

ARMSTRONG WORLD INDUSTRIES INC
Form 10-Q
May 09, 2016
Table of Contents

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

FORM 10-Q

(Mark One)

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

For the quarterly period ended March 31, 2016

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 1-2116

ARMSTRONG WORLD INDUSTRIES, INC.

(Exact name of registrant as specified in its charter)

Pennsylvania
(State or other jurisdiction of
incorporation or organization)

23-0366390
(I.R.S. Employer
Identification No.)

2500 Columbia Avenue, Lancaster, Pennsylvania
(Address of principal executive offices)

17603
(Zip Code)

Registrant's telephone number, including area code (717) 397-0611

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter time period that the registrant was required to submit and post such files). Yes No

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

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

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

Number of shares of Armstrong World Industries, Inc.'s common stock outstanding as of May 2, 2016 55,481,159.

Table of Contents

TABLE OF CONTENTS

	PAGE
<u>Cautionary Note Regarding Forward-Looking Statements</u>	3
<u>PART I - FINANCIAL INFORMATION</u>	
Item 1. <u>Financial Statements</u>	5
Item 2. <u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	30
Item 3. <u>Quantitative and Qualitative Disclosures About Market Risk</u>	38
Item 4. <u>Controls and Procedures</u>	38
<u>PART II - OTHER INFORMATION</u>	
Item 1. <u>Legal Proceedings</u>	39
Item 1A. <u>Risk Factors</u>	39
Item 2. <u>Unregistered Sales of Equity Securities and Use of Proceeds</u>	40
Item 3. <u>Defaults Upon Senior Securities</u>	40
Item 4. <u>Mine Safety Disclosures</u>	40
Item 5. <u>Other Information</u>	40
Item 6. <u>Exhibits</u>	41
<u>Signatures</u>	42

Table of Contents

When we refer to AWI, we, our and us, we are referring to Armstrong World Industries, Inc. and its subsidiaries.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements in this Quarterly Report on Form 10-Q and the documents incorporated by reference may constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Those forward-looking statements are subject to various risks and uncertainties and include all statements that are not historical statements of fact and those regarding our intent, belief or expectations, including, but not limited to, our expectations concerning our residential and commercial markets and their effect on our operating results; our expectations regarding the payment of dividends, and our ability to increase revenues, earnings and EBITDA (as such terms are defined by documents incorporated by reference herein). Words such as anticipate, expect, intend, plan, target, project, predict, believe, may, will, would, could, should, seek, estimate and similar expressions identify such forward-looking statements. These statements are based on management's current expectations and beliefs and are subject to a number of factors that could lead to actual results materially different from those described in the forward-looking statements. Although we believe that the assumptions underlying the forward-looking statements are reasonable, we can give no assurance that our expectations will be attained. Factors that could have a material adverse effect on our financial condition, liquidity, results of operations or future prospects or which could cause actual results to differ materially from our expectations include, but are not limited to:

global economic conditions;

construction activity;

the separation of the flooring business;

competition;

key customers;

availability and costs of raw materials and energy;

international operations;

covenants in our debt agreements;

our indebtedness;

our liquidity;

our WAVE joint venture;

environmental matters;

strategic transactions;

plant construction projects;

negative tax consequences;

defined benefit plan obligations;

claims and litigation;

labor;

our intellectual property rights;

costs savings and productivity initiatives; and

other risks detailed from time to time in our filings with the Securities and Exchange Commission (the SEC), press releases and other communications, including those set forth under Risk Factors included in our Annual Report on Form 10-K and in the documents incorporated by reference.

Table of Contents

Such forward-looking statements speak only as of the date they are made. We expressly disclaim any obligation to release publicly any updates or revisions to any forward-looking statements to reflect any change in our expectations with regard thereto or change in events, conditions or circumstances on which any statement is based.

Table of Contents**PART I - FINANCIAL INFORMATION****ITEM 1. FINANCIAL STATEMENTS**

Armstrong World Industries, Inc., and Subsidiaries

Condensed Consolidated Statements of Operations and Comprehensive Income

(amounts in millions, except per share data)

Unaudited

	Three Months Ended March 31, 2016	Three Months Ended March 31, 2015
Net sales	\$ 571.8	\$ 551.4
Cost of goods sold	440.3	421.9
Gross profit	131.5	129.5
Selling, general and administrative expenses	104.2	103.0
Separation costs	27.1	4.3
Equity earnings from joint venture	(18.1)	(13.6)
Operating income	18.3	35.8
Interest expense	21.9	11.2
Other non-operating expense	0.3	1.3
Other non-operating (income)	(4.4)	(0.6)
Earnings from continuing operations before income taxes	0.5	23.9
Income tax expense	12.1	20.1
(Loss) earnings from continuing operations	(11.6)	3.8
Gain from disposal of discontinued business, net of tax benefit of (\$1.8) and (\$43.4)	1.7	42.8
Net (loss) earnings	(\$ 9.9)	\$ 46.6
Other comprehensive income (loss), net of tax:		
Foreign currency translation adjustments	1.4	(15.3)
Derivative gain (loss)	1.6	(0.5)
Pension and postretirement adjustments	7.8	11.9
Total other comprehensive income (loss)	10.8	(3.9)

Edgar Filing: ARMSTRONG WORLD INDUSTRIES INC - Form 10-Q

Total comprehensive income	\$	0.9	\$	42.7
(Loss) earnings per share of common stock, continuing operations:				
Basic	(\$	0.21)	\$	0.07
Diluted	(\$	0.21)	\$	0.07
Earnings per share of common stock, discontinued operations:				
Basic	\$	0.03	\$	0.77
Diluted	\$	0.03	\$	0.76
Net (loss) earnings per share of common stock:				
Basic	(\$	0.18)	\$	0.84
Diluted	(\$	0.18)	\$	0.83
Average number of common shares outstanding:				
Basic		55.6		55.3
Diluted		55.6		55.7

See accompanying notes to Condensed Consolidated Financial Statements beginning on page 9.

Table of Contents

Armstrong World Industries, Inc., and Subsidiaries

Condensed Consolidated Balance Sheets

(amounts in millions, except share data)

	Unaudited March 31, 2016	December 31, 2015
<u>Assets</u>		
Current assets:		
Cash and cash equivalents	\$ 149.8	\$ 244.8
Accounts and notes receivable, net	213.4	184.3
Inventories, net	345.8	344.2
Deferred income taxes	35.3	35.5
Income tax receivable	6.5	11.1
Other current assets	65.2	60.9
Total current assets	816.0	880.8
Property, plant, and equipment, less accumulated depreciation and amortization of \$739.6 and \$718.6, respectively	1,100.7	1,096.3
Prepaid pension costs	8.4	8.3
Investment in joint venture	131.1	130.8
Intangible assets, net	486.9	489.7
Deferred income taxes	18.5	21.0
Income taxes receivable	3.3	2.4
Other non-current assets	61.0	57.9
Total assets	\$ 2,625.9	\$ 2,687.2
<u>Liabilities and Shareholders' Equity</u>		
Current liabilities:		
Current installments of long-term debt	\$ 52.5	\$ 52.1
Accounts payable and accrued expenses	348.3	380.4
Income tax payable	4.4	3.2
Deferred income taxes	0.6	0.6
Total current liabilities	405.8	436.3
Long-term debt, less current installments	925.7	946.2
Postretirement benefit liabilities	171.6	172.4
Pension benefit liabilities	99.2	107.6
Other long-term liabilities	40.5	49.6
Income taxes payable	94.6	92.3
Deferred income taxes	118.2	114.0

Edgar Filing: ARMSTRONG WORLD INDUSTRIES INC - Form 10-Q

Total non-current liabilities	1,449.8	1,482.1
Shareholders' equity:		
Common stock, \$0.01 par value per share, 200 million shares authorized, 60,534,939 shares issued, and 55,477,557 shares outstanding at March 31, 2016 and 60,416,446 shares issued and 55,359,064 shares outstanding at December 31, 2015	0.6	0.6
Capital in excess of par value	1,152.4	1,151.8
Retained earnings	355.3	365.2
Treasury stock, at cost, 5,057,382 shares	(261.4)	(261.4)
Accumulated other comprehensive (loss)	(476.6)	(487.4)
Total shareholders' equity	770.3	768.8
Total liabilities and shareholders' equity	\$ 2,625.9	\$ 2,687.2

See accompanying notes to Condensed Consolidated Financial Statements beginning on page 9.

Table of Contents

Armstrong World Industries, Inc., and Subsidiaries

Condensed Consolidated Statements of Shareholders Equity

(amounts in millions, except share data)

Unaudited

	Three Months Ended March 31, 2016								
	Common Stock				Treasury Stock		Accumulated Other Comprehensive		Total
	Shares	Amount	Additional Paid-In Capital	Retained Earnings	Shares	Amount	(Loss)		
Balance at beginning of period	55,359,064	\$ 0.6	\$ 1,151.8	\$ 365.2	5,057,382	(\$ 261.4)	(\$ 487.4)	\$ 768.8	
Stock issuance	118,493								
Share-based employee compensation			0.6					0.6	
Net (loss)				(9.9)				(9.9)	
Other comprehensive income							10.8	10.8	
Balance at end of period	55,477,557	\$ 0.6	\$ 1,152.4	\$ 355.3	5,057,382	(\$ 261.4)	(\$ 476.6)	\$ 770.3	

	Three Months Ended March 31, 2015								
	Common Stock				Treasury Stock		Accumulated Other Comprehensive		Total
	Shares	Amount	Additional Paid-In Capital	Retained Earnings	Shares	Amount	(Loss)		
Balance at beginning of period	55,126,153	\$ 0.6	\$ 1,134.4	\$ 271.0	5,057,382	(\$ 261.4)	(\$ 495.5)	\$ 649.1	
Stock issuance	146,971								
Share-based employee compensation			5.4					5.4	
Net earnings				46.6				46.6	
Other comprehensive (loss)							(3.9)	(3.9)	
	55,273,124	\$ 0.6	\$ 1,139.8	\$ 317.6	5,057,382	(\$ 261.4)	(\$ 499.4)	\$ 697.2	

Balance at end of
period

See accompanying notes to Condensed Consolidated Financial Statements beginning on page 9.

7

Table of Contents

Armstrong World Industries, Inc., and Subsidiaries

Condensed Consolidated Statements of Cash Flows

(amounts in millions)

Unaudited

	Three Months Ended March 31,	
	2016	2015
Cash flows from operating activities:		
Net (loss) earnings	(\$ 9.9)	\$ 46.6
Adjustments to reconcile net (loss) earnings to net cash provided by operating activities:		
Depreciation and amortization	30.2	28.5
Deferred income taxes	(1.5)	(32.0)
Share-based compensation	2.6	4.2
Equity earnings from joint venture	(18.1)	(13.6)
Separation costs	27.1	4.3
Loss on interest rate swap	10.7	
U.S. pension expense	5.4	6.3
Non-cash foreign currency translation on intercompany loans	(3.7)	(0.6)
Other non-cash adjustments, net	0.7	(0.6)
Changes in operating assets and liabilities:		
Receivables	(27.5)	(25.4)
Inventories	0.3	(19.4)
Other current assets	(8.9)	1.9
Other non-current assets	(4.6)	(3.5)
Accounts payable and accrued expenses	(68.2)	(26.3)
Income taxes payable	7.3	(6.9)
Other long-term liabilities	(4.6)	(1.9)
Other, net	(2.3)	4.3
Net cash (used for) operating activities	(65.0)	(34.1)
Cash flows from investing activities:		
Purchases of property, plant and equipment	(28.5)	(26.2)
Return of investment from joint venture	17.9	15.3
Proceeds from settlement of note receivable	0.2	
Proceeds from the sale of assets	0.1	2.8
Net cash (used for) investing activities	(10.3)	(8.1)
Cash flows from financing activities:		
Proceeds from revolving credit facility and other short-term debt	40.0	
Payments of revolving credit facility and other short-term debt	(40.0)	

Edgar Filing: ARMSTRONG WORLD INDUSTRIES INC - Form 10-Q

Payments of long-term debt	(20.7)	(7.4)
Special dividends paid		(1.2)
Proceeds from exercised stock options		3.2
Excess tax benefit from share-based awards	0.6	
Payment of company owned life insurance loans, net		(0.1)
Net cash (used for) financing activities	(20.1)	(5.5)
Effect of exchange rate changes on cash and cash equivalents	0.4	(5.6)
Net (decrease) in cash and cash equivalents	(95.0)	(53.3)
Cash and cash equivalents at beginning of year	244.8	185.3
Cash and cash equivalents at end of period	\$ 149.8	\$ 132.0
Supplemental Cash Flow Disclosures:		
Interest paid	\$ 10.1	\$ 10.0
Income taxes paid, net	3.9	15.6
Amounts in accounts payable for capital expenditures	8.3	20.2

See accompanying notes to Condensed Consolidated Financial Statements beginning on page 9.

Table of Contents

Armstrong World Industries, Inc., and Subsidiaries

Notes to Condensed Consolidated Financial Statements (unaudited)

(dollar amounts in millions, except share data)

NOTE 1. BUSINESS AND BASIS OF PRESENTATION

Armstrong World Industries, Inc. (AWI) is a Pennsylvania corporation incorporated in 1891. When we refer to AWI, we, our and us in these notes, we are referring to AWI and its subsidiaries.

