

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

**FORM 6-K**

**Report of Foreign Private Issuer Pursuant to Rule 13a-16 or 15d-16  
under the Securities Exchange Act of 1934**

For the Month of November 2018

1-15240  
(Commission File Number)

**JAMES HARDIE INDUSTRIES plc**  
(Translation of registrant's name into English)

Europa House, Second Floor  
Harcourt Centre  
Harcourt Street, Dublin 2, Ireland  
(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F..X.... Form 40-F.....

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): Not Applicable

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): Not Applicable

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## Forward-Looking Statements

This Form 6-K contains forward-looking statements. James Hardie Industries plc (the “company”) may from time to time make forward-looking statements in its periodic reports filed with or furnished to the Securities and Exchange Commission, on Forms 20-F and 6-K, in its annual reports to shareholders, in offering circulars, invitation memoranda and prospectuses, in media releases and other written materials and in oral statements made by the company’s officers, directors or employees to analysts, institutional investors, existing and potential lenders, representatives of the media and others. Statements that are not historical facts are forward-looking statements and such forward-looking statements are statements made pursuant to the Safe Harbor Provisions of the Private Securities Litigation Reform Act of 1995.

Examples of forward-looking statements include:

- statements about the company’s future performance;
- projections of the company’s results of operations or financial condition;
- statements regarding the company’s plans, objectives or goals, including those relating to strategies, initiatives, competition, acquisitions, dispositions and/or its products;
- expectations concerning the costs associated with the suspension or closure of operations at any of the company’s plants and future plans with respect to any such plants;
- expectations concerning the costs associated with the significant capital expenditure projects at any of the company’s plants and future plans with respect to any such projects;
- expectations regarding the extension or renewal of the company’s credit facilities including changes to terms, covenants or ratios;
- expectations concerning dividend payments and share buy-backs;
- statements concerning the company’s corporate and tax domiciles and structures and potential changes to them, including potential tax charges;
- statements regarding tax liabilities and related audits, reviews and proceedings;
- statements regarding the possible consequences and/or potential outcome of legal proceedings brought against us and the potential liabilities, if any, associated with such proceedings;
- expectations about the timing and amount of contributions to AICF, a special purpose fund for the compensation of proven Australian asbestos-related personal injury and death claims;
- expectations concerning the adequacy of the company’s warranty provisions and estimates for future warranty-related costs;
- statements regarding the company’s ability to manage legal and regulatory matters (including but not limited to product liability, environmental, intellectual property and competition law matters) and to resolve any such pending legal and regulatory matters within current estimates and in anticipation of certain third-party recoveries; and
- statements about economic conditions, such as changes in the US economic or housing market conditions or changes in the market conditions in the Asia Pacific region, the levels of new home construction and home renovations, unemployment levels, changes in consumer income, changes or stability in housing values, the availability of mortgages and other financing, mortgage and other interest rates, housing affordability and supply, the levels of foreclosures and home resales, currency exchange rates, and builder and consumer confidence.

Words such as “believe,” “anticipate,” “plan,” “expect,” “intend,” “target,” “estimate,” “project,” “predict,” “forecast,” “guideline,” “aim,” “will,” “should,” “likely,” “continue,” “may,” “objective,” “outlook” and similar expressions are intended to identify forward-looking statements but are not the exclusive means of identifying such statements. Readers are cautioned not to place undue reliance on these forward-looking statements and all such forward-looking statements are qualified in their entirety by reference to the following cautionary statements.

Forward-looking statements are based on the Company’s current expectations, estimates and assumptions and because forward-looking statements address future results, events and conditions, they, by their very nature, involve inherent risks and uncertainties, many of which are unforeseeable and beyond the Company’s control. Such known and unknown risks, uncertainties and other factors may cause actual results, performance or other achievements to differ materially from the anticipated results, performance or achievements expressed, projected or implied by these forward-looking statements. These factors, some of which are discussed

under "Risk Factors" in Section 3 of the Form 20-F filed with the Securities and Exchange Commission on 22 May 2018, include, but are not limited to: all matters relating to or arising out of the prior manufacture of products that contained asbestos by current and former Company subsidiaries; required contributions to AICF, any shortfall in AICF and the effect of currency exchange rate movements on the amount recorded in the Company's financial statements as an asbestos liability; the continuation or termination of the governmental loan facility to AICF; compliance with and changes in tax laws and treatments; competition and product pricing in the markets in which the Company operates; the consequences of product failures or defects; exposure to environmental, asbestos, putative consumer class action or other legal proceedings; general economic and market conditions; the supply and cost of raw materials; possible increases in competition and the potential that competitors could copy the Company's products; reliance on a small number of customers; a customer's inability to pay; compliance with and changes in environmental and health and safety laws; risks of conducting business internationally; compliance with and changes in laws and regulations; currency exchange risks; dependence on customer preference and the concentration of the Company's customer base on large format retail customers, distributors and dealers; dependence on residential and commercial construction markets; the effect of adverse changes in climate or weather patterns; possible inability to renew credit facilities on terms favorable to the Company, or at all; acquisition or sale of businesses and business segments; changes in the Company's key management personnel; inherent limitations on internal controls; use of accounting estimates; the integration of Fermacell into our business; and all other risks identified in the Company's reports filed with Australian, Irish and US securities regulatory agencies and exchanges (as appropriate). The Company cautions you that the foregoing list of factors is not exhaustive and that other risks and uncertainties may cause actual results to differ materially from those referenced in the Company's forward-looking statements. Forward-looking statements speak only as of the date they are made and are statements of the Company's current expectations concerning future results, events and conditions. The Company assumes no obligation to update any forward-looking statements or information except as required by law.

## EXHIBIT INDEX

<b>Exhibit No.</b>	<b>Description</b>
<a href="#">99.1</a>	ASX Cover 30 September 2018
<a href="#">99.2</a>	Media Release Q2 FY19
<a href="#">99.3</a>	Management's Analysis of Results Q2 FY19
<a href="#">99.4</a>	Management Presentation Q2 FY19
<a href="#">99.5</a>	Condensed Consolidated Financial Statements Q2 FY19
<a href="#">99.6</a>	Half-Yearly Directors' Report
<a href="#">99.7</a>	Non-Executive Director Appointment
<a href="#">99.8</a>	Indenture, dated October 4, 2018, among James Hardie International Finance Designated Activity Company, the guarantors listed therein, Deutsche Bank Trust Company Americas, as Trustee and Registrar and Deutsche Bank AG, London Branch, as Paying Agent and Transfer Agent
99.9	Form of 3.625% Senior Notes due 2026 (incorporated by reference from Exhibit 99.8)
<a href="#">99.10</a>	Appendix 3X - Lloyd
<a href="#">99.11</a>	FY2019 First Half Dividend Notification

**SIGNATURES**

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

Date: 8 November 2018

**James Hardie Industries plc**  
By: /s/ Natasha Mercer

Natasha Mercer  
Company Secretary

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## Results for Announcement to the Market

### James Hardie Industries plc

ARBN 097 829 895

Half Year Ended 30 September 2018				
Key Information	Half Year Ended 30 September			
	FY 2019 US\$M	FY 2018 US\$M	Movement	
Net Sales From Ordinary Activities	1,295.6	1,033.5	Up	25%
Profit From Ordinary Activities After Tax Attributable to Shareholders	160.1	123.8	Up	29%
Net Profit Attributable to Shareholders	160.1	123.8	Up	29%
Net Tangible (Liabilities) Assets per Ordinary Share	US\$1.26	US\$(0.48)	Up	347%

#### Dividend Information

- A FY2019 first half ordinary dividend ("FY2019 first half dividend") of US10.0 cents per security is payable to CUFS holders on 22 February 2019.
- The record date to determine entitlements to the FY2019 first half dividend is 12 December 2018 (on the basis of proper instruments of transfer received by the Company's registrar, Computershare Investor Services Pty Ltd, Level 4, 60 Carrington Street, Sydney NSW 2000, Australia, by 5:00pm if securities are not CHESS approved, or security holding balances established by 5:00pm or such later time permitted by ASTC Operating Rules if securities are CHESS approved).
- The FY2019 first half dividend was, and future dividends will be unfranked for Australian taxation purposes.
- The company was required to deduct Irish DWT (currently 20% of the gross dividend amount) from this dividend and will be required to for future dividends, unless the beneficial owner has completed and returned a non-resident declaration form (DWT Form).
- The Australian currency equivalent amount of the FY2019 first half dividend paid to CUFS holders will be announced after the record date.
- No dividend reinvestment plan is currently in operation for the FY2019 first half dividend.
- The FY2018 second half ordinary dividend ("FY2018 second half dividend") of US30.0 cents per security was paid to CUFS holders on 3 August 2018.

#### Movements in Controlled Entities during the half year ended 30 September 2018

The following entities were created or acquired:

XI (DL) Holdings GmbH (3 April 2018), Fermacell GmbH (3 April 2018), SNC Parc 3 (3 April 2018), Fermacell B.V (3 April 2018), Fermacell Spain S.L.U. (3 April 2018), Fermacell Schraplau GmbH (3 April 2018), FELS Recycling GmbH (3 April 2018), Fermacell SAS (3 April 2018)

#### Review

The results and information included within this report have been prepared using US GAAP and have been subject to an independent review by external auditors.

#### Results for the 2nd Quarter and Half Year Ended 30 September 2018

##### Contents

1. Media Release
2. Management's Analysis of Results
3. Management Presentation
4. Condensed Consolidated Financial Statements
5. Half-Yearly Directors' Report

James Hardie Industries plc is incorporated under the laws of Ireland with its corporate seat in Dublin, Ireland. The liability of members is limited. The information contained in the above documents should be read in conjunction with the James Hardie 2018 Annual Report which can be found on the company website at [www.jameshardie.com](http://www.jameshardie.com).

## James Hardie Announces Adjusted Net Operating Profit of US\$80.9 million for Q2 Fiscal Year 2019 and US\$160.8 million for the half year ended 30 September 2018

### James Hardie announces a fiscal year 2019 first half dividend of US10.0 cents per security

James Hardie today announced results for the second quarter of fiscal year 2019 and the half year ended 30 September 2018:

- Group Adjusted net operating profit of US\$80.9 million for the quarter and US\$160.8 million for the half year, an increase of 7% and 17%, respectively, compared to the prior corresponding periods ("pcp");
- Group Adjusted EBIT of US\$106.9 million for the quarter and US\$214.0 million for the half year, an increase of 1% and 10%, respectively, compared to pcp;
- Group net sales of US\$644.6 million for the quarter and US\$1,295.6 million for the half year, an increase of 23% and 25%, respectively, compared to pcp;
- North America Fiber Cement Segment volume increased 5% for the quarter and half year, compared to pcp;
- North America Fiber Cement Segment EBIT margin excluding product line discontinuation expenses of 22.8% for the quarter and 23.8% for the half year;
- Asia Pacific Fiber Cement Segment EBIT margin of 23.4% for the quarter and 23.8% for the half year;
- Europe Building Products Segment Adjusted EBIT margin excluding costs associated with the acquisition of 9.7% for the quarter and 10.9% for the half year; and
- The Fermacell acquisition closed on 3 April 2018 and is included in the financial results for the first half of fiscal year 2019.

### CEO Commentary

James Hardie CEO Louis Gries said, "Our North America Fiber Cement Segment delivered good top line growth of 9% for the quarter and 10% for the half year, respectively. Volume increased 5% for both the quarter and half year, with our exteriors business continuing to grow modestly above our addressable market. Additionally, EBIT margin excluding product line discontinuation expenses of 22.8% and 23.8% for the quarter and half year, respectively, remain within our target range, but continue to be pressured by the increasing market costs of raw materials and freight. We anticipate this inflationary pressure against our key input costs will continue through the rest of the year. Furthermore, while primary demand growth improved in the second quarter, our focus remains on continuing to build momentum and delivering a higher primary demand growth in fiscal year 2020."

He continued, "Within our Asia Pacific Fiber Cement Segment, our Australian and Philippines businesses achieved volume growth above their underlying market growth. Furthermore, our Australian business delivered a 10% and 13% increase in EBIT for the quarter and half year, respectively, in local currency. However, the segment results in US dollars for the quarter and half year were unfavorably impacted by the change in foreign exchange rates."

