

ARMSTRONG WORLD INDUSTRIES INC
 Form 424B7
 September 12, 2013
Table of Contents

Filed Pursuant to Rule 424(b)(7)
 Registration No. 333-179711

CALCULATION OF REGISTRATION FEE

	Amount	Proposed Maximum Offering Price	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee(1)
Title of Securities to be Registered	Registered	Per Share	Offering Price	Registration Fee(1)
Common Shares, par value \$0.01	12,057,382	\$51.75	\$623,969,518.50(2)	\$85,109.45

- (1) Calculated in accordance with Rule 457(r) under the Securities Act of 1933, as amended.
- (2) The proposed maximum aggregate offering price was calculated by multiplying the total number of shares being registered by the maximum offering price per share for the shares sold to the public in this offering.

PROSPECTUS SUPPLEMENT

(To prospectus dated February 27, 2012)

12,057,382 Shares

Armstrong World Industries, Inc.

Common Shares

The selling shareholders are selling 12,057,382 of our common shares. We will not receive any proceeds from the sale of shares to be offered by the selling shareholders.

We have agreed to purchase from the underwriter 5,057,382 of the common shares that are subject to this offering, referred to as the share repurchase, at a price per share equal to the price paid by the underwriter to the selling shareholders in this offering. The closing of the share repurchase is contingent upon the closing of this offering, and the closing of this offering is contingent upon the closing of the share repurchase.

Edgar Filing: ARMSTRONG WORLD INDUSTRIES INC - Form 424B7

Our shares trade on the New York Stock Exchange (NYSE) under the symbol AWI. On September 9, 2013, the last sale price of the shares as reported on the New York Stock Exchange was \$52.37 per share.

Investing in our common shares involves risks that are described in the Risk Factors section beginning on page S-6 of this prospectus supplement and the Risk Factors section of our Annual Report on Form 10-K for the year ended December 31, 2012, which is incorporated by reference herein.

	Per Share	Total
Public offering price (1)	\$51.75	\$622,250,009
Underwriting discount (2)	\$00.34	\$2,380,000
Proceeds, before expenses, to the selling shareholders	\$51.41	\$619,870,009

- (1) The public offering price for the 7,000,000 shares sold to the public was \$51.75 per share. The price for the 5,057,382 shares being purchased by us was \$51.41 per share.
- (2) The underwriting discount for the 7,000,000 shares sold to the public was \$00.34 per share. No underwriting discount was paid in respect of the 5,057,382 shares being purchased by us.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The shares will be ready for delivery on or about September 13, 2013.

Deutsche Bank Securities

The date of this prospectus supplement is September 10, 2013.

Table of Contents**TABLE OF CONTENTS****Prospectus Supplement**

	Page
<u>About This Prospectus Supplement</u>	S-ii
<u>Market, Industry and Other Data</u>	S-ii
<u>Incorporation of Certain Information by Reference</u>	S-ii
<u>Summary</u>	S-1
<u>Risk Factors</u>	S-6
<u>Cautionary Note Regarding Forward-Looking Statements</u>	S-15
<u>Use of Proceeds</u>	S-17
<u>Description of Capital Stock</u>	S-18
<u>Price Range of Our Common Shares</u>	S-23
<u>Dividend Policy</u>	S-24
<u>Capitalization</u>	S-25
<u>Selling Shareholders</u>	S-26
<u>United States Federal Income Tax Considerations for Non-U.S. Holders</u>	S-27
<u>Underwriting</u>	S-30
<u>Legal Matters</u>	S-36
<u>Experts</u>	S-36

Prospectus

	Page
<u>About This Prospectus</u>	1
<u>Armstrong World Industries, Inc.</u>	1
<u>Risk Factors</u>	2
<u>Use of Proceeds</u>	2
<u>Ratio of Earnings to Fixed Charges</u>	2
<u>Description of Capital Stock</u>	2
<u>Description of Debt Securities</u>	7
<u>Selling Shareholders</u>	8
<u>Plan of Distribution</u>	9
<u>Legal Matters</u>	12
<u>Experts</u>	13
<u>Cautionary Statement Regarding Forward-Looking Statements</u>	13
<u>Where You Can Find More Information</u>	14

We are responsible for the information contained and incorporated by reference in this prospectus supplement, the accompanying prospectus and any related free writing prospectus we prepare or authorize. Neither we nor the selling shareholders have authorized anyone to give you any other information, and we take no responsibility for any other information that others may give you. This document may only be used where it is legal to sell these securities. The information contained and incorporated by reference in this prospectus supplement, the accompanying prospectus or in any related free writing prospectus we prepare or authorize may only be accurate as of the date of the applicable document.

Neither this prospectus supplement nor the accompanying prospectus constitutes an offer, or an invitation on our behalf or on behalf of the selling shareholders to subscribe for and purchase any securities and may not be used for or in connection with an offer or solicitation by anyone, in any jurisdiction in which such an offer or solicitation is not authorized or to any person to whom it is unlawful to make such an offer or solicitation.

Table of Contents

ABOUT THIS PROSPECTUS SUPPLEMENT

This document consists of two parts. The first part is this prospectus supplement, which describes the specific terms of this offering. The second part is the accompanying prospectus, which describes more general information, some of which may not apply to this offering. You should read both this prospectus supplement and the accompanying prospectus, together with the documents incorporated by reference and the additional information described in the accompanying prospectus under the heading *Where You Can Find More Information*.

If the description of the offering varies between this prospectus supplement and the accompanying prospectus, you should rely on the information in this prospectus supplement.

Any statement made in this prospectus supplement or in a document incorporated or deemed to be incorporated by reference in this prospectus supplement will be deemed to be modified or superseded for purposes of this prospectus supplement to the extent that a statement contained in this prospectus supplement or in any other subsequently filed document that is also incorporated or deemed to be incorporated by reference in this prospectus supplement modifies or supersedes that statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement. The information we have included in this prospectus supplement and the accompanying prospectus is accurate only as of the date of this prospectus supplement or the accompanying prospectus, and any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference. Our business, financial condition, results of operations and prospects may have changed since such date.

In this prospectus supplement, unless otherwise specified or the context requires otherwise, we use the terms *Armstrong*, *the company*, *we*, *us* and *our* to refer to Armstrong World Industries, Inc. and its direct and indirect subsidiaries.

MARKET, INDUSTRY AND OTHER DATA

We obtained the industry and market data used in this prospectus supplement, the accompanying prospectus, any free writing prospectus or any document incorporated by reference from industry publications, research, surveys and studies conducted by third parties and our own internal estimates based on our management's knowledge and experience in the markets in which we operate. We believe our estimates to be accurate as of the date of this prospectus supplement. However, this information may prove to be inaccurate because of the method by which we obtained some of the data for the estimates or because this information cannot always be verified with complete certainty due to the limits on the availability and reliability of raw data, the voluntary nature of the data gathering process and other limitations and uncertainties. As a result, you should be aware that industry, market and other similar data included in this prospectus supplement, the accompanying prospectus, any free writing prospectus and any document incorporated by reference and estimates and beliefs based on such data may not be reliable.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

We are allowed to incorporate by reference the information contained in documents that we file with the Securities and Exchange Commission, or the SEC, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus supplement and the accompanying prospectus, and information that we file after the date of this prospectus supplement with the SEC will automatically update and supersede this information. We hereby incorporate by reference the documents listed below and any future filings made with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, prior to the termination of this offering (other than in each case, unless otherwise indicated, documents or information that is, or is deemed to be, furnished and not filed in accordance with applicable SEC rules):

our Annual Report on Form 10-K for the fiscal year ended December 31, 2012;

our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2013 and June 30, 2013;

Table of Contents

our Current Reports on Form 8-K, as filed with the SEC on January 4, 2013, March 18, 2013 (excluding Item 7.01 and Exhibit 99.1 of Item 9.01), June 24, 2013 and September 9, 2013 (two Current Reports);

the information specifically incorporated by reference in our Annual Report on Form 10-K for the fiscal year ended December 31, 2012 from our Definitive Proxy Statement on Schedule 14A filed with the SEC on April 24, 2013; and

the description of our common shares contained in our registration statement on Form 8-A, filed with the SEC on October 10, 2006, as amended by that certain Current Report on Form 8-K filed with the SEC on September 9, 2013, and any other amendments or reports filed for the purpose of updating such description.

Any information incorporated or deemed to be incorporated by reference shall be deemed to be modified or superseded for purposes of this prospectus supplement to the extent that the information contained in this prospectus supplement modifies or supersedes that information.

We will provide without charge to each person to whom this prospectus supplement is delivered, upon written or oral request of any such person, a copy of any or all of the information that has been or will be incorporated by reference in this prospectus supplement and the accompanying prospectus, excluding all exhibits unless an exhibit has been specifically incorporated by reference into this prospectus supplement or the accompanying prospectus. Requests for such copies should be directed to:

Armstrong World Industries, Inc.

2500 Columbia Avenue

P.O. Box 3001

Lancaster, Pennsylvania 17603

717-397-0611

Attn: Mark A. Hershey

We make these filings available through the Investor Relations section of our website at www.armstrong.com. The information on, or accessible through, our website is not part of this prospectus supplement or the accompanying prospectus and should not be relied upon in connection with making any investment decision with respect to the securities offered by this prospectus supplement and the accompanying prospectus.

Table of Contents

SUMMARY

Our Company

General

We are a leading global producer of flooring products and ceiling systems for use primarily in the construction and renovation of residential, commercial and institutional buildings. We design, manufacture and sell flooring products (primarily resilient and wood) and ceiling systems (primarily mineral fiber, fiberglass and metal) around the world. As of August 31, 2013 we operated 35 manufacturing plants in eight countries, including 21 plants located throughout the United States.

In December 2000, we filed a voluntary petition for relief under Chapter 11 of the U.S. Bankruptcy Code in order to use the court-supervised reorganization process to achieve a resolution of our asbestos liability. In October 2006, our plan of reorganization became effective and we emerged from Chapter 11. See Note 1 to the consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2012 for additional information about our Chapter 11 case.

Our Business Segments

We operate four business segments: Building Products, Resilient Flooring, Wood Flooring and Unallocated Corporate.

Building Products. The Building Products segment 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 ceiling systems contractors and to resale distributors. Residential ceiling products are sold in North America primarily to wholesalers and retailers (including large home centers). Suspension system (grid) products manufactured by Worthington Armstrong Venture are sold by both us and Worthington Armstrong Venture.

Resilient Flooring. The Resilient Flooring segment produces and sources 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 linoleum flooring. In addition, our Resilient Flooring segment sources and sells laminate flooring products, vinyl tile products, vinyl sheet products, adhesives, and installation and maintenance materials and accessories. Resilient Flooring products are offered in a wide variety of types, designs, and colors. We sell these products worldwide to wholesalers, large home centers, retailers, contractors and to the manufactured homes industry.

Wood Flooring. The Wood Flooring segment produces and sources wood 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 are in North America. Our Wood Flooring products are generally sold to independent wholesale flooring distributors and large home centers.

Unallocated Corporate. The Unallocated Corporate segment 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 Armstrong brand name, the U.S. prepaid pension cost 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, headcount or net sales.

Table of Contents

The remaining items, which cannot be attributed to the reportable segments without a high degree of generalization, are reported in Unallocated Corporate.

Corporate Information

Our principal executive offices are located at 2500 Columbia Avenue, P.O. Box 3001, Lancaster, Pennsylvania 17603, and our telephone number at that address is (717) 397-0611. Our website address is www.armstrong.com. The information on, or accessible through, our website is not part of this prospectus supplement or the accompanying prospectus and should not be relied upon in connection with making any investment decision with respect to the securities offered by this prospectus supplement and the accompanying prospectus.

Selling Shareholders

The Armstrong World Industries, Inc. Asbestos Personal Injury Settlement Trust, or Asbestos Trust, and Armor TPG Holdings, L.P., or TPG, are the selling shareholders in this offering. Asbestos Trust was created in October 2006 in connection with our emergence from Chapter 11 to address our personal injury (including wrongful death) asbestos-related liability, and pursuant to the plan of reorganization, received more than 60% of our then-outstanding common shares. In August 2009, Asbestos Trust and TPG entered into agreements pursuant to which TPG purchased 7,000,000 common shares from Asbestos Trust and acquired an economic interest in an additional 1,039,777 common shares from Asbestos Trust. They have also entered into a shareholders' agreement pursuant to which Asbestos Trust and TPG have agreed to vote their shares together on certain matters.

During the fourth quarter of 2012, Asbestos Trust and TPG together sold 5,980,000 of their shares in a secondary public offering at a public offering price of \$51.00 per share. We did not sell any shares and did not receive any proceeds from the offering, and the total number of common shares outstanding did not change as a result of the offering.

As of August 31, 2013, Asbestos Trust and TPG together owned approximately 53.2% of our outstanding common shares and are selling a proportionate number of their shares in this offering. After the completion of this offering and the share repurchase described below, Asbestos Trust and TPG will together own approximately 35.9% of our outstanding common shares. As a result of the offering and the share repurchase, the selling shareholders will own less than 50% of the total voting power of our common shares.

Share Repurchase

Subject to the completion of this offering, we have agreed to purchase from the underwriter 5,057,382 of the common shares that are subject to this offering at a price per share equal to the price paid by the underwriter to the selling shareholders in this offering. The repurchased common shares will be held in treasury (the "Treasury Stock"). We intend to fund the share repurchase with cash on hand and borrowings under our \$250 million revolving credit facility and our \$75 million trade receivables securitization facility, which we refer to together as our credit facility. The funding of the share repurchase will, if completed, increase the amount of debt on our balance sheet. The closing of the share repurchase is contingent upon the closing of this offering, and the closing of this offering is contingent upon the closing of the share repurchase.

Table of Contents

The Offering

Common shares offered by the selling shareholders	12,057,382 shares.
Common shares to be sold to the public	7,000,000 shares.
Common shares to be purchased by the Company	5,057,382 shares.
Common shares outstanding after this offering and share repurchase	54,135,215 shares.
Use of proceeds	The selling shareholders will receive all of the proceeds from this offering and we will not receive any proceeds from the sale of shares in this offering.
Company share repurchase	Subject to the completion of this offering, we have agreed to purchase from the underwriter 5,057,382 of the common shares that are subject to this offering at a price per share equal to the price paid by the underwriter to the selling shareholders in this offering. The closing of the share repurchase is contingent upon the closing of this offering, and the closing of this offering is contingent upon the closing of the share repurchase.
Selling shareholders	Asbestos Trust and TPG are our principal shareholders and the only selling shareholders in this offering. After the completion of this offering and the share repurchase, Asbestos Trust and TPG will together own approximately 35.9% of our outstanding common shares. See Selling Shareholders.
Risk factors	Investing in our common shares involves a high degree of risk. See Risk Factors included in this prospectus supplement and other information included or incorporated by reference in this prospectus supplement and the accompanying prospectus for a discussion of factors you should carefully consider before deciding to invest in our common shares.
New York Stock Exchange Symbol	AWI
Except as otherwise noted, all information in this prospectus supplement:	

is based on 59,192,597 common shares outstanding as of August 31, 2013;

excludes 2,098,493 common shares reserved for future issuance under our equity incentive plans currently in effect as of August 31, 2013; and

Edgar Filing: ARMSTRONG WORLD INDUSTRIES INC - Form 424B7

excludes 1,517,674 common shares issuable upon the exercise of options outstanding as of August 31, 2013, at a weighted average exercise price of \$26.60 per share.

