

October 28, 2019

Earnings Call Presentation

3rd Quarter 2019

Inspiring Great Spaces®

Armstrong®
WORLD INDUSTRIES

Our disclosures in this presentation, including without limitation, those relating to future financial results market conditions and guidance, 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 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.

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.

The guidance in this presentation is only effective as of the date given, October 28, 2019 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.

- Results throughout this presentation are presented on a normalized basis with the exception of cash flow.
- With the sale of our EMEA and Pacific Rim businesses, we no longer adjust our sales for movements in foreign exchange rates as we expect these to have minimal impact on revenue.
- We remove the impact of certain discrete expenses and income. Examples include plant closures, restructuring actions, separation costs, environmental site expenses and related insurance recoveries, and other large unusual items. We also adjust for our U.S. pension plan (credit) expense⁽¹⁾.
- We are using actual tax rates to report 2019 and 2018 results as well as in our guidance for 2019. Prior to this year we used a normalized book tax rate when reporting EPS.

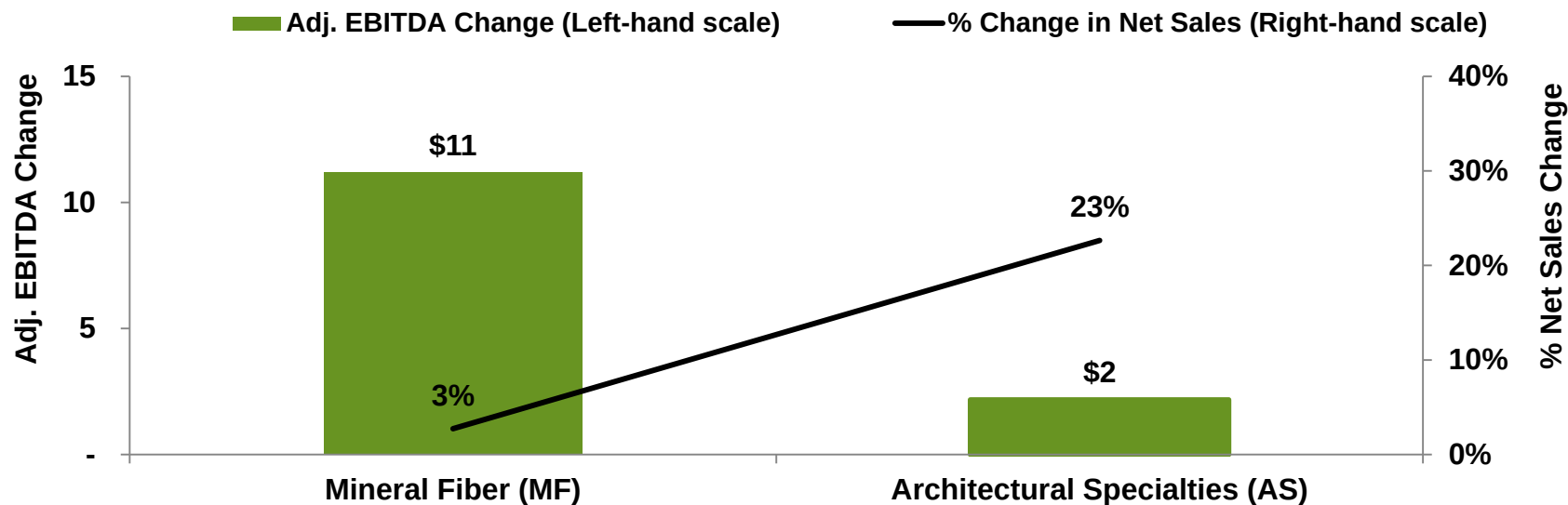
All figures throughout the presentation are in \$ millions unless otherwise noted. Figures may not add due to rounding.