He added, "We closed our acquisition of Fermacell on 3 April 2018, and the new Europe Building Products Segment delivered strong net sales compared to the prior corresponding periods, and an Adjusted EBIT margin excluding costs associated with the acquisition of 9.7% for the quarter and 10.9% for the half year. We are encouraged by the early indicators from our European business."

Mr. Gries continued, "After a detailed review of our product portfolio and business segments, we have determined the appropriate path forward is to discontinue the Windows business and the Multiple Contour Trim product line, and to simplify our core ColorPlus product offering. These decisions will help focus us on our core business, drive

higher return on capital and accelerate our focus on 35/90 in North America, €1 billion in 10 years in Europe and continued growth in Asia Pacific."

He concluded, "Our consolidated group results reflected overall steady financial performance in a difficult input cost and foreign exchange environment, and modest growth in our primary markets."

## Outlook

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We expect to see the modest growth in the US housing market to continue in fiscal year 2019. The single family new construction market and repair and remodel market are expected to grow similarly to the year-on-year growth experienced in fiscal year 2018. The Company expects new construction starts between approximately 1.2 and 1.3 million.

We expect our North America Fiber Cement segment EBIT margin to be in the top half of our stated target range of 20% to 25% for fiscal year 2019. This expectation is based upon the Company continuing to achieve strong operating performance in its plants, exchange rates at current levels and a continuation of current inflationary trends for input costs.

Net sales from the Australian business are expected to trend above the average growth of the domestic repair and remodel and single family detached housing markets in the eastern states of Australia.

## Full Year Earnings Guidance

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Management notes the range of analysts' forecasts for net operating profit excluding asbestos for the year ending 31 March 2019 is between US\$313 million and US\$335 million. Management expects full year Adjusted net operating profit to be between US\$280 million and US\$320 million assuming, among other things, housing conditions in the United States continue to improve in line with our assumed forecast of new construction starts, input prices remain consistent and an average USD/AUD exchange rate that is at, or near current levels for the remainder of the year. Management cautions that although US housing activity has been improving, market conditions remain somewhat uncertain and some input costs remain volatile.

The comparable Adjusted net operating profit for fiscal year 2018 was US\$291.3 million. The Company is unable to forecast the comparable US GAAP financial measure due to uncertainty regarding the impact of actuarial estimates on asbestos-related assets and liabilities in future periods.



## Further Information

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Readers are referred to the Company's Condensed Consolidated Financial Statements and Management's Analysis of Results for the second quarter and half year ended 30 September 2018 for additional information regarding the Company's results, including information regarding income taxes, the asbestos liability and contingent liabilities.

As of 30 June 2018, the Company changed its reportable operating segments. Previously, the Company reported on four operating segments: (i) North America Fiber Cement, (ii) International Fiber Cement, (iii) Other Businesses, and (iv) Research and Development. As of 30 June 2018, the Company began reporting on five operating segments: (i) North America Fiber Cement, (ii) Asia Pacific Fiber Cement, (iii) Europe Building Products, (iv) Other Businesses, and (v) Research and Development. The significant changes to how certain businesses are reported in the new segment structure are as follows: (i) our European Fiber Cement business as well as the newly acquired Fermacell business are now reported as the Europe Building Products segment, and the remaining businesses that were historically reported in the International Fiber Cement segment are now reported in the Asia Pacific Fiber Cement segment. The Company has revised its historical segment information at 31 March 2018 and for the second quarter and half year ended 30 September 2017 to be consistent with the new reportable segment structure. The change in reportable segments had no effect on the Company's financial position, results of operations or cash flows for the periods presented. Readers are referred to Note 15 of our condensed consolidated financial statements for further information on our segments.

## Use of Non-GAAP Financial Information; Australian Equivalent Terminology

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This Media Release includes financial measures that are not considered a measure of financial performance under generally accepted accounting principles in the United States (GAAP), such as Adjusted net operating profit and Adjusted EBIT. These non-GAAP financial measures should not be considered to be more meaningful than the equivalent GAAP measure. Management has included such measures to provide investors with an alternative method for assessing its operating results in a manner that is focused on the performance of its ongoing operations and excludes the impact of certain legacy items, such as asbestos adjustments. Additionally, management uses such non-GAAP financial measures for the same purposes. However, these non-GAAP financial measures are not prepared in accordance with US GAAP, may not be reported by all of the Company's competitors and may not be directly comparable to similarly titled measures of the Company's competitors due to potential differences in the exact method of calculation. For additional information regarding the non-GAAP financial measures presented in this Media Release, including a reconciliation of each non-GAAP financial measure to the equivalent US GAAP measure, see the section titled "Non-US GAAP Financial Measures" included in the Company's Management's Analysis of Results for the second quarter and half year ended 30 September 2018.

In addition, this Media Release includes financial measures and descriptions that are considered to not be in accordance with US GAAP, but which are consistent with financial measures reported by Australian companies, such as operating profit, EBIT and EBIT margin. Since the Company prepares its Consolidated Financial Statements in accordance with US GAAP, the Company provides investors with a table and definitions presenting cross-references between each US GAAP financial measure used in the Company's Consolidated Financial Statements to the equivalent non-US GAAP financial measure used in this press release. See the sections titled "Non-US GAAP Financial Measures" included in the Company's Management's Analysis of Results for the second quarter and half year ended 30 September 2018.

## Forward-Looking Statements

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This Media Release contains forward-looking statements and information that are necessarily subject to risks, uncertainties and assumptions. Many factors could cause the actual results, performance or achievements of James Hardie to be materially different from those expressed or implied in this release, including, among others, the risks and uncertainties set forth in Section 3 “Risk Factors” in James Hardie’s Annual Report on Form 20-F for the year ended 31 March 2018; changes in general economic, political, governmental and business conditions globally and in the countries in which James Hardie does business; changes in interest rates, changes in inflation rates; changes in exchange rates; the level of construction generally; changes in cement demand and prices; changes in raw material and energy prices; changes in business strategy and various other factors. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described herein. James Hardie assumes no obligation to update or correct the information contained in this Media Release except as required by law.

END

### Media/Analyst Enquiries:

Jason Miele  
Vice President, Investor and Media Relations

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**Email:** [media@jameshardie.com.au](mailto:media@jameshardie.com.au)

## Management's Analysis of Results

This Management's Analysis of Results forms part of a package of information about James Hardie Industries plc's results. It should be read in conjunction with the other parts of this package, including the Media Release, the Management Presentation and the condensed consolidated financial statements. Except as otherwise indicated in this Management's Analysis of Results, James Hardie Industries plc is referred to as "JHI plc." JHI plc, together with its direct and indirect wholly-owned subsidiaries, are collectively referred to as "James Hardie," the "Company," "we," "our," or "us." Definitions for certain capitalized terms used in this Management's Analysis of Results can be found in the section titled "Non-GAAP Financial Measures."

This Management's Analysis of Results includes financial measures that are not considered a measure of financial performance under generally accepted accounting principles in the United States ("US GAAP"). These non-GAAP financial measures should not be considered to be more meaningful than the equivalent US GAAP measures. Management has included such measures to provide investors with an alternative method for assessing its financial condition and operating results in a manner that is focused on the performance of its ongoing operations. These measures exclude the impact of certain legacy items, such as asbestos adjustments, or significant non-recurring items, such as debt restructuring and acquisition costs, asset impairments, as well as adjustments to tax expense. In addition, management provides an adjusted effective tax rate, which excludes the tax impact of the pre-tax special items (items listed above) and tax special items. Management believes that this non-GAAP tax measure provides an ongoing effective rate which investors may find useful for historical comparisons and for forecasting and is an alternative method of assessing the economic impact of taxes on the Company, as it more closely approximates payments to taxing authorities. Management uses such non-GAAP financial measures for the same purposes. These non-GAAP measures should not be considered as a substitute for, or superior to, measures of financial performance prepared in accordance with US GAAP. These non-GAAP financial measures are not prepared in accordance with US GAAP, may not be reported by all of the Company's competitors and may not be directly comparable to similarly titled measures of the Company's competitors due to potential differences in the exact method of calculation. For additional information regarding the non-GAAP financial measures presented in this Management's Analysis of Results, including a reconciliation of each non-GAAP financial measure to the equivalent US GAAP measure, see the section titled "Non-US GAAP Financial Measures." In addition, this Management's Analysis of Results includes financial measures and descriptions that are considered to not be in accordance with US GAAP, but which are consistent with financial measures reported by Australian companies. Since James Hardie prepares its condensed consolidated financial statements in accordance with US GAAP, the Company provides investors with a table and definitions presenting cross-references between each US GAAP financial measure used in the Company's condensed consolidated financial statements to the equivalent non-US GAAP financial measure used in this Management's Analysis of Results. See the section titled "Non-US GAAP Financial Measures."

These documents, along with an audio webcast of the Management Presentation on 8 November 2018, are available from the Investor Relations area of our website at <http://www.ir.jameshardie.com.au>

### NOTE TO THE READER:

As of 30 June 2018, the Company changed its reportable operating segments. Previously, the Company reported on four operating segments: (i) North America Fiber Cement, (ii) International Fiber Cement, (iii) Other Businesses, and (iv) Research and Development. As of 30 June 2018, the Company began reporting on five operating segments: (i) North America Fiber Cement, (ii) Asia Pacific Fiber Cement, (iii) Europe Building Products, (iv) Other Businesses, and (v) Research and Development. The significant changes to how certain businesses are reported in the new segment structure are as follows: (i) our European Fiber Cement business, as well as the newly acquired Fermacell business, are now reported as the Europe Building Products segment, and the remaining

businesses that were historically reported in the International Fiber Cement segment are now reported in the Asia Pacific Fiber Cement segment. The Company has revised its historical segment information for the second quarter and half year ended 30 September 2017 to be consistent with the new reportable segment structure. The change in reportable segments had no effect on the Company's financial position, results of operations or cash flows for the periods presented. Readers are referred to Note 15 of our condensed consolidated financial statements for further information on our segments.

**Media/Analyst Enquiries:**

Jason Miele  
Vice President, Investor and Media Relations

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**James Hardie Industries plc**  
**Results for the 2nd Quarter and Half Year Ended 30 September**

US\$ Millions	Three Months and Half Year Ended 30 September					
	Q2 FY19	Q2 FY18	Change %	HY FY19	HY FY18	Change %
<b>Net sales</b>	\$ 644.6	\$ 525.8	23	\$ 1,295.6	\$ 1,033.5	25
Cost of goods sold	(437.5)	(338.6)	(29)	(867.4)	(677.3)	(28)
<b>Gross profit</b>	<b>207.1</b>	<b>187.2</b>	<b>11</b>	<b>428.2</b>	<b>356.2</b>	<b>20</b>
Selling, general and administrative expenses	(98.9)	(75.0)	(32)	(203.8)	(148.5)	(37)
Research and development expenses	(9.8)	(8.5)	(15)	(19.2)	(16.1)	(19)
Asset impairments	(13.1)	—		(13.1)	—	
Asbestos adjustments	14.2	(6.6)		39.3	(10.5)	
<b>EBIT</b>	<b>99.5</b>	<b>97.1</b>	<b>2</b>	<b>231.4</b>	<b>181.1</b>	<b>28</b>
Net interest expense	(12.5)	(6.8)	(84)	(23.1)	(13.3)	(74)
Other income (expense)	0.1	—		0.3	(0.4)	
Operating profit before income taxes	87.1	90.3	(4)	208.6	167.4	25
Income tax expense	(17.6)	(23.9)	26	(48.5)	(43.6)	(11)
<b>Net operating profit</b>	<b>\$ 69.5</b>	<b>\$ 66.4</b>	<b>5</b>	<b>\$ 160.1</b>	<b>\$ 123.8</b>	<b>29</b>
Earnings per share - basic (US cents)	16	15		36	28	
Earnings per share - diluted (US cents)	16	15		36	28	
Volume (mmsf)	928.1	701.0	32	1,866.7	1,391.2	34

**Net sales** for the quarter and half year increased 23% and 25%, respectively, from the prior corresponding periods to US\$644.6 million and US\$1,295.6 million, respectively. For both periods, net sales were favorably impacted by the acquisition of Fermacell in Europe and higher net sales in the North America Fiber Cement and Asia Pacific Fiber Cement segments. The increase in North America Fiber Cement net sales is due to higher sales volumes and higher average net sales price, and the increase in Asia Pacific Fiber Cement net sales is driven by higher sales volumes.

