

July 27, 2021

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# Earnings Call Presentation

2<sup>nd</sup> Quarter 2021

Inspiring Great Spaces®

**Armstrong**®  
WORLD INDUSTRIES

Our disclosures in this presentation, 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. 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 may affect our ability to achieve the projected performance is included in the “Risk Factors” and “Management’s Discussion and Analysis” sections of our reports on Form 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.

In addition, we will be referring to non-GAAP financial measures within the meaning of SEC Regulation G. A reconciliation of the differences between these measures with the most directly comparable financial measures calculated in accordance with GAAP are included within this presentation and available on the Investor Relations page of our website at [www.armstrongceilings.com](http://www.armstrongceilings.com).

The guidance in this presentation is only effective as of the date given, July 27, 2021 and will not be updated or affirmed unless and until we publicly announce updated or affirmed guidance.

When reporting our financial results within this presentation, we make several adjustments. Management uses these non-GAAP measures in managing the business and believes the adjustments provide meaningful comparisons of operating performance between periods. As reported results will be footnoted throughout the presentation on a continuing operations basis (excludes corporate unallocated).

- Results throughout this presentation are presented on a normalized basis.
- We remove the impact of certain discrete expenses and income in certain measures including adjusted net sales, adjusted EBITDA, adjusted earnings per share (EPS) and adjusted free cash flow. The Company excludes certain acquisition related expenses (i.e. – changes in the fair value of earnouts, deferred compensation accruals<sup>(1)</sup>, impact of adjustments related to the fair value of inventory and deferred revenue) for recent acquisitions. The Company excludes all acquisition-related amortization from adjusted earnings from continuing operations and in calculations of adjusted diluted earnings per share. Examples of other excluded items include plant closures, restructuring actions and related costs, impairments, separation costs, environmental site expenses and related insurance recoveries, endowment level charitable contributions, and other large unusual items. We also adjust for our U.S. pension plan (credit) expense<sup>(2)</sup>.
- Our tax rate may be adjusted for certain discrete items which are identified in the footnotes.
- Investors should not consider non-GAAP measures as a substitute for GAAP measures.

***All figures throughout the presentation are in \$ millions and all comparisons are versus prior year unless otherwise noted. Figures may not sum due to rounding.***

(1) 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.

(2) U.S. pension (credit) expense represents the actuarial net periodic benefit cost expected to be recorded as a component of earnings from continuing operations. For all periods presented, we were not required to and did not make cash contributions to our U.S. Retirement Income Plan based on guidelines established by the Pension Benefit Guaranty Corporation.

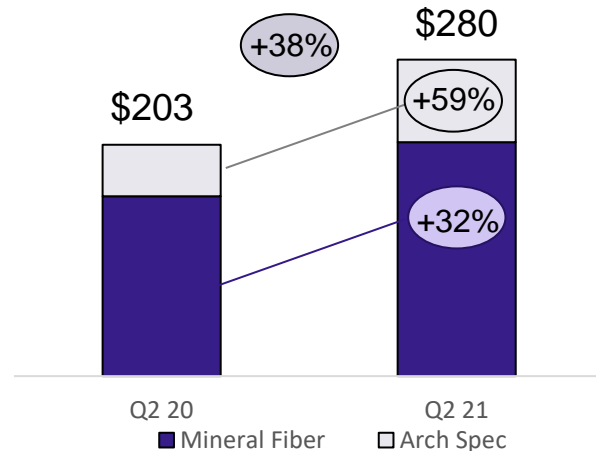
**1** Strong year-over-year and sequential improvements in sales and earnings

**2** Average Unit Value (AUV) up 10% on both price and mix improvements; pricing actions offsetting inflation pressures

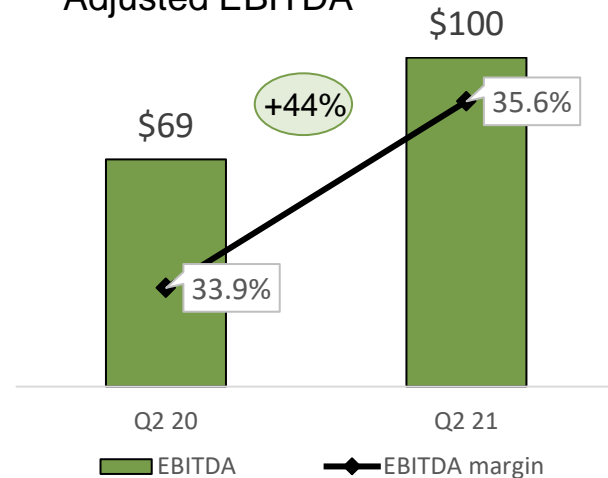
**3** Strong operations and service performance despite challenged supply chains in the industry