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

Consolidated Company Key Metrics-Third Quarter 2019

4

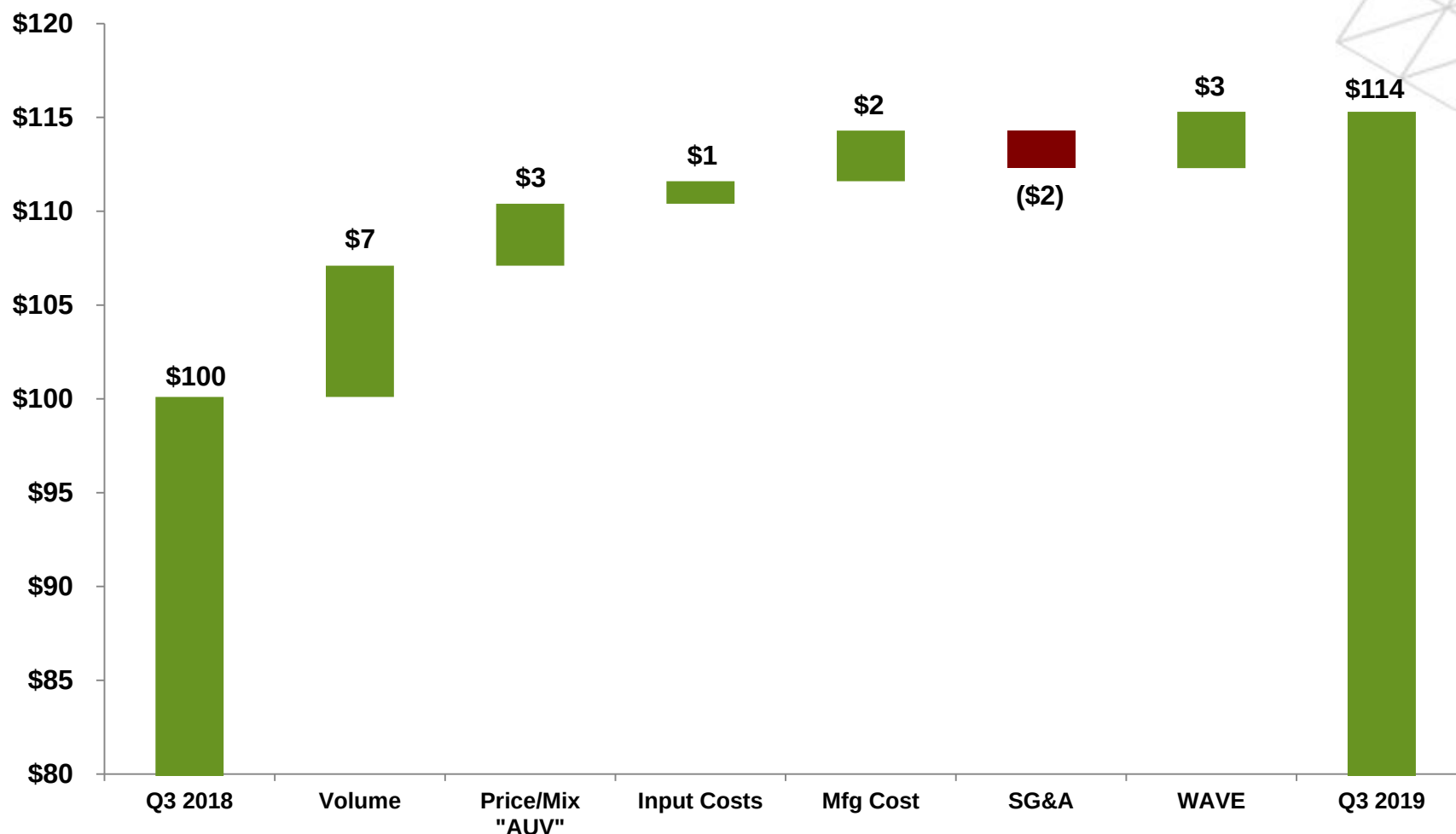
	2019	2018	Variance
Net Sales	\$277	\$261	6%
Adj. EBITDA	\$114	\$100	13%
% of Sales	41%	38%	250 bps
Adj. Earnings Per Share ⁽¹⁾	\$1.38	\$1.15	20%
Adj. Free Cash Flow	\$99	\$74	34%
Net Debt	\$553	\$494	\$58