**Gross profit** of US\$207.1 million for the quarter and US\$428.2 million for the half year increased 11% and 20%, respectively, when compared to the prior corresponding periods. Gross profit margin of 32.1% for the quarter and 33.1% for the half year decreased 3.5 percentage points and 1.4 percentage points, respectively, when compared with the prior corresponding periods.

**Selling, general and administrative ("SG&A") expenses** for the quarter and half year increased 32% and 37%, respectively, when compared to the prior corresponding periods. The increase is primarily driven by the SG&A costs of the European Building Products segment, which are significantly higher when compared to the prior corresponding period due to the acquisition of Fermacell on 3 April 2018, as well as, higher labor and discretionary costs in the North America Fiber Cement segment.

**Asbestos adjustments** primarily reflects the non-cash foreign exchange re-measurement impact on asbestos related balance

sheet items, driven by the change in AUD/USD spot exchange rate.

**Asset Impairments** for the quarter and half year reflects a US\$10.1 million and a US\$3.0 million asset impairment charge, related to our decision to discontinue our Windows business and our Multiple Contour Trim ("MCT") product line, respectively.

**Other income (expense)** for the quarter and half year reflects the gains and losses on interest rate swaps.

**Income tax expense** for the quarter decreased compared to the prior corresponding period, primarily due to the decrease in the US corporate income tax rate.

Income tax for the half year increased compared to the prior corresponding period, primarily due to a change in the accounting treatment of intangible assets which did not apply in the prior corresponding period, partially offset by the decrease in US corporate income tax rate.

**Net operating profit** increased for the quarter, primarily driven by the favorable movement in asbestos adjustments and higher gross profit, partially offset by higher SG&A expenses and asset impairment charges. Net operating profit for the half year increased, primarily driven by the favorable underlying performance of the operating business units and the favorable movement in asbestos adjustments, partially offset by higher SG&A expenses and asset impairment charges.

North America Fiber Cement Segment

Operating results for the North America Fiber Cement segment were as follows:

US\$ Millions	Three Months and Half Year Ended 30 September					
	Q2 FY19	Q2 FY18	Change	HY FY19	HY FY18	Change
Volume (mmsf)	591.7	561.6	5%	1,182.7	1,123.1	5%
Average net sales price per unit (per msf)	US\$728	US\$702	4%	US\$726	US\$697	4%
Fiber cement net sales	435.6	398.1	9%	869.4	791.2	10%
Gross profit			5%			13%
Gross margin (%)			(1.5 pts)			1.1 pts
EBIT	94.1	97.4	(3%)	201.3	177.2	14%
EBIT margin (%)	21.6	24.5	(2.9 pts)	23.2	22.4	0.8 pts
EBIT excluding <sup>1</sup>	99.5	97.4	2%	206.7	177.2	17%
EBIT margin excluding <sup>1</sup> (%)	22.8	24.5	(1.7 pts)	23.8	22.4	1.4 pts

<sup>1</sup> Excludes product line discontinuation expenses of US\$5.4 million in the second quarter and half year FY19. These expenses include asset impairments of US\$3.0 million, and a one time charge of US\$2.4 million to cost of goods sold associated with our decision to discontinue our MCT product line, as well as certain excess and obsolete ColorPlus color palettes

Net sales for the quarter and half year were favorably impacted by higher sales volumes and a higher average net sales price compared to prior corresponding periods. The increase in volume includes growth in exteriors for the quarter and half year of 8% and 7%, respectively, compared to the prior corresponding periods, reflecting growth above its market index. This increase was partially offset by a decrease in interiors volume for the quarter and half year of 6% and 2%, respectively. The increase in average net sales price of 4% for the quarter and half year primarily reflects the annual change in our strategic pricing effective April 2018, as well as favorable product mix.

We note that there are a number of data sources that measure US housing market growth. At the time of filing our results for the quarter ended 30 September 2018, only US Census Bureau data was available. According to the US Census Bureau, single family housing starts for the quarter were 235,600, or 2% above the prior corresponding period, and for the half year ended 30 September 2018, single family housing starts were 492,900, or 5% above the prior corresponding period.

While we have provided US Census Bureau data above, we note that this data can be different from other indices we use to measure US housing market growth, namely the McGraw-Hill Construction Residential Starts Data (also known as Dodge), the National Association of Home Builders and Fannie Mae.

**Results Including Product Line Discontinuation Expenses**

The change in gross margin for the quarter can be attributed to the following components:

**For the Three Months Ended 30 September 2018:**

Higher average net sales price	2.5 pts
Higher start up costs	(0.4 pts)
Higher production costs	(3.6 pts)
Total percentage point change in gross margin	(1.5 pts)

**For the Half Year Ended 30 September 2018:**

Higher average net sales price	2.8 pts
Start up costs	— pts
Higher production costs	(1.7 pts)
Total percentage point change in gross margin	1.1 pts

We continue to experience significant inflationary pressure across our key input costs, including pulp, materials and labor. In addition, the freight market continues to be in very tight supply, and as a result, market rates for freight are exhibiting significant inflationary pressure. These costs will continue to compress North America Fiber Cement segment margins for the remainder of fiscal year 2019.

Gross margin for the quarter decreased 1.5 percentage points compared to the prior corresponding period, primarily driven by higher production costs and higher start up costs, partially offset by higher average net sales price. Higher production costs were primarily due to higher freight and raw material costs. In addition, gross margin decreased as a result of a one time charge of US\$2.4 million resulting from our decision to discontinue the MCT product line and certain excess and obsolete ColorPlus color palettes.

Gross margin for the half year increased 1.1 percentage points compared to the prior corresponding period. This increase was primarily driven by higher average net sales price, partially offset by higher production costs. Higher production costs were primarily due to higher raw material and freight costs. In addition, gross margin decreased as a result of the one time charge of US\$2.4 million as described above.

SG&A expenses for the quarter and half year was higher compared to the prior corresponding periods, driven primarily by higher labor related costs and higher discretionary spend. As a percentage of sales, SG&A expenses increased 0.7 percentage points for the quarter and was flat for the half year, when compared to the prior corresponding periods.

EBIT for the quarter decreased 3% compared to the prior corresponding period, primarily due to US\$5.4 million in product line discontinuation expenses. EBIT for the half year increased 14% compared to the prior corresponding period, primarily driven by a 13% increase in gross profit, partially offset by product line discontinuation expenses.

EBIT margin for the quarter decreased 2.9 percentage points to 21.6% when compared to the prior corresponding period, driven primarily by the decrease in gross margin, higher SG&A expenses and product line discontinuation expenses as described above. EBIT margin for the half year increased 0.8 percentage points to 23.2% when compared to the prior corresponding period, driven primarily by the increase in gross margin, partially offset by product line discontinuation expenses as described above.

**Results Excluding Product Line Discontinuation Expenses**

Gross margin for the quarter excluding product line discontinuation expenses decreased compared to the prior corresponding period, primarily driven by higher production costs and higher start up costs, partially offset by higher average net sales price. Higher production costs were primarily due to higher freight and raw material costs.

Gross margin for the half year excluding product line discontinuation expenses increased compared to the prior corresponding period, primarily driven by higher average net sales price, partially offset by higher production costs. Higher production costs were primarily due to higher raw material and freight costs.

SG&A expenses for the quarter and half year was higher compared to the prior corresponding periods, driven primarily by higher labor related costs and higher discretionary spend. As a percentage of sales, SG&A expenses

increased 0.7 percentage points for the quarter and was flat for the half year, when compared to the prior corresponding periods.

EBIT for the quarter and half year excluding product line discontinuation expenses increased by 2% and 17%, respectively, compared to the prior corresponding periods, driven by an increase in gross profit, partially offset by higher SG&A expenses.

EBIT margin for the quarter excluding product line discontinuation expenses decreased 1.7 percentage points to 22.8% when compared to the prior corresponding period, driven primarily by the decrease in gross margin and higher SG&A expenses. EBIT margin for the half year increased 1.4 percentage points to 23.8% when compared to the prior corresponding period, primarily driven by the increase in gross margin.

### Asia Pacific Fiber Cement Segment

The Asia Pacific Fiber Cement segment is comprised of the following businesses: (i) Australia Fiber Cement, (ii) New Zealand Fiber Cement, and (iii) Philippines Fiber Cement.

Operating results for the Asia Pacific Fiber Cement segment in US dollars were as follows:

US\$ Millions	Three Months and Half Year Ended 30 September					
	Q2 FY19	Q2 FY18	Change	HY FY19	HY FY18	Change
Volume (mmsf)	142.1	130.0	9%	280.1	250.1	12%
Average net sales price per unit (per msf)	US\$728	US\$768	(5%)	US\$740	US\$761	(3%)
Fiber cement net sales	117.3	113.4	3%	234.4	215.0	9%
Gross profit			(8%)			—%
Gross margin (%)			(4.3 pts)			(3.2 pts)
EBIT	27.5	30.5	(10%)	55.8	56.9	(2%)
EBIT margin (%)	23.4	26.9	(3.5 pts)	23.8	26.5	(2.7 pts)

The Asia Pacific Fiber Cement segment results in US dollars were unfavorably impacted for the quarter and half year by a 7% and 3% change in the average AUD/USD foreign exchange rate, respectively, when compared the prior corresponding periods. The impact of the unfavorable foreign exchange rate movements are detailed in the table below:

	Q2FY19			HY FY19		
	Results in AUD	Results in USD	Impact of FX	Results in AUD	Results in USD	Impact of FX
Average net sales price per unit (per msf)	+2%	-5%	-7%	+1%	-3%	-4%
Net Sales	+12%	+3%	-9%	+13%	+9%	-4%
Gross Profit	-1%	-8%	-7%	+3%	FLAT	-3%
EBIT	-3%	-10%	-7%	+2%	-2%	-4%

Volume for the quarter and half year increased 9% and 12%, respectively, compared to the prior corresponding periods, driven primarily by our Australian and Philippines businesses with volume growth above their underlying market growth. In Australia, volume growth was driven by market penetration and category share gains. In the Philippines, volume growth was a result of strategic distributor programs implemented in the region.



Fiber cement net sales in US dollars for the quarter and half year increased 3% and 9%, respectively, compared to the prior corresponding periods, primarily driven by higher volume, partially offset by a lower average net sales price in US dollars. The lower average net sales price for the quarter and half year was driven by the unfavorable impact of foreign exchange rates on our US dollar reported sales, partially offset by an increase in price and favorable product mix. In Australian dollars, average net sales price for the quarter and half year increased 2% and 1%, respectively.

Gross profit in US dollars for the quarter decreased 8% compared to the prior corresponding periods. The decrease for the quarter was primarily driven by the impact of unfavorable foreign exchange rates, higher pulp and freight costs, as well as, a one time inventory adjustment in the Philippines.

Gross profit in US dollars for the half year was flat compared to the prior corresponding period. For the half year, gross profit was favorably impacted by higher net sales, offset by the impact of unfavorable foreign exchange rates, as well as, higher production costs driven by higher pulp and freight costs, unfavorable plant performance in New Zealand and a one time inventory adjustment in the Philippines. We continue to experience inflationary pressures on our key input and freight costs, which will continue to compress the segment's margins for the remainder of fiscal year 2019.

The change in gross margin for the quarter can be attributed to the following components:

**For the Three Months Ended 30 September 2018:**

Lower average net sales price	(3.0 pts)
Higher production costs	(1.3 pts)
Total percentage point change in gross margin	(4.3 pts)

**For the Half Year Ended 30 September 2018:**

Lower average net sales price	(1.5 pts)
Higher production costs	(1.7 pts)
Total percentage point change in gross margin	(3.2 pts)

EBIT for the quarter and half year decreased 10% and 2%, respectively, when compared to the prior corresponding periods to US\$ 27.5 million and US\$55.8 million. EBIT for the quarter decreased primarily due to the 8% decrease in gross profit described above. EBIT for the half year decreased primarily driven by the unfavorable impact of foreign exchange rates on gross profit. As a percentage of sales, SG&A expense decreased 1.0 percentage point for the quarter and 0.8 percentage point for the half year when compared to the prior corresponding period.

