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Armstrong World Industries Reports Fourth Quarter and Full Year 2020 Results

February 23, 2021

Key Highlights

- Net sales down 3% versus the prior year quarter
- Operating income down 29% versus the prior year quarter
- Adjusted EBITDA down 19% versus the prior year quarter
- Acquired Arktura, LLC during the quarter
- 2021 Guidance versus prior year: Net Sales of +10%-13% and EBITDA of +9%-13%

LANCASTER, Pa., Feb. 23, 2021 (GLOBE NEWSWIRE) -- Armstrong World Industries, Inc. (NYSE:AWI), a leader in the design, innovation and manufacture of commercial and residential ceiling, wall and suspension system solutions, today reported financial results for the fourth quarter and full year 2020.

Fourth Quarter Results from Continuing Operations

(Dollar amounts in millions except per-share data)

	For the Three Months Ended December 31,		Change
	2020	2019	
Net sales	\$ 238.7	\$ 246.9	(3.3)%
Operating income	\$ 44.1	\$ 62.2	(29.1)%
Earnings from continuing operations	\$ 34.8	\$ 51.5	(32.4)%
Diluted earnings per share	\$ 0.72	\$ 1.04	(30.8)%

Net sales decreased compared to the prior year quarter, driven by lower volume in both the Mineral Fiber and Architectural Specialties segments as a result of lower market demand due to COVID-19, as well as unfavorable Mineral Fiber Average Unit Value ("AUV") primarily due to unfavorable channel mix and regional weakness in major metropolitan areas heavily impacted by COVID-19, partially offset by the positive sales impact of 2020 and 2019 acquisitions.

Operating income decreased from the prior year quarter, driven primarily by lower sales volume in the Mineral Fiber segment and higher SG&A costs related to growth initiatives, partially offset by improved manufacturing productivity.

"2020 was an extraordinary year with social, economic and health crises all contributing to new and unusual operating challenges. I am extremely proud that Armstrong was able to advance our strategic initiatives in the face of those challenges, as our teams quickly adapted to new ways of working in order to continue the pursuit of our strategic priorities. We continued to invest in digital tools and initiatives, we launched over thirty new products, including many with a focus on Healthy Spaces, and we completed three acquisitions, including Arktura in December," said Vic Grizzle, President and CEO of Armstrong. "Notwithstanding the impacts of COVID-19, we again demonstrated the strength of our business model, as we delivered over \$200 million of free cash flow."

Additional (non-GAAP*) Financial Metrics from Continuing Operations

(Dollar amounts in millions except per-share data)

	For the Three Months Ended December 31,		Change
	2020	2019	
Adjusted EBITDA	\$ 73	\$ 90	(18.9)%
Adjusted net income	\$ 37	\$ 55	(32.2)%
Adjusted diluted earnings per share	\$ 0.77	\$ 1.11	(30.6)%
Adjusted free cash flow	\$ 68	\$ 71	(4.6)%

* The Company uses the above non-GAAP adjusted measures in managing the business and believes the adjustments provide meaningful comparisons of operating performance between periods. The Company also believes that the adjustments help users of our financial information understand the effect of those adjusted items on our selected reported results and provide useful alternative measurements of performance. See Supplemental Reconciliations of GAAP to non-GAAP results (below) for a breakdown of the adjustments and a reconciliation of the selected reported results to these non-GAAP measures.

(Dollar amounts in millions)	For the Three Months Ended December 31,		
	2020	2019	Change
Adjusted EBITDA			
Mineral Fiber	\$ 66	\$ 81	(19.1)%
Architectural Specialties	7	8	(16.0)%
Consolidated Adjusted EBITDA	\$ 73	\$ 90	(18.9)%

Consolidated adjusted EBITDA declined (19)% in the fourth quarter when compared to the same prior year period, driven primarily by unfavorable channel mix and a decrease in WAVE earnings, partially offset by improved manufacturing productivity. Adjusted free cash flow declined primarily due to lower cash earnings driven by volume declines, partially offset by working capital improvements.