(1) As reported EPS: \$1.28 in 2019 and \$0.90 in 2018

Adjusted EBITDA Bridge – Third Quarter 2019 vs. PY

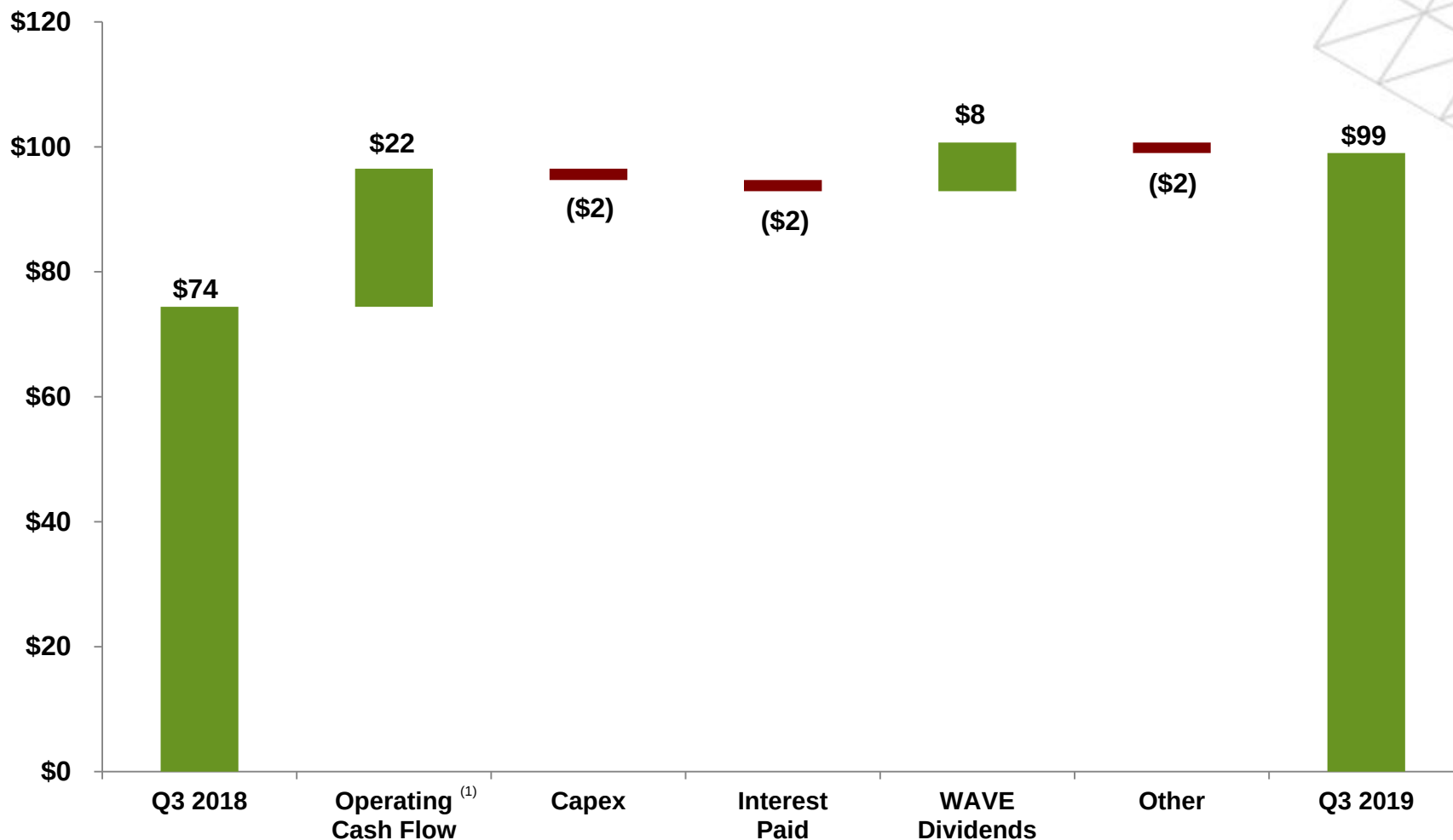
5



Positive price realization in Mineral Fiber segment coupled with a 23% increase in Architectural Specialties sales drove adjusted EBITDA up 13%

Adjusted Free Cash Flow Bridge - Third Quarter 2019 vs. PY

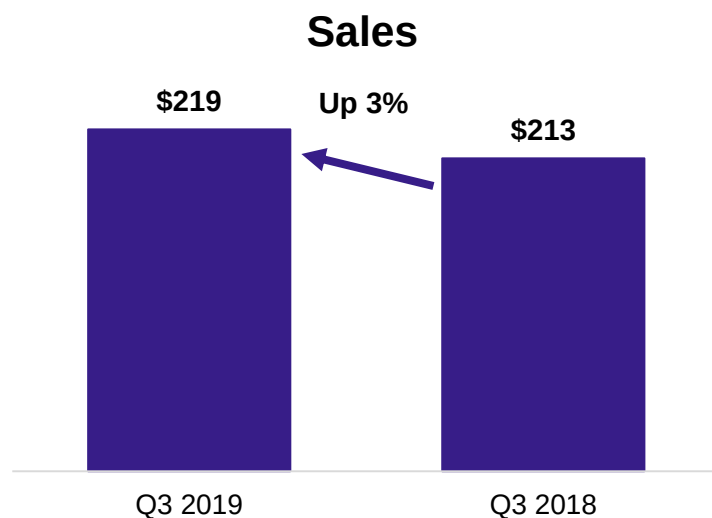
6



Strong cash earnings growth slightly offset by increased CapEx and interest

Mineral Fiber Third Quarter Results

7



Key Highlights

- Average Unit Value (AUV) expanded 2% versus the prior year quarter
- Manufacturing gains driven by productivity and the benefits of St Helens plant closure in 2018
- WAVE equity earnings increased 16% driven by positive volume and mix

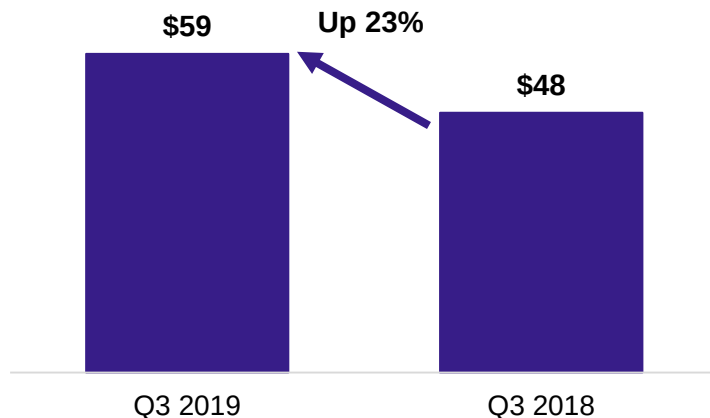
	Q1	Q2	Q3	
2018 Adjusted EBITDA	\$70	\$86	\$88	Current Quarter Comments
AUV	15	11	4	Fall through of mix and price
Volume	(8)	(3)	-	
Manufacturing	4	1	3	Productivity and benefits from 2018 restructuring
Input costs	(3)	(1)	1	Lower energy and freight costs
SG&A	2	4	1	
WAVE	2	(2)	3	Fall through of volume and mix
2019 Adjusted EBITDA	\$82	\$96	\$99	Margins expanded 400 bps
% Change	17%	11%	13%	