On April 1, 2016, AWI completed its previously announced separation of Armstrong Flooring, Inc. (AFI) by allocating the assets and liabilities related primarily to the Resilient Flooring and Wood Flooring segments to AFI and then distributing the common stock of AFI to AWI's shareholders at a ratio of one share of AFI common stock for every two shares of AWI common stock. Subsequent to the separation and distribution, AWI and AFI operate as two independent, publicly-traded companies, with AFI owning and operating the Resilient Flooring and Wood Flooring segments and AWI continuing to own and operate the Building Products (Ceilings) segment. Beginning in the second quarter of 2016, AFI's historical financial results for periods prior to April 1, 2016 will be reflected in AWI's Consolidated Financial Statements as a discontinued operation. Separation costs of \$27.1 million and \$4.3 million for the first three months of 2016 and 2015, respectively, primarily relate to outside professional services and employee compensation and retention and severance accruals which were recorded within the Unallocated Corporate segment in conjunction with this initiative.

The accounting policies used in preparing the Condensed Consolidated Financial Statements in this Form 10-Q are the same as those used in preparing the Consolidated Financial Statements for the year ended December 31, 2015. These statements should therefore be read in conjunction with the Consolidated Financial Statements and notes that are included in the Form 10-K for the fiscal year ended December 31, 2015. In the opinion of management, all adjustments of a normal recurring nature have been included to provide a fair statement of the results for the reporting periods presented. Operating results for the first quarter of 2016 and 2015 included in this report are unaudited. Quarterly results are not necessarily indicative of annual earnings, primarily due to the different level of sales in each quarter of the year and the possibility of changes in general economic conditions.

These Condensed Consolidated Financial Statements are prepared in accordance with U.S. generally accepted accounting principles (U.S. GAAP). The statements include management estimates and judgments, where appropriate. Management utilizes estimates to record many items including certain asset values, allowances for bad debts, inventory obsolescence and lower of cost or market charges, warranty reserves, workers' compensation, general liability and environmental claims and income taxes. When preparing an estimate, management determines the amount based upon the consideration of relevant information. Management may confer with outside parties, including outside counsel. Actual results may differ from these estimates.

Certain amounts in the prior year's Condensed Consolidated Financial Statements have been recast to conform to the 2016 presentation.

Recently Adopted Accounting Standards

In June 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2014-12 *Accounting for Share-Based Payments When the Terms of an Award Provide That a Performance Target Could Be Achieved after the Requisite Service Period* which amends Accounting Standards Codification (ASC)

Topic 718: Compensation-Stock Compensation. This new guidance requires that a performance target that affects vesting and that could be achieved after the requisite service period be treated as a performance condition and should not be reflected in the estimate of the grant-date fair value of the award. The guidance was effective for annual periods beginning after December 15, 2015. There was no impact on our financial condition, results of operations or cash flows as a result of the adoption of this guidance.

In April 2015, the FASB issued ASU 2015-03, *Simplifying the Presentation of Debt Issuance Costs*. This standards update amends existing guidance to require the presentation of debt issuance costs in the balance sheet as a deduction from the carrying amount of the related debt liability instead of a deferred charge. In August 2015, the FASB issued ASU 2015-15, *Presentation and Subsequent Measurement of*

Table of Contents

Armstrong World Industries, Inc., and Subsidiaries

Notes to Condensed Consolidated Financial Statements (unaudited)

(dollar amounts in millions, except share data)

Debt Issuance Costs Associated with Line-of-Credit Arrangements, which was issued to address the presentation and subsequent measurement of debt issuance costs related to line-of-credit arrangements. ASU 2015-03 and 2015-15 were effective for annual reporting periods beginning after December 15, 2015. We adopted ASU 2015-03 and 2015-15 retrospectively on January 1, 2016. As of March 31, 2016, our adoption of these ASC updates resulted in a \$4.1 million reduction to other non-current assets and a corresponding decrease to long-term debt. As of December 31, 2015, our adoption of these ASC updates resulted in a \$4.7 million reduction to other non-current assets and a corresponding decrease to long-term debt. There was no impact on results of operations as a result of the adoption of this guidance.

In April 2015, the FASB issued ASU 2015-05, *Customer's Accounting for Fees Paid in a Cloud Computing Arrangement* which provides guidance to determine when a customer's fees paid in a cloud computing arrangement include a software license. If a cloud computing arrangement includes a software license, the customer should account for the software license element of the arrangement consistent with the acquisition of other software licenses. If the arrangement does not include a software license, the customer should account for a cloud computing arrangement as a service contract. This new guidance was effective for annual reporting periods beginning after December 15, 2015. There was no impact on our financial condition, results of operations or cash flows as a result of the adoption of this guidance.

Recently Issued Accounting Standards

In May 2014, the FASB issued ASU 2014-09 *Revenue from Contracts with Customers*. The guidance requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to a customer. The ASU will replace most existing revenue recognition guidance in U.S. GAAP when it becomes effective. In August 2015, the FASB issued ASU 2015-14, *Revenue from Contracts with Customers: Deferral of the Effective Date* which defers the effective date for ASU 2014-09 by one year. In March 2016, the FASB issued ASU 2016-08, *Principal versus Agent Considerations (Reporting Gross versus Net)*, which clarifies the implementation guidance in ASU 2014-09 relating to principle versus agent considerations. In April 2016, the FASB issued ASU 2016-10, *Identifying Performance Obligations and Licensing* which clarifies the implementation guidance in ASU 2014-09 relating to the identification of performance obligations in a contract, including how entities should account for shipping and handling services it provides after control of goods transfers to a customer. ASU 2016-10 also clarifies guidance on the timing and pattern of revenue recognition for intellectual property licenses. These ASC updates are effective for annual reporting periods beginning after December 15, 2017, but early adoption is permitted. We have not selected a transition method and are currently evaluating the impact these ASC updates would have on our financial condition, results of operations and cash flows.

In July 2015, the FASB issued ASU 2015-11, *Simplifying the Measurement of Inventory* which requires inventory that is measured on a first-in, first-out or average cost basis to be measured at lower of cost and net realizable value, as opposed to the lower of cost or market. For inventory that is measured under the last-in, first-out (LIFO) basis or the retail recovery method, there is no change to current measurement requirements. This new guidance must be applied prospectively and is effective for annual reporting periods beginning after December 15, 2016, but early adoption is

permitted. We are currently evaluating the impact the adoption of this standard would have on our financial condition, results of operations and cash flows.

In November 2015, the FASB issued ASU 2015-17, *Balance Sheet Classification of Deferred Taxes* which requires entities with a classified balance sheet to present all deferred tax assets and liabilities as non-current. This new guidance is effective for annual reporting periods beginning after December 15, 2016. We are currently evaluating the impact the adoption of this standard would have on our financial condition and cash flows.

In January 2016, the FASB issued ASU 2016-01, *Recognition and Measurement of Financial Assets and Financial Liabilities* which addresses certain aspects of recognition, measurement, presentation, and disclosure of financial instruments. Most notably, this new guidance requires equity investments (except

Table of Contents

Armstrong World Industries, Inc., and Subsidiaries

Notes to Condensed Consolidated Financial Statements (unaudited)

(dollar amounts in millions, except share data)

those accounted for under the equity method of accounting or those that result in consolidation of the investee) to be measured at fair value with changes in fair value recognized in net income. This new guidance is effective for annual reporting periods beginning after December 15, 2017. We are currently evaluating the impact the adoption of this standard would have on our financial condition, results of operations and cash flows.

In February 2016, the FASB issued ASU 2016-02, *Leases* which amends accounting for leases, most notably by requiring a lessee to recognize the assets and liabilities that arise from a lease agreement. Specifically, this new guidance will require lessees to recognize a liability to make lease payments and a right-of-use asset representing its right to use the underlying asset for the lease term, with limited exceptions. The accounting applied by a lessor is largely unchanged from that applied under existing U.S. GAAP. This new guidance is effective for annual reporting periods beginning after December 15, 2018 and must be adopted under a modified retrospective basis. We are currently evaluating the impact the adoption of this standard would have on our financial condition, results of operations and cash flows.

In March 2016, the FASB issued ASU 2016-05, *Effect of Derivative Contract Novations on Existing Hedge Accounting Relationships* which amends ASC Topic 815: Derivatives and Hedging. This new guidance clarifies that a novation, or a change in the counterparty to a derivative instrument, by itself would not cause a hedge accounting relationship to be discontinued. This new guidance is effective for annual reporting periods beginning after December 15, 2016 and may be adopted prospectively or retroactively. We are currently evaluating the impact the adoption of this standard would have on our financial condition, results of operations and cash flows.

In March 2016, the FASB issued ASU 2016-09, *Improvements to Employee Share-Based Payment Accounting* which amends ASC Topic 718: Compensation-Stock Compensation. This new guidance simplifies accounting for share-based payments, most notably by requiring all excess tax benefits and tax deficiencies to be recorded as income tax benefits or expense in the income statement and by allowing entities to recognize forfeitures of awards when they occur. This new guidance is effective for annual reporting periods beginning after December 15, 2016 and may be adopted prospectively or retroactively. We are currently evaluating the impact the adoption of this standard would have on our financial condition, results of operations and cash flows.

Table of Contents

Armstrong World Industries, Inc., and Subsidiaries

Notes to Condensed Consolidated Financial Statements (unaudited)

(dollar amounts in millions, except share data)

NOTE 2. SEGMENT RESULTS

	Three Months Ended March 31,	
	2016	2015
<u>Net sales to external customers</u>		
Building Products	\$ 287.4	\$ 292.0
Resilient Flooring	163.9	156.8
Wood Flooring	120.5	102.6
Total net sales to external customers	\$ 571.8	\$ 551.4
	Three Months Ended March 31,	
	2016	2015
<u>Segment operating income (loss)</u>		
Building Products	\$ 50.8	\$ 59.8
Resilient Flooring	(5.4)	5.9
Wood Flooring	1.3	(1.2)
Unallocated Corporate	(28.4)	(28.7)
Total consolidated operating income	\$ 18.3	\$ 35.8
	Three Months Ended March 31,	
	2016	2015
Total consolidated operating income	\$ 18.3	\$ 35.8
Interest expense	21.9	11.2
Other non-operating expense	0.3	1.3
Other non-operating (income)	(4.4)	(0.6)
Earnings from continuing operations before income taxes	\$ 0.5	\$ 23.9

	March 31, 2016	December 31, 2015
<u>Segment assets</u>		
Building Products	\$ 1,535.1	\$ 1,068.9
Resilient Flooring	509.4	510.2
Wood Flooring	346.7	337.4
Unallocated Corporate	234.7	770.7
 Total consolidated assets	 \$ 2,625.9	 \$ 2,687.2

Impairment testing of our tangible assets occurs whenever events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable.

Our Unallocated Corporate segment includes assets, liabilities, income and expenses that have not been allocated to the business units. Expenses for our Corporate departments and certain employee benefit plans are allocated to the reportable segments based on known metrics, such as specific activity or headcount. The remaining items, which cannot be attributed to the other reportable segments without a high degree of generalization, including separation costs, are reported in the Unallocated Corporate segment.

Effective January 1, 2016, in anticipation of the April 1, 2016 separation, the majority of our historical corporate support functions, representing costs of approximately \$20 million for the three months ended

Table of Contents

Armstrong World Industries, Inc., and Subsidiaries

Notes to Condensed Consolidated Financial Statements (unaudited)

(dollar amounts in millions, except share data)

March 31, 2016, were incorporated into each of the business units. Accordingly, unallocated corporate support expenses have decreased significantly during the first three months of 2016. For the three months ended March 31, 2016 and 2015 Unallocated Corporate segment operating (loss) was comprised of the following:

	Three Months Ended March 31,	
	2016	2015
Corporate expenses	(\$ 1.3)	(\$ 24.4)
Separation costs	(27.1)	(4.3)
Total Unallocated Corporate segment operating (loss)	(\$ 28.4)	(\$ 28.7)

As of March 31, 2016 and December 31, 2015, balance sheet items classified as Unallocated Corporate primarily include cash and cash equivalents, income tax related accounts, pension and postretirement liabilities and outstanding borrowings under our senior credit facilities. In anticipation of the April 1, 2016 separation, effective January 1, 2016, Building Products assets increased due to the incorporation of certain Unallocated Corporate assets, most notably the Armstrong trade name intangible asset, property plant and equipment comprised primarily of Corporate campus facilities, and cash surrender value of life insurance supporting deferred compensation liabilities. The following table presents a summary of Unallocated Corporate assets within these asset categories incorporated into our business units effective January 1, 2016:

Property, plant and equipment, less accumulated depreciation and amortization	\$ 60.2
Intangible assets, net	316.6
Other non-current assets	51.2
	\$ 428.0

Each of the items above were presented as Unallocated Corporate assets at December 31, 2015.

NOTE 3. DISCONTINUED OPERATIONS**European Resilient Flooring**

On December 4, 2014, our Board of Directors approved the cessation of funding to our DLW subsidiary, which at that time was our European flooring business. As a result, DLW management filed for insolvency in Germany on December 11, 2014.