S-3

Table of Contents**Summary of Consolidated Financial Information**

The table below sets forth our summary consolidated historical financial information for the periods indicated. The summary financial data presented below for the years ended December 31, 2012, 2011 and 2010 and as of December 31, 2012 and 2011 have been derived from our audited consolidated financial statements incorporated by reference in this prospectus supplement. The summary financial data for the six months ended June 30, 2013 and 2012 and as of June 30, 2013 have been derived from our unaudited condensed consolidated financial statements incorporated by reference in this prospectus supplement. The summary financial data reflect our previously owned Cabinets business as a discontinued operation. The unaudited consolidated financial statements have been prepared on a basis consistent with our annual financial statements and include, in the opinion of management, all adjustments of a normal recurring nature to provide a fair statement of the results for the reporting periods presented. Results for interim periods are not necessarily indicative of results that might be expected for any other interim period or for an entire year.

The summary consolidated financial information presented below should be read in conjunction with the information contained in Management's Discussion and Analysis of Financial Condition and Results of Operations and the audited consolidated financial statements and the notes thereto, all included in our Annual Report on Form 10-K for the year ended December 31, 2012, filed with the SEC on February 27, 2013, and Management's Discussion and Analysis of Financial Condition and Results of Operations and the unaudited condensed consolidated financial statements and the notes thereto, all included in our Quarterly Report on Form 10-Q for the quarter ended June 30, 2013, filed with the SEC on July 29, 2013, which are incorporated by reference in this prospectus supplement and the accompanying prospectus.

	Years ended December 31,			Six Months ended June 30,	
	2012	2011	2010	2013 (Unaudited)	2012 (Unaudited)
(Amounts in millions, except per share data)					
Consolidated Statements of Earnings Data:					
Net sales (1)	\$ 2,618.9	\$ 2,723.1	\$ 2,627.8	\$ 1,328.9	\$ 1,311.4
Cost of goods sold	1,985.7	2,075.2	2,041.7	1,020.1	1,000.8
Gross profit	633.2	647.9	586.1	308.8	310.6
Selling, general and administrative expenses	418.3	454.0	499.2	223.9	218.6
Intangible asset impairment			22.4		
Restructuring charges (reversals)	(0.4)	9.0	22.0	(0.1)	0.2
Equity (earnings) from affiliates, net	(55.9)	(54.9)	(45.0)	(29.6)	(28.5)
Operating income	271.2	239.8	87.5	114.6	120.3
Interest expense	53.7	48.5	21.2	45.0	25.6
Other non-operating expense	0.5	1.3	1.2	0.7	0.3
Other non-operating (income)	(3.5)	(3.8)	(8.0)	(2.7)	(1.5)
Earnings before income taxes	220.5	193.8	73.1	71.6	95.9
Income tax expense	76.1	81.0	58.0	37.8	34.7
Net income from continuing operations	144.4	112.8	15.1	33.8	61.2
Net (loss) from discontinued operations, net of tax benefit of (\$7.1), (\$0.2) and (\$2.3)	(12.2)	(0.4)	(4.1)		(1.2)
(Loss) on sale of discontinued operations, net of tax benefit of (\$0.6), \$0.0 and \$0.0	(0.9)			(0.9)	
(Loss) from discontinued operations	(13.1)	(0.4)	(4.1)	(0.9)	(1.2)
Net earnings	\$ 131.3	\$ 112.4	\$ 11.0	\$ 32.9	\$ 60.0

Table of Contents

	Years ended December 31,			Six Months ended	
	2012	2011	2010	2013	2012
	(Unaudited)				
	(Amounts in millions, except per share data)				
Earnings per share of common stock, continuing operations:					
Basic	\$ 2.43	\$ 1.92	\$ 0.26	\$ 0.57	\$ 1.04
Diluted	\$ 2.41	\$ 1.91	\$ 0.26	\$ 0.56	\$ 1.03
(Loss) per share of common stock, discontinued operations:					
Basic	\$ (0.22)	\$ (0.01)	\$ (0.07)	\$ (0.02)	\$ (0.02)
Diluted	\$ (0.22)	\$ (0.01)	\$ (0.07)	\$ (0.02)	\$ (0.02)
Net earnings per share of common stock:					
Basic	\$ 2.21	\$ 1.91	\$ 0.19	\$ 0.55	\$ 1.02
Diluted	\$ 2.19	\$ 1.90	\$ 0.19	\$ 0.54	\$ 1.01
Average number of common shares outstanding:					
Basic	58.9	58.3	57.7	59.2	58.7
Diluted	59.5	58.8	58.2	59.8	59.3

- (1) The consolidated statement data above reflects the Cabinets business, which was sold on October 31, 2012, as a discontinued operation in all periods presented.

	As of December 31,		As of June 30,
	2012	2011	2013
	(Unaudited)		
	(Amounts in millions)		
Consolidated Balance Sheet Data:			
Cash and cash equivalents	\$ 336.4	\$ 480.6	\$ 304.7
Total assets	\$ 2,854.3	\$ 2,994.7	\$ 2,961.8
Total debt	\$ 1,071.0	\$ 843.0	\$ 1,068.8

Table of Contents

RISK FACTORS

Investing in our common shares involves risks. You should consider carefully the following risks and the risks and uncertainties described in other documents that are included or incorporated by reference in this prospectus supplement and the accompanying prospectus.

Risk Factors Relating to Our Business

Worldwide economic conditions and credit tightening could have a material adverse impact on our business.

Our business may be adversely impacted by changes in United States or global economic conditions, including inflation, deflation, interest rates, availability of capital, consumer spending rates, energy availability and costs, and the effects of governmental initiatives to manage economic conditions. Volatility in financial markets and the deterioration of national and global economic conditions could materially adversely impact our operations, financial results and/or liquidity including as follows:

the financial stability of our customers or suppliers may be compromised, which could result in additional bad debts for us or non-performance by suppliers;

one or more of the lenders under our senior secured credit facility may cease to be able to fulfill their funding obligations, which could adversely impact our liquidity;

it may become more costly or difficult to obtain financing or refinance our debt in the future;

the value of our assets held in pension plans may decline; and/or

our assets may be impaired or subject to write down or write off.

Uncertainty about global economic conditions may cause commercial and residential consumers of our products to postpone spending in response to tighter credit, negative financial news and/or declines in income or asset values. This could have a material adverse impact on the demand for our products and on our financial condition and operating results. A deterioration of economic conditions would likely exacerbate these adverse effects and could result in a wide-ranging and prolonged impact on general business conditions, thereby negatively impacting our operations, financial results and/or liquidity.

Our business is dependent on construction activity. Downturns in construction activity could adversely affect our business and results of operations.

Our businesses have greater sales opportunities when construction activity is strong and, conversely, have fewer opportunities when such activity declines. The cyclical nature of commercial and residential construction activity, including construction activity funded by the public sector, tends to be influenced by prevailing economic conditions, including favorable interest rates, strong government spending, consumer confidence and other factors beyond our control. Prolonged downturns in construction activity could have an adverse effect on our business, profitability, and the carrying value of assets.

Our indebtedness may adversely affect our cash flow and our ability to operate our business, make payments on our indebtedness and declare dividends on our capital stock.

Our level of indebtedness and degree of leverage could:

Edgar Filing: ARMSTRONG WORLD INDUSTRIES INC - Form 424B7

make it more difficult for us to satisfy our obligations with respect to our indebtedness;

make us more vulnerable to adverse changes in general economic, industry and competitive conditions and adverse changes in government regulation;

S-6

Table of Contents

limit our flexibility in planning for, or reacting to, changes in our business and the industry in which we operate;

place us at a competitive disadvantage compared to our competitors that are less leveraged and therefore more able to take advantage of opportunities that our leverage prevents us from exploiting;

limit our ability to refinance existing indebtedness or borrow additional amounts for working capital, capital expenditures, acquisitions, debt service requirements, execution of our business strategy or other purposes;

restrict our ability to pay dividends on our capital stock; and

adversely affect our credit ratings.

We may also incur additional indebtedness, which could exacerbate the risks described above. In addition, to the extent that our indebtedness bears interest at floating rates, our sensitivity to interest rate fluctuations will increase.

Any of the above listed factors could materially adversely affect our business, financial condition and results of operations.

The agreements that govern our indebtedness contain a number of covenants that impose significant operating and financial restrictions, including restrictions on our ability to engage in acts that may be in our best long-term interests.

The agreements that govern our indebtedness include covenants that, among other things, may restrict our ability to:

incur additional debt;

pay dividends on or make other distributions in respect of our capital stock or redeem, repurchase or retire our capital stock or subordinated debt or make certain other restricted payments;

make certain acquisitions;

sell certain assets;

consolidate, merge, sell or otherwise dispose of all or substantially all of our assets; and

create liens on certain assets to secure debt.

Under the terms of our senior secured credit facility, we are required to maintain specified leverage and interest coverage ratios. Our ability to meet such ratios could be affected by events beyond our control, and we cannot assure that we will meet such ratios. A breach of any of the restrictive covenants or leverage ratios would result in a default under the senior secured credit facility. If any such default occurs, the lenders under the senior secured credit facility may be able to elect to declare all outstanding borrowings under such facilities, together with accrued interest and other fees, to be immediately due and payable, or enforce their security interest, any of which would result in an event of default under the notes. The lenders may also have the right in these circumstances to terminate any commitments they have to provide further borrowings.

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

Our liquidity needs vary throughout the year. If our business experiences materially negative unforeseen events, we may be unable to generate sufficient cash flow from operations to fund our needs or maintain

S-7

Table of Contents

sufficient liquidity to operate and remain in compliance with our debt covenants, which could result in reduced or delayed planned capital expenditures and other investments and adversely affect our future revenue prospects.

If the availability of raw materials or energy decreases, or the costs increase, and we are unable to pass along increased costs, our operating results could be adversely affected.

The cost and availability of raw materials, packaging materials, energy and sourced products are critical to our operations. For example, we use substantial quantities of natural gas, petroleum-based raw materials, and hardwood lumber in our manufacturing operations. The cost of some of these items has been volatile in recent years and availability has been limited at times. We source some materials from a limited number of suppliers, which, among other things, increases the risk of unavailability. Limited availability could cause us to reformulate products or limit our production. Decreased access to raw materials and energy or significant increased production cost differentials and any corresponding inability to pass along such costs through price increases could have a material adverse effect on our business, financial condition and operating results.

Our markets are highly competitive. Competition can reduce demand for our products or cause us to lower prices. Failure to compete effectively by meeting consumer preferences and maintaining market share would adversely affect our results.

Our customers consider our products' performance, product styling, customer service and price when deciding whether to purchase our products. Shifting consumer preference in our highly competitive markets, from residential vinyl products to other flooring products, for example, styling preferences or inability to offer new competitive performance features could have an adverse effect on our sales. In addition, excess industry capacity exists for certain products in several geographic markets, which tends to increase price competition, as does competition from overseas competitors with lower cost structures.

Sales fluctuations to key customers could have a material adverse effect on our revenues and profits.

Some of our businesses are dependent on a few key customers. The loss of sales to one of these major customers, or any adverse change in our business relationship with any one of them, could have an adverse affect on both our revenues and profits.

Our plant construction projects may adversely impact our results.

We are building a new ceilings manufacturing plant in Russia, and recently announced an investment to manufacture LVT in North America. There can be no assurance that the actual cost of these projects will not exceed our projections. In addition, we may experience delays in these projects for many reasons, including unavailability of materials, labor or equipment, regulatory matters or inclement weather. Economic and competitive advantages expected from these projects may not fully materialize as a result of delays, cost overruns or changes in market conditions.

We are subject to risks associated with our international operations in both established and emerging markets. Legislative, political, regulatory and economic volatility, as well as vulnerability to infrastructure and labor disruptions, could have an adverse effect on our business.

A significant portion of our products move in international trade, particularly among the U.S., Canada, Europe and Asia markets. Approximately 30% of our revenues were from operations outside the United States and Canada in 2012. Our international trade is subject to currency exchange fluctuations, trade regulations, import duties, logistics costs, delays and other related risks. Our international operations are also subject to variable tax rates, credit risks in emerging markets, political risks, uncertain legal systems, high costs in repatriating profits to the United States from some countries, and loss of sales to local competitors following currency devaluations in countries where we import products for sale. In addition, our international growth strategy depends in part on our ability to expand our operations in certain emerging markets. However, some emerging markets have greater political and economic volatility and greater vulnerability to infrastructure and labor disruptions than established

Table of Contents

markets. In many countries outside of the United States, particularly in those with developing economies, it may be common for others to engage in business practices prohibited by laws and regulations applicable to us, such as the Foreign Corrupt Practices Act or similar local anti-bribery laws. These laws generally prohibit companies and their employees, contractors or agents from making improper payments to government officials for the purpose of obtaining or retaining business. Failure to comply with these laws could subject us to civil and criminal penalties. As we continue to expand our business globally, including in emerging markets, we may have difficulty anticipating and effectively managing these and other risks that our international operations may face, which may adversely impact our business outside the United States and our financial condition and results of operations.

We may pursue strategic transactions that could create risks and present unforeseen integration obstacles or costs, any of which could materially adversely affect our business.

Acquiring companies that we believe will expand and/or complement our business is an important part of our growth strategy. We have evaluated, and expect to continue to evaluate, potential strategic transactions from time to time as those opportunities arise. We routinely engage in discussions with third parties regarding potential acquisitions that could be significant. Any such strategic transactions involve a number of risks, including potential disruption of our ongoing business and distraction of management, difficulty with integrating personnel and operating infrastructure, and increasing the scope, geographic diversity and complexity of our operations. Strategic transactions could involve payment by us of a substantial amount of cash, incurrence of a substantial amount of debt or issuance of a substantial amount of equity. Certain acquisition opportunities may not result in the consummation of a transaction or may fail to realize the intended benefits and synergy. If we fail to consummate and integrate our acquisitions in a timely and cost-effective manner, our business could be materially and adversely affected.

Our intellectual property rights may not provide meaningful commercial protection for our products or brands, which could adversely impact our business.

We rely on our proprietary intellectual property, including numerous patents and registered trademarks, as well as our licensed intellectual property. We monitor and protect against activities that might infringe, dilute or otherwise harm our patents, trademarks and other intellectual property and rely on the patent, trademark and other laws of the United States and other countries. However, we may be unable to prevent third parties from using our intellectual property without our authorization. In addition, the laws of some non-United States jurisdictions, particularly those of certain emerging markets, provide less protection for our proprietary rights than the laws of the United States. To the extent we cannot protect our intellectual property, unauthorized use and misuse of our intellectual property could harm our competitive position and have a material adverse impact on our business, financial condition and results of operations.

Our LEAN initiatives may not achieve expected savings in our operating costs or improved operating results.

We aggressively look for ways to make our operations more efficient and effective. We reduce, move and expand our plants and operations as needed. Such actions involve substantial planning, often require capital investments and may result in charges for fixed asset impairments or obsolescence and substantial severance costs. We are committed to augmenting margin expansion through further cost elimination. However, there can be no assurance that we will be able to achieve our desired level of cost savings. Even if we achieve our targeted savings, there is no assurance that our net operating results in the future will improve by this amount. Planning and executing delays or challenges could adversely affect our customer service and result in unplanned costs.

Adverse judgments in regulatory actions, product claims, environmental claims and other litigation could be costly. Insurance coverage may not be available or adequate in all circumstances.

While we strive to ensure that our products comply with applicable government regulatory standards and internal requirements, and that our products perform effectively and safely, customers from time to time

Table of Contents

could claim that our products do not meet warranty or contractual requirements, and users could claim to be harmed by use or misuse of our products. These claims could give rise to breach of contract, warranty or recall claims, or claims for negligence, product liability, strict liability, personal injury or property damage. They could also result in negative publicity that could harm our sales and operating results. The building materials industry has been subject to claims relating to raw materials such as silicates, PCBs, PVC, formaldehyde, fire-retardants and claims related to other issues such as mold and toxic fumes, as well as for incidents of catastrophic loss, such as building fires. We have not received any significant claims involving our raw materials or product performance, however, product liability insurance coverage may not be available or adequate in all circumstances to cover any such claims that may arise in the future.