Fourth Quarter Segment Highlights

Mineral Fiber

(Dollar amounts in millions)	For the Three Months Ended December 31,		
	2020	2019	Change
Net sales (as reported)	\$ 183.1	\$ 197.2	(7.2)%
Operating income (as reported)	\$ 45.0	\$ 59.1	(23.9)%
Adjusted EBITDA	\$ 66	\$ 81	(19.1)%

Mineral Fiber net sales decreased due to lower volume and unfavorable AUV. Unfavorable AUV was driven primarily by unfavorable channel mix and regional weakness in major metropolitan areas heavily impacted by COVID-19. Like for like price was positive in the quarter.

Operating income decreased in the fourth quarter primarily due to the negative impact of lower sales volume, higher SG&A spend, lower WAVE earnings and the impact of unfavorable AUV, partially offset by improved manufacturing productivity and a reduction in incentive compensation expenses.

Architectural Specialties

(Dollar amounts in millions)	For the Three Months Ended December 31,		
	2020	2019	Change
Net sales (as reported)	\$ 55.6	\$ 49.7	11.9%
Operating income (as reported)	\$ 1.4	\$ 5.6	(75.0)%
Adjusted EBITDA	\$ 7	\$ 8	(16.0)%

Net sales in Architectural Specialties increased by 12% due to sales from the recent acquisitions of Turf Design, Moz Designs and Arktura, LLC mostly offset by a reduction in demand as a result of COVID-19.

Operating income decreased due to the negative impact of lower sales volume, excluding the impact of the 2020 acquisitions, as well as additional amortization expense related to acquisitions.

Unallocated Corporate

Unallocated corporate expense of \$2.3 million decreased from \$2.5 million of expense in the prior year quarter.

Year to Date Results from Continuing Operations

(Dollar amounts in millions)	For the Year Ended December 31,		
	2020	2019	Change
Net sales (as reported)	\$ 936.9	\$ 1,038.1	(9.7)%
Operating income (as reported)	\$ 254.8	\$ 317.4	(19.7)%
Adjusted EBITDA	\$ 330	\$ 403	(18.1)%
Adjusted free cash flow	\$ 212	\$ 244	(13.0)%

Net sales decreased driven mainly by lower volumes in both the Mineral Fiber and Architectural Specialties segments as a result of COVID-19 and unfavorable AUV in the Mineral Fiber segment.

Operating income decreased from the prior year period, primarily due to the impact of decreased sales and lower WAVE earnings, which was partially offset by lower SG&A expenses, the gain on sale of the idled China plant, and improved manufacturing productivity.

Adjusted Free Cash Flow (FCF) decreased from the prior year period, driven by lower cash generated from operating activities as a result of COVID-19 and lower equity earnings from WAVE. Adjusted FCF for the year is 23% as a percent of sales, or 121% of adjusted net income.

Market Outlook and 2021 Guidance

"We continue to expect sequential improvements in our end markets as market conditions improve and vaccinations allow businesses to return to

more normal operations,” said Brian MacNeal, CFO of Armstrong. “With our growth initiatives, including Healthy Spaces and kanopi, and the year-on-year benefit of our 2020 acquisitions, we expect to grow sales 10% to 13% in 2021. We expect this sales growth, together with continued productivity in our plants, to deliver adjusted EBITDA growth of 9% to 13%, and, after a step up in capital expenditures, to drive a free cash flow margin of 19%.”

Earnings Webcast

Management will host a live internet broadcast beginning at 11:00 a.m. eastern time today, to discuss fourth quarter and full year 2020 results. This event will be broadcast live on the Company’s website. To access the call and accompanying slide presentation, go to www.armstrongceilings.com and click Investors. The replay of this event will also be available on the Company’s website for up to one year after the date of the call.