**4.** Increasing full-year 2021 guidance

Net Sales



Adjusted EBITDA\*

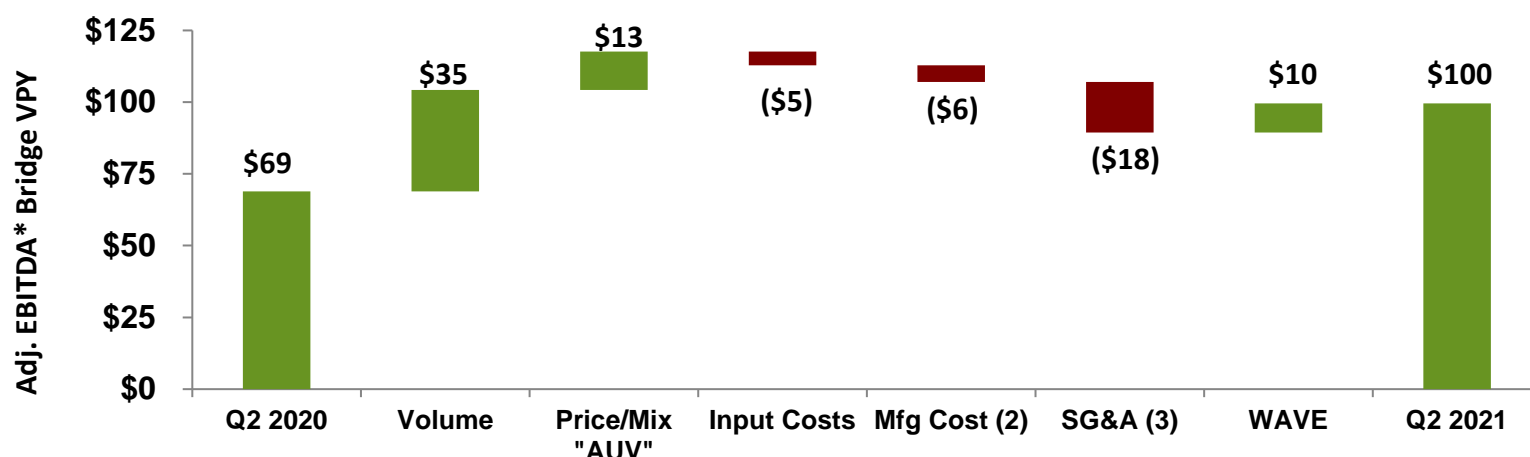


**Strong performance and momentum supports increased guidance**

\*Non-GAAP measure. See appendix for reconciliation to nearest GAAP measure.

# Second Quarter 2021 Consolidated Company Key Metrics

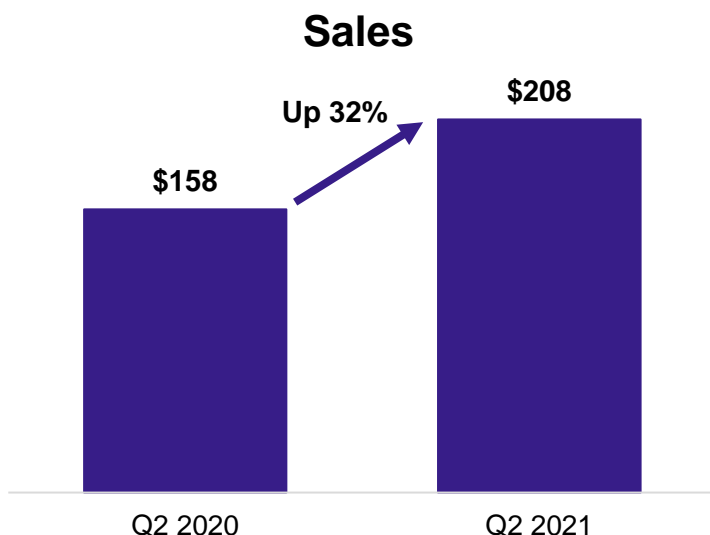
	Q2 2020	Q2 2021	Variance
<b>Net Sales</b>	\$203	\$280	38%
<b>Adj. EBITDA*</b>	\$69	\$100	44%
% of Sales	34%	36%	160 bps
<b>Adj. Earnings Per Share*</b>	\$0.72	\$1.16	61%
<b>Adj. Free Cash Flow*</b>	\$63	\$64	1%
<b>Cash</b>	\$117	\$119	\$2
<b>Liquidity</b>	\$487	\$419	(\$68)
<b>Net Debt</b>	\$539	\$559	\$20
<b>Leverage<sup>(1)</sup></b>	1.5x	1.6x	



2020 Acquisitions	-	12	-	-	(4)	(5)	-	3
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\*Non-GAAP measure. See appendix for reconciliation to nearest GAAP measure.