We are parties to several legal proceedings involving environmental matters (see Note 17 to the consolidated financial statements included in our Quarterly Report on Form 10-Q for the quarter ended June 30, 2013, filed with the SEC on July 29, 2013 and incorporated by reference in this prospectus supplement), and we have incurred, and will continue to incur, capital and operating expenditures and other costs in complying with environmental laws and regulations. It is possible that we could become subject to additional environmental liabilities in the future.

We are also subject to regulatory requirements regarding protection of the environment. Current and future environmental laws and regulations, including those proposed concerning climate change, could increase our cost of compliance, cost of energy, or otherwise materially adversely affect our business, results of operations and financial condition.

We are also subject to a claim with respect to our multi-employer pension plan, as further described in Note 17 to the consolidated financial statements included in our Quarterly Report on Form 10-Q for the quarter ended June 30, 2013, filed with the SEC on July 29, 2013.

In addition, claims and investigations may arise related to patent infringement, distributor relationships, commercial contracts, antitrust or competition law requirements, employment and employee benefits issues, and other compliance and regulatory matters. While we have processes and policies designed to mitigate these risks and to investigate and address such claims as they arise, we cannot predict or, in some cases, control the costs to defend or resolve such claims.

Income taxes can have an unanticipated effect on our financial results.

Our business is subject to income taxes in the United States and many foreign jurisdictions. Because our income tax expense for any period depends heavily on the mix of income derived from the various taxing jurisdictions, our income tax expense and reported net income may fluctuate significantly, and may be materially different than forecasted or experienced in the past.

Moreover, changes in, or interpretations of, tax laws and regulations (including laws related to the remittance of foreign earnings), could also have a significant adverse effect on our profitability and financial condition.

Under provisions of the Internal Revenue Code, the utilization of a U.S. corporation's deferred tax assets may be limited following a change in ownership, as defined in the Internal Revenue Code. There have been no ownership changes as defined in the Internal Revenue Code subsequent to our bankruptcy emergence. Future ownership changes could have an impact on our ability to utilize the deferred tax assets.

Increased costs of labor, labor disputes, work stoppages or union organizing activity could delay or impede production and reduce sales and profits.

Increased costs of U.S. and international labor, including the costs of employee benefits plans, could affect our financial results and operations. As the majority of our manufacturing employees are represented by

Table of Contents

unions and covered by collective bargaining or similar agreements, there are also costs attributable to our periodic renegotiation of those agreements. We are also subject to the risk that strikes or other types of conflicts with organized personnel may arise or that we may become the subject of union organizing activity at our facilities that do not have union representation. Prolonged negotiations, conflicts or related activities could lead to increased costs and work stoppages, which could adversely affect production, revenues, profits and customer relations.

We outsource our information technology infrastructure and certain finance and accounting functions, which makes us more dependent upon third parties.

In an effort to make our IT, finance and accounting functions more efficient, increase related capabilities, as well as generate cost savings, we outsource a significant portion of our IT infrastructure and certain finance and accounting functions to separate third party service providers. As a result, we rely on third parties to ensure that our related needs are sufficiently met. This reliance subjects us to risks arising from the loss of control over certain processes, changes in pricing that may affect our operating results, and potentially, termination of provisions of these services by our suppliers. A failure of our service providers to perform may have a significant adverse effect on our business.

Risk Factors Relating to the Offering

Concentration of ownership among our principal shareholders may prevent new investors from influencing significant corporate decisions.

Following the completion of this offering and share repurchase, Asbestos Trust and TPG will still own together a significant amount of our common shares. Pursuant to a shareholders' agreement entered into by Asbestos Trust and TPG, as amended effective as of November 5, 2012, Asbestos Trust and TPG have agreed to vote their shares together on certain matters, including the nomination and election of directors to our board of directors. Also, pursuant to the terms of the shareholders' agreement, each of Asbestos Trust and TPG has the right to designate two directors. The provisions of the shareholders' agreement may be amended, modified or waived by Asbestos Trust and TPG without our consent.

Furthermore, Asbestos Trust and TPG together are able to exercise influence over all matters requiring shareholder approval, including approval of significant corporate transactions and amendment of our amended and restated articles of incorporation, or the Articles, and amended bylaws, or the Bylaws, and have significant control over our management and policies. The interests of these shareholders may not be consistent with the interests of other shareholders. The existence of significant shareholders may also have the effect of deterring hostile takeovers, delaying or preventing changes in control or changes in management or limiting the ability of our other shareholders to approve transactions that they may deem to be in the best interests of our company. In addition, our Articles provide that Subchapter 25F of the Business Corporation Law of 1998 of the Commonwealth of Pennsylvania, or PBCL, which relates to business combinations with interested shareholders, does not apply to us.

The market price of our common shares may fluctuate significantly, and they may trade at prices below the price at which you purchased them.

The market price of our common shares following this offering and share repurchase may fluctuate significantly from time to time as a result of many factors, including:

investors' perceptions of our prospects;

differences between our actual financial and operating results and those expected by investors and analysts;

changes in analysts' recommendations or projections;

Table of Contents

actual or anticipated fluctuations in our results of operations;

announcements by us or our competitors of significant acquisitions, strategic partnerships or divestitures;

changes or trends in our industry;

commencement or outcome of investigations, litigation or environmental matters;

additions or departures of key personnel;

changes in general economic conditions;

future sale of our equity securities;

legislation or regulatory policies, practices or actions;

broad market fluctuations; and

sales fluctuations to key customers.

Broad market and industry factors may adversely affect the market price of our common shares, regardless of our actual operating performance. As a result, our common shares may trade at prices significantly below the price at which you purchased them. In addition, in the past, following periods of volatility in the overall market and the market price of a company's securities, securities class action litigation has often been instituted against the affected company. This type of litigation, if instituted against us, could result in substantial costs and a diversion of our management's attention and resources.

Future sales of our shares could adversely affect the market price of our common shares.

Future sales of substantial amounts of our common shares in the public market following this offering and share repurchase, whether by us or our existing shareholders, or the perception that such sales could occur, may adversely affect the market price of our common shares, which could decline significantly. Sales by our existing shareholders might also make it more difficult for us to raise equity capital by selling new common shares at a time and price that we deem appropriate.

We, each of our executive officers, directors and the selling shareholders have agreed to a 45-day lock-up agreement with the underwriter that prohibits the offer, pledge or sale of, or entering into any transaction that is designed to, or might reasonably be expected to, dispose of or transfer, any of our common shares or any securities convertible into or exchangeable or exercisable for our common shares, among other restrictions, for a period of 45 days following the date of this prospectus supplement. However, this lock-up agreement is subject to several exceptions, and the underwriter in its sole discretion may release any of the securities subject to the lock-up, at any time without notice.

Anti-takeover provisions of our organizational documents could prevent or delay a change in control of our company.

Certain provisions of our Articles and Bylaws may have the effect of discouraging, delaying or preventing a change in control of our company. A change of control could be proposed in the form of a tender offer or takeover proposal that might result in a premium over the market price for our common shares. In

Table of Contents

addition, these provisions could make it more difficult to bring about a change in the composition of our board of directors, which could result in entrenchment of current management. For example, our Articles and Bylaws:

permit special meetings of shareholders to be called only by shareholders holding at least 20% of voting shares;

establish advance notice procedures with respect to shareholder proposals and the nomination of candidates for election of directors, other than nominations made by, or at the direction of, our board of directors or by Asbestos Trust;

do not provide for cumulative voting in the election of directors;

require affirmative vote or written consent of the holders of at least 80% of our common shares to amend, alter or repeal certain provisions of our Articles regarding the number, terms of office and removal of directors, special meetings of shareholders, shareholder action by written consent and the rights of Asbestos Trust under the Articles;

until no shareholder beneficially owns at least 20% of our common shares, require the affirmative vote of at least 80% of shareholders for changes to certain provisions of the Bylaws, including provisions concerning director independence, shareholder voting at special meetings and action by written consent, board size and appointments to our nominating and governance committee; and

authorize the issuance of undesignated preferred shares, or blank check preferred shares, by our board of directors without shareholder approval.

The existence of these provisions and other provisions of our organizational documents could limit the price that investors might be willing to pay in the future for our common shares. They could also deter potential acquirers of our company, thereby reducing the likelihood that you could receive a premium for your common shares in any acquisition.

We are under no legal obligation to pay dividends on our common shares in the future.

We are under no obligation to pay dividends. Our senior secured credit facility may preclude us from paying cash dividends, and we may be subject to other restrictions on our ability to pay dividends from time to time. Accordingly, you may have to sell some or all of your common shares in order to generate cash flow from your investment. You may not receive a gain on your investment when you sell your common shares and may lose some or the entire amount. In addition, pursuant to a shareholders' agreement entered into by and between Asbestos Trust and TPG, Asbestos Trust and TPG have agreed to take all necessary action to prevent us from declaring dividends without their written approval or the unanimous vote or written consent by their designated directors. Accordingly, there can be no guarantee that we will pay dividends on our common shares in the future or that, if paid, such dividends will continue or be as large as in prior periods. Therefore, investors must be prepared to rely on sales of their common shares after price appreciation to earn an investment return, which may never occur. Investors seeking cash dividends should not purchase our common shares. Any determination to pay dividends in the future will be made at the discretion of our board of directors subject to the restrictions above, and will depend upon our results of operations, financial conditions, contractual restrictions, restrictions imposed by applicable law and other factors our board deems relevant.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our share price and trading volume could decline.

The trading market for our common shares will depend in part on the research and reports that securities or industry analysts publish about us or our business. If few securities or industry analysts cover our company,

Table of Contents

the trading price for our common shares would be negatively impacted. If one or more of the analysts who covers us downgrades our common shares or publishes inaccurate or unfavorable research about our business, our share price would likely decline. If one or more of these analysts ceases coverage of us or fails to publish reports on us regularly, demand for our common shares could decrease, which could cause our share price and trading volume to decline.

S-14

Table of Contents

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements in this prospectus supplement, the accompanying prospectus 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 our revenue opportunities from commercial renovation and new commercial construction inside the United States; 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, will, would, could, should, seek, estimate and similar expressions are intended to 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 operations and future prospects or which could cause actual results to differ materially from our expectations include, but are not limited to:

global economic conditions including inflation, deflation, interest rates, availability of capital, consumer spending rates, energy availability and costs, and the effects of governmental initiatives to manage economic conditions;

the risk that downturns in construction activity could adversely affect our business and results of operations;

the risk that our indebtedness and degree of leverage could adversely affect our cash flow and our ability to operate our business, make payments on our indebtedness and declare dividends on our capital stock;

the possibility that a number of covenants contained in the agreements that govern our indebtedness, impose significant operating and financial restrictions on our business, including restrictions on our ability to engage in acts that may be in our best long-term interests;

the possibility that our indebtedness may increase our vulnerability to negative unforeseen events;

the effect of our indebtedness on our liquidity;

our ability to generate sufficient cash flow from operations to fund our needs and remain in compliance with our debt covenants;

the risk that the availability of raw materials and energy decreases or that the costs of these materials increase and we are unable to pass along the increased costs;

the possibility that competition can reduce demand for our products or cause us to lower prices;

the risk that we may lose sales to one of our major customers;

the risk that the costs of construction and operation of our new manufacturing plants may exceed our projections;

changes in the political, regulatory and business environments of our international markets, including changes in trade regulations;

S-15

Table of Contents

the risk of changes in foreign currency exchange rates, interest rates and commodity prices;

the risk that our intellectual property rights may not provide meaningful commercial protection for our products or brands;

the risk that our LEAN initiatives may not achieve expected savings in our operating costs or improve operating results;

integration obstacles or costs associated with the pursuit or consummation of strategic transactions;

the risk that adverse judgments in regulatory actions, product claims, environmental claims and other litigation may not be covered by insurance in all circumstances;

the risk that increased costs of labor, labor disputes, work stoppages or union organizing activity could delay or impede production and reduce sales and profits;

the risk that our principal shareholders could significantly influence our management and our affairs;

the risk that our decision to outsource our information technology infrastructure and certain finance and accounting functions will make us more dependent upon third parties;

the cost and difficulty of complying with increasing and evolving regulation; and

other risks detailed from time to time in our filings with the SEC, press releases and other communications, including those set forth under **Risk Factors** included elsewhere in this prospectus supplement, the accompanying prospectus and in the documents incorporated by reference in this prospectus supplement or the accompanying prospectus.

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.

You should carefully consider the **Risk Factors and subsequent public statements, or reports filed with or furnished to the SEC, before making any investment decision with respect to our securities. If any of these trends, risks, assumptions or uncertainties actually occurs or continues, our business, financial condition or results of operations could be materially adversely affected, the trading prices of our securities could decline and you could lose all or part of your investment. All forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by this cautionary statement.**

Table of Contents

USE OF PROCEEDS

The selling shareholders will receive all of the proceeds from this offering. We will not receive any proceeds from the sale of our common shares in this offering. We will pay the expenses associated with the sale of shares by the selling shareholders. Asbestos Trust and TPG are our principal shareholders and are selling shareholders in this offering. See Selling Shareholders.

S-17

Table of Contents

DESCRIPTION OF CAPITAL STOCK

Set forth below is a summary description of the material terms of our capital stock. This description is qualified in its entirety by reference to our amended and restated articles of incorporation, or the Articles, and amended bylaws, or the Bylaws.

Authorized Capital Stock

As of the date of this prospectus supplement, our authorized capital stock under our Articles consists of:

200,000,000 common shares, par value \$0.01 per share; and

15,000,000 preferred shares, without par value.

Common Shares

As of August 31, 2013, we had 59,192,597 common shares outstanding (excluding unvested restricted shares) and we had approximately 383 holders of record of our common shares. All of the common shares outstanding on the date of this prospectus supplement are validly issued, fully paid and non-assessable under the PBCL. We purchased 5,057,382 common shares in this offering and the shares will be held in treasury.

Holders of our common shares are entitled to one vote per share on all matters (including the election of directors) on which any of our shareholders are entitled to vote.

Subject to applicable law and any preference rights of holders of our preferred shares that we may issue in the future, the holders of our common shares are entitled to receive dividends, if any, when and as declared from time to time by our board of directors, or Board, out of assets legally available therefor. In the event of our liquidation, dissolution or winding up, the holders of our common shares are entitled to share ratably in all assets remaining after the payment of liabilities, subject to the rights of any holders of preferred shares that we might have issued prior to such distribution.

The holders of common shares have no preemptive, subscription, redemption or conversion rights. There are no sinking fund provisions applicable to our common shares.

Our common shares are listed on the NYSE under the symbol AWI.

As of September 9, 2013, the closing price of our common shares on the NYSE was \$52.37 per share.

Preferred Shares

The Board has the authority, without action by our shareholders, to issue preferred shares and to fix voting powers for each class or series of preferred shares, and to provide that any class or series may be subject to redemption, entitled to receive dividends, entitled to rights upon dissolution or convertible into, or exchangeable for, shares of any other class or classes of capital stock. The rights with respect to a series or class of preferred shares may be greater than the rights attached to our common shares. It is not possible to state the actual effect of the issuance of any of our preferred shares on the rights of holders of our common shares until our Board determines the specific rights attached to such preferred shares. The effect of issuing preferred shares could include one or more of the following:

restricting dividends in respect of our common shares;

diluting the voting power of our common shares or providing that holders of preferred shares have the right to vote on matters as a class;

Table of Contents

impairing the liquidation rights of our common shares; or

delaying or preventing a change of control of us.