EBITDA growth driven by Average Unit Value (AUV), productivity & WAVE

Architectural Specialties Third Quarter Results

8

Sales



Key Highlights

- Sales up 23% driven by increases in both base business and M&A
- Adjusted EBITDA up 18% as sales gains were partially offset by higher manufacturing and SG&A investments

	Q1	Q2	Q3
2018 Adjusted EBITDA	\$9	\$9	\$12
Sales	5	7	7
Period Expense	(2)	(1)	(2)
SG&A	(2)	(3)	(3)
2019 Adjusted EBITDA	\$10	\$12	\$14
% Change	15%	39%	18%

Current Quarter Comments

Strong sales growth falls through to bottom line

Manufacturing expenses relating to acquisitions

SG&A expenses relating to acquisitions

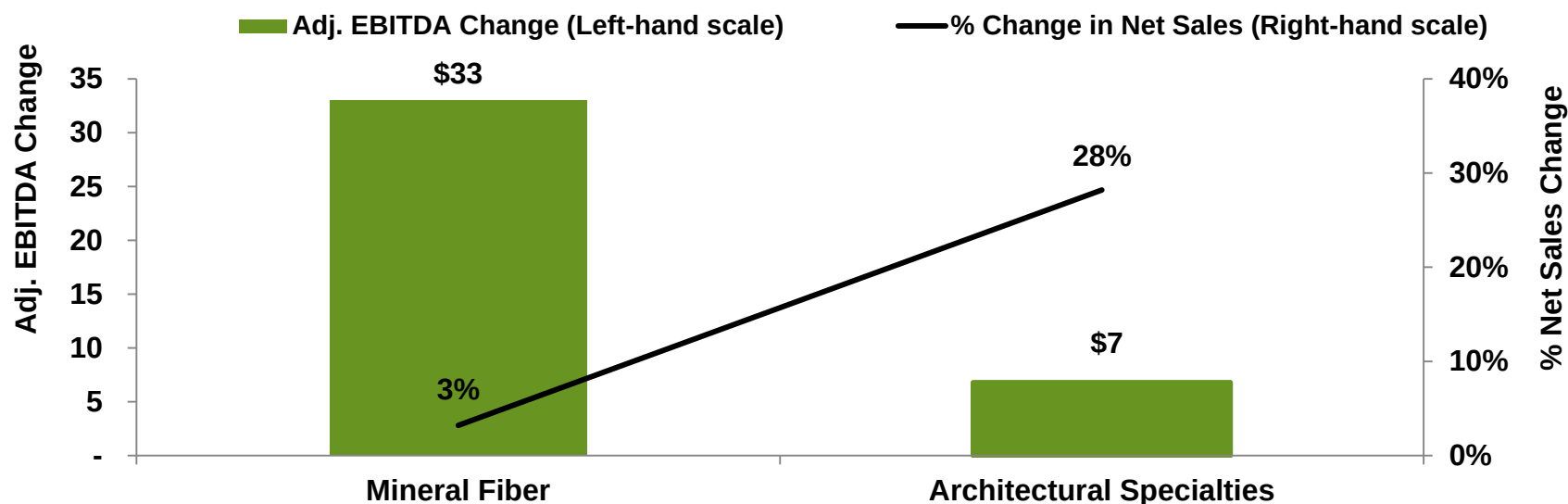
Margins contracted 100 bps, Organic margins expanded 210 bps