- (1) As defined by the terms of our credit agreement.
- (2) Excludes change in depreciation
- (3) Excludes change in amortization

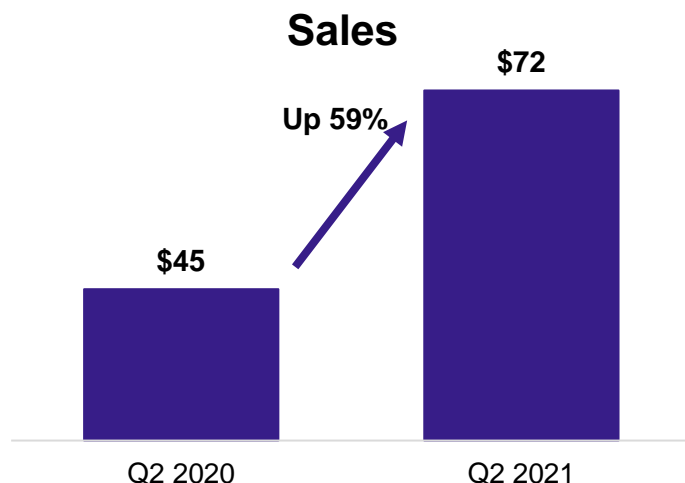


## Key Highlights

- Volumes surged on more normalized demand vs. peak impacts from COVID-19 in prior-year period
- Fourth consecutive quarter of sequential improvement in sales per shipping day
- AUV up 10% vs. Q2 2020 on positive like-for-like pricing and territory mix improvements
- Strong performance from WAVE JV

	Q1	Q2	<u>Current Quarter Comments</u>
<b>2020 Adjusted EBITDA*</b>	<b>\$87</b>	<b>\$62</b>	
AUV	2	13	Positive price and favorable mix, good fall-through
Volume	(10)	21	Increased demand vs PY heavily impacted by COVID-19
Manufacturing	3	(0)	Productivity offsetting return of 2020 temporary reductions
Input costs	1	(5)	Raw material, energy and freight inflation
SG&A	(7)	(11)	Growth investments, return of 2020 temporary reductions
WAVE	2	10	Strong volume and price over inflation
<b>2021 Adjusted EBITDA*</b>	<b>\$78</b>	<b>\$90</b>	<b>Margin expanded 370 bps in Q2</b>
<b>% Change</b>	<b>(10%)</b>	<b>44%</b>	

\*Non-GAAP measure. See appendix for reconciliation to nearest GAAP measure.



## Key Highlights

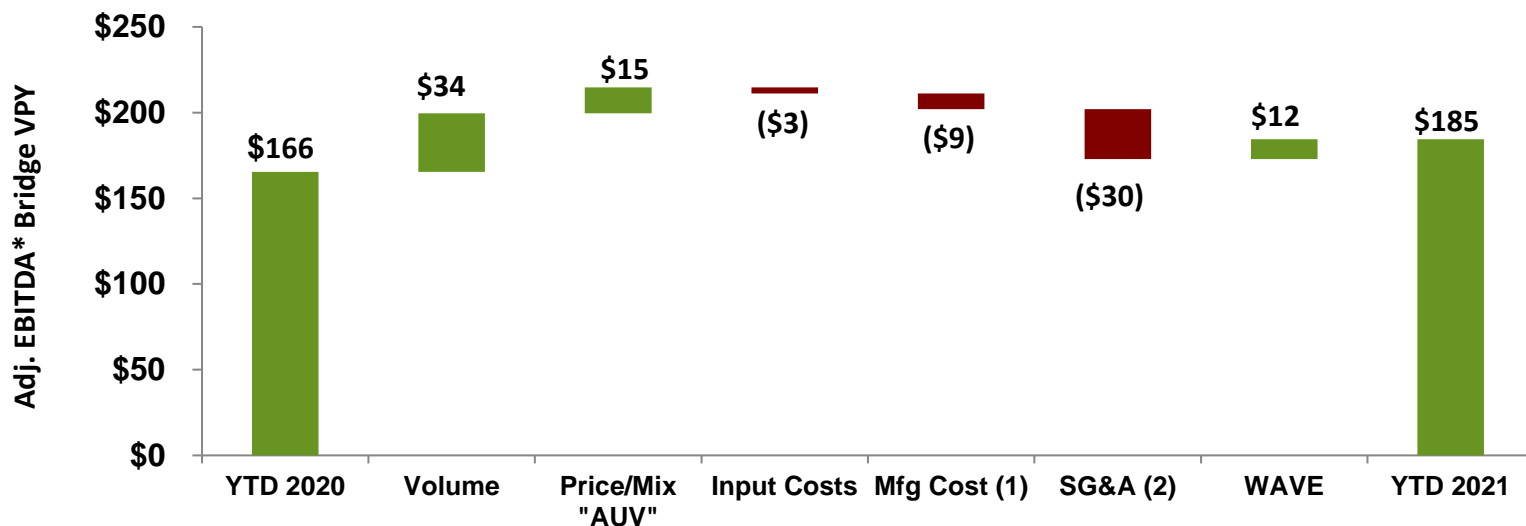
- 2020 Acquisitions added \$17 million in sales
- Organic\* sales up 20% or \$9 million driven by diminished Covid-19 impacts vs. prior year
- Adjusted EBITDA\*\* up 48% vs. prior year
- Adjusted EBITDA\*\* margin expanded 255 bps sequentially
- Growth investments in capabilities and capacity across the segment continued