Our Articles provide that, until such time as Asbestos Trust first ceases to be the beneficial owner (determined as provided in the Articles) of at least 20% of the outstanding common shares, we may not, without the prior written consent of Asbestos Trust, authorize any new class of shares or issue any preferred shares other than conventional preferred shares (as defined in the Articles).

Asbestos Trust

Our Articles provide that, until such time as Asbestos Trust first ceases to be the beneficial owner of at least 20% of the outstanding common shares, Asbestos Trust may not, subject to certain exceptions, transfer, in one transaction or a series of related transactions, any voting shares (i.e., any common shares or other shares entitled to cast more than 5% of the votes that may be cast in the election of directors) to any purchaser who, after giving effect to such transfer, would beneficially own either more than 35% of all voting shares or more than the number of voting shares owned by Asbestos Trust. Asbestos Trust may, however, effect such an otherwise prohibited transfer if:

(1) the transfer is a public sale of shares made in compliance with certain provisions of the U.S. federal securities laws or in certain derivative transactions (as specified in the Articles);

(2) all other holders of common shares have an opportunity to participate in the transaction or series of transactions on the same terms as Asbestos Trust; or

(3) in the case of a disposition of shares by Asbestos Trust pursuant to a merger, consolidation, recapitalization or similar corporate transaction involving us, the material terms of the transaction have been approved by a majority of our directors who are not affiliated with Asbestos Trust and who have no personal financial interest in the transaction (Disinterested Directors), or by such vote of the holders of the common shares as is required by law, our Articles or Bylaws (as then in effect) or any applicable listing standards, provided that, if such a transaction would result in Asbestos Trust receiving a type or amount of payment per common share that is different from the payment to be received by other holders of common shares, the transaction must be approved by the affirmative vote of the holders of a majority of the common shares not beneficially owned by Asbestos Trust (in addition to any other required shareholder approval).

Our Articles provide that, until such time as Asbestos Trust first ceases to be the beneficial owner of at least 20% of the outstanding common shares, any transaction between the Company or any of its subsidiaries and Asbestos Trust or any affiliate thereof (other than a dividend or other distribution made to all shareholders pro rata to their shareholdings and otherwise on terms which are the same with respect to Asbestos Trust and all other participating shareholders), shall require review by and approval of a majority of the Disinterested Directors, whether or not such review and approval is required by law or applicable listing standards, subject to any exception from such review and approval for transactions of an immaterial nature determined under such criteria as have been approved in advance by a majority of the Disinterested Directors; provided, however, that, in the case of any transaction or series of related transactions involving the cancellation, retirement, disposition, conversion, exchange or reclassification of the shares of the Company, or any dividend, distribution or payment in respect of outstanding shares of the Company, pursuant to a merger, consolidation, recapitalization, reorganization or similar corporate transaction, which transaction would result in Asbestos Trust receiving any dividend, distribution, security, other property or payment that differs from that which would be received by all other holders of common shares, then the approval of the holders of a majority of the common shares not owned or controlled by Asbestos Trust shall be required (in addition to approval by any shareholder vote otherwise required, but approval of a majority of the disinterested directors, as such, shall not be required).

Table of Contents

Our Articles provide that, until such time as Asbestos Trust first ceases to be the beneficial owner of at least 20% of the outstanding common shares, we shall not without the prior, written consent of Asbestos Trust:

- (a) authorize any new class of shares (i.e., other than the common shares or conventional preferred shares (as defined in our Articles));
- (b) issue any preferred shares, other than conventional preferred shares (as defined in the Articles); or
- (c) adopt a shareholder rights plan that provides some, but not all, holders of common shares the right to acquire our securities, for the purpose of making more difficult or expensive an acquisition of additional voting shares by a person or group acquiring more than a specified level of ownership in us.

Our Articles provide that, until such time as Asbestos Trust first ceases to be the beneficial owner of at least 20% of the outstanding common shares, our Board is required to present to the shareholders nominations of candidates for election to the Board (or recommend the election of such candidates as nominated by others) such that, and shall take such other corporate actions as may be reasonably required to provide that, to the best knowledge of the Board, if such candidates are elected by the shareholders, at least a majority of the members of the Board shall be independent directors (determined in accordance with the listing standards of the market on which the common shares are listed and in compliance with the standards of director independence required by Rule 10A-3 under the Exchange Act).

Our Articles provide that, until such time as Asbestos Trust first ceases to be the beneficial owner of at least 20% of the outstanding common shares, the affirmative vote of Asbestos Trust would be required for the amendment of the provisions of the Articles described above.

Stockholder and Registration Rights Agreement with Asbestos Trust

We are a party to the Stockholder and Registration Rights Agreement, dated as of October 2, 2006, between us and Asbestos Trust. Certain of the provisions of our Articles and Bylaws regarding the rights, powers or privileges, or limitations on the rights, powers or privileges, of Asbestos Trust described above are also contained in this agreement, which also contains certain other provisions governing our relationship with Asbestos Trust.

Shareholders Agreement between Asbestos Trust and TPG

Pursuant to the Shareholders Agreement, dated as of August 28, 2009, as amended effective November 5, 2012, between TPG and Asbestos Trust, Asbestos Trust and TPG have agreed to vote their shares together in the nomination and election of directors to our Board, including the Chief Executive Officer and independent directors (as defined in the Articles), who constitute a majority of the Board in accordance with the Articles. Under the Shareholders Agreement, as amended, Asbestos Trust shall be entitled to designate two such directors. Under the Shareholders Agreement, as amended, TPG shall be entitled to designate one or two directors, as applicable, and participate in the selection of the independent directors, provided that TPG beneficially owns the respective minimum number of common shares required under the Shareholders Agreement, as amended. If TPG's ownership of common shares fails to satisfy any of the required minimum numbers, TPG would no longer be entitled to designate any directors or participate in the selection of the independent directors. We are not a party to the Shareholders Agreement, so the provisions of such Shareholders Agreement may be amended, modified or waived by Asbestos Trust and TPG without our consent.

As of the date of this prospectus supplement, TPG and Asbestos Trust, beneficially own each others shares, but TPG and Asbestos Trust directly hold approximately 6,127,890 and 25,362,610 common shares, respectively. Under the Shareholders Agreement, as amended, TPG is currently entitled to designate two members of our Board.

Table of Contents

Anti-Takeover Effects of Certain Provisions

The following is a summary of certain provisions of the PBCL and our Articles and Bylaws that may be deemed to have an anti-takeover effect and may delay, deter or prevent a tender offer or takeover attempt that a shareholder might consider to be in its best interest, including those attempts that might result in a premium over the market price for the shares.

Authorized but Unissued Shares

Our authorized but unissued common shares will be available for future issuance without approval by our shareholders. These additional shares may be utilized for a variety of corporate purposes, including future public offerings to raise additional capital, corporate acquisitions and employee benefit plans. The existence of our authorized but unissued common shares could render more difficult or discourage an attempt to obtain control over us by means of a proxy contest, tender offer, merger or otherwise.

Pennsylvania Anti-Takeover Statutes

We are organized under Pennsylvania law. In general, a corporation organized under Pennsylvania law is subject to various anti-takeover provisions of the PBCL unless the corporation's articles of incorporation or, in certain cases, bylaws explicitly provide that these provisions shall not apply to the corporation or another statutory exception applies. These anti-takeover provisions may delay or prevent a transaction that would cause a change in our control and they seek to discourage certain fundamental changes, control transactions, business combinations and control-share acquisitions as well as to protect registered corporations from being exposed to and paying greenmail.

Our Articles explicitly provide that Subchapters 25D, 25E, 25F, 25G and 25H of the PBCL, the anti-takeover statutes, will not apply to us, except as may be required by law.

Other Provisions of Our Articles and Bylaws

Pursuant to our Articles, special meetings of shareholders can be called only by shareholders holding at least 20% of voting shares. In addition, our Bylaws establish advance notice procedures with respect to shareholder proposals and the nomination of candidates for election of directors, other than nominations made by, or at the direction of, our Board or by Asbestos Trust. These requirements may impede shareholders' ability to call special meetings, bring matters before a meeting of shareholders or make nominations for directors at a meeting of shareholders.

Our Articles do not provide for cumulative voting in the election of directors. Because cumulative voting might otherwise permit an insurgent to gain Board representation even though it only owns a minority interest, the inability of our shareholders to vote cumulatively may impede or delay attempts to change of control of us.

Our Bylaws include provisions eliminating the personal liability of our directors and provisions indemnifying our directors and officers, in each case to the fullest extent permitted by Pennsylvania law. The limitation of liability and indemnification provisions in our Bylaws may discourage shareholders from bringing a lawsuit against directors for breach of their fiduciary duty. These provisions may also have the effect of reducing the likelihood of derivative litigation against directors and officers, even though a derivative action, if successful, might otherwise benefit us and our shareholders. In addition, the value of investments in our securities may be adversely affected to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

Our Articles may be amended, altered or repealed as provided by the PBCL with the exception that certain provisions regarding (i) the number, terms of office and removal of directors, (ii) special meetings of

Table of Contents

shareholders, (iii) shareholder action by written consent and (iv) Asbestos Trust (see Asbestos Trust above) may only be amended, modified or repealed by affirmative vote or written consent of the holders of at least 80% of our outstanding common shares.

Our Bylaws may be amended, modified or repealed by either a (i) a majority vote of holders of the outstanding shares entitled to vote on the matter or (ii) majority vote of the total number of directors on the Board, except as otherwise provided by the PBCL, the Articles or as is otherwise qualified in the Bylaws. Certain matters, such as changes in the number of directors, may require the prior written consent of Asbestos Trust. Until no shareholder beneficially owns at least 20% of our common shares, the affirmative vote of at least 80% of shareholders is required for changes to certain provisions of the Bylaws, including provisions concerning director independence, shareholder voting at special meetings and action by written consent, Board size and appointments to our nominating and governance committee.

Transfer Agent and Registrar

The transfer agent and registrar for our common shares is American Stock Transfer & Trust Company, LLC, 6201 15th Avenue, Brooklyn, New York 11219, telephone (718) 921-8261.

Table of Contents**PRICE RANGE OF OUR COMMON SHARES**

Our common shares are listed on the New York Stock Exchange under the symbol AWI. The following table sets forth on a per share basis the high and low intra-day sale prices on the New York Stock Exchange for our common shares during the periods indicated.

	Share Price Range	
	High	Low
2013		
Third Quarter (through September 9, 2013)	\$ 52.42	\$ 45.81
Second Quarter	\$ 55.94	\$ 46.22
First Quarter	\$ 57.46	\$ 49.84
2012		
Fourth Quarter	\$ 54.98	\$ 45.83
Third Quarter	\$ 50.00	\$ 38.08
Second Quarter	\$ 49.97	\$ 42.57
First Quarter	\$ 59.78	\$ 44.60
2011		
Fourth Quarter	\$ 45.96	\$ 32.82
Third Quarter	\$ 48.68	\$ 32.47
Second Quarter	\$ 48.37	\$ 42.50
First Quarter	\$ 47.53	\$ 39.41

Table of Contents

DIVIDEND POLICY

We currently intend to retain all available funds and any future earnings to fund the development and growth of our business, and we do not anticipate paying regular cash dividends in the foreseeable future. Dividends are paid as and when declared by our board of directors and in accordance with restrictions set forth in our debt agreements. In general, our debt agreements allow us to make restricted payments, which include dividends and stock repurchases, subject to certain limitations and other restrictions and provided that we are in compliance with the financial and other covenants of our debt agreements and meet certain liquidity requirements after giving effect to the restricted payment. On March 23, 2012, our board of directors declared a special cash dividend in the amount of \$8.55 per share, or \$508.2 million in the aggregate, of which \$502.9 million was paid on April 10, 2012 to the shareholders of record as of April 3, 2012. Payment of an additional \$1.5 million was made during the remainder of 2012. The unpaid portion of the dividend relates to unvested employee and director shares and as of June 30, 2013, is reflected in current liabilities (\$1.9 million) and other long term liabilities (\$1.5 million) and will be paid when the underlying employee shares vest and director shares are issued. On November 23, 2010, our board of directors declared a special cash dividend in the amount of \$13.74 per share, or approximately \$803.3 million in the aggregate, of which \$798.6 million was paid on December 10, 2010 to the shareholders of record as of December 3, 2010. The unpaid portion of the dividend relates to unvested employee and director shares and as of June 30, 2013 is reflected in current liabilities (\$0.5 million) and other long term liabilities (\$0.5 million) and will be paid when the underlying employee shares vest and director shares are issued.

Table of Contents**CAPITALIZATION**

The following table sets forth our cash and cash equivalents and our consolidated capitalization as of June 30, 2013:

on an actual basis; and

on an as adjusted basis giving effect to the share repurchase and related borrowing under our credit facility.

You should read this information together with Summary of Consolidated Financial Information and our historical consolidated financial statements and related notes thereto and Management's Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on Form 10-K for the year ended December 31, 2012, filed with the SEC on February 27, 2013 and our Quarterly Report on Form 10-Q for the quarter ended June 30, 2013, filed with the SEC on July 29, 2013, which are incorporated by reference in this prospectus supplement and the accompanying prospectus.

	As of June 30, 2013 (in millions, except par value)	
	Actual	As Adjusted (2)
Cash and cash equivalents	\$ 304.7	\$ 100.7
Short-term debt	\$	\$
Long-term debt, including current portions:		
Senior secured credit facility		
Term loan A	550.0	550.0
Term loan B	473.8	473.8
Revolver		40.0
Securitization		18.0
Tax exempt bonds due 2025-2041 (1)	45.0	45.0
Total long-term debt	1,068.8	1,126.8
Shareholders' Equity:		
Preferred Stock, no par value per share; 15,000,000 shares authorized; none issued or outstanding		
Common Stock, \$0.01 par value per share; 200,000,000 shares authorized; 59,181,876 shares issued and outstanding actual; 59,181,876 shares issued and 54,135,215 shares outstanding as adjusted	0.6	0.6
Capital in excess of par value	1,087.2	1,087.2
Retained earnings	146.0	146.0
Accumulated other comprehensive (loss)	(454.9)	(454.9)
Treasury Stock, at cost (Actual: no shares; As adjusted: 5,057,382 shares) (3)		(260.0)
Total shareholders' equity	778.9	518.9
Total capitalization:	\$ 1,847.7	\$ 1,645.7

(1) Includes \$10 million Variable Rate Demand Industrial Building Revenue Refunding Bonds due 2025 issued through Somerset, KY and \$35 million Industrial Development Revenue Bonds due 2041 issued through Jackson County, WV.

(2)

Edgar Filing: ARMSTRONG WORLD INDUSTRIES INC - Form 424B7

Reflects Treasury Stock purchase of approximately \$260.0 million using approximately \$202.0 million of balance sheet cash, \$40.0 million of Revolver borrowings and \$18.0 million of Securitization borrowings. Also, includes \$2.0 million of third party fees paid from cash and reflected in cost of Treasury Stock.

- (3) Reflects share repurchase of 5,057,382 shares at \$51.41 per share.

S-25

Table of Contents**SELLING SHAREHOLDERS**

The following table sets forth information with respect to the beneficial ownership of our common shares held as of August 31, 2013 by the selling shareholders, the number of shares being offered hereby and information with respect to shares to be beneficially owned by the selling shareholders after the completion of this offering. Subject to the completion of this offering, we have agreed to purchase from the underwriter 5,057,382 of the common shares that are subject to this offering at a price per share equal to the price paid by the underwriter to the selling shareholders in this offering. Percentage of beneficial ownership is based on 59,192,597 common shares outstanding as of August 31, 2013.

Beneficial ownership is determined in accordance with the rules and regulations of the SEC. These rules generally provide that a person is the beneficial owner of securities if such person has or shares the power to vote or direct the voting thereof, or to dispose or direct the disposition thereof or has the right to acquire such powers within 60 days.