Continued strong sales and profit performance

Consolidated Company Key Metrics – YTD 2019

9

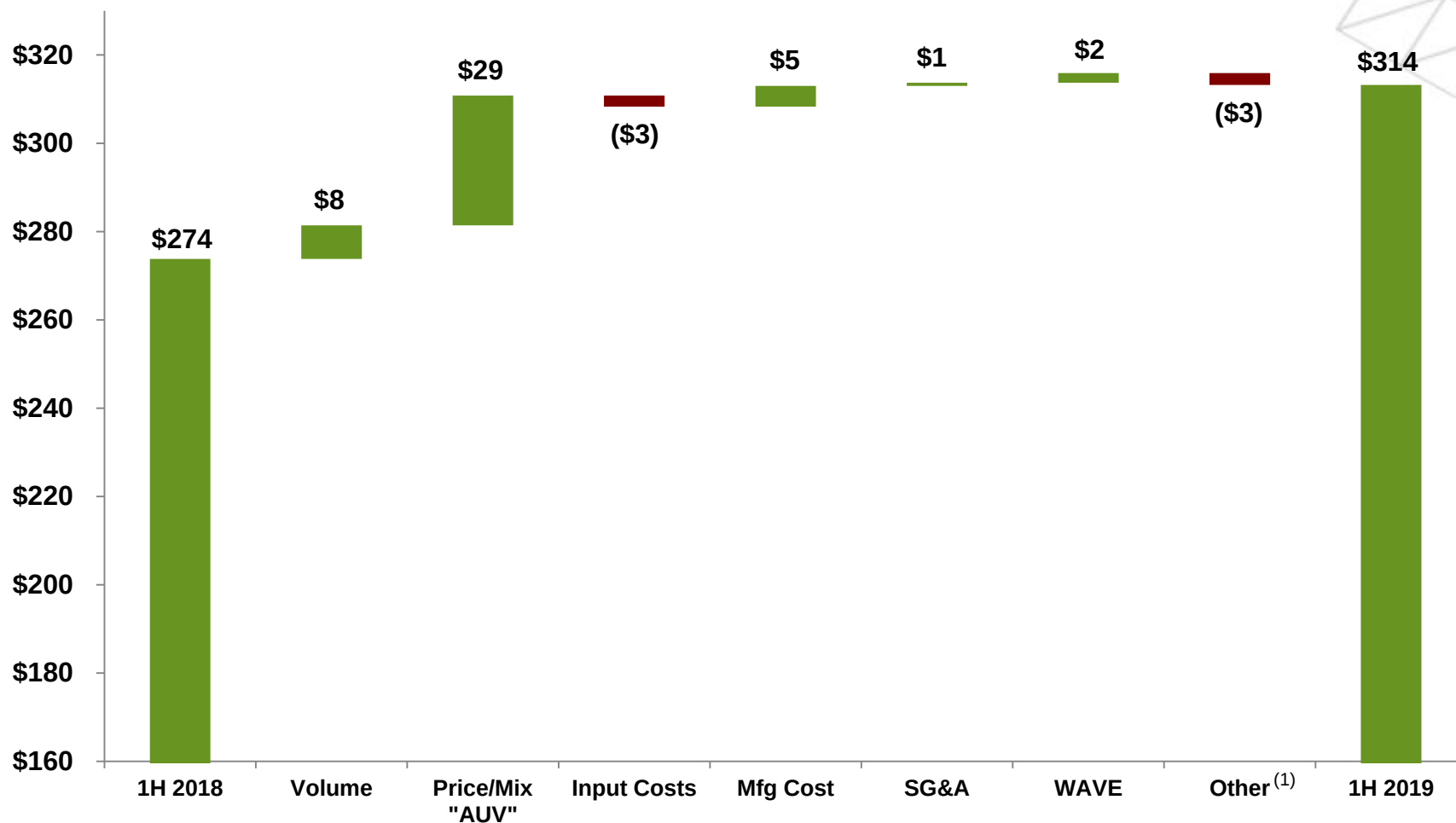
	2019	2018	Variance
Net Sales	\$791	\$736	8%
Adj. EBITDA	\$314	\$274	15%
% of Sales	40%	37%	240 bps
Adj. Earnings Per Share ⁽¹⁾	\$3.66	\$2.99	22%
Adj. Free Cash Flow	\$173	\$148	17%