Uncertainties Affecting Forward-Looking Statements

Disclosures in this release, including without limitation, those relating to future financial results, market conditions and guidance, the impacts of COVID-19 on our business, and in our other public documents and comments, contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Those statements provide our future expectations or forecasts and can be identified by our use of words such as “anticipate,” “estimate,” “expect,” “project,” “intend,” “plan,” “believe,” “outlook,” “target,” “predict,” “may,” “will,” “would,” “could,” “should,” “seek,” and other words or phrases of similar meaning in connection with any discussion of future operating or financial performance. Forward-looking statements, by their nature, address matters that are uncertain and involve risks because they relate to events and depend on circumstances that may or may not occur in the future. As a result, our actual results may differ materially from our expected results and from those expressed in our forward-looking statements. A more detailed discussion of the risks and uncertainties that could cause our actual results to differ materially from those projected, anticipated or implied is included in the “Risk Factors” and “Management’s Discussion and Analysis” section of our report on Forms 10-K and 10-Q filed with the U.S. Securities and Exchange Commission (“SEC”). Forward-looking statements speak only as of the date they are made. We undertake no obligation to update any forward-looking statements beyond what is required under applicable securities law.

About Armstrong and Additional Information

More details on the Company’s performance can be found in its annual report on Form 10-K for the year ended December 31, 2020 that the Company expects to file with the SEC today.

Armstrong World Industries, Inc. (AWI) is a leader in the design and manufacture of innovative commercial and residential ceiling, wall and suspension system solutions in the Americas. With \$937 million in revenue in 2020, AWI has approximately 2,700 employees and a manufacturing network of 16 facilities, plus six facilities dedicated to its WAVE joint venture.

Additional forward looking non-GAAP metrics are available on the Company’s website at www.armstrongceilings.com under the Investors tab. The website is not part of this release and references to our website address in this release are intended to be inactive textual references only.

As Reported Financial Highlights

FINANCIAL HIGHLIGHTS
Armstrong World Industries, Inc. and Subsidiaries
(Amounts in millions, except for per-share amounts, quarterly data is unaudited)

	For the Three Months Ended		For the Year Ended	
	December 31,		December 31,	
	2020	2019	2020	2019
Net sales	\$ 238.7	\$ 246.9	\$ 936.9	\$ 1,038.1
Cost of goods sold	155.9	158.3	603.8	643.0
Gross profit	82.8	88.6	333.1	395.1
Selling, general and administrative expenses	54.5	40.0	163.3	174.3
Gain related to sale of fixed and intangible assets	-	-	(21.0)	-
Equity earnings from joint venture	(15.8)	(13.6)	(64.0)	(96.6)
Operating income	44.1	62.2	254.8	317.4
Interest expense	5.4	6.8	24.1	38.4
Other non-operating (income) expense, net	(4.4)	(4.4)	357.4	(20.4)
Earnings (loss) from continuing operations before income taxes	43.1	59.8	(126.7)	299.4
Income tax expense (benefit)	8.3	8.3	(42.6)	57.1
Earnings (loss) from continuing operations	34.8	51.5	(84.1)	242.3
Net (loss) from discontinued operations	(12.0)	(3.8)	(15.0)	(27.8)
Net earnings (loss)	\$ 22.8	\$ 47.7	\$ (99.1)	\$ 214.5
Diluted earnings (loss) per share of common stock, continuing operations	\$ 0.72	\$ 1.04	\$ (1.76)	\$ 4.88
Diluted (loss) per share of common stock, discontinued operations	\$ (0.25)	\$ (0.08)	\$ (0.31)	\$ (0.56)
Net earnings (loss) per share of common stock	\$ 0.47	\$ 0.96	\$ (2.07)	\$ 4.32
Average number of diluted common shares outstanding	48.1	49.2	47.9	49.5

SEGMENT RESULTS
Armstrong World Industries, Inc. and Subsidiaries
(Amounts in millions)
(Unaudited)

	Three Months Ended December 31,		Twelve Months Ended December 31,	
	2020	2019	2020	2019
<u>Net Sales</u>				
Mineral Fiber	\$ 183.1	\$ 197.2	\$ 726.0	\$ 826.6
Architectural Specialties	55.6	49.7	210.9	211.5
Total net sales	<u>\$ 238.7</u>	<u>\$ 246.9</u>	<u>\$ 936.9</u>	<u>\$ 1,038.1</u>