Names and Addresses of the Selling Shareholders	Common Shares Beneficially Owned Prior to this Offering		Number of Shares Offered	Common Shares Beneficially Owned After This Offering(3)	
	Number	%		Number	%
The Armstrong World Industries, Inc. Asbestos Personal Injury Settlement Trust (1) c/o Kevin E. Irwin, Keating Muething & Klekamp PLL One East Fourth Street, Suite 1400 Cincinnati, OH 45202	31,490,500	53.2%	9,312,957	19,433,118	35.9%
Armor TPG Holdings, L.P. (2) c/o TPG Global, LLC 301 Commerce Street, Suite 3300 Fort Worth, TX 76102	31,490,500	53.2%	2,744,425	19,433,118	35.9%

- (1) Includes 25,362,610 common shares (the Trust Shares) directly held by Asbestos Trust as well as 6,127,890 common shares (the TPG Shares) and together with the Trust Shares, the Shares) directly held by TPG. Pursuant to a Purchase and Sale Agreement, dated as of August 10, 2009, among the Trust, TPG Partners V, L.P., a Delaware limited liability company (Partners V), and TPG Partners VI, L.P., a Delaware limited liability company (Partners VI), Asbestos Trust sold 7,000,000 common shares to TPG. As a result of the Shareholders Agreement, dated as of August 28, 2009, by and between Asbestos Trust and TPG (the Shareholders Agreement), Asbestos Trust and TPG may be deemed to be members of a group and to beneficially own the other member s common shares. Asbestos Trust may be deemed to have shared dispositive power over 31,490,500 common shares.
- (2) Includes 6,127,890 common shares directly held by TPG and 25,362,610 common shares directly held by Asbestos Trust. The general partner of TPG is TPG Advisors VI, Inc., a Delaware corporation (Advisors VI). Because of the relationship among TPG and Advisors VI, Advisors VI may be deemed to beneficially own the TPG Shares. Because of the Shareholders Agreement, Advisors VI may be deemed to beneficially own the Trust Shares. David Bonderman and James G. Coulter are officers and sole shareholders of Advisors VI and may therefore be deemed to beneficially own the Shares. Messrs. Bonderman and Coulter disclaim beneficial ownership of the Shares, except to the extent of their pecuniary interest therein. The address of Advisors VI and Messrs. Bonderman and Coulter is c/o TPG Global, LLC, 301 Commerce Street, Suite 3300, Fort Worth, Texas 76102.
- (3) Reflects share repurchase of 5,057,382 shares, which are to be held in treasury.

Table of Contents

UNITED STATES FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS

The following is a summary of United States federal income and estate tax consequences generally applicable to the ownership and disposition of our common shares by a non-U.S. holder (as defined below) as of the date of this prospectus supplement. Except where noted, this summary deals only with common shares that are held as a capital asset (generally, investment property) by a non-U.S. holder who purchases common shares in this offering. A non-U.S. holder means a beneficial owner of our common shares (other than a partnership or other entity or an arrangement treated as a partnership for United States federal income tax purposes) that is not for United States federal income tax purposes any of the following:

an individual citizen or resident of the United States including an alien individual who is a lawful permanent resident of the United States or meets the substantial presence test under Section 7701(b) of the Internal Revenue Code of 1986, as amended, or the Code;

a corporation (or any other entity treated as a corporation for United States federal income tax purposes) created or organized in or under the laws of the United States, any state thereof or the District of Columbia;

any other person that would otherwise be subject to U.S. federal income tax on a net income basis in respect of such common shares.

This discussion does not cover all aspects of U.S. federal income and estate tax consequences that may be relevant to the purchase, ownership or disposition of our common shares by prospective investors in light of their particular circumstances. In particular, this discussion does not address all of the tax considerations that may be relevant to persons in special tax situations, including persons that will hold shares of our common shares in connection with a U.S. trade or business or a U.S. permanent establishment, hold more than 5% of our common shares, are a controlled foreign corporation or a passive foreign investment company, certain U.S. expatriates, or are otherwise subject to special treatment under the Code.

This summary is based upon provisions of the Code, and regulations, rulings and judicial decisions as of the date hereof. Those authorities may be repealed, revoked, modified or subject to differing interpretations, potentially on a retroactive basis, so as to result in United States federal income and estate tax consequences different from those summarized below. This summary does not address all aspects of United States federal income and estate taxes and does not deal with non-U.S., state, local or other tax considerations that may be relevant to non-U.S. holders in light of their particular circumstances.

If a partnership (or other entity or an arrangement treated as a partnership for United States federal income tax purposes) holds our common shares, the tax treatment of a partner will generally depend upon the status of the partner, the activities of the partnership, and certain determinations made at the partner level. If you are a partner of a partnership holding our common shares, you should consult your tax advisors.

If you are considering the purchase of our common shares, we recommend that you consult your own tax advisors concerning the particular United States federal income and estate tax consequences to you of the ownership and disposition of the common shares, as well as the consequences to you arising under the laws of any other taxing jurisdiction.

Dividends

In the event that we make a distribution of cash or property with respect to our common shares, any such distributions generally will constitute dividends for U.S. federal income tax purposes to the extent of our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. If a distribution exceeds our current and accumulated earnings and profits, the excess will be treated as a tax-free

Table of Contents

return of the non-U.S. Holder's investment, up to such holder's tax basis in the common shares. Any remaining excess will be treated as capital gain, subject to the tax treatment described below in **Gain on Sale or Other Taxable Disposition of Common Shares**.

Dividends paid to you generally will be subject to withholding of U.S. federal tax at a 30% rate, or such lower rate as may be specified by an applicable tax treaty. Even if you are eligible for a lower treaty rate, U.S. federal tax will generally be required to be withheld at a 30% rate (rather than the lower treaty rate) on dividend payments to you, unless:

you have furnished to the applicable U.S. withholding agent a valid Internal Revenue Service, or IRS, Form W-8BEN or other documentary evidence establishing your entitlement to the lower treaty rate with respect to such payments, and

in the case of dividends paid to a non-U.S. entity after June 30, 2014, you or the non-U.S. entity, if required, have provided the applicable U.S. withholding agent with certain information with respect to your or the entity's direct and indirect U.S. owners. If the common shares are held by or through a non-U.S. financial institution, such institution generally must also have entered into an agreement with the U.S. government to collect and provide to the U.S. tax authorities information about its accountholders (including certain investors in such institution or entity). An intergovernmental agreement between the United States and an applicable foreign country may modify the requirement described in this paragraph.

A non-U.S. holder of our common shares eligible for a reduced rate of withholding of U.S. federal tax pursuant to an income tax treaty may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS. Investors are encouraged to consult with their own tax advisors regarding the possible implications of these withholding requirements on their investment in our common shares.

Gain on Sale or Other Taxable Disposition of Common Shares

You generally will not be subject to U.S. federal income tax with respect to gain recognized on a sale, exchange or other taxable disposition of our common shares unless you are an individual who is present in the United States for 183 or more days in the taxable year of the sale, exchange or other taxable disposition and certain other requirements are met. If you are such an individual, you will generally be subject to a flat 30% tax on any gain derived from the sale, exchange or other taxable disposition that may be offset by certain U.S. source capital losses (even though you are not considered a resident of the United States).

In the case of the sale or disposition of common shares after December 31, 2016, you may be subject to a 30% withholding of U.S. federal income tax on the gross proceeds of the sale or disposition unless the requirements described in the last bullet point above under **Dividends** are satisfied. Investors are encouraged to consult with their own tax advisors regarding the possible implications of these withholding requirements on their investment in our common shares and the potential for a refund or credit in the case of any withholding tax.

Federal Estate Tax

Common shares held by an individual who is not a citizen of the United States or a resident of the United States (as specially defined for United States federal estate tax purposes) at the time of death will be included in such holder's gross estate for United States federal estate tax purposes, unless an applicable estate tax treaty provides otherwise.

Backup Withholding, Information Reporting and Other Reporting Requirements

We must report annually to the IRS and to each non-U.S. holder the amount of dividends paid to such holder and the tax withheld with respect to such dividends, regardless of whether withholding was required.

Table of Contents

Copies of the information returns reporting such dividends and withholding may also be made available to the tax authorities in the country in which the non-U.S. holder resides under the provisions of an applicable income tax treaty, exchange of information treaty or other agreement.

A non-U.S. holder will be subject to backup withholding for dividends paid to such holder unless such holder certifies under penalty of perjury that it is not a United States person as defined in the Code, and the payor does not have actual knowledge or reason to know that such holder is a United States person, or such holder otherwise establishes an exemption.

Information reporting and, depending on the circumstances, backup withholding will apply to the proceeds of a sale of our common shares within the United States or conducted through certain United States-related financial intermediaries, unless the non-U.S. holder certifies under penalty of perjury that it is not a United States person (and the payor does not have actual knowledge or reason to know that the beneficial owner is a United States person) or such the non-U.S. holder otherwise establishes an exemption.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a credit against a non-U.S. holder's United States federal income tax liability, and may entitle such non-U.S. holder to a refund, provided the required information is timely furnished to the IRS.

S-29

Table of Contents**UNDERWRITING**

Subject to the terms and conditions set forth in an underwriting agreement among us, the selling shareholders and Deutsche Bank Securities Inc., as the sole underwriter, each of the selling shareholders have agreed, severally and not jointly, to sell to the underwriter, and the underwriter has agreed to purchase from the selling shareholders, the number of common shares set forth on the cover page of this prospectus supplement.

Subject to the terms and conditions set forth in the underwriting agreement, the underwriter has agreed to purchase all of the shares sold under the underwriting agreement if any of these shares are purchased.

We and the selling shareholders have agreed to indemnify the underwriter against certain liabilities, including liabilities under the Securities Act of 1933, as amended, or Securities Act, or to contribute to payments the underwriter may be required to make in respect of those liabilities.

The underwriter is offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by its counsel, including the validity of the shares, and other conditions contained in the underwriting agreement, such as the receipt by the underwriter of officer's certificates and legal opinions. The underwriter reserves the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Commissions and Discounts

The underwriter has advised us and the selling shareholders that the underwriter proposes initially to offer the shares to the public at the public offering price set forth on the cover page of this prospectus supplement and to dealers at that price less a concession not in excess of \$0.15 per share. After the initial offering, the public offering price, concession or any other term of the offering may be changed.

Subject to the completion of this offering, we have agreed to purchase from the underwriter 5,057,382 of the common shares that are subject to this offering at a price per share equal to the price paid by the underwriter to the selling shareholders in this offering.

The following table shows the public offering price, underwriting discount and proceeds before expenses to the selling shareholders.

	Per Share	Total
Public offering price (1)	\$51.75	\$ 622,250,009
Underwriting discount (2)	\$00.34	\$2,380,000
Proceeds, before expenses, to the selling shareholders	\$51.41	\$ 619,870,009

- (1) The public offering price for the 7,000,000 shares sold to the public was \$51.75 per share. The price for the 5,057,382 shares being purchased by us was \$51.41 per share.
- (2) The underwriting discount for the 7,000,000 shares sold to the public was \$00.34 per share. No underwriting discount was paid in respect of the 5,057,382 shares being purchased by us.

The expenses of the offering are estimated at \$1,000,000 and are payable by us.

No Sales of Similar Securities

We, our executive officers and directors and the Selling Shareholders (collectively, the Lock-Up Parties) have agreed not to sell or transfer any common shares or any securities convertible into, exchangeable or exercisable for common shares (collectively, the Lock-Up Securities), or publicly announce an intention to effect any such transaction, for 45 days after the date of this prospectus supplement without the prior written

Table of Contents

consent of the underwriter. Specifically, the Lock-Up Parties have agreed, with certain limited exceptions, not to directly or indirectly:

offer, sell, contract to sell, pledge or otherwise transfer or dispose of any Lock-Up Securities,

enter into any transaction which is designed to, or might reasonably be expected to, result in the transfer or disposition (whether by actual transfer or disposition or effective economic transfer or disposition due to cash settlement or otherwise) by the Lock-Up Parties or any affiliate of the Lock-Up Parties or any person in privity with the Lock-Up Parties or any affiliate of the Lock-Up Parties of any Lock-Up Securities,

establish or increase a put equivalent position or liquidate or decrease a call equivalent position within the meaning of Section 16 of the Exchange Act in respect of any Lock-Up Securities, or

exercise any right with respect to the registration of, or file or cause to be filed any registration statement under the Securities Act, in connection with the registration of, any Lock-Up Securities.

The foregoing lock-up is subject to several exceptions, and the underwriter in its sole discretion may release any of the securities subject to the lock-up, at any time without notice.

New York Stock Exchange Listing

Our common shares are listed on the New York Stock Exchange under the symbol AWI.

Price Stabilization, Short Positions

Until the distribution of the shares is completed, SEC rules may limit underwriter and selling group members from bidding for and purchasing our common shares. However, the underwriter may engage in transactions that stabilize the price of the common shares, such as bids or purchases to peg, fix or maintain that price.

In connection with the offering, the underwriter may purchase and sell our common shares in the open market. These transactions may include short sales, purchases on the open market to cover positions created by short sales and stabilizing transactions. Short sales involve the sale by the underwriter of a greater number of shares than it is required to purchase in the offering, which are referred to as naked short sales. The underwriter must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriter is concerned that there may be downward pressure on the price of our common shares in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of common shares made by the underwriter in the open market prior to the completion of the offering.

Similar to other purchase transactions, the underwriter's purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common shares or preventing or retarding a decline in the market price of our common shares. As a result, the price of our common shares may be higher than the price that might otherwise exist in the open market. The underwriter may conduct these transactions on the New York Stock Exchange, in the over-the-counter market or otherwise.

Neither we nor the underwriter makes any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common shares. In addition, neither we nor the underwriter makes any representation that the underwriter will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Table of Contents

Electronic Distribution

In connection with the offering, the underwriter or securities dealers may distribute prospectuses by electronic means, such as e-mail.

Other Relationships

The underwriter and its affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us or our affiliates. It has received, or may in the future receive, customary fees and commissions for these transactions.

In addition, in the ordinary course of their business activities, the underwriter and its affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. The underwriter and its affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Notice to Prospective Investors in the European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive, each, a Relevant Member State, with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State, or the Relevant Implementation Date, no offer of shares may be made to the public in that Relevant Member State other than:

- A. to any legal entity which is a qualified investor as defined in the Prospectus Directive;
- B. to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending Directive, 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the representatives; or
- C. in any other circumstances falling within Article 3(2) of the Prospectus Directive,

provided that no such offer of shares shall require the company or the representatives to publish a prospectus pursuant to Article 3 of the Prospectus Directive or supplement a prospectus pursuant to Article 16 of the Prospectus Directive.

Each person in a Relevant Member State who initially acquires any shares or to whom any offer is made will be deemed to have represented, acknowledged and agreed that (A) it is a qualified investor within the meaning of the law in that Relevant Member State implementing Article 2(1)(e) of the Prospectus Directive, and (B) in the case of any shares acquired by it as a financial intermediary, as that term is used in Article 3(2) of the Prospectus Directive, the shares acquired by it in the offering have not been acquired on behalf of, nor have they been acquired with a view to their offer or resale to, persons in any Relevant Member State other than qualified investors as defined in the Prospectus Directive, or in circumstances in which the prior consent of the representatives has been given to the offer or resale. In the case of any shares being offered to a financial intermediary as that term is used in Article 3(2) of the Prospectus Directive, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the shares acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer of any shares to the public other than their offer or resale in a Relevant Member State to qualified investors as so defined or in circumstances in which the prior consent of the representatives has been obtained to each such proposed offer or resale.