The DLW insolvency filing in December 2014 resulted in our disposal and presentation of DLW for all historical periods as a discontinued operation. However, the insolvency filing did not meet the U.S. tax criteria to be considered disposed of until the first quarter of 2015. In determining the U.S. tax impact of the disposition, the liabilities, including an unfunded pension liability of approximately \$115 million, were considered proceeds. However, pension deductions for tax purposes result only when the benefit payments are made. Accordingly, a deferred tax asset and non-cash income tax benefit of \$43.4 million were recorded in the first quarter of 2015 within discontinued operations for the tax benefit of the future pension deductions.

At deconsolidation, DLW had a net liability of \$12.9 million, representing assets of \$151.9 million and liabilities of \$164.8 million, which were removed from our balance sheet. This net liability was recognized as a contingent liability on our consolidated balance sheet pending the closure and results of the insolvency proceedings. Any shortfall will be recognized immediately when identified and any excess will be reflected when insolvency proceedings are finalized, all through discontinued operations. The amount of the net liability was \$12.1 million as of March 31, 2016.

Table of Contents

Armstrong World Industries, Inc., and Subsidiaries

Notes to Condensed Consolidated Financial Statements (unaudited)

(dollar amounts in millions, except share data)

The following is a summary of the results related to the DLW business, (previously shown within the Resilient Flooring reporting segment), which are included in discontinued operations.

	Three Months Ended	
	March 31,	
	2016	2015
(Loss) on disposal of discontinued business before income tax	(\$ 0.1)	(\$ 0.6)
Income tax benefit	1.8	43.4
Net gain on disposal of discontinued business	\$ 1.7	\$ 42.8

Separation and Distribution of AFI

Beginning in the second quarter of 2016, AFI's historical financial results for periods prior to April 1, 2016 will be reflected in AWI's Consolidated Financial Statements as a discontinued operation. See Note 20 for additional details.

NOTE 4. ACCOUNTS AND NOTES RECEIVABLE

	March 31, 2016	December 31, 2015
Customer receivables	\$ 232.4	\$ 198.8
Customer notes	1.6	1.5
Miscellaneous receivables	7.2	8.2
Less allowance for warranties, discounts and losses	(27.8)	(24.2)
Accounts and notes receivable, net	\$ 213.4	\$ 184.3

Generally, we sell our products to select, pre-approved customers whose businesses are affected by changes in economic and market conditions. We consider these factors and the financial condition of each customer when establishing our allowance for losses from doubtful accounts.

NOTE 5. INVENTORIES

Edgar Filing: ARMSTRONG WORLD INDUSTRIES INC - Form 10-Q

	March 31, 2016	December 31, 2015
Finished goods	\$ 216.1	\$ 202.0
Goods in process	24.5	25.2
Raw materials and supplies	127.5	138.2
Less LIFO and other reserves	(22.3)	(21.2)
Total inventories, net	\$ 345.8	\$ 344.2

NOTE 6. OTHER CURRENT ASSETS

	March 31, 2016	December 31, 2015
Prepaid expenses	\$ 39.9	\$ 41.1
Fair value of derivative assets	1.6	6.6
Other	23.7	13.2
Total other current assets	\$ 65.2	\$ 60.9

Table of Contents

Armstrong World Industries, Inc., and Subsidiaries

Notes to Condensed Consolidated Financial Statements (unaudited)

(dollar amounts in millions, except share data)

NOTE 7. EQUITY INVESTMENT

Investment in joint venture at March 31, 2016 reflected our 50% equity interest in our Worthington Armstrong Venture (WAVE) joint venture with Worthington Industries, Inc. Condensed income statement data for WAVE is summarized below:

	Three Months Ended March 31,	
	2016	2015
Net sales	\$ 93.9	\$ 86.6
Gross profit	50.3	40.8
Net earnings	39.2	30.5

NOTE 8. INTANGIBLE ASSETS

The following table details amounts related to our intangible assets as of March 31, 2016 and December 31, 2015.

	Estimated Useful Life	March 31, 2016		December 31, 2015	
		Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
<u>Amortizing intangible assets</u>					
Customer relationships	20 years	\$ 165.4	\$ 78.8	\$ 165.4	\$ 76.7
Developed technology	15 years	87.4	52.4	87.2	51.0
Other	Various	20.3	2.8	20.4	2.7
Total		\$ 273.1	\$ 134.0	\$ 273.0	\$ 130.4
<u>Non-amortizing intangible assets</u>					
Trademarks and brand names	Indefinite	347.8		347.1	
Total intangible assets		\$ 620.9		\$ 620.1	

Three Months Ended
March 31,

	2016	2015
Amortization expense	\$ 3.6	\$ 3.6

NOTE 9. SEVERANCE AND RELATED COSTS

In the first quarter of 2016, we recorded \$2.4 million in Unallocated Corporate for severance and related costs as a result of our initiative to separate our flooring business from our ceiling business. These costs, along with costs incurred in the fourth quarter of 2015, reflect approximately 30 position eliminations (including our former Chief Executive Officer) and are reflected within Separation costs on the statement of operations.

NOTE 10. INCOME TAX EXPENSE

Income tax expense was \$12.1 million on a pre-tax income of \$0.5 million for the first quarter of 2016 compared to income tax expense of \$20.1 million on pre-tax income of \$23.9 million in the first quarter of 2015. Excluding the impact of the decrease in pre-tax earnings, the effective tax rate for the first quarter of 2016 was flat in comparison to the same period in 2015. Income tax expense in the first quarter of 2016 was negatively affected by tax impacts resulting from the separation of AFI. Income tax expense in the first quarter of 2015 was negatively affected by state net operating loss write-offs as a result of a change in ownership under Section 382 of the Internal Revenue Code.

We do not expect to record any material changes during 2016 to unrecognized tax benefits that were claimed on tax returns covering tax years ending on or before December 31, 2015.

Table of Contents

Armstrong World Industries, Inc., and Subsidiaries

Notes to Condensed Consolidated Financial Statements (unaudited)

(dollar amounts in millions, except share data)

As of March 31, 2016, we consider foreign unremitted earnings to be permanently reinvested.

NOTE 11. DEBT

In connection with the separation and distribution, both AWI and AFI entered into new credit facilities in April 2016. On April 1, 2016, AFI entered into a \$225.0 million asset based revolving credit facility and borrowed \$100.0 million from this facility with \$50.0 million of the proceeds used to fund a dividend to AWI.

On April 1, 2016, we refinanced our \$1,275.0 million senior credit facility, utilizing the \$50.0 million cash dividend from AFI and cash on hand to pay down a portion of the debt outstanding. The \$1,050.0 million new credit facility is composed of a \$200.0 million revolving credit facility (with a \$150.0 million sublimit for letters of credit), a \$600.0 million Term Loan A and a \$250.0 million Term Loan B. The terms of the credit facility resulted in a lower interest rate spread for both the revolving credit facility and Term Loan A (2.00% vs. 2.50%) and a higher spread for Term Loan B (3.25% vs. 2.50%). In addition, we lowered the interest rate floor on the Term Loan B from 1.0% to 0.75%. We also extended the maturity of both the revolving credit facility and Term Loan A from March 2018 to April 2021 and of Term Loan B from November 2020 to April 2023. In connection with the refinancing, we executed new interest rate swaps. See Note 14 for additional details.

In March 2016, we amended and decreased our \$100.0 million Accounts Receivable Securitization Facility with the Bank of Nova Scotia, under which AWI and its subsidiary, Armstrong Hardwood Flooring Company, sell their U.S. receivables to Armstrong Receivables Company LLC (ARC), a Delaware entity that is consolidated in these financial statements. We decreased the facility to \$40.0 million to reflect a lower anticipated receivables balance in connection with the separation of AFI, and we extended the maturity date to March 2019. In connection with this amendment Armstrong Hardwood Flooring Company was removed as an originator under this facility. As of March 31, 2016, there were no outstanding borrowings on the accounts receivable securitization facility.

Table of Contents

Armstrong World Industries, Inc., and Subsidiaries

Notes to Condensed Consolidated Financial Statements (unaudited)

(dollar amounts in millions, except share data)

NOTE 12. PENSIONS AND OTHER BENEFIT PROGRAMS

Following are the components of net periodic benefit costs:

	Three Months Ended March 31,	
	2016	2015
<u>U.S. defined-benefit plans:</u>		
<u>Pension benefits</u>		
Service cost of benefits earned during the period	\$ 3.6	\$ 4.1
Interest cost on projected benefit obligation	20.4	20.2
Expected return on plan assets	(32.0)	(35.1)
Amortization of prior service cost	0.5	0.5
Amortization of net actuarial loss	14.0	18.2
Net periodic pension cost	\$ 6.5	\$ 7.9
<u>Retiree health and life insurance benefits</u>		
Service cost of benefits earned during the period	\$ 0.1	\$ 0.2
Interest cost on projected benefit obligation	1.8	2.0
Amortization of prior service credit	(0.1)	(0.2)
Amortization of net actuarial gain	(2.3)	(1.9)
Net periodic postretirement benefit (credit) cost	(\$ 0.5)	\$ 0.1
<u>Non-U.S. defined-benefit pension plans</u>		
Service cost of benefits earned during the period	\$ 0.5	\$ 0.6
Interest cost on projected benefit obligation	1.9	2.1
Expected return on plan assets	(2.2)	(2.3)
Amortization of net actuarial loss	0.4	0.7
Net periodic pension cost	\$ 0.6	\$ 1.1

NOTE 13. FINANCIAL INSTRUMENTS

We do not hold or issue financial instruments for trading purposes. The estimated fair values of our financial instruments are as follows:

	March 31, 2016		December 31, 2015	
	Carrying amount	Estimated fair value	Carrying amount	Estimated fair value
Assets (Liabilities), net:				
Total long-term debt, including current portion	(\$ 978.2)	(\$ 977.1)	(\$ 998.3)	(\$ 989.4)
Foreign currency contracts	0.9	0.9	6.2	6.2
Natural gas contracts	(0.6)	(0.6)	(0.8)	(0.8)
Interest rate swap contracts	(3.0)	(3.0)	(10.6)	(10.6)

The carrying amounts of cash and cash equivalents, receivables, accounts payable, accrued expenses, and short-term debt approximate fair value because of the short-term maturity of these instruments. The fair value estimates of long-term debt were based upon quotes from a major financial institution of recently observed trading levels of our Term Loan B debt. The fair value estimates of foreign currency contract obligations are estimated from market quotes provided by a well-recognized national market data provider. The fair value estimates of natural gas contracts are estimated using internal valuation models with verification by obtaining quotes from major financial institutions. For natural gas swap transactions, fair value is calculated using NYMEX market quotes provided by a well-recognized national market data provider. For natural gas option based strategies, fair value is calculated using an industry standard Black-Scholes model with market based inputs, including but not limited to, underlying asset price, strike price, implied volatility, discounted risk free rate and time to expiration, provided by a well-recognized national market data provider. The fair value estimates for interest rate swap contracts are estimated by obtaining quotes from major financial institutions with verification by internal valuation models.

Table of Contents

Armstrong World Industries, Inc., and Subsidiaries

Notes to Condensed Consolidated Financial Statements (unaudited)

(dollar amounts in millions, except share data)

Fair value is defined as 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 Observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data.

Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. This includes certain pricing models, discounted cash flow methodologies and similar techniques that use significant unobservable inputs.

The fair value measurement of assets and liabilities measured at fair value on a recurring basis and reported on the consolidated balance sheets is summarized below:

	March 31, 2016		December 31, 2015	
	Quoted, active markets Level 1	Other observable inputs Level 2	Quoted, active markets Level 1	Other observable inputs Level 2
Assets (Liabilities), net:				
Foreign currency contracts	\$ 0.9		\$ 6.2	
Natural gas contracts		(\$ 0.6)		(\$ 0.8)
Interest rate swap contracts		(3.0)		(10.6)

We do not have any financial assets or liabilities that are valued using Level 3 (unobservable) inputs.

NOTE 14. DERIVATIVE FINANCIAL INSTRUMENTS

We are exposed to market risk from changes in foreign exchange rates, interest rates and commodity prices that could impact our results of operations, cash flows and financial condition. We use forward swaps and option contracts to hedge these exposures. Exposure to individual counterparties is controlled and derivative financial instruments are entered into with a diversified group of major financial institutions. Forward swaps and option contracts are entered into for periods consistent with underlying exposure and do not constitute positions independent of those exposures. At inception, hedges that we designate as hedging instruments are formally documented as either (1) a hedge of a

forecasted transaction or cash flow hedge, or (2) a hedge of the fair value of a recognized liability or asset or fair value hedge. We also formally assess both at inception and at least quarterly thereafter, whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in either the fair value or cash flows of the hedged item. If it is determined that a derivative ceases to be a highly effective hedge, or if the anticipated transaction is no longer probable of occurring, we discontinue hedge accounting, and any future mark-to-market adjustments are recognized in earnings. We use derivative financial instruments as risk management tools and not for speculative trading purposes.