	Three Months Ended December 31,		Twelve Months Ended December 31,	
	2020	2019	2020	2019
<u>Segment operating income (loss)</u>				
Mineral Fiber	\$ 45.0	\$ 59.1	\$ 218.7	\$ 289.6
Architectural Specialties	1.4	5.6	\$ 22.3	\$ 35.9
Unallocated Corporate	(2.3)	(2.5)	\$ 13.8	\$ (8.1)
Total consolidated operating income	<u>\$ 44.1</u>	<u>\$ 62.2</u>	<u>\$ 254.8</u>	<u>\$ 317.4</u>

Selected Balance Sheet Information
(Amounts in millions)

	December 31, 2020	December 31, 2019
<u>Assets</u>		
Current assets	\$ 311.8	\$ 244.4
Property, plant and equipment, net	529.9	524.6
Other noncurrent assets	876.8	724.3
Total assets	<u>\$ 1,718.5</u>	<u>\$ 1,493.3</u>
<u>Liabilities and shareholders' equity</u>		
Current liabilities	\$ 172.3	\$ 155.2
Noncurrent liabilities	1,095.3	973.2
Equity	450.9	364.9
Total liabilities and shareholders' equity	<u>\$ 1,718.5</u>	<u>\$ 1,493.3</u>

Selected Cash Flow Information
(Amounts in millions)
(Unaudited)

	For the Year Ended December 31,	
	2020	2019
Net (loss) earnings	\$ (99.1)	\$ 214.5
Other adjustments to reconcile net (loss) earnings to net cash provided by operating activities	301.5	27.9
Changes in operating assets and liabilities, net	16.4	(59.7)
Net cash provided by operating activities	218.8	182.7
Net cash (used for) investing activities	(141.1)	(89.1)
Net cash provided by (used for) financing activities	13.5	(384.9)
Effect of exchange rate changes on cash and cash equivalents	0.4	0.9
Net increase (decrease) in cash and cash equivalents	91.6	(290.4)
Cash and cash equivalents at beginning of year	45.3	335.7
Cash and cash equivalents at end of period	<u>\$ 136.9</u>	<u>\$ 45.3</u>

Supplemental Reconciliations of GAAP to non-GAAP Results (unaudited)

(Amounts in millions, except per share data)

To supplement its consolidated financial statements presented in accordance with accounting principles generally accepted in the United States ("GAAP"), the Company provides additional measures of performance adjusted to exclude the impact of certain discrete expenses and income. Investors should not consider non-GAAP measures as a substitute for GAAP measures. The Company excludes certain acquisition related expenses (i.e. – changes in the fair value of earnouts, deferred compensation accruals, impact of adjustments related to the fair value of inventory and deferred revenue) for recent acquisitions. The deferred compensation accruals are for cash and stock awards that will be recorded over the vesting period, as such payments are subject to the sellers' and employees' continued employment with the Company. Examples of other excluded items include plant closures, restructuring charges and related costs, impairments, separation costs, environmental site expenses and related insurance recoveries, endowment level charitable contributions, and certain other gains and losses. The Company also excludes income/expense from its U.S. Retirement Income Plan ("RIP") in the non-GAAP results as it represents the actuarial net periodic benefit credit/cost recorded. For all periods presented, the Company was not required and did not make cash contributions to the RIP based on guidelines established by the Pension Benefit Guaranty Corporation, nor does the Company expect to make cash contributions to the plan in 2021. Adjusted free cash flow is defined as cash from operating and investing activities, adjusted to remove the impact of cash used or proceeds received for acquisitions and divestitures, legacy environmental matters and litigation. The Company believes adjusted free cash flow is useful because it provides insight into the amount of cash that the Company generates for discretionary uses, after expenditures for capital investments and adjustments for acquisitions and divestitures. The Company uses these adjusted performance measures in managing the business, including communications with its Board of Directors and employees, and believes that they provide users of this financial information with meaningful comparisons of operating performance between current results and results in prior periods. The Company believes that these non-GAAP financial measures are appropriate to enhance understanding of its past performance, as well as prospects for its future performance. The Company also uses adjusted EBITDA and adjusted free cash flow as factors in determining at-risk compensation for senior management. These non-GAAP measures may not be defined and calculated the same as similar measures used by other companies. A reconciliation of these adjustments to the most directly comparable GAAP measures is included in this release and on the Company's website. These non-GAAP measures should not be considered in isolation or as a substitute for the most comparable GAAP measures. Non-GAAP financial measures utilized by the Company may not be comparable to non-GAAP financial measures used by other companies.