*Country Analysis*

Australia Fiber Cement

Net sales for the quarter and half year increased 6% and 12%, respectively, from the prior corresponding periods, primarily due to an increase in volume combined with the favorable impact of our price increase. The key driver of volume growth was market penetration, as we gained market share since the prior corresponding periods. The category share gains reflect the addition of several large customers, including one large customer in the first half of fiscal year 2018, and another large customer in the first quarter of fiscal year 2019. The volume growth during the quarter and half year was most prominent in the East Coast regions, and was realized in both the new construction and additions and alterations markets.

EBIT for the quarter and half year increased 1% and 9%, respectively, when compared to the prior corresponding periods. The increase in EBIT is primarily driven by higher net sales and favorable plant performance, partially offset by higher freight and pulp costs, as well as unfavorable foreign translation impact. Excluding the unfavorable foreign translation impact, EBIT increased 10% and 13% for the quarter and half year, respectively, in local currency.

According to Australian Bureau of Statistics data, approvals for detached houses, which are a key driver of the Australian business' sales volume, were 30,397 for the quarter, a decrease of 5%, when compared to the prior corresponding quarter. For the half year, approvals were 61,748, flat compared to the prior corresponding period. The other key driver of our sales volume is the alterations and additions market, which increased 5% when compared to the prior corresponding period. For the half year, the alterations and additions market increased 7% compared to the prior corresponding period.

#### New Zealand Fiber Cement

Net sales for the quarter and half year decreased 6% and increased 1%, respectively, from the prior corresponding periods. The decrease for the quarter was primarily driven by unfavorable foreign translation impact on our US dollar reported sales, partially offset by higher volume. For the half year, the increase in net sales was primarily driven by higher volume, partially offset by unfavorable foreign translation impact on our US dollar reported sales. Excluding the unfavorable foreign translation impact, net sales increased 3% and 6% for the quarter and half year, respectively, in local currency.

EBIT for the quarter and half year decreased compared to the prior corresponding periods, primarily driven by unfavorable plant performance and higher pulp costs.

#### Philippines Fiber Cement

Volume for the quarter and half year increased 11% and 12%, respectively, when compared to the prior corresponding periods, primarily as a result of market share gained during the current fiscal year. EBIT for the quarter and half year decreased compared to the prior corresponding periods, driven by a one time inventory adjustment of US\$1.6 million, as well as, higher pulp costs and start-up costs associated with our capacity expansion.

### Europe Building Products Segment

The Europe Building Products segment is comprised of: (i) Europe Fiber Cement; and (ii) Fiber Gypsum. Operating results for the Europe Building Products segment in US dollars were as follows:

US\$ Millions	Three Months and Half Year Ended 30 September					
	Q2 FY19	Q2 FY18	Change	HY FY19	HY FY18	Change
Volume (mmsf)	194.3	9.4		403.9	18.0	
Average net sales price per unit (per msf)	US\$354	US\$1,000	(65%)	US\$358	US\$978	(63%)
Fiber cement net sales	9.6	10.5	(9%)	18.8	19.7	(5%)
Fiber gypsum net sales <sup>1</sup>	77.8	—		164.0	—	
Net sales	87.4	10.5		182.8	19.7	
Gross profit <sup>2</sup>						
Gross margin (%) <sup>2</sup>						
EBIT <sup>3</sup>	3.4	0.3		(1.2)	0.1	
EBIT margin (%) <sup>3</sup>	3.9	2.9	1.0 pts	(0.7)	0.5	(1.2 pts)

<sup>1</sup> Also includes cement bonded board net sales

<sup>2</sup> The change in gross profit and gross margin is not presented due to the impact from the acquisition of Fermacell during the first quarter of fiscal year 2019

<sup>3</sup> Includes Fermacell transaction and integration costs of US\$5.1 million for the second quarter and US\$13.8 for the half year, as well as, a US\$7.3 million inventory fair value adjustment in the half year resulting from acquisition accounting adjustments in Q1FY19

Net sales for the quarter and half year increased compared to the prior corresponding period, driven by the increase in volume due to the Fermacell acquisition on 3 April 2018. Average net sales price in US dollars for the quarter and half year decreased compared to prior corresponding periods, primarily due to product mix, as most of the volume in the current period was from fiber gypsum products, which have lower average net sales price than fiber cement.

EBIT for the quarter increased US\$3.1 million, compared to the prior corresponding period, primarily due to additional gross profit provided by Fermacell, partially offset by US\$5.1 million of Fermacell integration related costs.

EBIT for the half year decreased US\$1.3 million to a loss of US\$ 1.2 million, compared to the prior corresponding period, primarily due to transaction and integration costs incurred by the Fermacell acquisition, as well as the one-time inventory fair value adjustment of US\$7.3 million. As part of the acquisition of Fermacell, we incurred US\$7.2 million of transaction costs and US\$6.6 million of integration related costs for the half year.

Below, we have included a Non-US GAAP measure, “Europe Building Products segment EBIT excluding costs associated with the acquisition”. Note that the below reconciling items have not been excluded from Adjusted EBIT and Adjusted net operating profit as presented on pages 13 and 15, respectively.

US\$ Millions	Three Months and Half Year Ended 30 September	
	Q2 FY19	HY FY19
Europe Building Products segment EBIT	3.4	(1.2)
Inventory fair value adjustment <sup>1</sup>	—	7.3
Transaction costs <sup>2</sup>	—	7.2
Integration costs <sup>3</sup>	5.1	6.6
Europe Building Products segment Adjusted EBIT excluding costs associated with the acquisition	8.5	19.9
Europe Building Products segment Adjusted EBIT margin excluding costs associated with the acquisition	9.7%	10.9%

<sup>1</sup> Under US GAAP, we are required to value the inventory acquired at fair market value, resulting in a preliminary total inventory fair value adjustment of US\$7.3 million. As this inventory was sold during the quarter, the entire adjustment was recognized into cost of goods sold

<sup>2</sup> Transaction costs include certain non-recurring fees incurred in conjunction with the acquisition of Fermacell

<sup>3</sup> Integration costs relate to professional, legal and other fees incurred in conjunction with the integration of Fermacell

Net sales in the Europe Building Products segment for the quarter and half year of US\$87.4 million and US\$182.8 million, respectively, increased 3% and 10%, respectively, from pro-forma net sales from the prior corresponding periods of US\$84.6 million and US\$166.1 million, respectively. In local currency, pro-forma net sales for the quarter and half year increased 4% and 6%, respectively, compared to the prior corresponding periods, primarily driven by higher average net sales price from strategic pricing.

### Other Businesses Segment

US\$ Millions	Three Months and Half Year Ended 30 September					
	Q2 FY19	Q2 FY18	Change	HY FY19	HY FY18	Change
Net sales	4.3	3.8	13%	9.0	7.6	18%
Gross profit			NM			NM
Gross profit margin (%)			NM			NM
EBIT	(17.6)	(2.1)		(19.1)	(3.9)	

EBIT loss for the quarter and half year increased to a loss of US\$ 17.6 million and US\$ 19.1 million, respectively, when compared to the prior corresponding periods. The increase in EBIT loss was primarily driven by our decision to exit the Windows business in the second quarter of fiscal year 2019, resulting in asset impairment charges totaling to US\$10.1 million, and adjustments related to inventory existence, inventory valuation write-downs and other liability write-offs of US\$5.7 million.

## Research and Development Segment

We record R&D expenses depending on whether they are core R&D projects that are designed to benefit all business units, which are recorded in our R&D segment, or commercialization projects for the benefit of a particular business unit, which are recorded in the individual business unit's segment results. The table below details the expenses of our R&D segment:

US\$ Millions	Three Months and Half Year Ended 30 September					
	Q2 FY19	Q2 FY18	Change %	HY FY19	HY FY18	Change %
Segment R&D expenses	\$ (6.8)	\$ (6.6)	(3)	\$ (13.7)	\$ (12.2)	(12)
Segment R&D SG&A expenses	(0.3)	(0.6)	50	(0.8)	(1.1)	27
Total R&D EBIT	\$ (7.1)	\$ (7.2)	1	\$ (14.5)	\$ (13.3)	(9)

The change in segment R&D expenses for the half year was due to an increase in core research and development projects being undertaken by the R&D team. The expense will fluctuate period to period depending on the nature and number of core R&D projects being worked on and the AUD/USD exchange rates during the period.

Other R&D expenses associated with commercialization projects in business units are recorded in the results of the respective business unit segment. Other R&D expenses associated with commercialization projects were US\$3.0 million for the quarter and US\$5.5 million for the half year, compared to US\$1.9 million and US\$3.9 million, respectively, for the prior corresponding periods.

## General Corporate

Results for General Corporate were as follows:

US\$ Millions	Three Months and Half Year Ended 30 September					
	Q2 FY19	Q2 FY18	Change %	HY FY19	HY FY18	Change %
General Corporate SG&A expenses	\$ (14.6)	\$ (13.1)	(11)	\$ (29.5)	\$ (22.9)	(29)
Fermacell acquisition costs <sup>1</sup>	—	(1.7)		—	(1.7)	
Asbestos:						
Asbestos adjustments	14.2	(6.6)		39.3	(10.5)	
AICF SG&A expenses <sup>2</sup>	(0.4)	(0.4)	—	(0.7)	(0.8)	13
General Corporate EBIT	\$ (0.8)	\$ (21.8)	96	\$ 9.1	\$ (35.9)	

<sup>1</sup>Relates to professional, legal and other fees incurred in FY2018 in conjunction with the acquisition of Fermacell

<sup>2</sup>Relates to non-claims related operating costs incurred by AICF, which we consolidate into our financial results due to our pecuniary and contractual interests in AICF.

For the quarter, General Corporate SG&A expenses increased US\$ 1.5 million, compared to the prior corresponding period, primarily due to higher stock compensation expenses.

For the half year, General Corporate SG&A expenses increased US\$ 6.6 million, compared to the prior corresponding period, primarily due to a non-recurring US\$3.4 million gain in the prior year from the sale of a storage building located near our Fontana facility and higher stock compensation expenses, as well as the settlement of a US\$1.6 million New Zealand weathertightness legal claim.

Asbestos adjustments for both periods primarily reflect the non-cash foreign exchange re-measurement impact on asbestos related balance sheet items, driven by the change in the AUD/USD spot exchange rate from the beginning balance sheet date to the ending balance sheet date, for each respective period.

The AUD/USD spot exchange rates are shown in the table below:

Q2 FY19		Q2 FY18		HY FY19		HY FY18	
30 June 2018	0.7387	30 June 2017	0.7697	31 March 2018	0.7681	31 March 2017	0.7644
30 September 2018	0.7212	30 September 2017	0.7840	30 September 2018	0.7212	30 September 2017	0.7840
Change (\$)	(0.0175)	Change (\$)	0.0143	Change (\$)	(0.0469)	Change (\$)	0.0196
Change (%)	(2)	Change (%)	2	Change (%)	(6)	Change (%)	3

Readers are referred to Note 9 of our 30 September 2018 condensed consolidated financial statements for further information on asbestos adjustments.