Counterparty Risk

We only enter into derivative transactions with established counterparties having a credit rating of BBB or better. We monitor counterparty credit default swap levels and credit ratings on a regular basis. All of our

Table of Contents

Armstrong World Industries, Inc., and Subsidiaries

Notes to Condensed Consolidated Financial Statements (unaudited)

(dollar amounts in millions, except share data)

derivative transactions with counterparties are governed by master International Swap and Derivatives Association agreements (ISDAs) with netting arrangements. These agreements can limit our exposure in situations where we have gain and loss positions outstanding with a single counterparty. We do not post nor do we receive cash collateral with any counterparty for our derivative transactions. These ISDAs do not have any credit contingent features; however, a default under our bank credit facility would trigger a default under these agreements. Exposure to individual counterparties is controlled, and thus we consider the risk of counterparty default to be negligible.

Commodity Price Risk

We purchase natural gas for use in the manufacturing process and to heat many of our facilities. As a result, we are exposed to fluctuations in the price of natural gas. We have a policy to reduce cost volatility for North American natural gas purchases by purchasing natural gas forward contracts and swaps, purchased call options, and zero-cost collars up to 24 months forward. The contracts are based on forecasted usage of natural gas measured in mmBtu s. There is a high correlation between the hedged item and the hedge instrument. The gains and losses on these instruments offset gains and losses on the transactions being hedged. These instruments are designated as cash flow hedges. As of March 31, 2016 and December 31, 2015, the notional amount of these hedges was \$3.9 million and \$9.2 million, respectively. The mark-to-market gain or loss on qualifying hedges is included in other comprehensive income to the extent effective, and reclassified into cost of goods sold in the period during which the underlying gas is consumed. The mark-to-market gains or losses on ineffective portions of hedges are recognized in cost of goods sold immediately. The earnings impact of the ineffective portion of these hedges was not material for the first quarters of 2016 and 2015.

Currency Rate Risk Sales and Purchases

We manufacture and sell our products in a number of countries throughout the world and, as a result, we are exposed to movements in foreign currency exchange rates. To a large extent, our global manufacturing and sales provide a natural hedge of foreign currency exchange rate movement, as foreign currency expenses generally offset foreign currency revenues. We manage our cash flow exposures on a net basis and use derivatives to hedge the majority of our unmatched foreign currency cash inflows and outflows. Our major foreign currency exposures as of March 31, 2016, based on operating profits by currency, are to the Canadian dollar, the Chinese Renminbi and the Australian dollar.

We use foreign currency forward exchange contracts to reduce our exposure to the risk that the eventual net cash inflows and outflows resulting from the sale of products to foreign customers and purchases from foreign suppliers will be adversely affected by changes in exchange rates. These derivative instruments are used for forecasted transactions and are classified as cash flow hedges. Cash flow hedges are executed quarterly, generally up to 15 months forward, and allow us to further reduce our overall exposure to exchange rate movements, since gains and losses on these contracts offset gains and losses on the transactions being hedged. The notional amount of these hedges was \$54.0 million and \$73.3 million at March 31, 2016 and December 31, 2015, respectively. Gains and losses on these instruments are recorded in other comprehensive income, to the extent effective, until the underlying transaction is recognized in earnings. The earnings impact of the ineffective portion of these hedges was not material

for the first quarters of 2016 and 2015.

Currency Rate Risk - Intercompany Loans and Dividends

Where efficient, reliable and liquid markets exist we may utilize foreign currency forward exchange contracts to hedge exposures created by cross-currency intercompany loans and dividends. The translation adjustments related to these loans and any offsetting gains or losses on the related derivative contracts are recorded in other non-operating income or expense. The notional amount of these hedges was \$6.1 million at December 31, 2015. We did not have any open hedges related to intercompany loans and dividends as of March 31, 2016.

Interest Rate Risk

We utilize interest rate swaps to minimize the fluctuations in earnings caused by interest rate volatility. Interest expense on variable-rate liabilities increases or decreases as a result of interest rate fluctuations.

Table of Contents

Armstrong World Industries, Inc., and Subsidiaries

Notes to Condensed Consolidated Financial Statements (unaudited)

(dollar amounts in millions, except share data)

The following table summarizes our interest rate swap as of March 31, 2016:

Trade Date	Notional Amount	Interest Rate Paid	Coverage Period	Risk Coverage
April 16, 2013	\$ 250.0	1.398%	November 2015 to March 2018	Term Loan A

In connection with the refinancing of our credit facilities, \$450.0 million of notional amount Term Loan B swaps with a trade date of March 27, 2012 were settled and \$10.7 million of losses recorded as a component of accumulated other comprehensive income were reclassified to interest expense as of March 31, 2016. Under the terms of the Term Loan A swap with a trade date of April 16, 2013 we receive 3-month LIBOR and pay a fixed rate over the hedged period. This swap is designated as a cash flow hedge against changes in LIBOR for a portion of our variable rate debt. Gains and losses on this instrument are recorded in other comprehensive income, to the extent effective, until the underlying transaction is recognized in earnings. The mark-to-market gains or losses on ineffective portion of hedges are recognized in interest expense. There was no earnings impact of the ineffective portion of these hedges for the first quarters of 2016 and 2015.

Also in connection with the refinancing, in April 2016, we entered into new Term Loan A and B swaps, summarized in the following table:

Notional Amount	Interest Rate Paid	Coverage Period	Risk Coverage
\$ 200.0	1.231%	April 2016 to March 2021	Term Loan A
\$ 100.0	1.756%	April 2016 to March 2023	Term Loan B

Under the terms of our new Term Loan A swap we receive 3-month LIBOR and pay a fixed rate over the hedged period. Under the terms of our new Term Loan B swap, we receive the greater of 3-month LIBOR or a 0.75% LIBOR Floor and pay a fixed rate over the hedged period. These swaps are designated as cash flow hedges against changes in LIBOR for a portion of our variable rate debt.

See Note 11 for additional details related to our April 1, 2016 credit facility refinancing.

Financial Statement Impacts

The following tables detail amounts related to our derivatives as of March 31, 2016 and December 31, 2015. We had no derivative liabilities not designated as hedging instruments as of March 31, 2016. Our derivative liabilities not designated as hedging instruments were \$0.1 million as of December 31, 2015. We had no derivative assets not designated as hedging instruments as of March 31, 2016 and December 31, 2015. The derivative asset and liability amounts below are shown in gross amounts; we have not netted assets with liabilities.

Table of Contents

Armstrong World Industries, Inc., and Subsidiaries

Notes to Condensed Consolidated Financial Statements (unaudited)

(dollar amounts in millions, except share data)

	Derivative Assets			Derivative Liabilities		
	Balance Sheet Location	Fair Value		Balance Sheet Location	Fair Value	
		March 31, 2016	December 31, 2015		March 31, 2016	December 31, 2015
<u>Derivatives designated as hedging instruments</u>						
Natural gas commodity contracts	Other current assets			Accounts payable and accrued expenses	\$ 0.6	\$ 0.8
Foreign exchange contracts	Other current assets	\$ 1.6	\$ 6.6	Accounts payable and accrued expenses	0.7	0.3
Interest rate swap contracts	Other non-current assets			Other long-term liabilities	3.0	10.6
Total derivatives designated as hedging instruments		\$ 1.6	\$ 6.6		\$ 4.3	\$ 11.7

	Amount of (Loss) Gain Recognized in Accumulated Other Comprehensive Income (AOCI) (Effective Portion)		Location of (Loss) Gain Reclassified from AOCI into Income (Effective Portion)	(Loss) Gain Reclassified from AOCI into Income (Effective Portion)	
	Three Months Ended March 31, 2016	Three Months Ended March 31, 2015		Three Months Ended March 31, 2016	Three Months Ended March 31, 2015
<u>Derivatives in cash flow hedging relationships</u>					
Natural gas commodity contracts	(\$ 0.6)	(\$ 2.7)	Cost of goods sold	(\$ 0.8)	(\$ 1.5)
Foreign exchange contracts purchases	(0.5)	1.0		0.4	0.1

				Cost of goods sold		
Foreign exchange contracts	sales	(2.4)	7.4	Net sales	1.8	2.3
Interest rate swap contracts		(3.1)	(13.3)	Interest expense	(10.7)	
Total		(\$ 6.6)	(\$ 7.6)		(\$ 9.3)	\$ 0.9

As of March 31, 2016 the amount of existing gains in AOCI expected to be recognized in earnings over the next twelve months is \$0.4 million.

The amount of pre-tax loss recognized in income for derivative instruments not designated as hedging instruments was \$0.3 million for the first quarter of 2016. The amount of pre-tax gain recognized was \$0.1 million for the first quarter of 2015.

NOTE 15. PRODUCT WARRANTIES

On certain products, we provide the original retail purchaser limited warranties which may cover structural integrity, wear, fade and certain other pre-installation manufacturing related defects. Our product warranties place certain requirements on the retail purchaser, including evidence of original purchase and

Table of Contents

Armstrong World Industries, Inc., and Subsidiaries

Notes to Condensed Consolidated Financial Statements (unaudited)

(dollar amounts in millions, except share data)

require installation in accordance with our instructions. All of our warranties are non-transferrable. Warranty claims are most commonly experienced in the periods immediately following retail purchase and decline with the passage of time. In addition to our warranty program, under certain limited circumstances, we will occasionally and at our sole discretion, provide a customer accommodation repair or replacement. Warranty repairs and replacements are most commonly made by professional installers employed by or affiliated with our independent distributors. Reimbursement for cost associated with warranty repairs are provided to our independent distributors through a credit against accounts receivable from the distributor to us.

The following table summarizes the activity for the accrual of product warranties for the first three months of 2016 and 2015:

	2016	2015
Balance at January 1,	\$ 7.7	\$ 7.9
Reductions for payments	(3.1)	(3.1)
Current year warranty accruals	4.1	2.7
Balance at March 31,	\$ 8.7	\$ 7.5

NOTE 16. OTHER LONG-TERM LIABILITIES

	March 31, 2016	December 31, 2015
Long-term deferred compensation arrangements	\$ 18.4	\$ 18.7
Long-term portion of derivative liabilities	3.0	10.6
U.S. workers compensation	4.3	4.0
Postemployment benefit liabilities	4.1	3.8
Environmental liabilities	5.0	6.0
Other	5.7	6.5
Total other long-term liabilities	\$ 40.5	\$ 49.6

NOTE 17. ACCUMULATED OTHER COMPREHENSIVE (LOSS)

Edgar Filing: ARMSTRONG WORLD INDUSTRIES INC - Form 10-Q

	Foreign Currency Translation Adjustments ⁽¹⁾	Derivative (Loss) Gain ⁽¹⁾	Pension and Postretirement Adjustments ⁽¹⁾	Total Accumulated Other Comprehensive (Loss) ⁽¹⁾
Balance, December 31, 2015	(\$ 33.8)	(\$ 3.3)	(\$ 450.3)	(\$ 487.4)
Other comprehensive (loss) income before reclassifications, net of tax expense of \$ -, \$2.2, (\$0.4), and \$1.8	1.4	(4.4)	(0.3)	(3.3)
Amounts reclassified from accumulated other comprehensive (loss)		6.0	8.1	14.1
Net current period other comprehensive income	1.4	1.6	7.8	10.8
Balance at March 31, 2016	(\$ 32.4)	(\$ 1.7)	(\$ 442.5)	(\$ 476.6)

Table of Contents

Armstrong World Industries, Inc., and Subsidiaries

Notes to Condensed Consolidated Financial Statements (unaudited)

(dollar amounts in millions, except share data)

	Foreign Currency Translation Adjustments ⁽¹⁾	Derivative (Loss) Gain ⁽¹⁾	Pension and Postretirement Adjustments ⁽¹⁾	Total Accumulated Other Comprehensive (Loss) ⁽¹⁾
Balance, December 31, 2014	(\$ 8.3)	(\$ 4.0)	(\$ 483.2)	(\$ 495.5)
Other comprehensive (loss) income before reclassifications, net of tax (expense) benefit of \$ -, \$0.3, (\$0.2), and \$0.1	(15.3)	0.1	0.7	(14.5)
Amounts reclassified from accumulated other comprehensive (loss)		(0.6)	11.2	10.6
Net current period other comprehensive (loss) income	(15.3)	(0.5)	11.9	(3.9)
Balance at March 31, 2015	(\$ 23.6)	(\$ 4.5)	(\$ 471.3)	(\$ 499.4)

⁽¹⁾ Amounts are net of tax

	Amounts Reclassified from Accumulated Other Comprehensive Loss Three Months Ended March 31, 2016 2015		Affected Line Item in the Condensed Consolidated Statement of Earnings and Comprehensive Income
Derivative Adjustments:			
Natural gas commodity contracts	\$ 0.8	\$ 1.5	Cost of goods sold
Foreign exchange contracts - purchases	(0.4)	(0.1)	Cost of goods sold
Foreign exchange contracts - sales	(1.8)	(2.3)	Net sales
Interest rate swap contracts	10.7		Interest expense
Total (loss) income before tax	9.3	(0.9)	
Tax impact	(3.3)	0.3	Income tax expense

Edgar Filing: ARMSTRONG WORLD INDUSTRIES INC - Form 10-Q

Total (loss) income, net of tax	6.0	(0.6)	
Pension and Postretirement Adjustments:			
Prior service cost amortization	0.2	0.1	Cost of goods sold
Prior service cost amortization	0.2	0.2	SG&A expense
Amortization of net actuarial loss	6.3	8.9	Cost of goods sold
Amortization of net actuarial loss	5.8	8.1	SG&A expense
Total expense before tax	12.5	17.3	
Tax impact	(4.4)	(6.1)	Income tax expense
Total expense, net of tax	8.1	11.2	
Total reclassifications for the period	\$ 14.1	\$ 10.6	

Table of Contents

Armstrong World Industries, Inc., and Subsidiaries

Notes to Condensed Consolidated Financial Statements (unaudited)

(dollar amounts in millions, except share data)

NOTE 18. LITIGATION AND RELATED MATTERS

ENVIRONMENTAL MATTERS

Environmental Compliance

Our manufacturing and research facilities are affected by various federal, state and local requirements relating to the discharge of materials and the protection of the environment. We make expenditures necessary for compliance with applicable environmental requirements at each of our operating facilities. These regulatory requirements continually change, therefore we cannot predict with certainty future expenditures associated with compliance with environmental requirements.