	Q1	Q2	<u>Current Quarter Comments</u>
<b>2020 Adjusted EBITDA**</b>	<b>\$10</b>	<b>\$6</b>	
Sales	8	15	Incremental sales driven by both organic and acquisitions
Period Expense	(6)	(6)	Expense from acquired companies and capacity investments
SG&A	(4)	(6)	Expense from acquired companies
<b>2021 Adjusted EBITDA**</b>	<b>\$7</b>	<b>\$10</b>	<b>Margin contracted 100 bps in Q2</b>
<b>% Change</b>	<b>(29%)</b>	<b>48%</b>	

**Organic growth and 2020 Acquisitions contribute to solid performance**

# Consolidated Company Key Metrics – 1<sup>st</sup> Half 2021

	YTD 2020	YTD 2021	Variance
<b>Adj. Net Sales*</b>	\$452	\$533	18%
<b>Adj. EBITDA*</b>	\$166	\$185	12%
% of Adj. Net Sales	36.6%	34.7%	(200) bps
<b>Adj. Earnings Per Share*</b>	\$1.86	\$2.11	13%
<b>Adj. Free Cash Flow*</b>	\$100	\$87	-13%



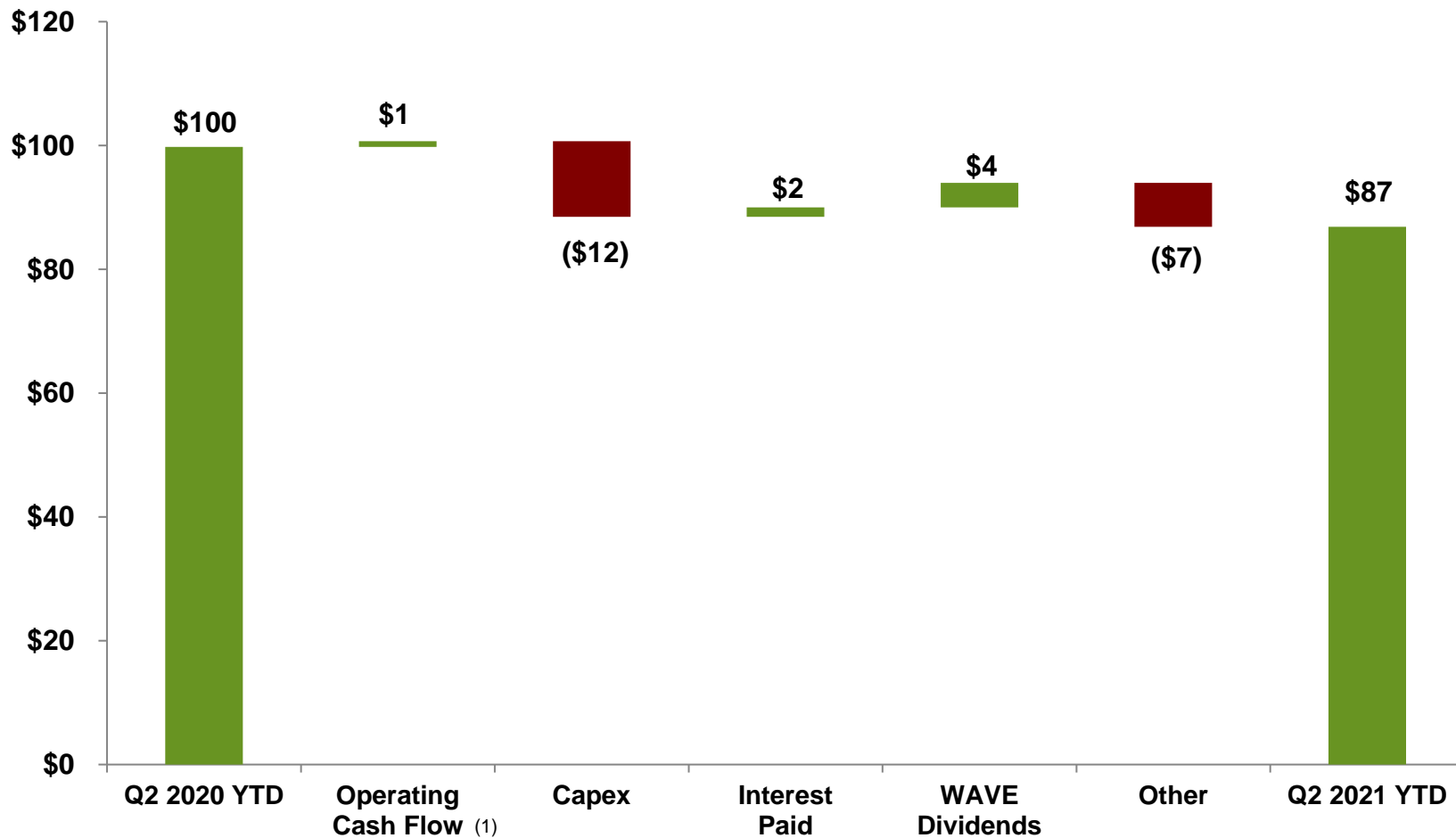
2020 Acquisitions	-	24	-	-	(9)	(8)	-	7
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\*Non-GAAP measure. See appendix for reconciliation to nearest GAAP measure.