In the following charts, numbers may not sum due to rounding.

Consolidated Results From Continuing Operations – Adjusted EBITDA

	For the Three Months Ended December 31,		For the Year Ended December 31,	
	2020	2019	2020	2019
Earnings (Loss) from continuing operations, Reported	\$ 35	\$ 51	\$ (84)	\$ 242
Add: Income tax expense (benefit), as reported	8	8	(43)	57
Earnings (Loss) before tax, Reported	\$ 43	\$ 60	\$ (127)	\$ 299
Add: Interest/other income and expense, net	1	2	382	18
Operating Income, Reported	\$ 44	\$ 62	\$ 255	\$ 317
Add: RIP Expense (1)	1	1	6	5
Add: WAVE Pension Settlement (2)	-	-	-	1
Add: Litigation Expense (3)	-	-	-	20
Add: Acquisition Related Expenses (4)	2	-	3	-
(Less)/Add: Net Environmental (Recoveries) Expenses	(7)	-	(6)	1
(Less): Gain on Sale of Idled China Plant Facility	-	-	(21)	-
Add: WAVE FSA (5)	-	-	-	4
Add: Charitable Contribution - AWI Foundation (6)	10	-	10	-
Add/(Less): AWI Portion of WAVE's loss (gain) on Sale to Knaf	-	5	-	(21)
Operating Income, Adjusted	\$ 50	\$ 68	\$ 246	\$ 328
Add: D&A	22	21	84	75
Adjusted EBITDA	\$ 73	\$ 90	\$ 330	\$ 403

(1) RIP expense represents only the plan service cost that is recorded within Operating Income. For all periods presented, we were not required and did not make cash contributions to our RIP.

(2) WAVE settled a portion of their pension plan, resulting in a non-cash accounting charge.

(3) Represents Rockfon litigation costs and settlement.

(4) Represents the impact of acquisition related adjustments for the fair value of acquired inventory and deferred revenue, changes in fair value of contingent consideration and deferred compensation accruals.

(5) Write off of intangible assets attributed to WAVE's international business sold. These intangible assets were recognized as part of our adoption of fresh-start reporting upon emergence from Chapter 11 in 2006.

(6) Donation to the AWI Foundation.

Mineral Fiber

	For the Three Months Ended December 31,		For the Year Ended December 31,	
	2020	2019	2020	2019
Operating Income, Reported	\$ 45	\$ 59	\$ 219	\$ 290
Add: WAVE Pension Settlement (1)	-	-	-	1
Add: Litigation Expense (2)	-	-	-	20
(Less)/Add: Net Environmental (Recoveries) Expenses	(7)	-	(6)	1
Add: WAVE FSA (3)	-	-	-	4
Add: Charitable Contribution - AWI Foundation (4)	10	-	10	-
Add/(Less): AWI Portion of WAVE's loss (gain) on Sale to Knauf	-	5	-	(21)
Operating Income, Adjusted	\$ 48	\$ 64	\$ 222	\$ 296
Add: D&A	18	17	72	63
Adjusted EBITDA	\$ 66	\$ 81	\$ 294	\$ 358

(1) WAVE settled a portion of their pension plan, resulting in a non-cash accounting charge.

(2) Represents Rockfon litigation costs and settlement.

(3) Write off of intangible assets attributed to WAVE's international businesses sold. These intangible assets were recognized as part of our adoption of fresh-start reporting upon emergence from Chapter 11 in 2006.

(4) Donation to the AWI Foundation.

Architectural Specialties

	For the Three Months Ended December 31,		For the Year Ended December 31,	
	2020	2019	2020	2019
Operating Income, Reported	\$ 1	\$ 6	\$ 22	\$ 36
Add: Acquisition Related Expenses (1)	2	-	3	-
Operating Income, Adjusted	\$ 3	\$ 6	\$ 25	\$ 36
Add: D&A	3	3	11	9
Adjusted EBITDA	\$ 7	\$ 8	\$ 36	\$ 45

(1) Represents the impact of acquisition related adjustments for the fair value of acquired inventory and deferred revenue, changes in fair value of contingent consideration and deferred compensation accruals.