Environmental Sites

Summary

We are actively involved in the investigation, closure and/or remediation of existing or potential environmental contamination under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and state or international Superfund and similar type environmental laws at several domestically- and internationally-owned, formerly owned and non-owned locations allegedly resulting from past industrial activity. In a few cases, we are one of several potentially responsible parties and have agreed to jointly fund the required investigation and remediation, while preserving our defenses to the liability. We may also have rights of contribution or reimbursement from other parties or coverage under applicable insurance policies. We are currently pursuing coverage and recoveries under those policies with respect to certain of the sites, but we are unable to predict the outcome or costs of these proceedings.

Estimates of our future liability at the environmental sites are based on evaluations of currently available facts regarding each individual site. We consider factors such as our activities associated with the site, existing technology, presently enacted laws and regulations and prior company experience in remediating contaminated sites. Although current law imposes joint and several liability on all parties at Superfund sites, our contribution to the remediation of these sites is expected to be limited by the number of other companies potentially liable for site remediation. As a result, our estimated liability reflects only our expected share. In determining the probability of contribution, we consider the solvency of other parties, the site activities of other parties, whether liability is being disputed, the terms of any existing agreements and experience with similar matters, and the effect of our October 2006 Chapter 11 reorganization upon the validity of the claim.

Specific Material Events

St Helens, OR

In August 2010, we entered into a Consent Order (the "Consent Order") with the Oregon Department of Environmental Quality ("ODEQ"), along with Kaiser Gypsum Company, Inc. ("Kaiser"), and Owens Corning Sales LLC ("OC"), with respect to our St. Helens, OR Building Products facility, which was previously owned by Kaiser and then OC. The Consent Order, which replaces a previous order of the ODEQ requiring us to investigate and remediate hazardous substances present at the facility, requires that we and Kaiser complete a remedial investigation and feasibility study ("RI/FS") on the portion of the site owned by us ("Owned Property"), which is comprised of Upland and Lowland areas. The Consent Order further requires us, Kaiser and OC to conduct an RI/FS in the In-Water area of the adjacent Scappoose Bay. We are currently in an investigation phase for both the Owned Property and the Scappoose Bay and are working with ODEQ, Kaiser and OC to finalize the reports to move to the Feasibility Study phase. We have determined that it is probable that remedial action for certain portions of both the Upland and Lowland areas of the Owned Property will be required. The current estimate of our future liability at the site includes any remaining known investigation work required by the Consent Order and the current projected cost of possible remedies for certain portions of the Owned Property. At this time, we are unable to reasonably estimate any remediation costs that we may ultimately incur with respect to other portions of the Owned Property or the Scappoose Bay or whether the projected costs for the areas we have included in our current estimate will increase. Additional investigative or remedial action required by ODEQ could result in additional costs greater than the amounts currently estimated. We believe that our ongoing work with ODEQ and Kaiser may enable us to reasonably estimate costs in 2016, and those costs may be material.

Table of Contents

Armstrong World Industries, Inc., and Subsidiaries

Notes to Condensed Consolidated Financial Statements (unaudited)

(dollar amounts in millions, except share data)

Costs and responsibilities for investigation, including the current RI/FS for the Owned Property continue to be shared with Kaiser pursuant to a cost sharing agreement with Kaiser. Contemporaneously with the execution of the Consent Order, we, Kaiser and OC also entered into a separate cost sharing agreement for both the investigation and possible remediation of the Scappoose Bay. Kaiser's shares under the cost sharing agreements are being funded by certain insurance policies, which comprise substantially all of Kaiser's assets. If Kaiser and OC are unwilling or unable to fulfill their obligations under the cost sharing agreements, or seek to contest or challenge the allocations, or if Kaiser's insurance policies are unable to fund Kaiser's shares, it could result in additional cost to us greater than the amounts currently estimated and those costs may be material.

The principal contaminants at the St. Helens site are arsenic and dioxin compounds from historic operations by prior owners of the plant. As part of the investigation on the site pursuant to the Consent Order, we conducted an analysis of the raw materials used in our manufacturing processes at the St. Helens facility to identify possible sources of these same contaminants. Our testing found low levels of naturally occurring dioxin in sourced clay, known as ball clay, used in the production of some of our fire-retardant products at our St. Helens manufacturing facility. Based on the data from the soil and sediment samples from our St. Helens property and the data from the ball clay, we do not believe that the presence of dioxin in our raw material will have a material impact on our ultimate liability at the site. In addition, consistent with our health and safety policies, we tested employee exposure levels at two facilities representative of our handling procedures at all plants that use this ball clay and, as a result of such testing, do not believe that the ball clay poses a hazard to our employees based on applicable regulatory standards. Based on the manufacturing process and the amount of raw material utilized, we also believe that the dioxin levels in our finished products do not pose a hazard to installers or consumers. While we have not received any claims related to this raw material or our fire-retardant products, there can be no assurance that the raw material or the finished products will not become the subject of legal claims or regulatory actions or that such claims or actions will not have a material adverse effect on our financial condition or results of operations.

Macon, GA

The U.S. Environmental Protection Agency (EPA) has listed two landfills located on a portion of our Building Products facility in Macon, GA, along with the former Macon Naval Ordnance Plant landfill adjacent to our property, and portions of Rocky Creek (collectively, the Macon Site) as a Superfund site on the National Priorities List due to the presence of contaminants, most notably PCBs.

In September 2010, we entered into an Administrative Order on Consent for a Removal Action with the EPA to investigate PCB contamination in one of the landfills on our property, the Wastewater Treatment Plant Landfill (the WWTP Landfill). We concluded the investigative phase of the Removal Action for the WWTP Landfill and submitted our final Engineering Evaluation/Cost Analysis (EE/CA) to the EPA in 2013. The EPA subsequently approved the EE/CA and issued an Action Memorandum in July 2013 selecting our recommended remedy for the Removal Action. In July 2014, we entered into an Administrative Order on Consent for Removal Action with the EPA for the WWTP Landfill. The EPA approved the Removal Action Work Plan on March 30, 2015 and the removal work commenced in the third quarter of 2015. We expect this work to be completed early in the second quarter of 2016. Our estimate of

future liability includes costs for the remedial work for the WWTP Landfill.

It is probable that we will incur field investigation, engineering and oversight costs associated with a RI/FS with respect to the remainder of the Superfund site, which includes the other landfill on our property, as well as areas on and adjacent to Armstrong's property and Rocky Creek (the Remaining Site). On September 25, 2015, AWI and six other Potentially Responsible Parties (PRPs) received a Special Notice Letter from the EPA under CERCLA inviting AWI and the PRPs to enter into the negotiation of a Settlement Agreement (formerly known as an Administrative Order on Consent) to conduct an RI/FS of Operable Unit 2, which is the Remaining Site. We have not yet entered into an Order with the EPA for the Remaining Site and have not yet commenced an investigation of this portion of the site. We anticipate that the EPA will require significant investigative work for the Remaining Site and that we may

Table of Contents

Armstrong World Industries, Inc., and Subsidiaries

Notes to Condensed Consolidated Financial Statements (unaudited)

(dollar amounts in millions, except share data)

ultimately incur costs in remediating any contamination discovered during the RI/FS. The current estimate of future liability at this site includes our estimated share of the costs of the investigative work that, at this time, we anticipate the EPA will require the PRP team to perform. We are unable to reasonably estimate AWI's final share of the costs or the total costs associated with the investigation work or any resulting remediation therefrom, although such amounts may be material.

Elizabeth City, NC

This site is a former cabinet manufacturing facility that was operated by Triangle Pacific Corporation, now known as Armstrong Wood Products, Inc. (Triangle Pacific), from 1977 until 1996. The site was formerly owned by the U.S. Navy (Navy) and Westinghouse, now CBS Corporation (CBS). We assumed ownership of the site when we acquired the stock of Triangle Pacific in 1998. Prior to our acquisition, the NC Department of Environment and Natural Resources listed the site as a hazardous waste site. In 1997, Triangle Pacific entered into a cost sharing agreement with Westinghouse whereby the parties agreed to share equally in costs associated with investigation and potential remediation. In 2000, Triangle Pacific and CBS entered into an RI/FS with the EPA for the site. In 2007, we and CBS entered into an agreement with the Navy whereby the Navy agreed to pay one third of defined past and future investigative costs up to a certain amount, which has now been exhausted. Although the parties initially submitted the RI/FS work plan to the EPA in 2004, the EPA did not approve the RI/FS work plan until August 2011. In January 2014, we submitted the draft Remedial Investigation and Risk Assessment reports and conducted supplemental investigative work based upon agency comments to those reports. The supplemental reports were submitted to the agency in January 2015 and the agency has not yet responded to those reports. We are unable to reasonably estimate any additional investigative costs or determine whether remediation will be required. If remediation is required, the related costs may be material, although we expect these costs to be shared with CBS and the Navy.

Summary of Financial Position

Liabilities of \$5.0 million as of March 31, 2016 and \$6.0 million as of December 31, 2015 were recorded for potential environmental liabilities, on a global basis, that we consider probable and for which a reasonable estimate of the probable liability could be made. Where existing data is sufficient to estimate the liability, that estimate has been used; where only a range of probable liabilities is available and no amount within that range is more likely than any other, the lower end of the range has been used. As assessments and remediation activities progress at each site, these liabilities are reviewed to reflect new information as it becomes available. These liabilities are undiscounted.

The estimated liabilities above do not take into account any claims for recoveries from insurance or third parties. It is our policy to record probable recoveries that are either available through settlement or anticipated to be recovered through negotiation or litigation as assets in the Condensed Consolidated Balance Sheets. No material amounts were recorded for probable recoveries as of March 31, 2016 or December 31, 2015.

Actual costs to be incurred at identified sites may vary from our estimates. Based on our knowledge of the identified sites, it is not possible to reasonably estimate future costs in excess of amounts already recognized.

ANTIDUMPING AND COUNTERVAILING DUTY CASES

In October 2010, a coalition of U.S. producers of multilayered wood flooring (not including AWI and its subsidiaries) filed petitions seeking antidumping duties (AD) and countervailing duties (CVD) with the United States Department of Commerce (DOC) and the United States International Trade Commission (ITC) against imports of multilayered wood flooring from China. The AD and CVD petitions ultimately resulted in DOC issuing AD and CVD orders (the Orders) against multilayered wood flooring imported into the U.S. from China. These Orders and the associated additional duties they have imposed have been the subject of extensive litigation, both at DOC and in the U.S. courts.

We produced multilayered wood flooring domestically and import multilayered wood flooring from third party suppliers in China. Until October 2014, we also operated a plant in Kunshan, China (Armstrong

Table of Contents

Armstrong World Industries, Inc., and Subsidiaries

Notes to Condensed Consolidated Financial Statements (unaudited)

(dollar amounts in millions, except share data)

Kunshan) that manufactured multilayered wood flooring for export to the U.S. As a result, we have been directly involved in the multilayered wood flooring-related litigation at DOC and in the U.S. courts. Our consistent view through the course of this matter has been, and remains, that our imports are neither dumped nor subsidized. In 2013, in the sole DOC investigation of AWI and its subsidiaries (as a mandatory respondent in connection with the first annual administrative review), Armstrong Kunshan received a final AD rate of 0.00% and a final CVD rate of 0.98%.

Litigation regarding this matter has continued in the U.S. courts. The most recent court decision, on July 6, 2015, upheld certain DOC calculations on remand. Armstrong Kunshan as well as other respondents have appealed the DOC's original decision to apply an AD rate to us and other separate rate respondents in the original investigation (for which we received a final initial AD rate of 3.31%) to the Court of Appeals for the Federal Circuit.

DOC also continues to conduct annual administrative reviews of the AD and CVD final duty rates under the Orders. In July 2015, DOC issued its final AD and CVD rates for the second administrative review, which applies to imports of multilayered wood flooring made between December 1, 2012 and November 30, 2013 (AD) and between January 1, 2012 and December 31, 2012 (CVD). Armstrong Kunshan was not selected as a mandatory respondent for the second AD review and, therefore, was not subject to individual review, but we are subject to the rates applicable to importers that were not individually reviewed (the separate rate or all others respondents).