- (1) Excludes change in depreciation
- (2) Excludes change in amortization



# Adjusted Free Cash Flow\* Bridge – Q2 YTD 2021 vs. PY



**Cash earnings decline driven by higher, planned CapEx vs. 2020**

\*Non-GAAP measure. See appendix for reconciliation to nearest GAAP measure.

(1) Includes cash earnings, working capital and other current assets and liabilities

Updated from prior guide

	<u>2020 Actual</u>	<u>Prior Guidance</u>	<u>Current Guidance</u>	
<b>Revenue</b>	<b>\$937</b>	<b>\$1,030 – \$1,060</b> 10% – 13% YoY	<b>\$1,085 – \$1,105</b> 16% – 18% YoY	<ul style="list-style-type: none"> <li>MF AUV 6%-9%, positive like-for-like pricing &amp; mix</li> <li>Growth Initiatives, primarily kanopi &amp; Healthy Spaces, drive MF volume up 2% - 4%</li> <li>2020 acquisitions benefit AS 20% - 25%</li> </ul>
<b>Adjusted EBITDA*</b>	<b>\$330</b>	<b>\$360 – \$372</b> 9% – 12% YoY	<b>\$370 – \$380</b> 12% – 15% YoY	<ul style="list-style-type: none"> <li>AUV and volume gains fall through</li> <li>Manufacturing productivity and improved earnings from WAVE drive margin improvement</li> <li>Includes benefit of 2020 acquisitions</li> <li>Investment in growth initiatives continues in 2021</li> </ul>
<b>Adjusted EPS*</b>	<b>\$3.74</b>	<b>\$3.80 – \$4.00</b> 5% – 10% YoY	<b>\$4.20 – \$4.40</b> 12% – 18% YoY	<ul style="list-style-type: none"> <li>\$25 million of interest expense</li> <li>25% book tax rate</li> <li>~\$63 million depreciation, ~\$35 million amortization</li> <li>48 million average diluted shares outstanding</li> <li>Excludes \$21 million of acquisition amortization</li> </ul>
<b>Adjusted Free Cash Flow*</b>	<b>\$212</b>	<b>\$185 – \$205</b> (13%) – (3%) YoY 19% FCF Margin	<b>\$195 – \$210</b> (8%) – 1% YoY 19% FCF Margin	<ul style="list-style-type: none"> <li>\$80-\$85 million of Cap Ex</li> <li>\$25 million of cash interest expense</li> <li>Cash tax rate 20% - 25%</li> <li>Higher Working Capital due to increased sales</li> </ul>

\*Non-GAAP measure. See appendix for reconciliation to nearest GAAP measure. Adjusted EPS excludes \$0.11 in relation to acquisition-related amortization in 2020.

(1) Assumes no significant pandemic-related shutdowns or project delays due to supply chain disruptions.

## Strategic Overview

### Mineral Fiber Revitalization

- Healthy Spaces to drive renovation “renaissance”
- Product innovation to meet new customer needs and improve product mix
- kanopi e-commerce platform for new demand

### Architectural Specialties Growth

- Continued integration of acquisitions
- Robust pipeline of additional opportunities
- Leverage new design capabilities across platform

### Digital Transformation

- 10-3-1 path from optimization to disruption
- Digital platforms to reduce friction with customers
- Focus on productivity and scalability

### Disciplined Capital Allocation

- Consistent capex
- Invest for growth and productivity
- Return to shareholders via dividends and buybacks