(1) As reported EPS: \$3.63 in 2018

Adjusted EBITDA Bridge – YTD 2019 vs. PY

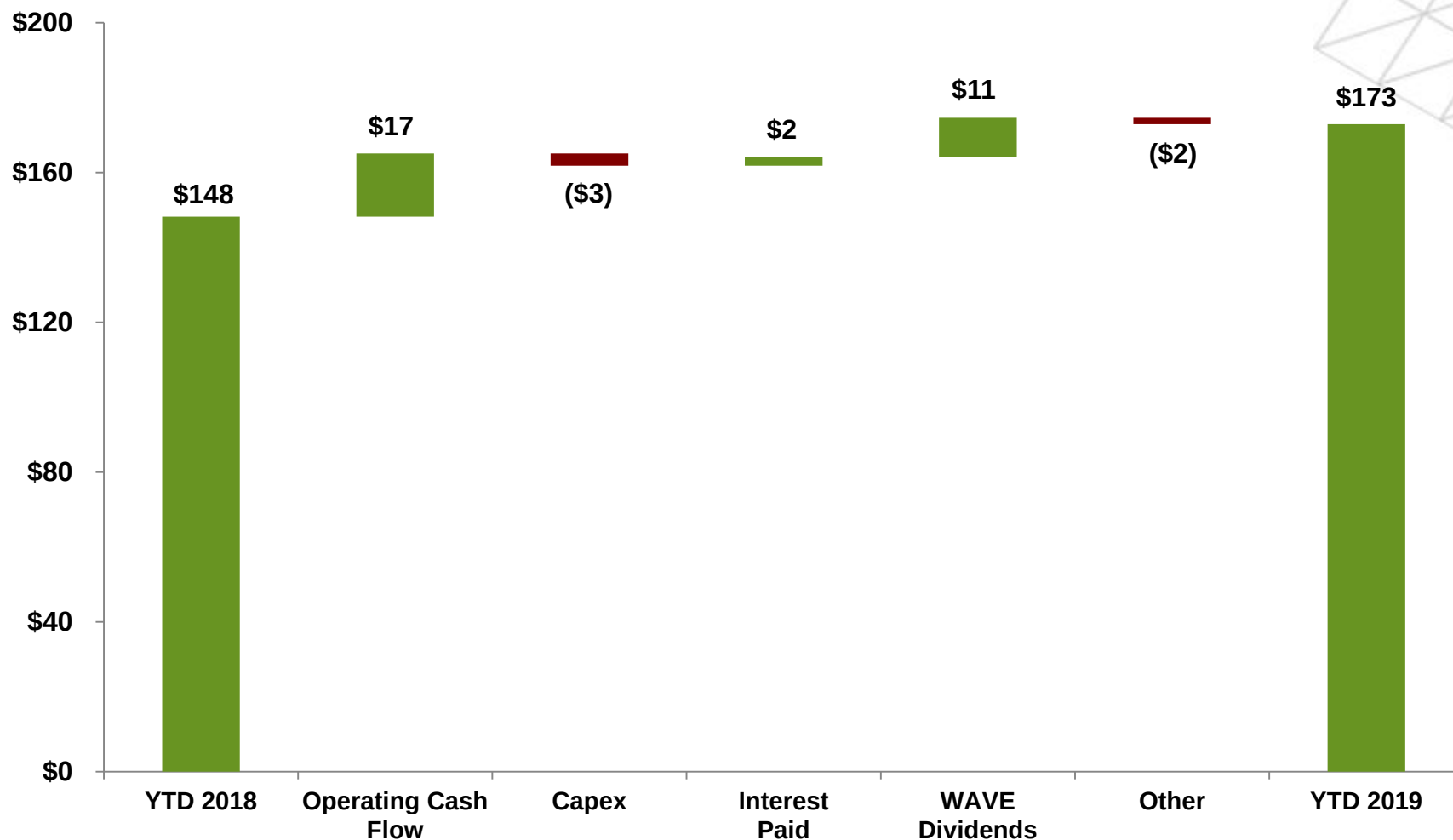
10



Strong price and mix drive adjusted EBITDA up 15%

Adjusted Free Cash Flow Bridge – YTD 2019 vs. PY

11

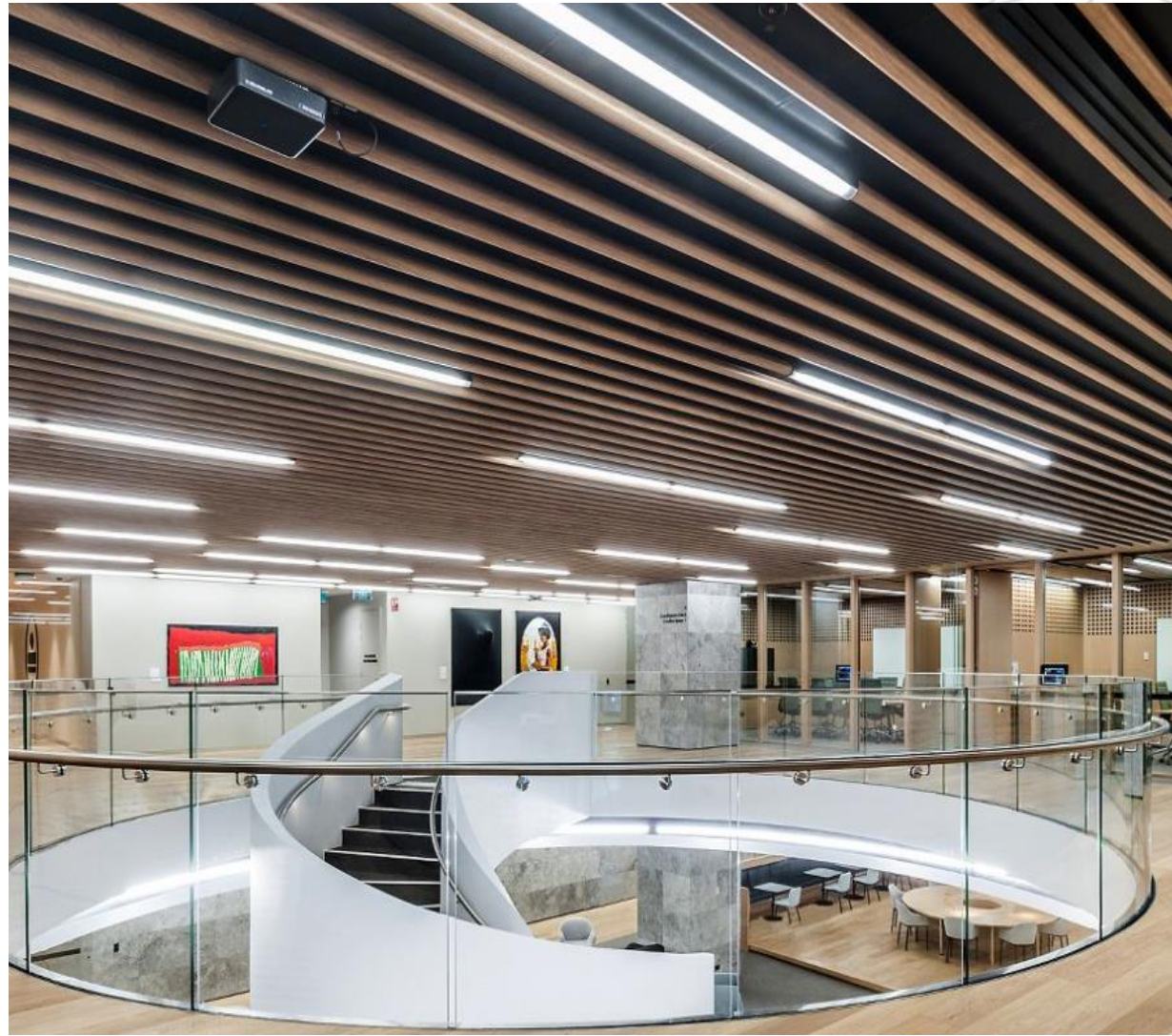


Strong cash earnings offset by timing of income tax

	2018 Actual	Prior 2019 Guidance	Updated 2019 Guidance	Green Bold = Change
Revenue	\$975	\$1,040 - \$1,075 7% – 10% YoY Growth	\$1,040 - \$1,050 7% – 8% YoY Growth	(3%)-(1%) Mineral Fiber volume 5% - 7% Average Unit Value (AUV) increase >15% Architectural Specialties volume 1-3 Acquisitions – add 1% - 3%
Adjusted EBITDA	\$353	\$390 - \$410 >10% Growth	\$400 - \$405 13%-15% YoY Growth	- Earnings contribution from AUV - Architectural Specialties volume contribution - Manufacturing productivity - Second year of restructuring savings
Adjusted EPS*	\$3.66	\$4.30 – \$4.60 18% – 26% YoY Growth	\$4.40 – \$4.50 21% – 23% YoY Growth	\$40 of interest expense 25% book tax rate 49.5 million average diluted shares outstanding
Adjusted Free Cash Flow	\$236	\$220 - \$240 4% - 14% growth ex WAVE special dividend	\$225 - \$235 7% - 11% growth ex WAVE special dividend	\$65 - \$70 of total capital expenditures - Cash tax rate 20% - 25% - No special dividend from WAVE in 2019

*As reported EPS: \$3.63 in 2018

Appendix



Adjusted EBITDA Reconciliation

14

	For the Three Months Ended September 30,			For the Nine Months Ended September 30,		
	2019	2018	V	2019	2018	V
Earnings from continuing operations, Reported	\$91	\$64	\$27	\$191	\$153	\$38
Add: Income tax expense, as reported	\$16	\$16	-	\$49	\$42	\$7
Earnings before tax, Reported	\$107	\$81	\$26	\$240	\$195	\$44
Add: Interest/other income and expense, net	\$7	\$1	\$6	\$16	\$2	\$14
Operating Income, Reported	\$113	\$81	\$32	\$255	\$197	\$58
Add: U.S. Pension Cost (1)	\$1	\$1	-	\$4	\$4	(\$1)
Add: WAVE Pension Settlement (2)	-	-	-	\$1	-	\$1
Add: Litigation Expense	-	\$3	(\$3)	\$20	\$3	\$17
Add: Cost Reduction Initiatives	-	\$2	(\$2)	-	\$7	(\$7)
Add: Net Proforma International Allocations, Other	\$1	\$1	-	-	\$5	(\$5)
Add/(Less): Net Environmental Expenses (Recoveries)	\$1	(\$5)	\$6	\$1	(\$3)	\$4