On July 7, 2015, the DOC issued a final All Others CVD rate of 0.99% that also applies to Armstrong Kunshan as part of the second CVD administrative review. On July 9, 2015, DOC issued a final AD determination for the second administrative review. DOC imposed a 13.74% AD rate determined solely on the basis of the AD duty rate assigned to the only mandatory respondent that did not receive a de minimis rate. DOC assigned this rate to all separate rate respondents that were not individually investigated, including Armstrong Kunshan. AWI and its subsidiaries, Armstrong Kunshan, and other respondents have filed complaints against DOC challenging the rate in the U.S. Court of International Trade with a decision expected in 2016. If such rates are ultimately upheld after any court appeals are exhausted, the estimated additional liability to us for the relevant period is approximately \$4.5 million. We accrued and made cash deposits for duties when we were the importer of record at the rates established by the DOC based on the second administrative review process.

DOC is also currently conducting its third annual administrative review. Armstrong Kunshan was not selected as a mandatory respondent for the third AD review and therefore, is not subject to individual mandatory review. As part of these reviews, Armstrong Kunshan's individual AD and CVD assessment rates may be changed and the revised rates applicable to participants that were not individually reviewed will apply to all multilayered wood flooring imports between December 1, 2013 and November 30, 2014 (AD) and between January 1, 2013 and December 31, 2013 (CVD). The DOC issued a preliminary AD rate of 13.34% and a preliminary CVD rate of 1.43% for the third administrative review. We do not anticipate final AD and CVD rates for the third administrative reviews until mid-2016. We are unable to predict the final AD and CVD rates for the pending reviews at this time, but plan to continue to defend our import practices and pursue our available legal rights and remedies, including litigation at DOC and in the U.S. courts. Armstrong Kunshan was not selected as a respondent in the DOC fourth AD and CVD administrative reviews.

In connection with the separation transaction and pursuant to the terms and conditions of the Separation and Distribution Agreement between us and AFI effective as of April 1, 2016, this matter and all liability relating thereto is the responsibility of AFI and AFI has agreed to indemnify us for any legacy liability or claims arising from the AD and CVD cases. As a result, we do not expect to incur additional charges for this matter.

Table of Contents

Armstrong World Industries, Inc., and Subsidiaries

Notes to Condensed Consolidated Financial Statements (unaudited)

(dollar amounts in millions, except share data)

OTHER CLAIMS

We are involved in various lawsuits, claims, investigations and other legal matters from time to time that arise in the ordinary course of business, including matters involving our products, intellectual property, relationships with suppliers, relationships with distributors, relationships with competitors, employees and other matters. From time to time, for example, we may be a party to litigation matters that involve product liability, tort liability and other claims under various allegations, including illness due to exposure to certain chemicals used in the workplace; or medical conditions arising from exposure to product ingredients or the presence of trace contaminants. Such allegations may involve multiple defendants and relate to legacy products that we and other defendants purportedly manufactured or sold. We believe that any current claims are without merit and intend to defend them vigorously. For these matters, we also may have rights of contribution or reimbursement from other parties or coverage under applicable insurance policies. When applicable and appropriate, we will pursue coverage and recoveries under those policies, but are unable to predict the outcome of those demands. While complete assurance cannot be given to the outcome of these proceedings, we do not believe that any current claims, individually or in the aggregate, will have a material adverse effect on our financial condition, liquidity or results of operations.

NOTE 19. EARNINGS PER SHARE

Earnings per share (EPS) components may not add due to rounding.

The following table is a reconciliation of earnings to earnings attributable to common shares used in our basic and diluted EPS calculations for the three month periods ended March 31, 2016 and 2015:

	Three Months Ended March 31,	
	2016	2015
(Loss) earnings from continuing operations	(\$ 11.6)	\$ 3.8
Earnings allocated to participating non-vested share awards		
(Loss) earnings from continuing operations attributable to common shares	(\$ 11.6)	\$ 3.8

For the three months ended March 31, 2016, losses allocated to participating non-vested share awards were excluded from basic and dilutive EPS due to the net loss for the period.

The following table is a reconciliation of basic shares outstanding to diluted shares outstanding for the three month periods ended March 31, 2016 and 2015 (shares in millions):

	Three Months Ended March 31,	
	2016	2015
Basic shares outstanding	55.6	55.3
Dilutive effect of common stock equivalents		0.4
Diluted shares outstanding	55.6	55.7

For the three months ended March 31, 2016, all common stock equivalents were excluded from dilutive EPS because their effect would have been anti-dilutive due to the net loss for the period. Anti-dilutive stock options excluded from the computation of diluted EPS for the three months ended March 31, 2015 were 276,324.

Table of Contents

Armstrong World Industries, Inc., and Subsidiaries

Notes to Condensed Consolidated Financial Statements (unaudited)

(dollar amounts in millions, except share data)

NOTE 20. SUBSEQUENT EVENT

Separation and Distribution of AFI

On April 1, 2016, in connection with the separation and distribution of AFI, AWI entered into several agreements with AFI that, together with a plan of division, provide for the separation and allocation between AWI and AFI of the flooring assets, employees, liabilities and obligations of AWI and its subsidiaries attributable to periods prior to, at and after AFI's separation from AWI, and govern the relationship between AWI and AFI subsequent to the completion of the separation and distribution.

These agreements include a Transition Services Agreement, a Tax Matters Agreement, an Employee Matters Agreement, a Trademark License Agreement, a Transition Trademark Agreement and a Campus Lease Agreement.

Under the Transition Services Agreement, AWI and AFI will provide various services to each other during a transition period expiring no later than December 31, 2017, including information technology, accounts payable, payroll, and other financial functions and administrative services. We do not anticipate the Transition Service Agreement will need to be extended beyond December 31, 2017.

The Tax Matters Agreement generally governs AWI's and AFI's respective rights, responsibilities and obligations after the separation and distribution with respect to tax liabilities and benefits, tax attributes, the preparation and filing of tax returns, the control of audits and other tax proceedings, and other matters regarding taxes for any tax period ending on or before the distribution date, as well as tax periods beginning after the distribution date. In addition, the Tax Matters Agreement provides that AFI is liable for taxes incurred by AWI that may arise if AFI takes, or fails to take, certain actions that may result in the separation, the distribution or certain related transactions failing to qualify as tax-free for U.S. federal income tax purposes. Upon distribution, AWI received an opinion from its tax counsel that the separation and distribution qualified as a tax-free transaction for AWI and its shareholders.

The Employee Matters Agreement governs certain compensation and employee benefit obligations with respect to the current and former employees and non-employee directors of AWI and AFI. Pursuant to this agreement and in connection with the distribution, AWI will transfer assets and liabilities from the AWI defined benefit pension and postretirement plans to AFI that relate to active AFI employees and certain former AFI employees to mirror plans established by AFI. Based on the analyses provided by our actuaries, approximately \$33 million and approximately \$95 million of defined benefit pension and postretirement benefit plan net liabilities under AWI's plans as of April 1, 2016, respectively, will be transferred to mirror plans established by AFI. The approximately \$33 million transfer of net pension benefit liabilities represents the underfunded status of the mirror pension plan established by AFI and is comprised of an approximately \$383 million projected benefit obligation, partially offset by the fair value of approximately \$350 million of pension assets.

Pursuant to the Trademark License Agreement, AWI provided AFI with a perpetual, royalty-free license to utilize the Armstrong trade name and logo.

Pursuant to the Transition Trademark License Agreement, AFI provided us with a five year royalty-free license to utilize the Inspiring Great Spaces tagline, logo and related color scheme.

Under the Campus Lease Agreement, certain portions of the AWI headquarters are being leased to AFI to use as its corporate headquarters, for an initial term of five years, subject to certain renewal rights.

Table of Contents

Management's Discussion and Analysis of Financial Condition and Results of Operations

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This discussion should be read in conjunction with the financial statements, the accompanying notes, the cautionary note regarding forward-looking statements and risk factors included in this report and our Annual Report on Form 10-K for the year ended December 31, 2015.

OVERVIEW

We are a leading global producer of ceiling systems and, prior to April 1, 2016, flooring products for use primarily in the construction and renovation of residential, commercial and institutional buildings. We design, manufacture and sell ceiling systems (primarily mineral fiber, fiberglass wool and metal) and, prior to April 1, 2016, flooring products (primarily resilient and wood) around the world.

On April 1, 2016, AWI completed its previously announced separation of Armstrong Flooring, Inc. (AFI) by allocating the assets and liabilities related primarily to the Resilient Flooring and Wood Flooring segments to AFI and then distributing the common stock of AFI to AWI's shareholders at a ratio of one share of AFI common stock for every two shares of AWI common stock. Subsequent to the separation and distribution, AWI and AFI operate as two independent, publicly-traded companies, with AFI owning and operating the Resilient Flooring and Wood Flooring segments and AWI continuing to own and operate the Building Products (Ceilings) segment. Beginning in the second quarter of 2016, AFI's historical financial results for periods prior to April 1, 2016 will be reflected in AWI's Consolidated Financial Statements as a discontinued operation.

As March 31, 2016, we operated 32 manufacturing plants in nine countries, including 20 plants located throughout the U.S. Excluding AFI, we operated 15 manufacturing plants in six countries, including 6 plants located throughout the U.S. Four of our plants are leased and the remaining 28 are owned, including one AFI leased plant. During the fourth quarter of 2015, we decided to idle one of our Buildings Products facilities in China, effective in the fourth quarter of 2016.

Worthington Armstrong Venture (WAVE), our joint venture with Worthington Industries, Inc., operates 9 additional plants in five countries to produce suspension system (grid) products which we use in our ceiling systems.

Reportable Segments

Building Products produces suspended mineral fiber, soft fiber and metal ceiling systems for use in commercial, institutional and residential settings. In addition, our Building Products segment sources complementary ceiling products. Our products, which are sold worldwide, are available in numerous colors, performance characteristics and designs, and offer attributes such as acoustical control, rated fire protection and aesthetic appeal. Commercial ceiling materials and accessories are sold to resale distributors and to ceiling systems contractors. Residential ceiling products are sold in North America primarily to wholesalers and retailers (including large home centers). Our WAVE joint venture manufactures suspension system (grid) products which are sold by both us and WAVE.

Resilient Flooring designs, manufactures, sources and sells a broad range of floor coverings primarily for homes and commercial and institutional buildings. Manufactured products in this segment include vinyl sheet, vinyl tile, and luxury vinyl tile (LVT) flooring. In addition, the Resilient Flooring segment sources and sells laminate flooring products, vinyl tile products, vinyl sheet products, LVT products, linoleum products, adhesives, and installation and

maintenance materials and accessories. Resilient Flooring products are offered in a wide variety of types, designs, colors and installation options. We sold these products to independent wholesale flooring distributors, large home centers, retailers, contractors and to the manufactured homes industry, and secure specifications for these products through architects, designers and end users. When market conditions and available capacity warrant, we also provided product on an original equipment manufacturer (OEM) basis to other flooring companies.

Table of Contents**Management's Discussion and Analysis of Financial Condition and Results of Operations**

Wood Flooring designs, manufactures, sources and sells hardwood flooring products for use in new residential construction and renovation, with some commercial applications in stores, restaurants and high-end offices. The product offering includes pre-finished solid and engineered wood floors in various wood species, and related accessories. Virtually all of our Wood Flooring sales were in North America. Wood Flooring products are generally sold to independent wholesale flooring distributors, large home centers, retailers and flooring contractors. When market conditions and available capacity warrant, we also provided product on an OEM basis to other flooring companies.

Unallocated Corporate includes assets, liabilities, income and expenses that have not been allocated to the business units. Balance sheet items classified as Unallocated Corporate are primarily income tax related accounts, cash and cash equivalents, the U.S. pension and long-term debt. Expenses for our corporate departments and certain benefit plans are allocated to the reportable segments based on known metrics, such as specific activity or headcount. The remaining items, which cannot be attributed to the other reportable segments without a high degree of generalization, are reported in Unallocated Corporate.

Effective January 1, 2016, in anticipation of the April 1, 2016 separation, the majority of our historical corporate support functions, representing costs of approximately \$20 million for the three months ended March 31, 2016, were incorporated into each of the business units. Accordingly, unallocated corporate support expenses have decreased significantly during the first three months of 2016. For the three months ended March 31, 2016 and 2015 Unallocated Corporate segment operating (loss) was comprised of the following:

	Three Months Ended March 31,	
	2016	2015
Corporate expenses	(\$ 1.3)	(\$ 24.4)
Separation costs	(27.1)	(4.3)
Total Unallocated Corporate segment operating (loss)	(\$ 28.4)	(\$ 28.7)

The financial results of our formerly owned European Resilient Flooring business are classified as discontinued operations for all periods presented.

See Note 2 to the Condensed Consolidated Financial Statements for additional financial information on our consolidated company and our reportable segments.

Factors Affecting Revenues

Markets. We compete in building material markets around the world. The majority of our sales are in North America. We closely monitor publicly available macroeconomic trends that provide insight into commercial and residential market activity including Gross Domestic Product, the Architecture Billings Index and the Consumer Confidence Index. In addition, we noted several factors and trends within our markets that we believe directly affected our

business performance during the first quarter of 2016, including:

Americas

For Building Products, activity expanded broadly across most geographies in North America and the U.S. commercial office market continued to improve. Overall, we experienced growth from new construction and flat to slightly positive renovation activity.

The Resilient Commercial Flooring business saw improvement in office and retail demand but continuing weakness in healthcare, while education markets turned negative after a slight improvement in 2015.