Table of Contents

The company, the underwriter and its affiliates will rely upon the truth and accuracy of the foregoing representation, acknowledgement and agreement.

This prospectus supplement and the accompanying prospectus have been prepared on the basis that any offer of shares in any Relevant Member State will be made pursuant to an exemption under the Prospectus Directive from the requirement to publish a prospectus for offers of shares. Accordingly any person making or intending to make an offer in that Relevant Member State of shares which are the subject of the offering contemplated in this prospectus supplement and the accompanying prospectus may only do so in circumstances in which no obligation arises for the company or the underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Directive in relation to such offer. Neither the company nor the underwriter has authorized, nor do they authorize, the making of any offer of shares in circumstances in which an obligation arises for the company or the underwriter to publish a prospectus for such offer.

For the purpose of the above provisions, the expression "an offer to the public" in relation to any shares in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the shares to be offered so as to enable an investor to decide to purchase or subscribe the shares, as the same may be varied in the Relevant Member State by any measure implementing the Prospectus Directive in the Relevant Member State and the expression "Prospectus Directive" means Directive 2003/71/EC (including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member States) and includes any relevant implementing measure in the Relevant Member State and the expression "2010 PD Amending Directive" means Directive 2010/73/EU.

Notice to Prospective Investors in the United Kingdom

In addition, in the United Kingdom, this document is being distributed only to, and is directed only at, and any offer subsequently made may only be directed at persons who are "qualified investors" (as defined in the Prospectus Directive) (i) who have professional experience in matters relating to investments falling within Article 19 (5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended, or the Order, and/or (ii) who are high net worth companies (or persons to whom it may otherwise be lawfully communicated) falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons"). This document must not be acted on or relied on in the United Kingdom by persons who are not relevant persons. In the United Kingdom, any investment or investment activity to which this document relates is only available to, and will be engaged in with, relevant persons.

Notice to Prospective Investors in Switzerland

The shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange, or SIX, or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, the company, the shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of shares will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA (FINMA), and the offer of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes, or CISA. The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of shares.

Table of Contents

Notice to Prospective Investors in the Dubai International Financial Centre

This prospectus supplement and the accompanying prospectus relate to an Exempt Offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority, or DFSA. This prospectus supplement and the accompanying prospectus are intended for distribution only to persons of a type specified in the Offered Securities Rules of the DFSA. They must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus supplement and the accompanying prospectus nor taken steps to verify the information set forth herein or therein and has no responsibility for the prospectus supplement and the accompanying prospectus. The shares to which this prospectus supplement and the accompanying prospectus relate may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the shares offered should conduct their own due diligence on the shares. If you do not understand the contents of this prospectus supplement and the accompanying prospectus you should consult an authorized financial advisor.

Notice to Prospective Investors in Australia

No placement document, prospectus, product disclosure statement or other disclosure document has been lodged with the Australian Securities and Investments Commission (ASIC), in relation to the offering. This prospectus does not constitute a prospectus, product disclosure statement or other disclosure document under the Corporations Act 2001 (the Corporations Act), and does not purport to include the information required for a prospectus, product disclosure statement or other disclosure document under the Corporations Act.

Any offer in Australia of the shares may only be made to persons (the Exempt Investors) who are sophisticated investors (within the meaning of section 708(8) of the Corporations Act), professional investors (within the meaning of section 708(11) of the Corporations Act) or otherwise pursuant to one or more exemptions contained in section 708 of the Corporations Act so that it is lawful to offer the shares without disclosure to investors under Chapter 6D of the Corporations Act.

The shares applied for by Exempt Investors in Australia must not be offered for sale in Australia in the period of 12 months after the date of allotment under the offering, except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under section 708 of the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Any person acquiring shares must observe such Australian on-sale restrictions.

This prospectus contains general information only and does not take account of the investment objectives, financial situation or particular needs of any particular person. It does not contain any securities recommendations or financial product advice. Before making an investment decision, investors need to consider whether the information in this prospectus is appropriate to their needs, objectives and circumstances, and, if necessary, seek expert advice on those matters.

Notice to Prospective Investors in Hong Kong

The common shares have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (a) to professional investors as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance; or (b) in other circumstances which do not result in the document being a prospectus as defined in the Companies Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance. No advertisement, invitation or document relating to the common shares has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to common shares which are or are intended to be disposed of only to persons outside Hong Kong or only to professional investors as defined in the Securities and Futures Ordinance and any rules made under that Ordinance.

Table of Contents

Notice to Prospective Investors in Japan

The common shares have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948, as amended) and, accordingly, will not be offered or sold, directly or indirectly, in Japan, or for the benefit of any Japanese Person or to others for re-offering or resale, directly or indirectly, in Japan or to any Japanese Person, except in compliance with all applicable laws, regulations and ministerial guidelines promulgated by relevant Japanese governmental or regulatory authorities in effect at the relevant time. For the purposes of this paragraph, Japanese Person shall mean any person resident in Japan, including any corporation or other entity organized under the laws of Japan.

Notice to Prospective Investors in Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of common shares may not be circulated or distributed, nor may the common shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the SFA), (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275, of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the common shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- (a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the

securities (as defined in Section 239(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the common shares pursuant to an offer made under Section 275 of the SFA except:

- (a) to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;
- (b) where no consideration is or will be given for the transfer;
- (c) where the transfer is by operation of law;
- (d) as specified in Section 276(7) of the SFA; or
- (e) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

Table of Contents

LEGAL MATTERS

Morgan, Lewis & Bockius LLP, Philadelphia, Pennsylvania is passing upon the validity of the common shares sold in this offering. Fried, Frank, Harris, Shriver & Jacobson LLP, New York, New York is passing upon certain legal matters in connection with this offering for the underwriter.

EXPERTS

The consolidated financial statements and the related financial statement schedule of Armstrong World Industries, Inc. and subsidiaries as of December 31, 2012 and 2011, and for each of the years in the three-year period ended December 31, 2012, and management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2012 have been incorporated by reference herein in reliance upon the reports of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

S-36

Table of Contents

PROSPECTUS

ARMSTRONG WORLD INDUSTRIES, INC.

COMMON SHARES

DEBT SECURITIES

We may offer and sell, from time to time in one or more offerings, any combination of common shares and debt securities on terms to be determined at the time of offering. The selling shareholders may also offer and sell, from time to time in one or more offerings, common shares. We will not receive any of the proceeds from the sale of our common shares by selling shareholders.

This prospectus describes some of the general terms that may apply to these securities. We will provide the specific prices and terms of these securities in one or more supplements to this prospectus at the time of the offering, including in the case of an offering by a selling shareholder the identity of, and specific information required with respect to, the selling shareholder. You should read this prospectus and the accompanying prospectus supplement carefully before you make your investment decision.

We or the selling shareholders may offer and sell these securities through underwriters, dealers or agents or directly to purchasers, on a continuous or delayed basis. The securities may also be resold by selling shareholders. The prospectus supplement for each offering will describe in detail the plan of distribution for that offering and will set forth the names of any underwriters, dealers or agents involved in the offering and any applicable fees, commissions or discount arrangements.

This prospectus may not be used to sell securities unless accompanied by a prospectus supplement.

Our common shares are listed on the New York Stock Exchange, or the NYSE, under the trading symbol AWI. Each prospectus supplement will indicate if the securities offered thereby will be listed on any securities exchange.

Investing in our securities involves risks. You should read the section entitled Risk Factors beginning on page 2 before buying our securities. This information may also be included in any supplement and/or may be incorporated by reference into this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus or the accompanying prospectus supplement is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is February 27, 2012.

Table of Contents

TABLE OF CONTENTS

	Page
<u>ABOUT THIS PROSPECTUS</u>	1
<u>ARMSTRONG WORLD INDUSTRIES, INC.</u>	1
<u>RISK FACTORS</u>	2
<u>USE OF PROCEEDS</u>	2
<u>RATIO OF EARNINGS TO FIXED CHARGES</u>	2
<u>DESCRIPTION OF CAPITAL STOCK</u>	2
<u>DESCRIPTION OF DEBT SECURITIES</u>	7
<u>SELLING SHAREHOLDERS</u>	8
<u>PLAN OF DISTRIBUTION</u>	9
<u>LEGAL MATTERS</u>	12
<u>EXPERTS</u>	13
<u>CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS</u>	13
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	14

Table of Contents

ABOUT THIS PROSPECTUS

This prospectus is part of an automatic shelf registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or the SEC, as a well known seasoned issuer as defined in Rule 405 under the Securities Act of 1933, as amended, or the Securities Act. Under the shelf process, we may sell any combination of the securities described in this prospectus in one or more offerings, and any selling shareholders named in a prospectus supplement may offer from time to time, in one or more offerings, our common shares.

This prospectus only provides you with a general description of the securities we and the selling shareholders may offer. Each time we or any selling shareholders sell securities described in the prospectus we will provide a supplement to this prospectus that will contain specific information about the terms of that offering, including the specific amounts, prices and terms of the securities offered, and in the case of a sale by a selling shareholder, the identity of, and specific information required with respect to, the selling shareholder. The prospectus supplement may also add, update or change information contained in this prospectus. Before making your investment decision, you should carefully read both this prospectus and any accompanying prospectus supplement, together with the additional information described under the heading "Where You Can Find More Information" on page 13 of this prospectus.

You should rely only on the information contained or incorporated by reference in this prospectus. Neither we nor the selling shareholders have authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. Neither we nor the selling shareholders are making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted.

Neither this prospectus nor any accompanying prospectus supplement contains all of the information included in the registration statement as permitted by the rules and regulations of the SEC. For further information, we refer you to the registration statement on Form S-3, including its exhibits. We are subject to the informational requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and, therefore, file reports and other information with the SEC. Statements contained in this prospectus and any accompanying prospectus supplement about the provisions or contents of any agreement or other document are only summaries. If SEC rules require that any agreement or document be filed as an exhibit to the registration statement, you should refer to that agreement or document for its complete contents. Such summaries are not complete and are subject to, and qualified in their entirety by reference to, the actual agreements or documents filed with the SEC.

You should not assume that the information in the registration statement, this prospectus or any prospectus supplement is accurate as of any date other than the date on the front of each document or that information incorporated by reference into this prospectus or any prospectus supplement is accurate as of any date other than the date of the document incorporated by reference. Our business, financial condition, results of operations and prospects may have changed since such date.

In this prospectus, unless otherwise specified or the context requires otherwise, we use the terms "Armstrong," "the Company," "we," "us" and "our" to refer to Armstrong World Industries, Inc. and its direct and indirect subsidiaries.

ARMSTRONG WORLD INDUSTRIES, INC.

We are a leading global producer of flooring products and ceiling systems for use primarily in the construction and renovation of residential, commercial and institutional buildings. We design, manufacture and sell flooring products (primarily resilient and wood) and ceiling systems (primarily mineral fiber, fiberglass and metal) around the world. We also design, manufacture and sell kitchen and bathroom cabinets in the

Table of Contents

United States. As of December 31, 2011 we operated 32 manufacturing plants in eight countries, including 20 plants located throughout the United States.

In December 2000, we filed a voluntary petition for relief under Chapter 11 of the U.S. Bankruptcy Code in order to use the court-supervised reorganization process to achieve a resolution of our asbestos liability. In October 2006, our plan of reorganization became effective and we emerged from Chapter 11. See Note 1 to the Consolidated Financial Statements included in our Annual Report on Form 10-K for the year ended December 31, 2011 for additional information about our Chapter 11 case.

The Armstrong World Industries, Inc. Asbestos Personal Injury Settlement Trust, or Asbestos PI Trust, and Armor TPG Holdings LLC, or TPG, together hold more than 60% of AWI's outstanding shares and have entered into a shareholders' agreement pursuant to which the Asbestos PI Trust and TPG have agreed to vote their shares together on certain matters.

Our principal executive offices are located at 2500 Columbia Avenue, P.O. Box 3001, Lancaster, Pennsylvania 17603, and our telephone number at that address is (717)-397-0611. Our website address is www.armstrong.com. The information on, or accessible through, our website is not part of this prospectus and should not be relied upon in connection with making any investment decision with respect to the securities offered by this prospectus.

RISK FACTORS

Before making an investment decision you should consider the specific risks and Risk Factors described in our Annual Report on Form 10-K for the year ended December 31, 2011, the risk factors described under the caption Risk Factors in any applicable prospectus supplement and any risk factors set forth in our other filings with the SEC that are incorporated by reference in this prospectus. See Where You Can Find More Information beginning on page 13 of this prospectus. Each of the risks described in these documents could materially and adversely affect our business, financial condition, results of operations and prospects and could result in a partial or complete loss of your investment. You should also review the cautionary statement in this prospectus under the caption Cautionary Statement Regarding Forward-Looking Statements.

USE OF PROCEEDS

Unless otherwise set forth in a prospectus supplement, we intend to use the net proceeds of any offering of securities for working capital and other general corporate purposes, which may include the repayment or refinancing of outstanding indebtedness and the financing of future acquisitions. We will have significant discretion in the use of any net proceeds. The net proceeds may be invested temporarily in interest-bearing accounts and short-term interest-bearing securities until they are used for their stated purpose. We will not receive any proceeds in the event that the securities are sold by a selling shareholder.

RATIO OF EARNINGS TO FIXED CHARGES

The ratio of earnings to fixed charges for the year ended December, 2011 and for the years 2007-2010 are included as an exhibit to Annual Report on Form 10-K for the year ended December, 2011 and are incorporated in this prospectus by reference.

DESCRIPTION OF CAPITAL STOCK

Set forth below is a summary description of the material terms of our capital stock. This description is qualified in its entirety by reference to our amended and restated articles of incorporation, or the Articles, and amended bylaws, or the Bylaws.

Table of Contents

Authorized Capital Stock

As of the date of this prospectus, our authorized capital stock under our Articles consists of:

200,000,000 common shares, par value \$0.01 per share; and

15,000,000 preferred shares, without par value.

Common Shares

As of the date of this prospectus, there were outstanding 58,609,140 common shares (excluding unvested restricted shares). All of the common shares outstanding on the date of this prospectus are validly issued, fully paid and non-assessable under the Business Corporation Law of 1988 of the Commonwealth of Pennsylvania, or the PBCL.

Holders of our common shares are entitled to one vote per share on all matters (including the election of directors) on which any of our shareholders are entitled to vote.

Subject to applicable law and any preference rights of holders of our preferred shares that we may issue in the future, the holders of our common shares are entitled to receive dividends, if any, when and as declared from time to time by our board of directors, or Board, out of assets legally available therefor. In the event of our liquidation, dissolution or winding up, the holders of our common shares are entitled to share ratably in all assets remaining after the payment of liabilities, subject to the rights of any holders of preferred shares that we might have issued prior to such distribution.

The holders of common shares have no preemptive, subscription, redemption or conversion rights. There are no sinking fund provisions applicable to our common shares. Any common shares sold under this prospectus will be fully paid and non-assessable upon issuance against full payment of the purchase price for such shares.

Our common shares are listed on the NYSE under the symbol AWI.

As of February 24, 2012, the closing price of our common shares on the NYSE was \$49.63 per share and we had approximately 412 holders of record of our common shares.

Preferred Shares

The Board has the authority, without action by our shareholders, to issue preferred shares and to fix voting powers for each class or series of preferred shares, and to provide that any class or series may be subject to redemption, entitled to receive dividends, entitled to rights upon dissolution or convertible into, or exchangeable for, shares of any other class or classes of capital stock. The rights with respect to a series or class of preferred shares may be greater than the rights attached to our common shares. It is not possible to state the actual effect of the issuance of any of our preferred shares on the rights of holders of our common shares until our Board determines the specific rights attached to such preferred shares. The effect of issuing preferred shares could include one or more of the following:

restricting dividends in respect of our common shares;

diluting the voting power of our common shares or providing that holders of preferred shares have the right to vote on matters as a class;

impairing the liquidation rights of our common shares; or

Edgar Filing: ARMSTRONG WORLD INDUSTRIES INC - Form 424B7

delaying or preventing a change of control of us.