Add: WAVE FSA (3)	\$4	-	\$4	\$4	-	\$4
(Less): AWI Portion of WAVE's Gain on Sale to Knauf	(\$25)	-	(\$25)	(\$25)	-	(\$25)
Add: D&A	\$19	\$17	\$2	\$53	\$60	(\$6)
Adjusted EBITDA	\$114	\$100	\$13	\$314	\$274	\$40
	13%			15%		

- (1) U.S. pension 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 and did not make cash contributions to our U.S. Retirement Income Plan.
- (2) WAVE settled a portion of their pension plan that resulted in a non-cash accounting charge.
- (3) WAVE Fresh Start Accounting asset amortization.

Adjusted Diluted Earnings Per Share Reconciliation

15

	CONSOLIDATED									
	For the Three Months Ended September 30,					For the Nine Months Ended September 30,				
	2019	Per Diluted Share	2018	Per Diluted Share	V	2019	Per Diluted Share	2018	Per Diluted Share	V
Earnings from continuing operations, As Reported	\$91	\$1.83	\$64	\$1.23	\$27	\$191	\$3.84	\$153	\$2.89	\$38
Add: Income tax expense, as reported	\$16		\$16		-	\$49		\$42		\$7
Earnings from continuing operations before income taxes, As Reported	\$107		\$81		\$26	\$240		\$195		\$44
(Less): U.S. Pension (Credit) (1)	(\$2)		(\$7)		\$5	(\$6)		(\$20)		\$14
Add: WAVE Pension Settlement (2)	-		-		-	\$1		-		\$1
Add: Litigation Expense	-		\$3		(\$3)	\$20		\$3		\$17
Add: Cost Reduction Initiatives	-		\$3		(\$3)	-		\$21		(\$21)
Add: Net Proforma International Allocations, Other	\$1		\$1		-	-		\$5		(\$5)
Add/(Less): Net Environmental Expenses (Recoveries)	\$1		(\$5)		\$6	\$1		(\$3)		\$4
Add: WAVE FSA (3)	\$4		-		\$4	\$4		-		\$4
(Less): AWI Portion of WAVE's Gain on Sale to Knauf	(\$25)		-		(\$25)	(\$25)		-		(\$25)
Adjusted earnings from continuing operations before income taxes	\$85		\$75		\$10	\$235		\$201		\$34
(Less): Adjusted Income tax expense (4)	(\$17)		(\$15)		(\$2)	(\$54)		(\$44)		(\$10)
Adjusted net income	\$68	\$1.38	\$60	\$1.15	\$9	\$181	\$3.66	\$158	\$2.99	\$23
Adjusted EPS Change versus Prior Year	20%					22%				

Diluted Shares Outstanding	49.6	51.9	49.6	52.8
As reported Tax Rate	20%	20%	23%	22%

(1) U.S. pension (credit) represents the entire actuarial net periodic pension (credit) cost 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 U.S. Retirement Income Plan.