## EBIT

The table below summarizes EBIT results as discussed above:

US\$ Millions	Three Months and Half Year Ended 30 September					
	Q2 FY19	Q2 FY18	Change %	HY FY19	HY FY18	Change %
North America Fiber Cement <sup>1</sup>	\$ 99.5	\$ 97.4	2	\$ 206.7	\$ 177.2	17
Asia Pacific Fiber Cement	27.5	30.5	(10)	55.8	56.9	(2)
Europe Building Products	3.4	0.3		(1.2)	0.1	
Other Businesses <sup>2</sup>	(1.8)	(2.1)	14	(3.3)	(3.9)	15
Research and Development	(7.1)	(7.2)	1	(14.5)	(13.3)	(9)
General Corporate <sup>3</sup>	(14.6)	(13.1)	(11)	(29.5)	(22.9)	(29)
<b>Adjusted EBIT</b>	<b>106.9</b>	<b>105.8</b>	<b>1</b>	<b>214.0</b>	<b>194.1</b>	<b>10</b>
Asbestos:						
Asbestos adjustments	14.2	(6.6)		39.3	(10.5)	
AICF SG&A expenses	(0.4)	(0.4)	—	(0.7)	(0.8)	13
Fermacell acquisition costs <sup>4</sup>	—	(1.7)		—	(1.7)	
Product line discontinuation <sup>5</sup>	(21.2)	—		(21.2)	—	
<b>EBIT</b>	<b>\$ 99.5</b>	<b>\$ 97.1</b>	<b>2</b>	<b>\$ 231.4</b>	<b>\$ 181.1</b>	<b>28</b>

<sup>1</sup> Excludes product line discontinuation expenses of US\$5.4 million for the second quarter and half year fiscal year 2019, as a result of our decision to discontinue our MCT product line, as well as, certain excess and obsolete ColorPlus color palettes

<sup>2</sup> Excludes product line discontinuation expenses of US\$15.8 million for the second quarter and half year fiscal year 2019, as a result of our decision to discontinue our windows business

<sup>3</sup> Excludes Asbestos-related expenses and adjustments, and Fermacell acquisition costs

<sup>4</sup> Relates to professional, legal and other fees incurred in FY2018 in conjunction with the acquisition of Fermacell

<sup>5</sup> Product line discontinuation expenses include asset impairments and other charges as a result of our decision to discontinue product lines in both our North America Fiber Cement segment and our Other Businesses segment

## Net Interest Expense

US\$ Millions	Three Months and Half Year Ended 30 September					
	Q2 FY19	Q2 FY18	Change %	HY FY19	HY FY18	Change %
Gross interest expense	\$ (14.1)	\$ (8.6)	(64)	\$ (27.3)	\$ (16.2)	(69)
Capitalized interest	0.7	0.9	(22)	2.5	1.8	39
Interest income	0.4	0.3	33	0.9	0.4	
Net AICF interest income	0.5	0.6	(17)	0.8	0.7	14
<b>Net interest expense</b>	<b>\$ (12.5)</b>	<b>\$ (6.8)</b>	<b>(84)</b>	<b>\$ (23.1)</b>	<b>\$ (13.3)</b>	<b>(74)</b>

Gross interest expense for the quarter and half year increased US\$5.5 million and US\$11.1 million, respectively, when compared to the prior corresponding periods, primarily due to the higher outstanding balance of our senior unsecured notes, as well as, interest on our 364-day term loan facility.

### Other Income (Expense)

During the quarter, other income increased from nil in the prior corresponding period to a US\$ 0.1 million gain. For the half year, other income increased from US\$0.4 million loss in the prior corresponding period to a US\$0.3 million gain. The movement in other income is primarily driven by the valuation of our interest rate swaps.

### Income Tax

	Three Months and Half Year Ended 30 September			
	Q2 FY19	Q2 FY18	HY FY19	HY FY18
Income tax expense (US\$ Millions)	(17.6)	(23.9)	(48.5)	(43.6)
Effective tax rate (%)	20.2	26.5	23.3	26.0
Adjusted income tax expense <sup>1</sup> (US\$ Millions)	(13.1)	(22.8)	(29.6)	(42.4)
Adjusted effective tax rate <sup>1</sup> (%)	13.9	23.2	15.5	23.6

<sup>1</sup> Includes tax adjustments related to Asbestos, the amortization benefit of certain US intangible assets and other tax adjustments

Total income tax expense for the quarter decreased US\$6.3 million, when compared to the prior corresponding period. The decrease in income tax expense was primarily due to the decrease in the US corporate income tax rate.

Total income tax for the half year increased US\$ 4.9 million, when compared to the prior corresponding period. The increase was primarily due to the change in the accounting treatment of the amortization of intangible assets which did not apply in the prior corresponding period, partially offset by the decrease in US corporate income tax rate.

Total Adjusted income tax expense for the quarter and half year decreased US\$ 9.7 million and US\$12.8 million compared to the prior corresponding periods. The decrease in Adjusted income tax expense was driven by adjustments from the ongoing accounting treatment of amortization of intangible assets, and a reduction in the US statutory corporate tax rate.

Readers are referred to Note 12 of our 30 September 2018 condensed consolidated financial statements for further information related to income tax.



## Net Operating Profit

US\$ Millions	Three Months and Half Year Ended 30 September					
	Q2 FY19	Q2 FY18	Change %	HY FY19	HY FY18	Change %
<b>EBIT</b>	\$ 99.5	\$ 97.1	2	\$ 231.4	\$ 181.1	28
Net interest expense	(12.5)	(6.8)	(84)	(23.1)	(13.3)	(74)
Other income (expense)	0.1	—		0.3	(0.4)	
Income tax expense	(17.6)	(23.9)	26	(48.5)	(43.6)	(11)
<b>Net operating profit</b>	<b>69.5</b>	<b>66.4</b>	<b>5</b>	<b>160.1</b>	<b>123.8</b>	<b>29</b>
<b>Excluding:</b>						
Asbestos:						
Asbestos adjustments	(14.2)	6.6		(39.3)	10.5	
AICF SG&A expenses	0.4	0.4	—	0.7	0.8	(13)
AICF interest income, net	(0.5)	(0.6)	17	(0.8)	(0.7)	(14)
Farmacell acquisition costs <sup>1</sup>	—	1.7		—	1.7	
Product line discontinuation <sup>2</sup>	21.2	—		21.2	—	
Tax adjustments <sup>3</sup>	4.5	1.1		18.9	1.2	
<b>Adjusted net operating profit</b>	<b>80.9</b>	<b>75.6</b>	<b>7</b>	<b>160.8</b>	<b>137.3</b>	<b>17</b>
Adjusted diluted earnings per share (US cents)	18	17		36	31	

<sup>1</sup> Relates to professional, legal and other fees incurred in FY2018 in conjunction with the acquisition ofarmacell

<sup>2</sup> Product line discontinuation expenses include asset impairments and other charges as a result of our decision to discontinue product lines in both our North America Fiber Cement segment and our Other Businesses segment

<sup>3</sup> Includes tax adjustments related to Asbestos, the amortization benefit of certain US intangible assets and other tax adjustments

Adjusted net operating profit of US\$80.9 million for the quarter increased US\$5.3 million, or 7%, compared to the prior corresponding period, primarily due to lower Adjusted income tax expense of US\$9.7 million, partially offset by higher net interest expense of US\$5.7 million.

Adjusted net operating profit of US\$160.8 million for the half year increased US\$23.5 million, or 17%, compared to the prior corresponding period, primarily due to lower Adjusted income tax expense of US\$12.8 million and a US\$19.9 million increase in Adjusted EBIT. The increase in Adjusted EBIT was primarily driven by the underlying performance of the operating business units, as reflected by the US\$29.5 million increase in Adjusted EBIT in the North America Fiber Cement segment.

## Cash Flow

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### *Operating Activities*

Cash provided by operating activities increased US\$25.8 million to US\$184.1 million. The increase in cash provided by operating activities was primarily driven by a US\$30.3 million increase in net income adjusted for non-cash items and a favorable change in working capital of US\$33.7 million, partially offset by unfavorable changes in other operating assets and liabilities of US\$38.2 million. The favorable change in working capital was primarily due to rebuilding inventories in the North America Fiber Cement segment in the prior year, related to our then capacity constraint. The primary driver of the change in other operating assets and liabilities was an increase in payments of asbestos related claims of US\$11.8 million and the remaining is attributable to normal variations of net assets in the course of our business.

### *Investing Activities*

Cash used in investing activities increased US\$596.0 million to US\$751.9 million. The increase in cash used in investing activities was primarily due to the US\$558.7 million acquisition of Fermacell, as well as an increase in purchases in property, plant and equipment of US\$56.4 million. The increase in capital expenditures was primarily related to the greenfield expansion project in Tacoma, as well as current year expenditures at our greenfield expansion project in Prattville. This was partially offset by lower net purchases of AICF's short-term investments of US\$27.7 million.

### *Financing Activities*

Cash provided by financing activities increased US\$451.9 million to US\$383.9 million. The increase in cash provided by financing activities was driven by the proceeds from our 364-day term loan facility of US\$492.4 million, and AICF's repayment of its NSW loan in the prior year of US\$51.9 million, compared to nil in the current year. This increase was partially offset by lower net proceeds from credit facilities of US\$95.0 million in the current year.

## Capacity Expansion

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We continually evaluate the capacity required to service the housing markets in which we operate to ensure we meet demand and achieve our market penetration objectives. During the current quarter:

In North America we:

- Continued the start-up of our Tacoma greenfield expansion project;
- Continued the construction of a greenfield expansion project in Prattville, Alabama, which is expected to be commissioned in the first half of fiscal year 2020 at a previously announced estimated total cost of US\$240.0 million; and
- Today we announced an expansion project within our ColorPlus product line including equipment, land, and building at an estimated cost of US\$20.6 million. This includes projects at our Peru and Pulaski facilities, and a greenfield project in the Northeast United States.

In Asia Pacific we:

- Continued the start-up of the additional capacity expansion in the Philippines; and
- Continued the planning and design of a brownfield expansion project at our existing Carole Park facility in Australia with an estimated total cost of A\$28.5 million. The brownfield expansion project is expected to be commissioned by the first quarter of fiscal year 2021.

### Liquidity and Capital Allocation

Our cash position decreased from US\$281.6 million at 31 March 2018 to US\$ 108.9 million at 30 September 2018.

At 30 September 2018, we held three forms of debt: an unsecured revolving credit facility; a 364-day term loan facility; and senior unsecured notes. The effective weighted average interest rate on our total debt was 3.7% and 4.7% at 30 September 2018 and 31 March 2018, respectively. The weighted average term of all debt, including undrawn facilities, was 4.9 years and 6.9 years at 30 September 2018 and 31 March 2018, respectively. The reduction in the weighted average term of all debt was driven by the inclusion of the 364-day term loan facility.

At 30 September 2018, we had US\$500.0 million available in an unsecured revolving credit facility. At 30 September 2018, a total of US\$120.0 million was drawn from the unsecured revolving facility, compared to US\$100.0 million at 31 March 2018. The unsecured revolving credit facility's expiration date is December 2022 and the size of the facility may be increased by up to US\$250.0 million.

On 3 April 2018, we drew €400.0 million ( US\$492.4 million based on the exchange rate at 3 April 2018) from the 364-day term loan facility, and used these funds to complete the Fermacell acquisition.

Subsequent to quarter end, in October 2018, we completed the sale of €400.0 million aggregate principal amount of 3.625% senior unsecured notes due 2026. The proceeds from the offering were primarily used to fund the redemption of our 364-day term loan facility.

Based on our existing cash balances, together with anticipated operating cash flows arising during the year and unutilized committed credit facilities, we anticipate that we will have sufficient funds to meet our planned working capital and other expected cash requirements for the next twelve months.

We have historically met our working capital needs and capital expenditure requirements from a combination of cash flows from operations and credit facilities. Seasonal fluctuations in working capital generally have not had a significant impact on our short or long term liquidity.

### Capital Management and Dividends

The following table summarizes the dividends declared or paid in respect of fiscal years 2019, 2018 and 2017:

US\$ Millions	US Cents/ Security	US\$ Total Amount	Announcement Date	Record Date	Payment Date
FY 2018 second half dividend	0.30	128.5	22 May 2018	7 June 2018	3 August 2018
FY 2018 first half dividend	0.10	46.2	9 November 2017	13 December 2017	23 February 2018
FY 2017 second half dividend	0.28	131.3	18 May 2017	8 June 2017	4 August 2017
FY 2017 first half dividend	0.10	46.6	17 November 2016	21 December 2016	24 February 2017
FY 2016 second half dividend	0.29	130.2	19 May 2016	9 June 2016	5 August 2016

Subsequent to 30 September 2018, the Company announced an ordinary dividend of US10.0 cents per security, with a record date of 12 December 2018 and a payment date of 22 February 2019.

We periodically review our capital structure and capital allocation objectives and expect the following prioritization to remain:

- invest in R&D and capacity expansion to support organic growth;

- provide ordinary dividend payments within the payout ratio of 50-70% of net operating profit, excluding asbestos;
- maintain flexibility for accretive and strategic inorganic growth and/or flexibility to manage through market cycles; and
- consider other shareholder returns when appropriate.