Mineral Fiber volume growth of **0% to 2%** and AUV growth of **3% to 6%**

**>15%** Architectural Specialties top-line growth with margin expansion

**Critical enabler** for sales, productivity and efficiency improvements

Declining net debt and **adjusted FCF ~20%** of sales

## Value Creation Model\*

**5% – 10%**

Revenue Growth

**>10%**

Adjusted EBITDA Growth

**5% – 10%**

Adjusted EPS Growth

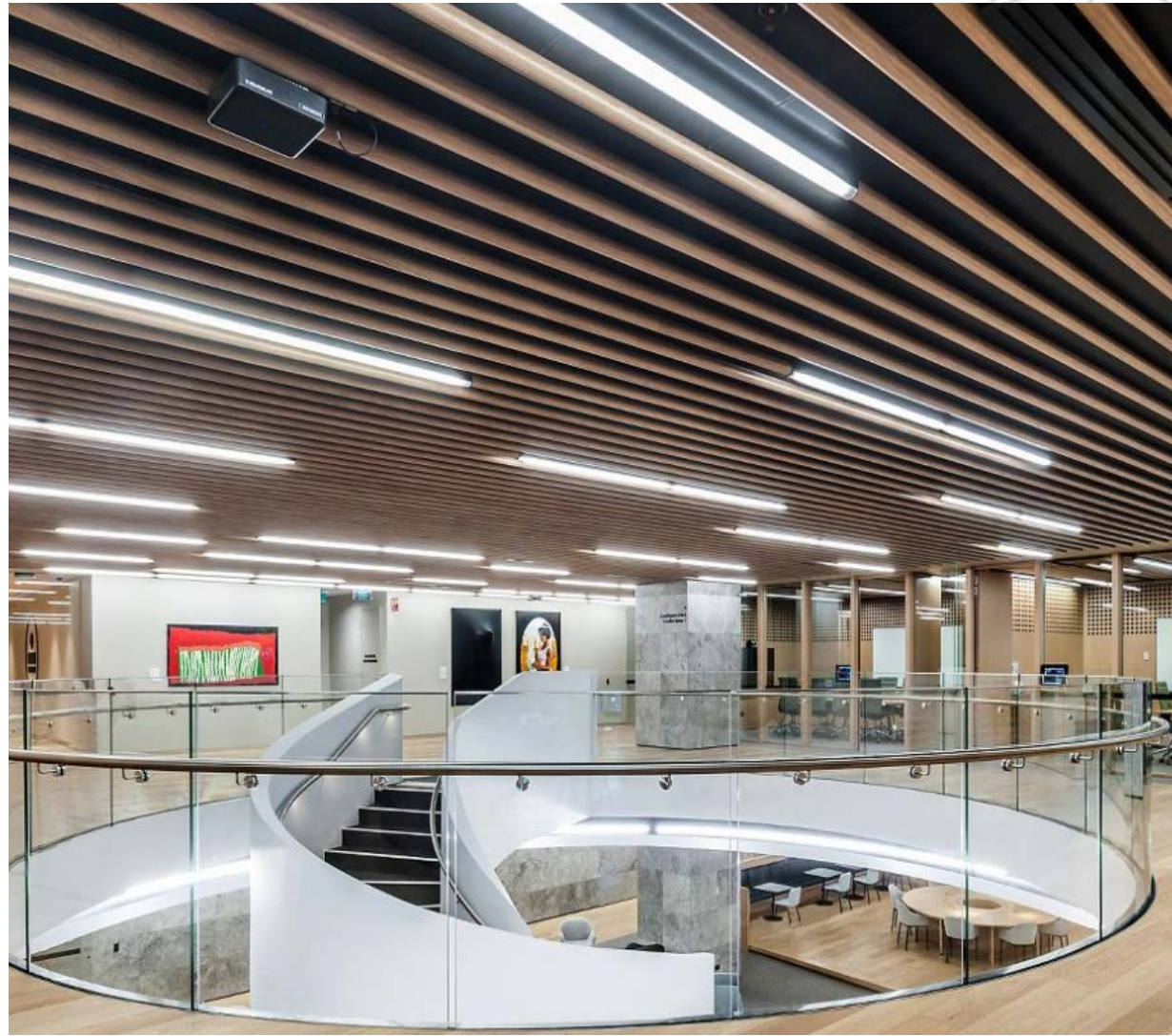
**10% – 15%**

Adjusted FCF Growth

\*Current management estimates; reflects medium-to-long term annual growth targets

