company's right to recovery of any Recoverable Incentive relating to a Restatement Triggering Event and this Policy shall supersede any such agreement (whether entered into before, on or after October 2, 2023). Any such purported indemnification (whether oral or in writing) shall be null and void. DISCLOSURE The Company shall file all disclosures with respect to this Policy in accordance with the requirements of U.S. federal securities laws, including any disclosure required by applicable SEC rules. The Company shall disclose to its stockholders, not later than the filing of the next following proxy statement, the actions taken or the decision not to take action with regard to recovery or non-recovery, as the case may be, of Recoverable Incentive (including reporting

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Page 7 of 7 . Revised: 10/31/2023 the aggregate amounts recovered) related to any Triggering Event, if such event has been previously disclosed in the Company's filings with the SEC. VII. Management and Administration: ADMINISTRATION Except as specifically set forth herein, this Policy shall be administered by the Committee. Any determinations made by the Board or its committees shall be final and binding on all affected individuals and need not be uniform with respect to each individual covered by this Policy. Subject to any limitation under applicable law, the Committee may authorize and empower any officer or employee of the Company to take any and all actions necessary or appropriate to carry out the purpose and intent of this Policy (other than with respect to any recovery under this Policy involving such officer or employee). The Committee is authorized to engage, on behalf of the Company, any third-party advisors it deems advisable in order to perform any calculations contemplated by this Policy. INTERPRETATION AND COMPLIANCE This Policy will be interpreted and enforced, and appropriate disclosures and filings will be made, in a manner that is consistent with the Applicable Rules. The terms of this Policy shall also be construed and enforced in such a manner as to comply with applicable law, including the Sarbanes-Oxley Act of 2002, the Dodd-Frank Wall Street Reform and Consumer Protection Act, and any other law or regulation that the Committee determines is applicable. To the extent the Applicable Rules require the Company to recover Incentive-based Compensation in additional circumstances besides those specified above, nothing in this Policy shall be deemed to restrict the right of the Company to recover Incentive-based Compensation to the fullest extent required by the Applicable Rules. To the extent any provision of this Policy is in any manner deemed inconsistent with or unenforceable or invalid by the Applicable Rules, this Policy shall be treated as retroactively and automatically amended to be compliant with such rules and such provision shall be applied to the maximum extent permitted by applicable law. AMENDMENT AND TERMINATION The Committee may terminate this Policy at any time. The Committee may also, from time to time, suspend, discontinue, revise, or amend this Policy in any respect whatsoever. Nothing in this Policy will be deemed to limit or restrict the Company from providing for recoupment, repayment and/or forfeiture of compensation (including Incentive-based Compensation) under circumstances not set forth in this Policy. Notwithstanding anything in this paragraph to the contrary, no amendment or termination of this Policy shall be effective if such amendment or termination would (after taking into account any actions taken by the Company contemporaneously with such amendment or termination) cause the Company to violate the Applicable Rules, or any federal securities law, SEC rule or Listing Exchange rule.

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