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

(3) WAVE Fresh Start Accounting asset amortization.

(4) Adjusted tax expense is calculated using the as reported tax rate multiplied by the adjusted earnings from continuing operations before income taxes. We have updated our previously reported first quarter results to be consistent with this methodology.

(5) As reported tax rate for 2019 is actual tax rate excluding WAVE's gain on sale to Knauf.

Adjusted Free Cash Flow Reconciliation

16

	For the Three Months Ended September 30,			For the Nine Months Ended September 30,		
	2019	2018	V	2019	2018	V
As Reported Net cash provided by operating activities	\$74	\$70	\$4	\$121	\$159	(\$38)
As Reported Net cash provided by (used for) investing activities	(\$39)	\$287	(\$327)	(\$71)	\$286	(\$357)
Subtotal	\$35	\$357	(\$322)	\$51	\$445	(\$394)
Add: Acquisitions, net	-	\$12	(\$12)	\$43	\$24	\$19
Add: Litigation, net	-	-	-	\$20	-	\$20
Add/(Less): Environmental Payments (Recoveries), net (1)	\$9	\$1	\$8	\$4	(\$26)	\$30
Add/(Less): Proceeds from sale of international, net (2)	\$55	(\$295)	\$350	\$55	(\$295)	\$350
(Less): Other	-	(\$1)	-	-	-	-
Adjusted Free Cash Flow (3)	\$99	\$74	\$25	\$173	\$148	\$25
	34%			17%		

(1) Prior year Adjusted Free Cash Flow did not adjust for Environmental Recoveries in the first quarter.

(2) Includes related income tax payments.

(3) 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

17

	MINERAL FIBER			ARCHITECTURAL SPECIALTIES			UNALLOCATED CORPORATE		
	For the Three Months Ended September 30,								
	2019	2018	V	2019	2018	V	2019	2018	V
Operating Income (Loss) – As Reported	\$104	\$72	\$32	\$12	\$11	-	(\$2)	(\$2)	-
Add: U.S. Pension Cost (1)	-	-	-	-	-	-	\$1	\$1	-
Add: Litigation Expense	-	\$3	(\$3)	-	-	-	-	-	-
Add: Cost Reduction Initiatives	-	\$2	(\$2)	-	-	-	-	-	-
Add: Net Proforma International Allocations, Other	\$1	-	\$1	-	-	-	-	\$1	(\$1)
Add/(Less): Net Environmental Expenses (Recoveries)	\$1	(\$6)	\$7	-	-	-	-	-	-
Add: WAVE FSA (3)	\$4	-	\$4	-	-	-	-	-	-
(Less): AWI Portion of WAVE's Gain on Sale to Knauf	(\$25)	-	(\$25)	-	-	-	-	-	-
Less: Depreciation and Amortization	\$16	\$17	(\$1)	\$3	\$1	\$2	\$1	(\$1)	\$1
EBITDA – Adjusted	\$99	\$88	\$11	\$14	\$12	\$2	-	-	-
	13%			18%					

(1) U.S. pension 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 and did not make cash contributions to our U.S. Retirement Income Plan.

(2) Wave settled a portion of their pension plan that resulted in a non-cash accounting charge.

(3) WAVE Fresh Start Accounting asset amortization.

Net Sales

	For the Year Ending December 31, 2019		
	Low	to	High
Reported Net Sales	\$1,040	to	\$1,050

Adjusted EBITDA

	For the Year Ending December 31, 2019		
	Low	to	High
Net income	\$233	to	\$236
Add: Interest expense	40		40
Add: Income tax expense	73		74
(Less): U.S. pension (credit)	(15)		(15)
Add: D&A	70		70
Adjusted EBITDA	\$400	to	\$405

Adjusted Diluted Earnings Per Share

	For the Year Ending December 31, 2019				
	Low	Per Diluted Share ⁽¹⁾	to	High	Per Diluted Share ⁽¹⁾
Net Income	\$233	\$4.70	to	\$236	\$4.80
Add: Interest expense	40			40	
(Less): U.S. Pension credit	(15)			(15)	
Add: Income tax expense	73			74	
(Less): Interest expense	(40)			(40)	
(Less): Income tax expense	(73)			(74)	
Adjusted Net Income	\$218	\$4.40	to	\$221	\$4.50

Adjusted Free Cash Flow

	For the Year Ending December 31, 2019		
	Low	to	High
Net cash provided by operating activities	\$220	to	\$235
Add: Return of investment from joint venture	70		70
Adjusted net cash provided by operating activities	\$290	to	\$305
(Less): Capital Expenditures	(65)		(70)
Adjusted Free Cash Flow	\$225	to	\$235

(1) Adjusted EPS guidance for 2019 is calculated based on an estimated effective tax rate of 25% and on 49.5 million of diluted shares outstanding.