### Other Asbestos Information

#### Claims Data

	Three Months and Half Year Ended 30 September					
	Q2 FY19	Q2 FY18	Change %	HY FY19	HY FY18	Change %
Claims received	156	156	—	281	302	7
Actuarial estimate for the period	144	144	—	288	288	—
Difference in claims received to actuarial estimate	(12)	(12)		7	(14)	
Average claim settlement <sup>1</sup> (A\$)	268,000	305,000	12	273,000	264,000	(3)
Actuarial estimate for the period <sup>2</sup>	290,000	283,000	(2)	290,000	283,000	(2)
Difference in claims paid to actuarial estimate	22,000	(22,000)		17,000	19,000	

<sup>1</sup> Average claim settlement is derived as the total amount paid divided by the number of non-nil claim settlements

<sup>2</sup> This actuarial estimate is a function of the assumed experience by disease type and the relative mix of settlements assumed by disease type. Any variances in the assumed mix of settlements by disease type will have an impact on the average claim settlement experience

For the period ended 30 September 2018, we noted the following related to asbestos-related claims:

- Claims received during the quarter were 8% above actuarial estimates and flat compared to the prior corresponding period;
- Claims received during the half year were 2% below actuarial estimates and 7% lower than the prior corresponding period;
- Mesothelioma claims reported for the half year were 3% below actuarial expectations and 9% lower than the prior corresponding period;
- The average claim settlement for the quarter and half year was 8% and 6% below actuarial expectations;
- Average claim settlement sizes for mesothelioma were slightly above actuarial expectations for most age groups, however, all other disease type were generally favorable compared to actuarial expectations for the half year; and
- The decrease in the average claim settlement for the half year versus actuarial estimates was largely attributable to lower average claim settlement for non-mesothelioma claims.

#### AICF Funding

On 2 July 2018, we made a payment of A\$138.4 million (US\$103.0 million) to AICF, representing 35% of our free cash flow for fiscal year 2018. Free cash flow, as defined in the AFFA, was equivalent to our fiscal year 2018 operating cash flow of US\$295.0 million less an adjustment of US\$0.8 million, resulting in free cash flow of US\$294.2 million for fiscal year 2018, as defined by the AFFA.

From the time AICF was established in February 2007 through 2 July 2018, we have contributed approximately A\$1,193.4 million to the fund.

Readers are referred to Note 9 of our 30 September 2018 condensed consolidated financial statements for further information on asbestos.

**Financial Measures - US GAAP equivalents**

This document contains financial statement line item descriptions that are considered to be non-US GAAP, but are consistent with those used by Australian companies. Because we prepare our condensed consolidated financial statements under US GAAP, the following table cross-references each non-US GAAP line item description, as used in Management's Analysis of Results and Media Release, to the equivalent US GAAP financial statement line item description used in our condensed consolidated financial statements:

<b>Management's Analysis of Results and Media Release</b>	<b>Consolidated Statements of Operations and Other Comprehensive Income (Loss) (US GAAP)</b>
Net sales	Net sales
Cost of goods sold	Cost of goods sold
Gross profit	Gross profit
Selling, general and administrative expenses	Selling, general and administrative expenses
Research and development expenses	Research and development expenses
Asbestos adjustments	Asbestos adjustments
EBIT*	Operating income (loss)
Net interest income (expense)*	Sum of interest expense and interest income
Other income (expense)	Other income (expense)
Operating profit (loss) before income taxes*	Income (loss) before income taxes
Income tax (expense) benefit	Income tax (expense) benefit
Net operating profit (loss)*	Net income (loss)

\*- Represents non-US GAAP descriptions used by Australian companies.

**EBIT** – Earnings before interest and tax.

**EBIT margin** – EBIT margin is defined as EBIT as a percentage of net sales.

**Sales Volume**

mmsf – million square feet, where a square foot is defined as a standard square foot of 5/16" thickness.

msf – thousand square feet, where a square foot is defined as a standard square foot of 5/16" thickness.

This Management's Analysis of Results includes certain financial information to supplement the Company's condensed consolidated financial statements which are prepared in accordance with accounting principles generally accepted in the United States ("US GAAP"). These financial measures are designed to provide investors with an alternative method for assessing our performance from on-going operations, capital efficiency and profit generation. Management uses these financial measure for the same purposes. These financial measures include:

- Adjusted EBIT;
- Europe Building Products Segment Adjusted EBIT excluding costs associated with the acquisition;
- Adjusted EBIT margin;
- Europe Building Products Segment Adjusted EBIT margin excluding costs associated with the acquisition;
- Adjusted net operating profit;
- Adjusted diluted earnings per share;
- Adjusted operating profit before income taxes;
- Adjusted income tax expense;
- Adjusted effective tax rate;
- Adjusted EBITDA;
- Adjusted EBITDA excluding Asbestos; and
- Adjusted selling, general and administrative expenses ("Adjusted SG&A").

These financial measures are or may be non-US GAAP financial measures as defined in the rules of the U.S. Securities and Exchange Commission and may exclude or include amounts that are included or excluded, as applicable, in the calculation of the most directly comparable financial measures calculated in accordance with US GAAP. These financial measures are not meant to be considered in isolation or as a substitute for comparable US GAAP financial measures and should be read only in conjunction with the Company's condensed consolidated financial statements prepared in accordance with US GAAP. In evaluating these financial measures, investors should note that other companies reporting or describing similarly titled financial measures may calculate them differently and investors should exercise caution in comparing the Company's financial measures to similar titled measures by other companies.

### Non-financial Terms

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**AFFA** – Amended and Restated Final Funding Agreement

**AICF** – Asbestos Injuries Compensation Fund Ltd

**Legacy New Zealand weathertightness claims ("New Zealand weathertightness")** – Expenses arising from defending and resolving claims in New Zealand that allege poor building design, inadequate certification of plans, inadequate construction review and compliance certification and deficient work by sub-contractors

**New South Wales loan facility ("NSW Loan")** – AICF has access to a secured loan facility made available by the New South Wales Government, which can be used by AICF to fund the payment of asbestos claims and certain operating and legal costs.

## Financial Measures - US GAAP equivalents

**Adjusted EBIT**

US\$ Millions	Three Months and Half Year Ended 30 September			
	Q2 FY19	Q2 FY18	HY FY19	HY FY18
<b>EBIT</b>	\$ 99.5	\$ 97.1	\$ 231.4	\$ 181.1
Asbestos:				
Asbestos adjustments	(14.2)	6.6	(39.3)	10.5
AICF SG&A expenses	0.4	0.4	0.7	0.8
Fermacell acquisition costs	—	1.7	—	1.7
Product line discontinuation	21.2	—	21.2	—
<b>Adjusted EBIT</b>	\$ 106.9	\$ 105.8	\$ 214.0	\$ 194.1
Net sales	644.6	525.8	1,295.6	1,033.5
<b>Adjusted EBIT margin</b>	<b>16.6%</b>	<b>20.1%</b>	<b>16.5%</b>	<b>18.8%</b>

**Europe Building Products Segment Adjusted EBIT excluding costs associated with the acquisition**

US\$ Millions	Three Months and Half Year Ended 30 September	
	Q2 FY19	HY FY19
<b>Europe Building Products Segment EBIT</b>	\$ 3.4	\$ (1.2)
Inventory fair value adjustment	—	7.3
Transaction costs	—	7.2
Integration costs	5.1	6.6
<b>Europe Building Products Segment Adjusted EBIT excluding costs associated with the acquisition</b>	<b>\$ 8.5</b>	<b>\$ 19.9</b>
European Building Products segment net sales	87.4	182.8
<b>Europe Building Products Segment Adjusted EBIT margin excluding costs associated with the acquisition</b>	<b>9.7%</b>	<b>10.9%</b>

**Adjusted Net Operating Profit**

US\$ Millions	Three Months and Half Year Ended 30 September			
	Q2 FY19	Q2 FY18	HY FY19	HY FY18
<b>Net operating profit</b>	\$ 69.5	\$ 66.4	\$ 160.1	\$ 123.8
Asbestos:				
Asbestos adjustments	(14.2)	6.6	(39.3)	10.5
AICF SG&A expenses	0.4	0.4	0.7	0.8
AICF interest income, net	(0.5)	(0.6)	(0.8)	(0.7)
Fermacell acquisition costs	—	1.7	—	1.7
Product line discontinuation	21.2	—	21.2	—
Tax adjustments <sup>1</sup>	4.5	1.1	18.9	1.2
<b>Adjusted net operating profit</b>	<b>\$ 80.9</b>	<b>\$ 75.6</b>	<b>\$ 160.8</b>	<b>\$ 137.3</b>

<sup>1</sup> Includes tax adjustments related to Asbestos, amortization benefit of certain US intangible assets and other tax adjustments.

**Adjusted diluted earnings per share**

	Three Months and Half Year Ended 30 September			
	Q2 FY19	Q2 FY18	HY FY19	HY FY18
<b>Adjusted net operating profit (US\$ millions)</b>	\$ 80.9	\$ 75.6	\$ 160.8	\$ 137.3
Weighted average common shares outstanding - Diluted (millions)	443.1	441.5	443.1	441.5
<b>Adjusted diluted earnings per share (US cents)</b>	18	17	36	31

**Adjusted effective tax rate**

US\$ Millions	Three Months and Half Year Ended 30 September			
	Q2 FY19	Q2 FY18	HY FY19	HY FY18
<b>Operating profit before income taxes</b>	\$ 87.1	\$ 90.3	\$ 208.6	\$ 167.4
Asbestos:				
Asbestos adjustments	(14.2)	6.6	(39.3)	10.5
AICF SG&A expenses	0.4	0.4	0.7	0.8
AICF interest income, net	(0.5)	(0.6)	(0.8)	(0.7)
Farmacell acquisition costs	—	1.7	—	1.7
Product line discontinuation	21.2	—	21.2	—
<b>Adjusted operating profit before income taxes</b>	\$ 94.0	\$ 98.4	\$ 190.4	\$ 179.7
Income tax expense	(17.6)	(23.9)	(48.5)	(43.6)
Tax adjustments <sup>1</sup>	4.5	1.1	18.9	1.2
<b>Adjusted income tax expense</b>	\$ (13.1)	\$ (22.8)	\$ (29.6)	\$ (42.4)
Effective tax rate	20.2%	26.5%	23.3%	26.0%
<b>Adjusted effective tax rate</b>	13.9%	23.2%	15.5%	23.6%

<sup>1</sup> Includes tax adjustments related to Asbestos, the amortization benefit of certain US intangible assets and other tax adjustments

**Adjusted EBITDA excluding Asbestos**

US\$ Millions	Three Months and Half Year Ended 30 September			
	Q2 FY19	Q2 FY18	HY FY19	HY FY18
<b>EBIT</b>	\$ 99.5	\$ 97.1	\$ 231.4	\$ 181.1
Depreciation and amortization	30.8	23.4	58.9	45.2
<b>Adjusted EBITDA</b>	\$ 130.3	\$ 120.5	\$ 290.3	\$ 226.3
Asbestos:				
Asbestos adjustments	(14.2)	6.6	(39.3)	10.5
AICF SG&A expenses	0.4	0.4	0.7	0.8
<b>Adjusted EBITDA excluding Asbestos</b>	\$ 116.5	\$ 127.5	\$ 251.7	\$ 237.6



**Adjusted selling, general and administrative expenses (“Adjusted SG&A”)**

US\$ Millions	Three Months and Half Year Ended 30 September			
	Q2 FY19	Q2 FY18	HY FY19	HY FY18
<b>SG&amp;A expenses</b>	<b>\$ 98.9</b>	<b>\$ 75.0</b>	<b>\$ 203.8</b>	<b>\$ 148.5</b>
Excluding:				
AICF SG&A expenses	(0.4)	(0.4)	(0.7)	(0.8)
Fermacell acquisition costs	—	(1.7)	—	(1.7)
<b>Adjusted SG&amp;A expenses</b>	<b>\$ 98.5</b>	<b>\$ 72.9</b>	<b>\$ 203.1</b>	<b>\$ 146.0</b>
Net sales	\$ 644.6	\$ 525.8	\$ 1,295.6	\$ 1,033.5
SG&A expenses as a percentage of net sales	15.3%	14.3%	15.7%	14.4%
<b>Adjusted SG&amp;A expenses as a percentage of net sales</b>	<b>15.3%</b>	<b>13.9%</b>	<b>15.7%</b>	<b>14.1%</b>

As set forth in Note 9 of the condensed consolidated financial statements, the net AFFA liability, while recurring, is based on periodic actuarial determinations, claims experience and currency fluctuations. The Company's management measures its financial position, operating performance and year-over-year changes in operating results with and without the effect of the net AFFA liability.

Further, the Company's annual payment to AICF is determined by reference to the free cash flow as defined in the AFFA, which was entered into on 21 November 2006. Free cash flow for these purposes is defined as the Company's operating cash flow, based on US GAAP at the time the AFFA was entered into. As there have been changes to US GAAP since the AFFA was entered into, the annual payment is no longer based upon the current US GAAP operating cash flow statement.