Unallocated Corporate

	For the Three Months Ended December 31,		For the Year Ended December 31,	
	2020	2019	2020	2019
Operating (Loss) Income, Reported	\$ (2)	\$ (3)	\$ 14	\$ (8)
Add: RIP expense (1)	1	1	6	5
(Less): Gain on Sale of Idled China Plant Facility	-	-	(21)	-
Operating (Loss), Adjusted	\$ (1)	\$ (1)	\$ (1)	\$ (3)
Add: D&A & Other	1	1	1	3
Adjusted EBITDA	\$ -	\$ -	\$ -	\$ -

(1) RIP expense represents only the plan service cost that is recorded within Operating Income. For all periods presented, we were not required and did not make cash contributions to our RIP.

Adjusted Free Cash Flow

	For the Three Months Ended December 31,		For the Year Ended December 31,	
	2020	2019	2020	2019
Net cash provided by operations	\$ 70	\$ 62	\$ 219	\$ 183
Net cash (used for) investing activities	(89)	(18)	(141)	(89)
Add: Acquisitions, net	90	13	165	56
Add: Litigation, net	-	3	-	23
(Less)/Add: Environmental (Recoveries) Payments, net	(12)	1	(12)	5

Add/(Less): Payments for (Proceeds from) sale of international, net (1)	\$	1	\$	11	(20)	66
Add: Net Payments to WAVE for Portion of Proceeds from Sale of International Business	\$	-	\$	-	13	-
(Less): Proceeds from sale of Idled China Plant Facility	\$	(2)	\$	-	(22)	-
Add: Charitable Contribution - AWI Foundation	\$	10	\$	-	10	-
Adjusted Free Cash Flow	\$	68	\$	71	\$	212
					\$	244

(1) Includes related income tax impacts.

(2) Donation to the AWI Foundation.

Consolidated Results From Continuing Operations – Adjusted Diluted Earnings Per Share

	For the Three Months Ended December 31,				For the Year Ended December 31,			
	2020		2019		2020		2019	
	Total	Per Diluted Share	Total	Per Diluted Share	Total	Per Diluted Share	Total	Per Diluted Share
Earnings (Loss) from continuing operations, As Reported	\$ 35	\$ 0.72	\$ 51	\$ 1.04	\$ (84)	\$ (1.76)	\$ 242	\$ 4.88
Add/(Less): Income tax expense (benefit), as reported	8		8		(43)		57	
Earnings (Loss) from continuing operations before income taxes, As Reported	\$ 43		\$ 60		\$ (127)		\$ 299	
(Less)/Add: RIP (Credit) Expense (1)	(2)		(2)		368		(8)	
Add: WAVE Pension Settlement (2)	-		-		-		1	
Add: Litigation Expense (3)	-		-		-		20	
Add: Acquisition Related Expenses (4)	2		-		3		-	
(Less)/Add: Environmental (Recoveries) Expenses, net	(7)		-		(6)		1	
Add: WAVE FSA (5)	-		-		-		4	
(Less): Gain on Sale of Idled China Plant Facility	-		-		(21)		-	
Add: Accelerated Depreciation from closed St. Helens Facility	-		-		3		-	
Add: Charitable Contribution - AWI Foundation (6)	10		-		10		-	
Add/(Less): AWI Portion of WAVE's loss (gain) on Sale to Knauf	-		5		-		(21)	
Adjusted earnings from continuing operations before income taxes	\$ 46		\$ 63		\$ 229		\$ 297	
(Less): Adjusted Income tax expense (7)	(9)		(8)		(54)		(61)	
Adjusted net income	\$ 37	\$ 0.77	\$ 55	\$ 1.11	\$ 175	\$ 3.63	\$ 237	\$ 4.78
Adjusted EPS Change versus Prior Year		-31%				-24%		
Diluted Shares Outstanding (8)	48.1		49.2		48.2		49.5	
As Reported Tax Rate (9)	19%		13%		24%		20%	

(1) RIP expense (credit) represents the entire actuarial net periodic pension expense (credit) recorded as a component of earnings from continuing operations. For all periods presented, we were not required and did not make cash contributions to our RIP.