Residential markets continued to show improvement in both builder activity and renovation activity. However, due to market conditions we experienced continued competitive pricing actions in the Wood and Resilient Flooring businesses.

Table of Contents

Management's Discussion and Analysis of Financial Condition and Results of Operations

Europe, Middle East and Africa (EMEA)

We experienced continued softness in commercial sectors, such as office, education and healthcare. Overall market softness was exacerbated by declines in global oil prices which heavily impacted market growth opportunities in economies closely linked to oil, such as Russia and the Middle East. These factors combined with the significant volatility in the Russian Ruble and its overall market impact contributed to mixed results across EMEA. These trends impacted our Building Products business.

Pacific Rim

Commercial markets for our Building Products businesses contracted throughout the Pacific Rim with the exception of Australia. Commercial markets slowed throughout the Pacific Rim for the Resilient Flooring business with the exception of China, where growth was driven by the healthcare and education market segments.

Average Unit Value. We periodically modify prices in each of our business segments due to changes in costs for raw materials and energy, market conditions and the competitive environment. In certain cases, realized price increases are less than the announced price increases because of competitive reactions and changing market conditions.

Additionally, each of our businesses offers a wide assortment of products that are differentiated by style, design and performance attributes. Pricing and margins for products within the assortment vary. In addition, changes in the relative quantity of products purchased at different price points can impact year-to-year comparisons of net sales and operating income. We focus on improving sales dollars per unit sold, or average unit value (AUV) across our businesses as a measure that accounts for the varying assortment of products and geographic mix impacting our revenues. We estimate that unfavorable AUV decreased our total consolidated net sales in the first quarter of 2016 by approximately \$3 million compared to the same period of 2015.

In the first quarter of 2016, we implemented pricing increases in our Building Products businesses in the Americas, EMEA and Pacific Rim.

Factors Affecting Operating Costs

Operating Expenses. Our operating expenses are comprised of direct production costs (principally raw materials, labor and energy), manufacturing overhead costs, freight, costs to purchase sourced products and selling, general, and administrative (SG&A) expenses.

Our largest individual raw material expenditures are for lumber and veneers, PVC resins and plasticizers. Natural gas is also a significant input cost. Fluctuations in the prices of these inputs are generally beyond our control and have a direct impact on our financial results. In the first quarter of 2016, costs for raw materials, sourced products and energy positively impacted operating income by \$11 million when compared to the same period of 2015.

Employees

As of March 31, 2016, we had approximately 7,700 full-time and part-time employees worldwide, compared to approximately 7,600 as of December 31, 2015. As a result of the separation, effective April 1, 2016 approximately 3,900 of our former employees were employed by AFI.

RESULTS OF CONTINUING OPERATIONS

Unless otherwise indicated, net sales in these results of continuing operations are reported based upon the location where the sale was made. Please refer to Notes 2 and 3 to the Condensed Consolidated Financial Statements for a reconciliation of operating income to consolidated earnings from continuing operations before income taxes and additional financial information related to discontinued operations.

Table of Contents**Management's Discussion and Analysis of Financial Condition and Results of Operations****CONSOLIDATED RESULTS FROM CONTINUING OPERATIONS**

(dollar amounts in millions)

	Three Months Ended March 31, Change is Favorable/ 2016 2015 (Unfavorable)		
Net sales:			
Americas	\$ 470.7	\$ 435.1	8.2%
EMEA	59.6	70.5	(15.5)%
Pacific Rim	41.5	45.8	(9.4)%
Total consolidated net sales	\$ 571.8	\$ 551.4	3.7%
Operating income	\$ 18.3	\$ 35.8	(48.9)%

Excluding the unfavorable impact of foreign exchange of \$11 million, consolidated net sales for the first quarter of 2016 increased due to higher volumes of \$34 million partially offset by unfavorable AUV of \$3 million.

Excluding the unfavorable impact from foreign exchange of \$3 million, net sales in the Americas increased during the first quarter of 2016 driven by higher volumes, partially offset by unfavorable AUV.

Excluding the unfavorable impact of foreign exchange of \$5 million, net sales in the EMEA markets decreased in the first quarter of 2016 due to lower volumes, partially offset by favorable AUV.

Excluding the unfavorable impact of foreign exchange of \$3 million in the first quarter of 2016, net sales in the Pacific Rim decreased driven by lower volumes which were only partially offset by favorable AUV.

Cost of goods sold in the first quarter of 2016 was 77.0% of net sales, compared to 76.5% for the same period in 2015. The percentage increase was due to higher manufacturing costs, primarily a result of ramp up costs associated with the expansion of the Lancaster, PA Resilient Flooring plant.

SG&A expenses in the first quarter of 2016 were \$104.2 million, or 18.2% of net sales, compared to \$103.0 million, or 18.7% of net sales, for the same period in 2015. The increase in SG&A expenses in the first quarter of 2016 was primarily due to administrative expenses added to each business unit in preparation of the separation.

Separation costs of \$27.1 million and \$4.3 million in the first quarters of 2016 and 2015, respectively, were primarily related to outside professional services and employee retention and severance accruals incurred in conjunction with our initiative to separate the flooring business from our ceilings business.

Equity earnings from our WAVE joint venture were \$18.1 million for the first quarter of 2016, compared to \$13.6 million in the first quarter of 2015. See Note 7 to the Condensed Consolidated Financial Statements for further information.

Interest expense was \$21.9 million for the first quarter of 2016 compared to \$11.2 million in the first quarter of 2015. In connection with the separation and distribution, we refinanced our credit facilities in April 2016. In connection with the refinancing of our credit facilities, \$450.0 million of notional amount Term Loan B swaps with a trade date of March 27, 2012 were settled and \$10.7 million of losses recorded as a component of accumulated other comprehensive income were reclassified to interest expense as of March 31, 2016.

Other non-operating income was \$4.4 million for the first quarter of 2016, compared to \$0.6 million for the first quarter of 2015. The increase in the first quarter of 2016 was primarily due to foreign exchange gains on the translation of unhedged cross-currency intercompany loans.

Income tax expense was \$12.1 million on a pre-tax income of \$0.5 million for the first quarter of 2016 compared to income tax expense of \$20.1 million on pre-tax income of \$23.9 million in the first quarter of

Table of Contents**Management's Discussion and Analysis of Financial Condition and Results of Operations**

2015. Excluding the impact of the decrease in pre-tax earnings, the effective tax rate for the first quarter of 2016 was flat in comparison to the same period in 2015. Income tax expense in the first quarter of 2016 was negatively affected by tax impacts resulting from the separation of AFI. Income tax expense in the first quarter of 2015 was negatively affected by state net operating loss write-offs as a result of a change in ownership under Section 382 of the Internal Revenue Code.

Total other comprehensive income (OCI) was \$10.8 million in the first quarter of 2016 compared to a loss of \$3.9 million for the first quarter of 2015. Foreign currency translation adjustments represent the change in the U.S. dollar value of assets and liabilities denominated in foreign currencies. Amounts in the first quarter of 2016 were driven primarily by changes in the exchange rates of the British Pound, the Australian dollar and the Euro. Amounts in the first quarter of 2015 were driven primarily by changes in the exchange rates of the Euro, the British Pound and the Australian Dollar. Derivative gain/loss represents the mark to market value adjustments of our derivative assets and liabilities and the recognition of gains and losses previously deferred in OCI. The period changes are primarily due to the mark to market changes related to our interest rate swap derivatives. Pension and postretirement adjustments represent the amortization of actuarial gains and losses related to our defined-benefit pension and postretirement plans. The amounts in all periods primarily related to the amortization of losses on the U.S. pension plans.

REPORTABLE SEGMENT RESULTS**Building Products**

(dollar amounts in millions)

	Three Months Ended March 31, Change is Favorable/ 2016 2015 (Unfavorable)		
Net sales:			
Americas	\$ 200.1	\$ 191.3	4.6%
EMEA	59.6	70.5	(15.5)%
Pacific Rim	27.7	30.2	(8.3)%
Total segment net sales	\$ 287.4	\$ 292.0	(1.6)%
Operating income	\$ 50.8	\$ 59.8	(15.1)%

Excluding the unfavorable impact of foreign exchange of \$8 million, Building Products net sales for the first quarter of 2016 increased 1% due to higher volumes of \$2 million and favorable AUV of \$1 million.

Excluding the unfavorable impact of foreign exchange of \$2 million, net sales in the Americas for the first quarter of 2016 increased 5% as improvements in volumes were partially offset by unfavorable AUV.

Excluding the unfavorable impact of foreign exchange of \$5 million, net sales in the EMEA markets decreased 9% in the first quarter of 2016 as lower volumes were partially offset by favorable AUV.

Excluding the unfavorable impact from foreign exchange of \$2 million, net sales in the Pacific Rim for the first quarter of 2016 decreased 2% as lower volumes were partially offset by favorable AUV.

Operating income decreased in the first quarter of 2016, driven by the margin impact of unfavorable AUV of \$6 million and higher SG&A expenses of \$8 million, due to an increase in allocations for Corporate costs in preparation of the separation, partially offset by higher earnings from WAVE of \$5 million.

Table of Contents**Management's Discussion and Analysis of Financial Condition and Results of Operations****Resilient Flooring**

(dollar amounts in millions)

	Three Months Ended March 31, Change is Favorable/ (Unfavorable)		
	2016	2015	
Net sales:			
Americas	\$ 150.1	\$ 141.2	6.3%
Pacific Rim	13.8	15.6	(11.5)%
Total segment net sales	\$ 163.9	\$ 156.8	4.5%
Operating (loss) income	\$ (5.4)	\$ 5.9	Unfavorable

Excluding the unfavorable impact from foreign exchange of \$2 million, Resilient Flooring net sales for the first quarter of 2016 increased 6% driven by \$8 million in higher volumes and favorable AUV of \$2 million.

Excluding the unfavorable impact from foreign exchange of \$1 million, net sales in the Americas increased 7% in the first quarter of 2016 due to higher volumes.

The decline in net sales in the Pacific Rim was primarily due to changes in foreign exchange rates.

Operating income declined in the first quarter of 2016 due to higher SG&A expenses of \$8 million, due mostly to an increase in allocations for Corporate costs in preparation of the separation, and an increase in manufacturing and input costs of \$4 million which more than offset the margin impact from higher sales volumes of \$4 million. The increase in manufacturing costs was primarily due to the ramp-up cost associated with the expansion of the Lancaster, PA flooring plant.

Wood Flooring

(dollar amounts in millions)

	Three Months Ended March 31, Change is Favorable		
	2016	2015	
Total segment net sales	\$ 120.5	\$ 102.6	17.4%
Operating income (loss)	\$ 1.3	\$ (1.2)	Favorable

Net sales increased in the first quarter of 2016 driven by volume improvements of \$23 million, partially offset by unfavorable AUV of \$5 million. The volume improvement primarily reflected inventory adjustments by home center customers and the recovery from engineered wood production issues experienced in the first quarter of 2015.

Operating income in the first quarter of 2016 improved due to a decline in lumber costs that resulted in a \$6 million benefit and the margin impact of higher sales volumes of \$8 million, partially offset by an unfavorable impact from

AUV of \$7 million and higher SG&A expenses of \$5 million, due in part to an increase in allocations for Corporate costs in preparation of the separation.

Unallocated Corporate

Unallocated corporate expense of \$28.4 million in the first quarter of 2016 decreased slightly from \$28.7 million in the prior year. The decrease was due to the incorporation of Corporate costs to the business units in preparation of the separation, partially offset by higher separation costs of \$23 million.

FINANCIAL CONDITION AND LIQUIDITY

Cash Flow

Operating activities in the first three months of 2016 used \$65.0 million of cash, compared to \$34.1 million used in the first three months of 2015. The increase in cash used was primarily due to lower net earnings.

Net cash used for investing activities was \$10.3 million for the first three months of 2016, compared to \$8.1 million used for the first three months of 2015. The increase in cash used was primarily due to higher purchases of property, plant and equipment and lower proceeds from the sale of assets, partially offset by higher return of investment from our WAVE joint venture.

Table of Contents

Management's Discussion and Analysis of Financial Condition and Results of Operations

Net cash used for financing activities was \$20.1 million for the first three months of 2016, compared to \$5.5 million used during the first three months of 2015. The increase in cash used was primarily the result of higher payments of debt.

Liquidity

Our liquidity needs for operations vary throughout the year. We retain lines of credit to facilitate our seasonal cash flow needs, since cash flow is generally lower during the first and fourth quarters of our fiscal year. As of March 31, 2016, we had a \$1,275.0 million senior credit facility which was composed of a \$250 million revolving credit facility (with a \$150 million sublimit for letters of credit), a \$550 million Term Loan A and a \$475 million Term Loan B. As of March 31, 2016, the Term Loan A and Term Loan B were both fully drawn and are currently priced on a variable interest rate basis.

In connection with the separation and distribution, both AWI and AFI entered into new credit facilities in April 2016. On April 1, 2016, AFI entered into a \$225.0 million asset based revolving credit facility and borrowed \$100.0 million from this facility with \$50.0 million of the proceeds used to fund a dividend to AWI.