**Consistent strategic priorities enabling shareholder value creation**

# Appendix



# Adjusted EBITDA Reconciliation

	For the Three Months Ended June 30,			For the Six Months Ended June 30,		
	2021	2020	V	2021	2020	V
<b>Earnings (Loss) from continuing operations, Reported</b>	\$55	\$50	\$6	\$93	(\$173)	\$266
Add: Income tax expense (benefit), as reported	19	11	8	31	(66)	98
<b>Earnings (Loss) before tax, Reported</b>	<b>\$74</b>	<b>\$61</b>	<b>\$13</b>	<b>\$124</b>	<b>(\$239)</b>	<b>\$363</b>
Add: Interest/other income and expense, net	4	2	3	8	378	(369)
<b>Operating Income, Reported</b>	<b>\$78</b>	<b>\$62</b>	<b>\$16</b>	<b>\$132</b>	<b>\$138</b>	<b>(\$6)</b>
Add: RIP expense (1)	1	1	(0)	2	3	(0)
(Less): Acquisition-related impacts (2)	(6)	-	(6)	(2)	-	(2)
(Less)/Add: Net environmental expenses	-	(0)	0	-	1	(1)
(Less): Gain on sale of idled China plant facility	-	(14)	14	-	(14)	14
Add: Depreciation	16	15	1	31	29	2
Add: Amortization	10	5	6	21	9	11
<b>Adjusted EBITDA</b>	<b>\$100</b>	<b>\$69</b>	<b>\$31</b>	<b>\$185</b>	<b>\$166</b>	<b>\$19</b>
			<b>44%</b>			<b>12%</b>

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

(2) 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 and restricted stock expenses.

# Adjusted Diluted Earnings Per Share Reconciliation

	CONSOLIDATED									
	For the Three Months Ended June 30,					For the Six Months Ended June 30,				
	2021	Per Diluted Share <sup>(3)</sup>	2020	Per Diluted Share <sup>(3)</sup>	V	2021	Per Diluted Share <sup>(3)</sup>	2020	Per Diluted Share <sup>(3)</sup>	V
<b>Earnings from continuing operations before income taxes, As Reported</b>	\$55	\$1.14	\$50	\$1.03	\$6	\$93	\$1.92	(\$173)	(\$3.61)	\$266
Add/(Less): Income tax expense (benefit), as reported	19		11		8	31		(66)		98
<b>Earnings (Loss) from continuing operations before income taxes, As Reported</b>	<b>\$74</b>		<b>\$61</b>		<b>\$13</b>	<b>\$124</b>		<b>(\$239)</b>		<b>\$363</b>
(Less)/Add: RIP (credit) expense (1)	0		(2)		2	-		370		(370)
(Less): Acquisition-related impacts (2)	(6)		-		(6)	(2)		-		(2)
Add: Acquisition related amortization (3)	7		1		6	14		2		11
Add: Net environmental expenses	-		(0)		0	-		1		(1)
(Less): Gain on sale of idled China plant facility	-		(14)		14	-		(14)		14
<b>Adjusted earnings from continuing operations before income taxes</b>	<b>\$75</b>		<b>\$46</b>		<b>\$30</b>	<b>\$136</b>		<b>\$119</b>		<b>\$17</b>
(Less): Adjusted income tax expense (4)	(19)		(11)		(8)	(34)		(29)		(5)
<b>Adjusted net income</b>	<b>\$56</b>	<b>\$1.16</b>	<b>\$35</b>	<b>\$0.72</b>	<b>\$22</b>	<b>\$101</b>	<b>\$2.11</b>	<b>\$90</b>	<b>\$1.86</b>	<b>\$11</b>
Diluted Shares Outstanding (5)	48.1		48.0			48.1		48.4		
Adjusted Tax Rate (6)	26%		24%			25%		25%		

(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 to and did not make cash contributions to our RIP.

(2) 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.

(3) Represents the intangible amortization related to acquired entities, including customer relationships, developed technology, software, trademarks and brand names, non-compete agreements and other intangibles.

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

(5) Dilutive shares are as-reported. 2020 dilutive shares outstanding for the six months ended June 30, 2020 include anti-dilutive common stock equivalents which are excluded from U.S. GAAP Accounting.

(6) The tax rate for the three and six months ended June 30, 2020 excludes the first quarter pension annuitization and the gain on the sale of our idled China facility.

# Adjusted Free Cash<sup>(1)</sup> Flow Reconciliation

	CONSOLIDATED					
	For the Three Months Ended June 30,			For the Six Months Ended June 30,		
	2021	2020	V	2021	2020	V
<b>As Reported net cash provided by operating activities</b>	<b>\$63</b>	<b>\$53</b>	<b>\$10</b>	<b>\$82</b>	<b>\$79</b>	<b>\$4</b>
Net cash provided by (used for) investing activities	2	0	1	(7)	10	(17)
Add: Payments related to sale of international, net	-	10	(10)	12	10	2
Add: Environmental payments, net	-	-	-	-	1	(1)
<b>Adjusted Free Cash Flow</b>	<b>\$64</b>	<b>\$63</b>	<b>\$1</b>	<b>\$87</b>	<b>\$100</b>	<b>(\$13)</b>

(1) Adjusted free cash flow is defined as cash from operations and dividends received from the WAVE joint venture, less expenditures for property and equipment, and is 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 has available for discretionary uses, after expenditures for capital commitments and adjustments for acquisitions and divestitures. Free cash flow includes discontinued international operations.