Accordingly, management believes that the following non-GAAP information is useful to it and investors in evaluating the company's financial position and ongoing operating financial performance, as well as estimating the annual payment due to AICF. The following non-GAAP tables should be read in conjunction with the condensed consolidated financial statements and related notes contained therein.

**James Hardie Industries plc**  
**Supplementary Financial Information**  
**30 September 2018**  
**(Unaudited)**

US\$ Millions	Total Excluding Asbestos Compensation	Asbestos Compensation	As Reported (US GAAP)
Restricted cash and cash equivalents – Asbestos	\$ —	\$ 19.7	\$ 19.7
Restricted short term investments – Asbestos	—	86.5	86.5
Insurance receivable – Asbestos <sup>1</sup>	—	52.4	52.4
Workers compensation asset – Asbestos <sup>1</sup>	—	29.0	29.0
Deferred income taxes – Asbestos	—	346.6	346.6
Asbestos liability <sup>1</sup>	—	1,083.9	1,083.9
Workers compensation liability – Asbestos <sup>1</sup>	—	29.0	29.0
Income taxes payable <sup>1</sup>	49.9	(12.9)	37.0
Asbestos adjustments	—	39.3	39.3
Selling, general and administrative expenses	(203.1)	(0.7)	(203.8)
Net interest (expense) income	(23.9)	0.8	(23.1)
Income tax expense	(48.4)	(0.1)	(48.5)

<sup>1</sup> The amounts shown on these lines are a summation of both the current and non-current portion of the respective asset or liability as presented on our condensed consolidated balance sheets.

**James Hardie Industries plc**  
**Supplementary Statements of Cash Flows**  
**For the six months ended**  
**30 September 2018**  
**(Unaudited)**

US\$ Millions	US GAAP as of 21 November 2006	Reconciling Items to Current US GAAP	As Reported
<b>Cash Flows From Operating Activities</b>			
Net income	\$ 160.1	\$ —	\$ 160.1
Adjustments to reconcile net income to net cash provided by operating activities			
Depreciation and amortization	58.9	—	58.9
Deferred income taxes	15.8	—	15.8
Stock-based compensation	6.2	—	6.2
Asbestos adjustments	(39.3)	—	(39.3)
Asset Impairments	13.1	—	13.1
Other, net	10.4	—	10.4
Changes in operating assets and liabilities:			
Restricted cash and cash equivalents - Asbestos	56.5	(56.5)	—
Payment to AICF	(103.0)	103.0	—
Accounts and other receivables	0.5	—	0.5
Inventories	2.7	—	2.7
Prepaid expenses and other assets	(0.6)	—	(0.6)
Insurance receivable - Asbestos	2.1	—	2.1
Accounts payable and accrued liabilities	18.8	—	18.8
Asbestos liability	(58.8)	58.8	—
Claims and handling costs paid - Asbestos	—	(58.8)	(58.8)
Income taxes payable	7.5	—	7.5
Other accrued liabilities	(13.3)	—	(13.3)
<b>Net cash provided by operating activities</b>	<b>\$ 137.6</b>	<b>\$ 46.5</b>	<b>\$ 184.1</b>
<b>Cash Flows From Investing Activities</b>			
Purchases of property, plant and equipment	\$ (140.0)	\$ —	\$ (140.0)
Capitalized interest	(2.5)	—	(2.5)
Acquisition of business, net of cash acquired	(558.7)	—	(558.7)
Purchase of restricted short-term investments - Asbestos	—	(89.1)	(89.1)
Proceeds from restricted short-term investments - Asbestos	—	38.4	38.4
<b>Net cash used in investing activities</b>	<b>\$ (701.2)</b>	<b>\$ (50.7)</b>	<b>\$ (751.9)</b>
<b>Cash Flows From Financing Activities</b>			
Proceeds from credit facilities	\$ 150.0	\$ —	\$ 150.0
Repayments of credit facilities	(130.0)	—	(130.0)
Proceeds from 364-day term loan facility	492.4	—	492.4
Dividends paid	(128.5)	—	(128.5)
<b>Net cash provided by financing activities</b>	<b>\$ 383.9</b>	<b>\$ —</b>	<b>\$ 383.9</b>
Net decrease in cash and cash equivalents, restricted cash and restricted cash - Asbestos	\$ (172.7)	\$ (6.8)	\$ (179.5)

This Management's Analysis of Results contains forward-looking statements. James Hardie Industries plc (the "Company") may from time to time make forward-looking statements in its periodic reports filed with or furnished to the Securities and Exchange Commission, on Forms 20-F and 6-K, in its annual reports to shareholders, in offering circulars, invitation memoranda and prospectuses, in media releases and other written materials and in oral statements made by the Company's officers, directors or employees to analysts, institutional investors, existing and potential lenders, representatives of the media and others. Statements that are not historical facts are forward-looking statements and such forward-looking statements are statements made pursuant to the Safe Harbor Provisions of the Private Securities Litigation Reform Act of 1995.

Examples of forward-looking statements include:

- statements about the Company's future performance;
- projections of the Company's results of operations or financial condition;
- statements regarding the Company's plans, objectives or goals, including those relating to strategies, initiatives, competition, acquisitions, dispositions and/or its products;
- expectations concerning the costs associated with the suspension or closure of operations at any of the Company's plants and future plans with respect to any such plants;
- expectations concerning the costs associated with the significant capital expenditure projects at any of the Company's plants and future plans with respect to any such projects;
- expectations regarding the extension or renewal of the Company's credit facilities including changes to terms, covenants or ratios;
- expectations concerning dividend payments and share buy-backs;
- statements concerning the Company's corporate and tax domiciles and structures and potential changes to them, including potential tax charges;
- statements regarding tax liabilities and related audits, reviews and proceedings;
- statements regarding the possible consequences and/or potential outcome of legal proceedings brought against us and the potential liabilities, if any, associated with such proceedings;
- expectations about the timing and amount of contributions to AICF, a special purpose fund for the compensation of proven Australian asbestos-related personal injury and death claims;
- expectations concerning the adequacy of the Company's warranty provisions and estimates for future warranty-related costs;
- statements regarding the Company's ability to manage legal and regulatory matters (including but not limited to product liability, environmental, intellectual property and competition law matters) and to resolve any such pending legal and regulatory matters within current estimates and in anticipation of certain third-party recoveries; and
- statements about economic conditions, such as changes in the US economic or housing market conditions or changes in the market conditions in the Asia Pacific region, the levels of new home construction and home renovations, unemployment levels, changes in consumer income, changes or stability in housing values, the availability of mortgages and other financing, mortgage and other interest rates, housing affordability and supply, the levels of foreclosures and home resales, currency exchange rates, and builder and consumer confidence.

Words such as "believe," "anticipate," "plan," "expect," "intend," "target," "estimate," "project," "predict," "forecast," "guideline," "aim," "will," "should," "likely," "continue," "may," "objective," "outlook" and similar expressions are intended to identify forward-looking statements but are not the exclusive means of identifying such statements. Readers are cautioned not to place undue reliance on these forward-looking statements and all such forward-looking statements are qualified in their entirety by reference to the following cautionary statements.

Forward-looking statements are based on the Company's current expectations, estimates and assumptions and because forward-looking statements address future results, events and conditions, they, by their very nature, involve inherent risks and uncertainties, many of which are unforeseeable and beyond the Company's control. Such known and unknown risks, uncertainties and other factors may cause actual results, performance or other achievements to differ materially from the anticipated results, performance or achievements expressed, projected or implied by these forward-looking statements. These factors, some of which are discussed under "Risk Factors" in Section 3 of the Form 20-F filed with the Securities and Exchange Commission on 22 May 2018, include, but are not limited to: all matters relating to or arising out of the prior manufacture of products that contained asbestos by current and former Company subsidiaries; required contributions to AICF, any shortfall in AICF and the effect of currency exchange rate movements on the amount recorded in the Company's financial statements as an asbestos liability; the continuation or termination of the governmental loan facility to AICF; compliance with and changes in tax laws and treatments; competition and product pricing in the markets in which the Company operates; the consequences of product failures or defects; exposure to environmental, asbestos, putative consumer class action or other legal proceedings; general economic and market conditions; the supply and cost of raw materials; possible increases in competition and the potential that competitors could copy the Company's products; reliance on a small number of customers; a customer's inability to pay; compliance with and changes in environmental and health and safety laws; risks of conducting business internationally; compliance with and changes in laws and regulations; currency exchange risks; dependence on customer preference and the concentration of the Company's customer base on large format retail customers, distributors and dealers; dependence on residential and commercial construction markets; the effect of adverse changes in climate or weather patterns; possible inability to renew credit facilities on terms favorable to the Company, or at all; acquisition or sale of businesses and business segments; changes in the Company's key management personnel; inherent limitations on internal controls; use of accounting estimates; the integration of Fermacell into our business; and all other risks identified in the Company's reports filed with Australian, Irish and US securities regulatory agencies and exchanges (as appropriate). The Company cautions you that the foregoing list of factors is not exhaustive and that other risks and uncertainties may cause actual results to differ materially from those referenced in the Company's forward-looking statements. Forward-looking statements speak only as of the date they are made and are statements of the Company's current expectations concerning future results, events and conditions. The Company assumes no obligation to update any forward-looking statements or information except as required by law.

Exhibit 99.4



# Q2 FY19 MANAGEMENT PRESENTATION

08 November 2018

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# CAUTIONARY NOTE ON FORWARD-LOOKING STATEMENTS

This Management Presentation contains forward-looking statements. James Hardie Industries plc (the "Company") may from time to time make forward-looking statements in its periodic reports filed with or furnished to the Securities and Exchange Commission, on Forms 20-F and 6-K, in its annual reports to shareholders, in offering circulars, invitation memoranda and prospectuses, in media releases and other written materials and in oral statements made by the Company's officers, directors or employees to analysts, institutional investors, existing and potential lenders, representatives of the media and others. Statements that are not historical facts are forward-looking statements and such forward-looking statements are statements made pursuant to the Safe Harbor Provisions of the Private Securities Litigation Reform Act of 1995.

Examples of forward-looking statements include:

- statements about the Company's future performance;
- projections of the Company's results of operations or financial condition;
- statements regarding the Company's plans, objectives or goals, including those relating to strategies, initiatives, competition, acquisitions, dispositions and/or its products;
- expectations concerning the costs associated with the suspension or closure of operations at any of the Company's plants and future plans with respect to any such plants;
- expectations concerning the costs associated with the significant capital expenditure projects at any of the Company's plants and future plans with respect to any such projects;
- expectations regarding the extension or renewal of the Company's credit facilities including changes to terms, covenants or ratios;
- expectations concerning dividend payments and share buy-backs;
- statements concerning the Company's corporate and tax domiciles and structures and potential changes to them, including potential tax charges;
- statements regarding tax liabilities and related audits, reviews and proceedings;
- statements regarding the possible consequences and/or potential outcome of legal proceedings brought against us and the potential liabilities, if any, associated with such proceedings;
- expectations about the timing and amount of contributions to Asbestos Injuries Compensation Fund (AICF), a special purpose fund for the compensation of proven Australian asbestos-related personal injury and death claims;
- expectations concerning the adequacy of the Company's warranty provisions and estimates for future warranty-related costs;
- statements regarding the Company's ability to manage legal and regulatory matters (including but not limited to product liability, environmental, intellectual property and competition law matters) and to resolve any such pending legal and regulatory matters within current estimates and in anticipation of certain third-party recoveries; and
- statements about economic conditions, such as changes in the US economic or housing recovery or changes in the market conditions in the Asia Pacific region, the levels of new home construction and home renovations, unemployment levels, changes in consumer income, changes or stability in housing values, the availability of mortgages and other financing, mortgage and other interest rates, housing affordability and supply, the levels of foreclosures and home resales, currency exchange rates, and builder and consumer confidence.



## CAUTIONARY NOTE ON FORWARD-LOOKING STATEMENTS (continued)

Words such as "believe," "anticipate," "plan," "expect," "intend," "target," "estimate," "project," "predict," "forecast," "guideline," "aim," "will," "should," "likely," "continue," "may," "objective," "outlook" and similar expressions are intended to identify forward-looking statements but are not the exclusive means of identifying such statements. Readers are cautioned not to place undue reliance on these forward-looking statements and all such forward-looking statements are qualified in their entirety by reference to the following cautionary statements.