(2) WAVE settled a portion of their pension plan, resulting in a non-cash accounting charge.

(3) Represents Rockfon litigation costs and settlement.

(4) Represents the impact of acquisition related adjustments for the fair value of acquired inventory and deferred revenue, changes in fair value of contingent consideration and deferred compensation accruals.

(5) Write off of intangible assets attributed to WAVE's international businesses sold. These intangible assets were recognized as part of our adoption of fresh-start reporting upon emergence from Chapter 11 in 2006.

(6) Donation to the AWI Foundation.

(7) Adjusted income tax expense is calculated using the as reported tax rate multiplied by the adjusted earnings from continuing operations before income taxes.

(8) 2020 Dilutive shares outstanding for the year ended December 31, 2020 include anti-dilutive common stock equivalents which are excluded from U.S. GAAP Accounting. Dilutive shares outstanding for the three and twelve months ended December 31, 2019 are as-reported.

(9) The tax rate for the year ended December 31, 2020 excludes Q1 pension annuitization and the gain on the sale of our idled China facility and for 2019 is our actual tax rate excluding WAVE's gain on sale to Knauf.

Adjusted EBITDA Guidance

For the Year Ending December 31, 2021

	Low		High
Net income	\$ 189	to	\$ 198
Add: Interest expense	25		25
(Less): RIP credit (1)	(9)		(9)
Add: Income Tax Expense	60		63
Operating income	\$ 264	to	\$ 276
Add: RIP expense (2)	6		6
Add: D&A/Other	90		90
Adjusted EBITDA	\$ 360	to	\$ 372

(1) RIP credit represents the actuarial net periodic benefit expected to be recorded as a component of other non-operating income. We do not expect to and do not plan to make cash contributions to our RIP in 2021 based on guidelines established by the Pension Benefit Guaranty Corporation.

(2) RIP expense represents only the plan service cost that is recorded within Operating Income. For all periods presented, we were not required and did not make cash contributions to our RIP.

Adjusted Diluted Earnings Per Share (EPS) Guidance

For the Year Ending December 31, 2021

	Low	Per Diluted Share ⁽¹⁾		High	Per Diluted Share ⁽¹⁾
Net income	\$ 189	\$ 3.93	to	\$ 198	\$ 4.12
Add: Interest expense	25			25	
(Less): RIP Credit (2)	(9)			(9)	
Add: Income tax Expense	60			63	
Operating income	\$ 264		to	\$ 276	
Add: RIP expense (3)	6			6	
(Less): Interest expense	(25)			(25)	
Adjusted earnings before income taxes	\$ 245		to	\$ 257	
(Less): Income tax expense (4)	(61)			(64)	
Adjusted net income	\$ 184	\$ 3.80	to	\$ 193	\$ 4.00

(1) Adjusted EPS guidance for 2021 is calculated based on an adjusted effective tax rate of 25% and based on ~48 million of diluted shares outstanding.

(2) RIP credit represents the actuarial net periodic benefit expected to be recorded as a component of other non-operating income. We do not expect to be required to make, nor do we plan to make cash contributions to our RIP based on guidelines established by the Pension Benefit Guaranty Corporation.

(3) RIP expense represents only the plan service cost related to the U.S. pension plan and is recorded as a component of operating income. We do not expect to be required to make, nor do we plan to make cash contributions to our RIP based on guidelines established by the Pension Benefit Guaranty Corporation.

(4) Adjusted income tax expense is based on an adjusted earnings before income tax.

Adjusted Free Cash Flow Guidance

For the Year Ending December 31, 2021

	Low		High
Net cash provided by operating activities	\$ 200	to	\$ 210
Add: Return of investment from joint venture	65		70
Adjusted net cash provided by operating activities	\$ 265	to	\$ 280
Less: Capital expenditures	(80)		(75)
Adjusted Free Cash Flow	\$ 185	to	\$ 205