Until Asbestos PI Trust no longer beneficially owns at least 20% of our outstanding common shares, we may not, without the prior written consent of Asbestos PI Trust, issue any preferred shares other than conventional preferred shares (as defined in the Articles).

Table of Contents

The Asbestos PI Trust

Our Articles provide that, commencing on the effective date (October 2, 2006) and continuing until the Asbestos PI Trust first ceases to be the beneficial owner (determined as provided in the Articles) of at least 20% of the outstanding common shares, the Asbestos PI Trust may not, subject to certain exceptions, transfer, in one transaction or a series of related transactions, any voting shares (i.e., any common shares or other shares entitled to cast more than 5% of the votes that may be cast in the election of directors) to any purchaser who, after giving effect to such transfer, would beneficially own either more than 35% of all voting shares or more than the number of voting shares owned by the Asbestos PI Trust. The Asbestos PI Trust may, however, effect such an otherwise prohibited transfer if:

- (1) the transfer is a public sale of shares made in compliance with certain provisions of the U.S. federal securities laws or in certain derivative transactions (as specified in the Articles);
- (2) all other holders of common shares have an opportunity to participate in the transaction or series of transactions on the same terms as the Asbestos PI Trust; or
- (3) in the case of a disposition of shares by the Asbestos PI Trust pursuant to a merger, consolidation, recapitalization or similar corporate transaction involving us, the material terms of the transaction have been approved by a majority of our directors who have no personal financial interest in the transaction or by such vote of the holders of the common shares as is required by law, our Articles or Bylaws (as then in effect) or any applicable listing standards, provided that, if such a transaction would result in the Asbestos PI Trust receiving a type or amount of payment per common share that is different from the payment to be received by other holders of common shares, the transaction must be approved by the affirmative vote of the holders of a majority of the common shares not beneficially owned by the Asbestos PI Trust (in addition to any other required shareholder approval).

Our Articles further provide that, until such time as the Asbestos PI Trust first ceases to be the beneficial owner of at least 20% of the outstanding voting shares, any transaction between us or any of our subsidiaries and the Asbestos PI Trust or any affiliate thereof (other than a dividend or other distribution made to all shareholders pro rata to their shareholdings and otherwise on terms which are the same with respect to the Asbestos PI Trust and all other participating shareholders), shall require review by and approval of a majority of our disinterested directors (as defined in our Articles), whether or not such review and approval is required by law or applicable listing standards, subject to any exception from such review and approval for transactions of an immaterial nature determined under such criteria as have been approved in advance by a majority of the disinterested directors; provided that, in the case of any transaction involving any change in our common shares, or any dividend, distribution or payment in respect of our outstanding common shares, that would result in the Asbestos PI Trust receiving any dividend, distribution, security, other property or payment that differs from that which would be received by all other holders of common shares, then the approval of the holders of a majority of the common shares not owned or controlled by the Asbestos PI Trust shall be required (in addition to approval by any shareholder vote otherwise required, but approval of a majority of the disinterested directors, as such, shall not be required).

Also until such time as the Asbestos PI Trust first ceases to be the beneficial owner of at least 20% of the outstanding common shares, we shall not without the prior, written consent of the Asbestos PI Trust:

- (a) authorize any new class of shares (i.e., other than the common shares or conventional preferred shares) (as defined in our Articles);
- (b) issue any preferred shares, other than conventional preferred shares (as defined in the Articles); or
- (c) adopt a shareholder rights plan that provides some, but not all, holders of common shares the right to acquire our securities, for the purpose of making more difficult or expensive an acquisition of additional voting shares by a person or group acquiring more than a specified level of ownership in us.

Table of Contents

Our Articles also provide that until the Asbestos PI Trust first ceases to be the beneficial owner of at least 20% of the outstanding voting shares, our Board is required to present to the shareholders nominations of candidates for election to the Board (or recommend the election of such candidates as nominated by others) such that, and shall take such other corporate actions as may be reasonably required to provide that, to the best knowledge of the Board, if such candidates are elected by the shareholders, at least a majority of the members of the Board shall be independent directors (determined in accordance with the listing standards of the market on which the common shares are listed and in compliance with the standards of director independence required by Rule 10A-3 under the Exchange Act).

The Articles and Bylaws also require, in effect, the affirmative vote of the Asbestos PI Trust for the amendment of the provisions of the Articles and Bylaws providing to the Asbestos PI Trust the rights described above.

Registration Rights and Shareholder Agreements

We are a party to the Stockholder and Registration Rights Agreement, dated as of October 2, 2006, between us and the Asbestos PI Trust. Certain of the provisions of our Articles and Bylaws regarding the rights, powers or privileges, or limitations on the rights, powers or privileges, of the Asbestos PI Trust described above are also contained in this agreement, which also contains certain other provisions governing our relationship with the Asbestos PI Trust. A copy of the Stockholder and Registration Rights Agreement is attached hereto as an Exhibit 4.2.

Pursuant to the Shareholders Agreement, dated as of August 28, 2009, between TPG and the Asbestos PI Trust, the Asbestos PI Trust and TPG have agreed to vote their shares together in the nomination and election of eleven directors to our Board. Of these eleven directors, one must be our Chief Executive Officer and six must be independent (as defined in our Articles). The Asbestos PI Trust shall be entitled to designate two such directors. TPG shall also be entitled to designate two directors and participate in the selection of the six independent directors, provided that TPG beneficially owns (i) at least 7,000,000 common shares. Should TPG's ownership of common shares amount to less than 7,000,000 but more than 3,500,000 common shares, TPG would then be entitled to designate only one director and the Board size would be required to be reduced by one. TPG would still be entitled to participate in the election of the six independent directors. Should TPG's ownership of common shares amount to less than 3,500,000 common shares, TPG would no longer be entitled to designate any directors or participate in the selection of the six independent directors. A copy of the Shareholders Agreement is attached hereto as an Exhibit 99.1.

As of the date of this prospectus, TPG and the Asbestos PI Trust, beneficially own approximately 7,001,892 and 29,981,480 common shares, respectively. As a result, TPG is currently entitled to designate two members of our Board.

Anti-Takeover Effects of Certain Provisions

The following is a summary of certain provisions of the PBCL and our Articles and Bylaws that may be deemed to have an anti-takeover effect and may delay, deter or prevent a tender offer or takeover attempt that a shareholder might consider to be in its best interest, including those attempts that might result in a premium over the market price for the shares.

Authorized but Unissued Shares

Our authorized but unissued common shares will be available for future issuance without approval by our shareholders. These additional shares may be utilized for a variety of corporate purposes, including future public offerings to raise additional capital, corporate acquisitions and employee benefit plans. The existence of our authorized but unissued common shares could render more difficult or discourage an attempt to obtain control over us by means of a proxy contest, tender offer, merger or otherwise.

Table of Contents

Pennsylvania Anti-Takeover Statutes

We are organized under Pennsylvania law. In general, a corporation organized under Pennsylvania law is subject to various anti-takeover provisions of the PBCL unless the corporation's articles of incorporation or, in certain cases, bylaws explicitly provide that these provisions shall not apply to the corporation or another statutory exception applies. These anti-takeover provisions may delay or prevent a transaction that would cause a change in our control and they seek to discourage certain fundamental changes, control transactions, business combinations and control-share acquisitions as well as to protect registered corporations from being exposed to and paying greenmail.

Our Articles explicitly provide that Subchapters 25D, 25E, 25F, 25G and 25H of the PBCL, the anti-takeover statutes, will not apply to us, except as may be required by law.

Other Provisions of Our Articles and Bylaws

Pursuant to our Articles, special meetings of shareholders can be called only by shareholders holding at least 20% of voting shares. In addition, our Bylaws establish advance notice procedures with respect to shareholder proposals and the nomination of candidates for election of directors, other than nominations made by, or at the direction of, our Board or by Asbestos PI Trust. These requirements may impede shareholders' ability to call special meetings, bring matters before a meeting of shareholders or make nominations for directors at a meeting of shareholders.

Our Articles do not provide for cumulative voting in the election of directors. Because cumulative voting might otherwise permit an insurgent to gain Board representation even though it only owns a minority interest, the inability of our shareholders to vote cumulatively may impede or delay attempts to change of control of us.

Our Bylaws include provisions eliminating the personal liability of our directors and provisions indemnifying our directors and officers, in each case to the fullest extent permitted by Pennsylvania law. The limitation of liability and indemnification provisions in our Bylaws may discourage shareholders from bringing a lawsuit against directors for breach of their fiduciary duty. These provisions may also have the effect of reducing the likelihood of derivative litigation against directors and officers, even though a derivative action, if successful, might otherwise benefit us and our shareholders. In addition, the value of investments in our securities may be adversely affected to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

Our Articles may be amended, altered or repealed as provided by the PBCL with the exception that certain provisions regarding (i) the number, terms of office and removal of directors, (ii) special meetings of shareholders, (iii) shareholder action by written consent and (iv) the Asbestos PI Trust (see *The Asbestos PI Trust* above) may only be amended, modified or repealed by affirmative vote or written consent of the holders of at least 80% of our outstanding common shares.

Our Bylaws may be amended, modified or repealed by either a (i) a majority vote of holders of the outstanding shares entitled to vote on the matter or (ii) majority vote of the total number of directors on the Board, except as otherwise provided by the PBCL, the Articles or as is otherwise qualified in the Bylaws. Certain matters, such as changes in the number of directors, may require the prior written consent of the Asbestos PI Trust. Until no shareholder beneficially owns at least 20% of our common shares, the affirmative vote of at least 80% of shareholders is required for changes to certain provisions of the Bylaws, including provisions concerning director independence, shareholder voting at special meetings and action by written consent, Board size and appointments to our nominating and governance committee.

Transfer Agent and Registrar

The transfer agent and registrar for our common shares is American Stock Transfer & Trust Company, LLC, 6201 15th Avenue, Brooklyn, New York 11219, telephone (718) 921-8261.

Table of Contents

DESCRIPTION OF DEBT SECURITIES

We may offer senior unsecured debt securities, which may be issued in one or more series.

The following description briefly sets forth certain general terms and provisions of the debt securities. The particular terms of the debt securities offered by any prospectus supplement and the extent, if any, to which these general provisions may apply to the debt securities will be described in the applicable prospectus supplement. The form of indenture is filed as an exhibit to the registration statement of which this prospectus forms a part. The terms of the debt securities will include those set forth in the indenture and any related securities documents and terms made a part of the indenture by the Trust Indenture Act of 1939. You should read the summary below, the applicable prospectus supplement and the provisions of the indenture and any related security documents, if any, in their entirety before investing in our debt securities. Capitalized terms used in the summary have the meanings specified in the indenture.

The prospectus supplement relating to any series of debt securities that we may offer will contain the specific terms of the debt securities. These terms may include the following:

the title of the series of debt securities;

the guarantors of each series, if any, and the extent of the guarantees (including provisions relating to seniority, subordination, security and release of the guarantees), if any;

the purchase price, denomination and any limit upon the aggregate principal amount of the series of debt securities;

the date or dates on which the principal of and premium, if any, on the series of debt securities is payable or the method of determination thereof;

the interest rate(s) at which the series of debt securities will bear interest or the method for determining the interest rate(s), the date or dates from which such interest will accrue or the method for determining that date or those dates, the dates on which interest will be payable and the regular record date, if any, for the interest payable on any interest payment date;

the place or places where the principal, any premium and any interest on the series of debt securities will be payable;

the place or places where the series of debt securities may be exchanged or transferred;

any redemption or early repayment provision;

our obligation or right to redeem, purchase or repay the series of debt securities under a sinking fund or analogous provision;

authorized denominations;

the currency, currencies or currency units in which the purchase price for, the principal of and any premium and any interest on, the series of debt securities will be payable;

the portion of the principal amount that will be payable upon declaration of acceleration in connection with the occurrence of an event of default or the method by which such portion will be determined;

any covenants applicable to the series of debt securities being issued, any defaults and events of default applicable to the series of debt securities being issued, and whether those additional or modified events of default or covenants are subject to covenant defeasance;

whether provisions relating to covenant defeasance and legal defeasance apply to that series of debt securities;

the identity of the registrar and any paying agent;

Table of Contents

whether such debt securities will be issued in whole or in part in the form of one or more global securities, the identity of the depositary for global securities, the form of any legends borne by the global securities and the terms upon which beneficial interests in a global security may be exchanged in whole or in part for beneficial interests in individual definitive securities;

whether the series of debt securities are convertible or exchangeable into other securities; and

additional terms not inconsistent with the provisions of the indenture.

General

We may sell the debt securities, including original issue discount securities, at par or at a substantial discount below their stated principal amount. Unless we inform you otherwise in a prospectus supplement, we may issue additional debt securities of a particular series without the consent of the holders of the debt securities of such series outstanding at the time of issuance. Any such additional debt securities, together with all other outstanding debt securities of that series, will constitute a single series of securities under the indenture. In addition, we will describe in the applicable prospectus supplement, material U.S. federal income tax considerations and any other special considerations for any debt securities we sell which are denominated in a currency or currency unit other than U.S. dollars.

Unless we inform you otherwise in a prospectus supplement, debt securities will be issued in fully registered form without coupons and in denominations of \$2,000 and multiples of \$1,000 in excess thereof. Subject to the limitations provided in the indenture and in the prospectus supplement, debt securities that are issued in registered form may be transferred or exchanged at the corporate office of the trustee or the principal corporate trust office of the trustee, without the payment of any service charge, other than any tax or other governmental charge payable in connection therewith.

Global Securities

Unless we inform you otherwise in the applicable prospectus supplement, the debt securities of a series may be issued in whole or in part in the form of one or more global securities that will be deposited with, or on behalf of, a depositary identified in the applicable prospectus supplement. Global securities will be issued in registered form and in either temporary or definitive form. Unless and until it is exchanged in whole or in part for the individual debt securities, a global security may not be transferred except as a whole by the depositary for such global security to a nominee of such depositary or by a nominee of such depositary to such depositary or another nominee of such depositary or by such depositary or any such nominee to a successor of such depositary or a nominee of such successor. The specific terms of the depositary arrangement with respect to any debt securities of a series and the rights of and limitations upon owners of beneficial interests in a global security will be described in the applicable prospectus supplement.

Governing Law

The indenture and the debt securities shall be construed in accordance with and governed by the laws of the State of New York.

SELLING SHAREHOLDERS

Selling shareholders are persons or entities that, directly or indirectly, have acquired or will from time to time acquire from us, common shares in various private transactions. Such selling shareholders may be parties to registration rights agreements with us, or we otherwise may have agreed or will agree to register their securities for resale. The initial purchasers of our securities, as well as their transferees, pledgees, donees or successors, all of whom we refer to as selling shareholders, may from time to time offer and sell the securities pursuant to this prospectus and any applicable prospectus supplement.

Table of Contents

The applicable prospectus supplement will set forth the name of each of the selling shareholders and the number of common shares beneficially owned by such selling shareholders prior to the offering covered by such prospectus supplement, the number of common shares owned by such selling shareholders that are offered for the selling shareholders' account in the prospectus supplement and the amount and (if more than one percent) the percentage of our common shares to be owned by such selling shareholder after completion of the offering. The applicable prospectus supplement will also disclose whether any of the selling shareholders has held any position or office with, has been employed by or otherwise has had a material relationship with us or any of our predecessors or affiliates during the three years prior to the date of the prospectus supplement.