# Segment Reported Operating Income (Loss) to Adjusted EBITDA

	MINERAL FIBER			ARCHITECTURAL SPECIALTIES			UNALLOCATED CORPORATE		
	For the Three Months Ended June 30,								
	2021	2020	V	2021	2020	V	2021	2020	V
<b>Operating Income (Loss) – As Reported</b>	<b>\$72</b>	<b>\$46</b>	<b>\$27</b>	<b>\$7</b>	<b>\$4</b>	<b>\$3</b>	<b>(\$1)</b>	<b>\$13</b>	<b>(\$14)</b>
Add: RIP expense (1)	-	-	-	-	-	-	1	1	(0)
(Less): Environmental expenses, net	-	(0)	0	-	-	-	-	-	-
(Less): Acquisition-related impacts (2)	-	-	-	(6)	-	(6)	-	-	-
(Less): Gain on sale of idled China plant facility	-	-	-	-	-	-	-	(14)	14
Add: Depreciation and Amortization	18	17	1	8	2	6	-	-	-
<b>EBITDA – Adjusted</b>	<b>\$90</b>	<b>\$62</b>	<b>\$28</b>	<b>\$10</b>	<b>\$6</b>	<b>\$3</b>	<b>-</b>	<b>-</b>	<b>-</b>
			<b>44%</b>			<b>48%</b>			

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

(2) 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.



	CONSOLIDATED					
	For the Three Months Ended June 30,			For the Six Months Ended June 30,		
	2021	2020	V	2021	2020	V
<b>Reported Net Sales</b>	\$280	\$203	\$77	\$532	\$452	\$80
Deferred revenue adjustment (1)	-	-	-	1	-	1
<b>Adjusted Net Sales</b>	\$280	\$203	\$77	\$533	\$452	\$81

(1) Represents the impact of acquisition-related deferred revenue adjustments to fair value.

## Adjusted EBITDA

	CONSOLIDATED		
	For the Year Ending December 31, 2021		
	Low	to	High
<b>Net Income</b>	<b>\$190</b>	<b>to</b>	<b>\$198</b>
Add: Interest expense	25		25
(Less): RIP credit (1)	(8)		(8)
Add: Income tax expense	61		63
<b>Operating Income</b>	<b>\$267</b>	<b>to</b>	<b>\$277</b>
Add: RIP expense (2)	5		5
Add: Depreciation	63		63
Add: Amortization	35		35
<b>Adjusted EBITDA</b>	<b>\$370</b>	<b>to</b>	<b>\$380</b>

(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 be and do not plan to make cash contributions to our U.S. Retirement Income Plan based on guidelines established by the Pension Benefit Guaranty Corporation.

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

## Adjusted Diluted Earnings Per Share

	CONSOLIDATED				
	For the Year Ending December 31, 2021				
	Low	Per Diluted Share <sup>(1)</sup>	to	High	Per Diluted Share <sup>(1)</sup>
<b>Net income</b>	<b>\$190</b>	<b>\$3.96</b>	<b>to</b>	<b>\$198</b>	<b>\$4.12</b>
Add: Interest expense	25			25	
(Less): RIP credit (2)	(8)			(8)	
Add: Income tax expense	61			63	
<b>Operating income</b>	<b>\$267</b>		<b>to</b>	<b>\$277</b>	
Add: RIP expense (3)	5			5	
(Less): Interest expense	(25)			(25)	
Add: Acquisition related amortization (4)	21			21	
<b>Adjusted earnings before income taxes</b>	<b>\$269</b>		<b>to</b>	<b>\$279</b>	
(Less): Income tax expense (5)	(67)			(70)	
<b>Adjusted net income</b>	<b>\$201</b>	<b>\$4.20</b>	<b>to</b>	<b>\$209</b>	<b>\$4.40</b>

(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 U.S. Retirement Income Plan based on guidelines established by the Pension Benefit Guaranty Corporation.

(3) RIP expense represents only the 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 U.S. Retirement Income Plan based on guidelines established by the Pension Benefit Guaranty Corporation.

(4) Represents the intangible amortization related to acquired entities, including customer relationships, developed technology, software, trademarks and brand names, non-compete agreements and other intangibles.

(5) Adjusted income tax expense is based adjusted earnings before income tax.

## Adjusted Free Cash Flow

	CONSOLIDATED		
	For the Year Ending December 31, 2021		
	Low	to	High
<b>Net cash provided by operating activities</b>	<b>\$200</b>	<b>to</b>	<b>\$210</b>
Add: Return of investment from joint venture	75		85
<b>Adjusted net cash provided by operating activities</b>	<b>\$275</b>	<b>to</b>	<b>\$295</b>
Less: Capital expenditures	(80)		(85)
<b>Adjusted Free Cash Flow</b>	<b>\$195</b>	<b>to</b>	<b>\$210</b>