On April 1, 2016, we refinanced our \$1,275.0 million senior credit facility, utilizing the \$50.0 million cash dividend from AFI and cash on hand to pay down a portion of the debt outstanding. The \$1,050.0 million new credit facility is composed of a \$200.0 million revolving credit facility (with a \$150.0 million sublimit for letters of credit), a \$600.0 million Term Loan A and a \$250.0 million Term Loan B. The terms of the credit facility resulted in a lower interest rate spread for both the revolving credit facility and Term Loan A (2.00% vs. 2.50%) and a higher spread for Term Loan B (3.25% vs. 2.50%). In addition, we lowered the floor on the Term Loan B from 1.0% to 0.75%. We also extended the maturity of both the revolving credit facility and Term Loan A from March 2018 to April 2021 and of Term Loan B from November 2020 to April 2023.

Under the senior credit facility in place as of March 31, 2016 and our refinanced senior credit facility we are subject to year-end leverage tests that may trigger mandatory prepayments. If our ratio of consolidated funded indebtedness, minus AWI and domestic subsidiary unrestricted cash and cash equivalents up to \$100 million, to consolidated earnings before interest, taxes, depreciation and amortization (EBITDA) (Consolidated Net Leverage Ratio) is greater than 3.5 to 1.0, the prepayment amount would be 50% of fiscal year Consolidated Excess Cash Flow. These annual payments would be made in the first quarter of the following year. No payment was required in the first quarter of 2016 under the senior credit facility in place as of March 31, 2016.

The senior credit facility in place as of March 31, 2016 and our refinanced credit facilities include two financial covenants that require the ratio of consolidated EBITDA to consolidated cash interest expense minus cash consolidated interest income to be greater than or equal to 3.0 to 1.0 and requires the Consolidated Net Leverage Ratio to be less than or equal to 3.75 to 1.0 as of April 1st each year. As of March 31, 2016, we were in compliance with all covenants of the senior credit facility in place as of March 31, 2016.

The following table summarizes our interest rate swap as of March 31, 2016 (dollar amounts in millions):

Edgar Filing: ARMSTRONG WORLD INDUSTRIES INC - Form 10-Q

Trade Date	Notional Amount	Interest Rate Paid	Coverage Period	Risk Coverage
April 16, 2013	\$ 250.0	1.398%	November 2015 to March 2018	Term Loan A

In connection with our credit facility refinancing, \$450.0 million of notional amount Term Loan B swaps with a trade date of March 27, 2012 were settled and \$10.7 million of losses recorded as a component of accumulated other comprehensive income were reclassified to interest expense as of March 31, 2016.

Table of Contents**Management's Discussion and Analysis of Financial Condition and Results of Operations**

Also in connection with the refinancing, in April 2016, we entered into new Term Loan A and B swaps, summarized in the following table:

Notional Amount	Interest Rate Paid	Coverage Period	Risk Coverage
\$200.0	1.231%	April 2016 to March 2021	Term Loan A
\$100.0	1.756%	April 2016 to March 2023	Term Loan B

Under the terms of the Term Loan A swap with a trade date of April 16, 2013 we receive 3-month LIBOR and pay a fixed rate over the hedged period. Under the terms of our new Term Loan A swap we receive 3-month LIBOR and pay a fixed rate over the hedged period. Under the terms of our new Term Loan B swap, we receive the greater of 3-month LIBOR or a 0.75% LIBOR Floor and pay a fixed rate over the hedged period.

These swaps are designated as cash flow hedges against changes in LIBOR for a portion of our variable rate debt. The unpaid balances of the Term Loan A, the Revolving Credit Facility and the Term Loan B of the credit facility may be prepaid without penalty at the maturity of their respective interest reset periods. Any amounts prepaid on the Term Loan A or Term Loan B may not be re-borrowed. As of March 31, 2016, there was no outstanding balance on the Revolving Credit Facility.

As of March 31, 2016, we had \$149.8 million of cash and cash equivalents, \$85.3 million in various foreign jurisdictions and \$64.5 million in the U.S.

In March 2016, we amended and decreased our \$100.0 million Accounts Receivable Securitization Facility with the Bank of Nova Scotia, under which AWI and its subsidiary, Armstrong Hardwood Flooring Company, sell their U.S. receivables to Armstrong Receivables Company LLC (ARC), a Delaware entity that is consolidated in these financial statements. We decreased the facility to \$40.0 million to reflect a lower anticipated receivables balance in connection with the separation of AFI, and we extended the maturity date to March 2019. In connection with this amendment Armstrong Hardwood Flooring Company was removed as an originator under this facility. As of March 31, 2016, there were no outstanding borrowings on the accounts receivable securitization facility.

On March 31, 2016, we had outstanding letters of credit totaling \$57.8 million, of which \$7.7 million was issued under the revolving credit facility, \$49.9 million was issued under the securitization facility, and \$0.2 million was issued by other banks of international subsidiaries. Letters of credit are issued to third party suppliers, insurance and financial institutions and typically can only be drawn upon in the event of AWI's failure to pay its obligations to the beneficiary.

Foreign Financing Arrangements (dollar amounts in millions)	As of March 31, 2016		
	Limit	Used	Available

Edgar Filing: ARMSTRONG WORLD INDUSTRIES INC - Form 10-Q

Lines of Credit Available for Borrowing	\$ 19.9		\$ 19.9
Lines of Credit Available for Letters of Credit	0.2	\$ 0.2	
Total	\$ 20.1	\$ 0.2	\$ 19.9

These lines of credit are uncommitted, and poor operating results or credit concerns at the related non-U.S. subsidiaries could result in the lines being withdrawn by the lenders. We have historically been able to maintain and, as needed, replace credit facilities to support our non-U.S. operations.

We believe that cash on hand and cash generated from operations, together with lines of credit, availability under our securitization facility and the availability under our \$200 million refinanced revolving credit facility, will be adequate to address our foreseeable liquidity needs based on current expectations of our business operations, capital expenditures and scheduled payments of debt obligations.

Table of Contents

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

For information regarding our exposure to certain market risks, see Item 7A, Quantitative and Qualitative Disclosures About Market Risk, in our 2015 Annual Report on Form 10-K. There have been no material changes in our use of financial instruments to hedge against market risks or market risk exposures since December 31, 2015.

ITEM 4. CONTROLS AND PROCEDURES

- (a) **Evaluation of Disclosure Controls and Procedures.** The Securities and Exchange Commission defines the term disclosure controls and procedures to mean a company's controls and other procedures that are designed to ensure that information required to be disclosed in the reports that it files or submits under the Securities Exchange Act of 1934, as amended (the Act), is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms. Based on the evaluation of the effectiveness of our disclosure controls and procedures by our management, with the participation of our principal executive officer and our chief financial officer, as of March 31, 2016, our principal executive officer and our chief financial officer have concluded that our disclosure controls and procedures were effective to ensure that information required to be disclosed in the reports that we file or submit under the Act is recorded, processed, summarized and reported within the time periods specified in the Commission's rules and forms.
- (b) **Changes in Internal Control Over Financial Reporting.** No change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Act) occurred during the fiscal quarter ended March 31, 2016 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Table of Contents

PART II OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

See Note 18 to the Condensed Consolidated Financial Statements, which is incorporated herein by reference.

ITEM 1A. RISK FACTORS

The following risk factors supplement and modify the discussion of the risk factors *If the separation and distribution fails to qualify as a tax-free transaction for U.S. federal income tax purposes, then AFI, AWI and AWI s shareholders could be subject to significant tax liability or tax indemnity obligations* and *The separation may not be beneficial* as set forth in our 2015 Annual Report on Form 10-K. There have been no other material changes to the risk factors disclosed in our 2015 Annual Report on Form 10-K except for modifications to the following risk factors.

If the separation and distribution, together with certain related transactions, fail to qualify as a tax-free transaction for U.S. federal income tax purposes, then the Company and the Company s shareholders could be subject to significant tax liabilities.

The Company received an opinion from Skadden, Arps, Slate, Meagher & Flom LLP, special tax counsel to the Company, on the basis of certain facts, representations, covenants and assumptions set forth in such opinion, substantially to the effect that, for U.S. federal income tax purposes, the separation and distribution, together with certain related transactions, should qualify as a transaction that generally is tax-free to the Company and the Company s shareholders, for U.S. federal income tax purposes, under Sections 355 and 368(a)(1)(D) of the Code. The opinion of Skadden, Arps, Slate, Meagher & Flom LLP is not binding on the Internal Revenue Service (IRS) or any courts.

Notwithstanding the tax opinion, the IRS could determine on audit that the distribution should be treated as a taxable transaction if it determines that any of the facts, assumptions, representations or covenants set forth in the tax opinion is not correct or has been violated, or that the distribution should be taxable for other reasons, including as a result of a significant change in stock or asset ownership after the distribution, or if the IRS were to disagree with the conclusions of the tax opinion.

If the distribution is ultimately determined to be taxable, the distribution could be treated as a taxable dividend to the Company s shareholders who received AFI common shares in the distribution, and such shareholders could incur significant U.S. federal income tax liability. In addition, the Company could incur significant U.S. federal income tax liabilities if it is ultimately determined that the distribution or certain related transactions undertaken in anticipation of the distribution are taxable.

The Company may not achieve some or all of the expected benefits of the separation and the separation may materially and adversely affect our business, financial condition and results of operations.

The Company may not be able to achieve the full strategic and financial benefits expected to result from the separation, or such benefits may be delayed due to a variety of circumstances, not all of which may be under the Company s control.

The Company may not achieve these benefits for a variety of reasons, including, among others: (i) the Company may be more susceptible to market fluctuations and other adverse events than if AFI were still a part of the Company; and

(ii) the Company's business after separation is less diversified than the Company's business prior to the separation. The delay or failure to achieve some or all of the benefits expected to result from the separation, could materially and adversely affect our business, financial conditions and results of operations.

Table of Contents**ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS****(c) Issuer Purchases of Equity Securities**

Period	Total Number of Shares Purchased ¹	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs ²	Maximum Number of Shares that may yet be Purchased under the Plans or Programs
January 1 31, 2016	1,340	\$ 44.16		
February 1 29, 2016	63,086	\$ 39.39		
March 1 31, 2016	1,188	\$ 39.20		
Total	65,614		N/A	N/A

¹ Shares reacquired through the withholding of shares to pay employee tax obligations upon the exercise of options or vesting of restricted shares previously granted under the 2011 Long Term Incentive Plan.

² The Company does not have a share buy-back program.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not Applicable.

ITEM 5. OTHER INFORMATION

None.

Table of Contents**ITEM 6. EXHIBITS**

The following exhibits are filed as part of this Quarterly Report on Form 10-Q:

Exhibit No.	Description
2.1	Separation and Distribution Agreement, dated March 11, 2016, by and between Armstrong World Industries, Inc. and Armstrong Flooring, Inc. is incorporated by reference from the Current Report on Form 8-K filed on March 15, 2016, wherein it appeared as Exhibit 2.1.
2.2	Plan of Division, adopted by Armstrong World Industries, Inc. on March 11, 2016 is incorporated by reference from the Current Report on Form 8-K filed on March 15, 2016, wherein in appeared as Exhibit 2.2.
3.1	Amended and Restated Articles of Incorporation of Armstrong World Industries, Inc. is incorporated by reference from the Current Report on Form 8-K filed on October 2, 2006, wherein it appeared as Exhibit 3.1.
3.2	Amended and Restated Bylaws of Armstrong World Industries, Inc., are incorporated by reference from the Current Report on Form 8-K filed on July 28, 2014, wherein it appeared as Exhibit 3.1.
10.1	Amended and Restated Joint Venture Agreement, dated February 22, 2016 between Armstrong Ventures, Inc. and Worthington Ventures, Inc. is incorporated by reference from the Annual Report on Form 10-K for the year ended December 31, 2015, wherein it appeared as Exhibit 10.12.
10.2	Severance Agreement and Release, dated as of March 30, 2016, by and between Armstrong World Industries, Inc. and Matthew J. Espe is incorporated by reference from the Current Report on Form 8-K filed on April 4, 2016, wherein it appeared as Exhibit 10.7.
31.1	Certification of Chief Executive Officer required by Rule 13a-15(e) or 15d-15(e) of the Securities Exchange Act.
31.2	Certification of Chief Financial Officer required by Rule 13a-15(e) or 15d-15(e) of the Securities Exchange Act.
32.1	Certification of Chief Executive Officer required by Rule 13a and 18 U.S.C. Section 1350.
32.2	Certification of Chief Financial Officer required by Rule 13a and 18 U.S.C. Section 1350.
101.INS	XBRL Instance Document.
101.SCH	XBRL Taxonomy Extension Schema.
101.CAL	XBRL Taxonomy Extension Calculation Linkbase.
101.DEF	XBRL Taxonomy Extension Definition Linkbase.
101.LAB	XBRL Taxonomy Extension Label Linkbase.
101.PRE	XBRL Taxonomy Extension Presentation Linkbase.

Filed herewith.

Table of Contents

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Armstrong World Industries, Inc.

By: /s/ Brian L. MacNeal
Brian L. MacNeal, Senior Vice President
and

Chief Financial Officer (Principal
Financial Officer)

By: /s/ Stephen F. McNamara
Stephen F. McNamara, Vice President and
Controller (Principal Accounting Officer)

Date: May 9, 2016