PLAN OF DISTRIBUTION

We or any selling shareholders may sell the applicable securities offered by this prospectus from time to time in one or more transactions, including without limitation:

directly to one or more purchasers;

through agents;

to or through underwriters, brokers or dealers; or

through a combination of any of these methods.

A distribution of the securities offered by this prospectus may also be effected through the issuance of derivative securities, including without limitation, warrants, subscriptions, exchangeable securities, forward delivery contracts and the writing of options.

In addition, the manner in which we may sell some or all of the securities covered by this prospectus and the manner in which the selling shareholders may sell our common shares, include, without limitation:

block trades in which a broker-dealer will attempt to sell as agent but may position or resell a portion of the block, as principal, in order to facilitate the transaction;

purchases by a broker-dealer, as principal, and resale by the broker-dealer for its account;

ordinary brokerage transactions and transactions in which a broker solicits purchasers; or

privately negotiated transactions.

We or the selling shareholders may also enter into hedging transactions. For example, we or any selling shareholders may:

enter into transactions with a broker-dealer or affiliate thereof in connection with which such broker-dealer or affiliate will engage in short sales of our common shares pursuant to this prospectus, in which case such broker-dealer or affiliate may use common shares received from us or the selling shareholders, as applicable, to close out its short positions;

Edgar Filing: ARMSTRONG WORLD INDUSTRIES INC - Form 424B7

sell securities short and redeliver such shares to close out our or the selling shareholders' short positions;

enter into options or other types of transactions that require us or the selling shareholders, as applicable, to deliver common shares to a broker-dealer or an affiliate thereof, who will then resell or transfer the common shares under this prospectus; or

loan or pledge the common shares to a broker-dealer or an affiliate thereof, who may sell the loaned shares or, in an event of default in the case of a pledge, sell the pledged shares pursuant to this prospectus.

Table of Contents

In addition, we or any selling shareholders may enter into derivative or hedging transactions with third parties or sell securities not covered by this prospectus to third parties in privately negotiated transactions. In connection with such a transaction, the third parties may sell the applicable securities covered by and pursuant to this prospectus and an applicable prospectus or pricing supplement, as the case may be. If so, the third party may use securities borrowed from us or any selling shareholders or others to settle such sales and may use securities received from us or any selling shareholder to close out any related short positions. We or any selling shareholders may also loan or pledge securities covered by this prospectus and an applicable prospectus or pricing supplement, as the case may be, to third parties, who may sell the loaned securities or, in an event of default in the case of a pledge, sell the pledged securities pursuant to this prospectus and the applicable prospectus or pricing supplement, as the case may be.

A prospectus supplement with respect to each offering of securities will state the terms of the offering of the securities, including:

the name or names of any underwriters or agents and the amounts of securities underwritten or purchased by each of them, if any;

the public offering price or purchase price of the securities and the net proceeds to be received by us from the sale;

any delayed delivery arrangements;

any underwriting discounts or agency fees and other items constituting underwriters' or agents' compensation;

any discounts or concessions allowed or reallocated or paid to dealers; and

any securities exchange or markets on which the securities may be listed.

The offer and sale of the securities described in this prospectus by us, any selling shareholders, the underwriters or the third parties described above may be effected from time to time in one or more transactions, including privately negotiated transactions, either:

at a fixed price or prices, which may be changed;

at market prices prevailing at the time of sale;

at prices related to the prevailing market prices; or

at negotiated prices.

General

Any public offering price and any discounts, commissions, concessions or other items constituting compensation allowed or reallocated or paid to underwriters, dealers, agents or remarketing firms may be changed from time to time. Any selling shareholders, underwriters, dealers, agents and remarketing firms that participate in the distribution of the offered securities may be "underwriters" as defined in the Securities Act. Any discounts or commissions they receive from us or any selling shareholders and any profits they receive on the resale of the offered securities may be treated as underwriting discounts and commissions under the Securities Act. We or the selling shareholders will identify any underwriters, agents or dealers and describe their commissions, fees or discounts in the applicable prospectus or pricing supplement, as the case may be.

Underwriters and Agents

If underwriters are used in a sale, they will acquire the offered securities for their own account. The underwriters may resell the offered securities in one or more transactions, including negotiated transactions. These sales may be made at a fixed public offering price or prices, which may be changed, at market prices

Table of Contents

prevailing at the time of the sale, at prices related to such prevailing market price or at negotiated prices. We or the selling shareholders may offer the securities to the public through an underwriting syndicate or through a single underwriter. The underwriters in any particular offering will be mentioned in the applicable prospectus or pricing supplement, as the case may be.

Unless otherwise specified in connection with any particular offering of securities, the obligations of the underwriters to purchase the offered securities will be subject to certain conditions contained in an underwriting agreement that we or the selling shareholders will enter into with the underwriters at the time of the sale to them. The underwriters will be obligated to purchase all of the securities of the series offered if any of the securities are purchased, unless otherwise specified in connection with any particular offering of securities. Any initial offering price and any discounts or concessions allowed, reallocated or paid to dealers may be changed from time to time.

We or the selling shareholders may designate agents to sell the offered securities. Unless otherwise specified in connection with any particular offering of securities, the agents will agree to use their best efforts to solicit purchases for the period of their appointment. We or the selling shareholders may also sell the offered securities to one or more remarketing firms, acting as principals for their own accounts or as agents for us or any selling shareholders. These firms will remarket the offered securities upon purchasing them in accordance with a redemption or repayment pursuant to the terms of the offered securities. A prospectus or pricing supplement, as the case may be, will identify any such remarketing firm and describe the terms of its agreement, if any, with us or any selling shareholders, including its compensation.

In connection with offerings made through underwriters or agents, we or the selling shareholders may enter into agreements with such underwriters or agents pursuant to which we or the selling shareholders receive our outstanding securities in consideration for the securities being offered to the public for cash. In connection with these arrangements, the underwriters or agents may also sell securities covered by this prospectus to hedge their positions in these outstanding securities, including in short-sale transactions. If so, the underwriters or agents may use the securities received from us or any selling shareholders under these arrangements to close out any related open borrowings of securities.

Dealers

We or the selling shareholders may sell the offered securities to dealers as principals. We may negotiate and pay dealers' commissions, discounts or concessions for their services. The dealer may then resell such securities to the public either at varying prices to be determined by the dealer or at a fixed offering price agreed to with us or any selling shareholders at the time of resale. Dealers engaged by us or any selling shareholders may allow other dealers to participate in resales.

Direct Sales

We or the selling shareholders may choose to sell the offered securities directly. In this case, no underwriters or agents would be involved.

Institutional Purchasers

We or the selling shareholders may authorize agents, dealers or underwriters to solicit certain institutional investors to purchase offered securities on a delayed delivery basis pursuant to delayed delivery contracts providing for payment and delivery on a specified future date. The applicable prospectus or pricing supplement, as the case may be, will provide the details of any such arrangement, including the offering price and any commissions payable on the solicitations.

We or the selling shareholders will enter into such delayed contracts only with institutional purchasers of which we or the selling shareholders, as applicable, approve. These institutions may include commercial and savings banks, insurance companies, pension funds, investment companies and educational and charitable institutions.

Table of Contents

Indemnification; Other Relationships

We or the selling shareholders may have agreements with agents, underwriters, dealers and remarketing firms to indemnify them against certain civil liabilities, including liabilities under the Securities Act. Agents, underwriters, dealers and remarketing firms, and their affiliates, may engage in transactions with, or perform services for, us or any selling shareholders in the ordinary course of business. This includes commercial banking and investment banking transactions.

Market-Making, Stabilization and Other Transactions

There is currently no market for any of the offered securities. If the offered securities are traded after their initial issuance, they may trade at a discount from their initial offering price, depending upon prevailing interest rates, the market for similar securities and other factors. While it is possible that an underwriter could inform us that it intends to make a market in the offered securities, such underwriter would not be obligated to do so, and any such market-making could be discontinued at any time without notice. Therefore, no assurance can be given as to whether an active trading market will develop for the offered securities. We have no current plans for listing of debt securities on any securities exchange or quotation system; any such listing with respect to any debt securities will be described in the applicable prospectus or pricing supplement, as the case may be.

In connection with any offering of common shares, debt securities or securities that provide for the issuance of our common shares upon conversion, exchange or exercise, as the case may be, the underwriters may purchase and sell our common shares or our debt securities in the open market. These transactions may include short sales, syndicate covering transactions and stabilizing transactions. Short sales involve syndicate sales of common shares in excess of the number of shares to be purchased by the underwriters in the offering, which creates a syndicate short position. Covered short sales are sales of shares made in an amount up to the number of shares represented by the underwriters over-allotment option. In determining the source of shares to close out the covered syndicate short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the over-allotment option. Transactions to close out the covered syndicate short position involve either purchases of our common shares in the open market after the distribution has been completed or the exercise of the over-allotment option. The underwriters may also make naked short sales of shares in excess of the over-allotment option. The underwriters must close out any naked short position by purchasing our common shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that after pricing there may be downward pressure on the price of the shares in the open market that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of bids for or purchases of shares in the open market while the offering is in progress for the purpose of pegging, fixing or maintaining the price of the securities.

In connection with any offering, the underwriters may also engage in penalty bids. Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the securities originally sold by the syndicate member are purchased in a syndicate covering transaction to cover syndicate short positions. Stabilizing transactions, syndicate covering transactions and penalty bids may cause the price of the securities to be higher than it would be in the absence of the transactions. The underwriters may, if they commence these transactions, discontinue them at any time.

LEGAL MATTERS

Unless otherwise indicated in the applicable prospectus supplement, Cleary Gottlieb Steen & Hamilton LLP, New York, New York will provide an opinion regarding the validity of the debt securities under New York law, and Morgan, Lewis & Bockius LLP, Philadelphia, Pennsylvania will provide an opinion on the validity of the common shares. Any underwriters will also be advised about legal matters by their own counsel, which will be named in the applicable prospectus supplement. Cleary Gottlieb Steen & Hamilton LLP may rely upon an opinion of Morgan, Lewis & Bockius LLP as to certain matters governed by Pennsylvania law.

Table of Contents

EXPERTS

The consolidated financial statements and the related financial statement schedule of Armstrong World Industries, Inc. and subsidiaries as of December 31, 2011 and 2010, and for each of the years in the three-year period ended December 31, 2011, and management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2011 have been incorporated by reference herein in reliance upon the reports of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

Certain statements in this prospectus, any accompanying prospectus or pricing supplements and the documents incorporated therein 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 the U.S. residential market and its effect on our operating results, our expectations regarding our revenue opportunities from commercial renovation and new commercial construction inside the United States; our expectations regarding the payment of dividends; and our ability to increase revenues, earnings, EBITDA, (as such terms are defined by incorporation by reference herein). Words such as anticipate, expect, intend, plan, target, project, predict, believe, may, could, should, seek, estimate and similar expressions are intended to 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 operations and future prospects or which could cause actual results to differ materially from our expectations include, but are not limited to, global economic conditions including inflation, deflation, interest rates, availability of capital, consumer spending rates, energy availability and costs, and the effects of governmental initiatives to manage economic conditions; the risk that downturns in construction activity could adversely affect our business and results of operations; the risk that our indebtedness and degree of leverage could adversely affect our cash flow and our ability to operate our business, make payments on our indebtedness and declare dividends on our capital stock; the possibility that a number of covenants contained in the agreements that govern our indebtedness, impose significant operating and financial restrictions on our business, including restrictions on our ability to engage in acts that may be in our best long-term interests; the possibility that our indebtedness may increase our vulnerability to negative unforeseen events; the effect of our indebtedness on our liquidity; our ability to generate sufficient cash flow from operations to fund our needs and remain in compliance with our debt covenants, the risk that the availability of raw materials and energy decreases or that the costs of these materials increase and we are unable to pass along the increased costs; the possibility that competition can reduce demand for our products or cause us to lower prices; the risk that we may lose sales to one of our major customers; the risk that the costs of construction and operation of our new manufacturing plants may exceed our projections; changes in the political, regulatory and business environments of our international markets, including changes in trade regulations; the risk of changes in foreign currency exchange rates, interest rates and commodity prices; the risk that our intellectual property rights do not provide meaningful commercial protection for our products or brands; the risk that our restructuring actions and LEAN initiatives may not achieve expected savings in our operating costs or improve operating results; the risk that adverse judgments in regulatory actions, product claims and other litigation may not be covered by insurance in all circumstances; the risk that increased costs of labor, labor disputes, work stoppages or union organizing activity could delay or impede production and reduce sales and profits; the risk that our principal shareholders, could significantly influence our business and our affairs; the risk that our decision to outsource our information technology infrastructure and certain finance and accounting functions will make us more dependent upon third parties; the cost and difficulty of complying with increasing and evolving regulation; and other risks detailed

Table of Contents

from time to time in our filings with the SEC, press releases and other communications, including those set forth under "Risk Factors" included elsewhere in this prospectus and in the documents incorporated by reference in this prospectus. Such forward looking statements speak only as of the date of this prospectus. We expressly disclaim any obligation to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in our expectations with regard thereto or change in events, conditions or circumstances on which any statement is based.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC under the Exchange Act. You may inspect without charge any documents filed by us at the SEC's Public Reference Room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet site, www.sec.gov, that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including us.

The SEC allows us to incorporate by reference information into this prospectus and any accompanying prospectus supplements, which means that we can disclose important information to you by referring you to other documents filed separately with the SEC. The information incorporated by reference is considered part of this prospectus and information filed with the SEC subsequent to this prospectus and prior to the termination of the particular offering referred to in such prospectus supplement will automatically be deemed to update and supersede this information. We incorporate by reference into this prospectus and any accompanying prospectus supplement the documents listed below (excluding any portions of such documents that have been furnished but not filed for purposes of the Exchange Act):

Annual Report on Form 10-K for the year ended December 31, 2011, filed on February 27, 2012;

Portions of the Definitive Proxy Statement on Schedule 14A anticipated to be filed no later than April 30, 2012 that are incorporated by reference into Part III of our Annual Report on Form 10-K for the year ended December 31, 2011, filed with the SEC on February 27, 2012;

Quarterly Reports on Form 10-Q for the quarters ended March 31, June 30 and September 30, 2011 and filed on May 2, August 1 and October 31, 2011, respectively;

Current Reports on Form 8-K filed on January 31, 2012, January 4, 2012, October 31, 2011, August 1, 2011, June 30, 2011, June 13, 2011, May 2, 2011, April 27, 2011, April 8, 2011, April 7, 2011, March 11, 2011 and February 28, 2011; and

The description of our common shares set forth in our registration statement on Form 8-A filed on October 10, 2006, and any amendment or report filed for the purpose of updating such description.

We also incorporate by reference any future filings made by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act between the date of this prospectus and the date all of the securities offered hereby are sold or the offering is otherwise terminated, with the exception of any information furnished under Item 2.02 and Item 7.01 of Form 8-K (including related exhibits), which is not deemed filed and which is not incorporated by reference herein. Any such filings shall be deemed to be incorporated by reference and to be a part of this prospectus from the respective dates of filing of those documents.

We will provide without charge upon written or oral request to each person, including any beneficial owner, to whom a prospectus is delivered, a copy of any and all of the documents which are incorporated by reference in this prospectus but not delivered with this prospectus (other than exhibits unless such exhibits are specifically incorporated by reference in such documents).

Table of Contents

You may request a copy of these documents by writing or telephoning us at:

Armstrong World Industries, Inc.

2500 Columbia Avenue

P.O. Box 3001

Lancaster, Pennsylvania 17603

717-397-0611

Attn: Mark A. Hershey

Table of Contents

Armstrong World Industries, Inc.

Common Shares

PROSPECTUS SUPPLEMENT

Deutsche Bank Securities

September 10, 2013