Forward-looking statements are based on the Company's current expectations, estimates and assumptions and because forward-looking statements address future results, events and conditions, they, by their very nature, involve inherent risks and uncertainties, many of which are unforeseeable and beyond the Company's control. Such known and unknown risks, uncertainties and other factors may cause actual results, performance or other achievements to differ materially from the anticipated results, performance or achievements expressed, projected or implied by these forward-looking statements. These factors, some of which are discussed under "Risk Factors" in Section 3 of the Form 20-F filed with the Securities and Exchange Commission on 22 May 2018, include, but are not limited to: all matters relating to or arising out of the prior manufacture of products that contained asbestos by current and former Company subsidiaries; required contributions to AICF, any shortfall in AICF and the effect of currency exchange rate movements on the amount recorded in the Company's financial statements as an asbestos liability; the continuation or termination of the governmental loan facility to AICF; compliance with and changes in tax laws and treatments; competition and product pricing in the markets in which the Company operates; the consequences of product failures or defects; exposure to environmental, asbestos, putative consumer class action or other legal proceedings; general economic and market conditions; the supply and cost of raw materials; possible increases in competition and the potential that competitors could copy the Company's products; reliance on a small number of customers; a customer's inability to pay; compliance with and changes in environmental and health and safety laws; risks of conducting business internationally; compliance with and changes in laws and regulations; currency exchange risks; dependence on customer preference and the concentration of the Company's customer base on large format retail customers, distributors and dealers; dependence on residential and commercial construction markets; the effect of adverse changes in climate or weather patterns; possible inability to renew credit facilities on terms favorable to the Company, or at all; acquisition or sale of businesses and business segments; changes in the Company's key management personnel; inherent limitations on internal controls; use of accounting estimates; the integration of Fermacell into our business; and all other risks identified in the Company's reports filed with Australian, Irish and US securities regulatory agencies and exchanges (as appropriate). The Company cautions you that the foregoing list of factors is not exhaustive and that other risks and uncertainties may cause actual results to differ materially from those referenced in the Company's forward-looking statements. Forward-looking statements speak only as of the date they are made and are statements of the Company's current expectations concerning future results, events and conditions. The Company assumes no obligation to update any forward-looking statements or information except as required by law.

## NOTE TO THE READER

As of 30 June 2018, the Company changed its reportable operating segments. Previously, the Company reported on four operating segments: (i) North America Fiber Cement, (ii) International Fiber Cement, (iii) Other Businesses, and (iv) Research and Development. As of 30 June 2018, the Company began reporting on five operating segments: (i) North America Fiber Cement, (ii) Asia Pacific Fiber Cement, (iii) Europe Building Products, (iv) Other Businesses, and (v) Research and Development. The significant changes to how certain businesses are reported in the new segment structure are as follows: (i) our European Fiber Cement business, as well as the newly acquired Fermacell business, are now reported as the Europe Building Products segment, and the remaining businesses that were historically reported in the International Fiber Cement segment are now reported in the Asia Pacific Fiber Cement segment. The Company has revised its historical segment information for the second quarter and half year ended 30 September 2017 to be consistent with the new reportable segment structure. The change in reportable segments had no effect on the Company's financial position, results of operations or cash flows for the periods presented. Readers are referred to Note 15 of our condensed consolidated financial statements for further information on our segments.



## USE OF NON-GAAP FINANCIAL INFORMATION; AUSTRALIAN EQUIVALENT TERMINOLOGY

This Management Presentation includes financial measures that are not considered a measure of financial performance under generally accepted accounting principles in the United States (US GAAP). These financial measures are designed to provide investors with an alternative method for assessing our performance from on-going operations, capital efficiency and profit generation. Management uses these financial measures for the same purposes. These financial measures include:

- Adjusted EBIT;
- Europe Building Products Segment Adjusted EBIT excluding costs associated with the acquisition;
- Adjusted EBIT margin;
- Europe Building Products Segment Adjusted EBIT margin excluding costs associated with the acquisition;
- Adjusted net operating profit;
- Adjusted diluted earnings per share;
- Adjusted operating profit before income taxes;
- Adjusted income tax expense;
- Adjusted effective tax rate;
- Adjusted EBITDA;
- Adjusted EBITDA excluding Asbestos; and
- Adjusted selling, general and administrative expenses ("Adjusted SG&A").

These financial measures are or may be non-US GAAP financial measures as defined in the rules of the U.S. Securities and Exchange Commission and may exclude or include amounts that are included or excluded, as applicable, in the calculation of the most directly comparable financial measures calculated in accordance with US GAAP. These non-GAAP financial measures should not be considered to be more meaningful than the equivalent US GAAP measure. Management has included such measures to provide investors with an alternative method for assessing its operating results in a manner that is focused on the performance of its ongoing operations and excludes the impact of certain legacy items, such as asbestos adjustments. Additionally, management uses such non-GAAP financial measures for the same purposes. However, these non-GAAP financial measures are not prepared in accordance with US GAAP, may not be reported by all of the Company's competitors and may not be directly comparable to similarly titled measures of the Company's competitors due to potential differences in the exact method of calculation. For additional information regarding the non-GAAP financial measures presented in this Management Presentation, including a reconciliation of each non-GAAP financial measure to the equivalent US GAAP measure, see the slide titled "Non-US GAAP Financial Measures" included in the Appendix to this Management Presentation.

In addition, this Management Presentation includes financial measures and descriptions that are considered to not be in accordance with US GAAP, but which are consistent with financial measures reported by Australian companies, such as operating profit, EBIT and EBIT margin. Since the Company prepares its Consolidated Financial Statements in accordance with US GAAP, the Company provides investors with a table and definitions presenting cross-references between each US GAAP financial measure used in the Company's Condensed Consolidated Financial Statements to the equivalent non-US GAAP financial measure used in this Management Presentation. See the section titled "Non-US GAAP Financial Measures" included in the Appendix to this Management Presentation.

## AGENDA

- Overview and Operating Review – Louis Gries, CEO
- Financial Review – Matt Marsh, EVP and CFO
- Questions and Answers





# OVERVIEW AND OPERATING REVIEW

Louis Gries, CEO

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## GROUP OVERVIEW

### Adjusted Net Operating Profit<sup>1</sup>

2nd Qtr		Half Year	
US\$80.9M	↑	US\$160.8M	↑
	7%		17%

### Adjusted Diluted EPS<sup>1</sup>

2nd Qtr		Half Year	
US18 cents	↑	US36 cents	↑
	6%		16%

### Adjusted EBIT<sup>2</sup>

2nd Qtr		Half Year	
US\$106.9M	↑	US\$214.0M	↑
	1%		10%

### Net Operating Cash Flow

Half Year	
US\$184.1M	↑
	16%

### Adjusted EBIT Margin %<sup>2</sup>

2nd Qtr		Half Year	
16.6%	↓	16.5%	↓
	3.5 pts		2.3 pts

- North America Fiber Cement exteriors growing modestly above market index, further momentum required
- Strong volume growth in Asia Pacific Fiber Cement
- Europe Building Products growth and returns continue to meet expectations
- Focusing on key drivers of value creation, resulting in changes to our product portfolio:
  - Decision to exit our Windows business
  - Discontinuation of Multiple Contour Trim (“MCT”) and excess and obsolete ColorPlus color palettes

<sup>1</sup> Excludes Asbestos related expenses and adjustments, tax adjustments, Fermacell acquisition costs and product line discontinuation expenses

<sup>2</sup> Excludes Asbestos related expenses and adjustments, Fermacell acquisition costs and product line discontinuation expenses

## PRODUCT LINE DISCONTINUATION EXPENSES

- **Simplifying our Core ColorPlus product line**
  - Capacity expansion
  - Refinement of color offering
- **Exiting Windows Business**
- **Discontinuing MCT product line**
- **In total, US\$21.2 million of discontinuation expenses in Q2**

## NORTH AMERICA FIBER CEMENT SUMMARY

	Q2'19	1H'19
Net Sales	US\$435.6M ↑ 9%	US\$869.4M ↑ 10%
Sales Volume	591.7 mmsf ↑ 5%	1,182.7 mmsf ↑ 5%
Average Price	US\$728 per msf ↑ 4%	US\$726 per msf ↑ 4%
EBIT	US\$94.1M ↓ 3%	US\$201.3M ↑ 14%
EBIT Excluding <sup>1</sup>	US\$99.5M ↑ 2%	US\$206.7M ↑ 17%

<sup>1</sup> Excludes product line discontinuation expenses of US\$5.4 million in Q2'19 and 1H'19

### Volume

- Positive PDG in exteriors, further momentum required to deliver higher PDG growth
- Decline in interiors

### Price

- Favorably impacted by annual change in our strategic pricing effective April 2018 and product mix

### Product line discontinuation

- MCT
- Certain excess and obsolete ColorPlus color palettes

### EBIT Excluding<sup>1</sup>

- Higher volume and average net sales price
- Partially offset by higher raw material and freight costs and higher SG&A expenses



# NORTH AMERICA FIBER CEMENT VOLUME



Exteriors

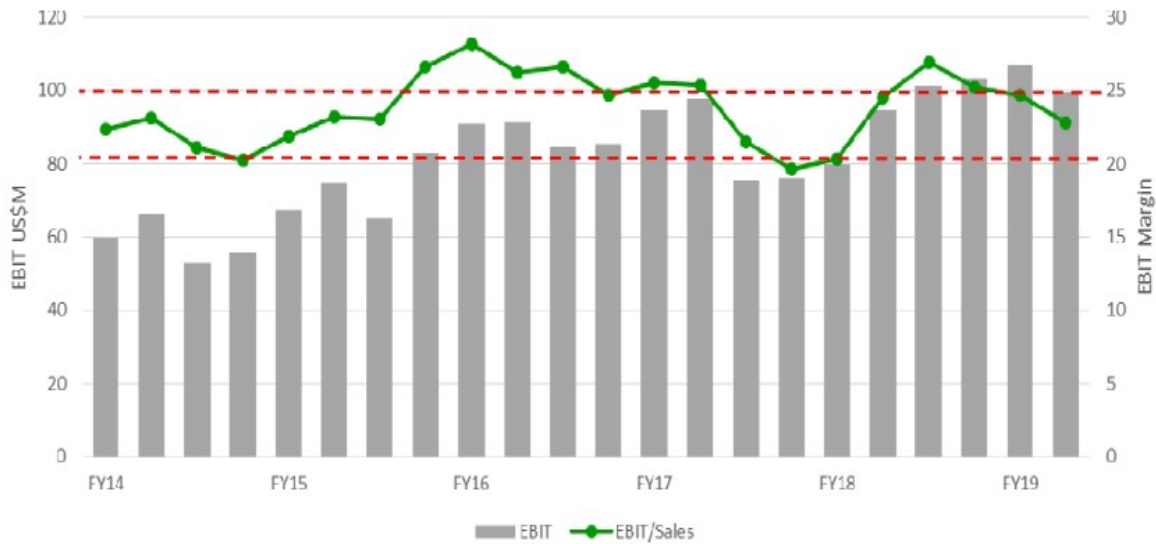
- Volume increased 8% and 7% for the quarter and half year, respectively, compared to pcp
- Focus remains on continuing to build momentum and delivering higher PDG

Interiors

- Volume decreased 6% and 2% for the quarter and half year, respectively, compared to pcp

# NORTH AMERICA FIBER CEMENT

Quarterly EBIT and EBIT Margin<sup>1</sup>

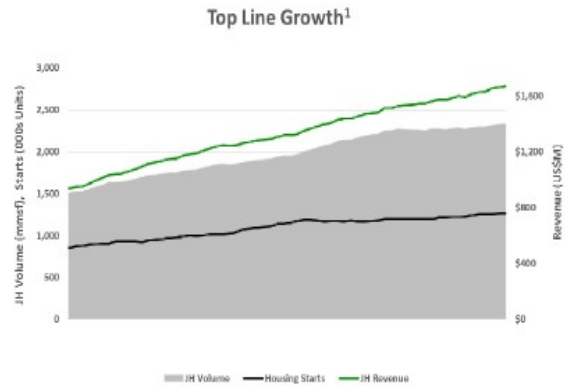


1H'19 EBIT Margin excluding<sup>1</sup> % up 140 bps to 23.8% compared to pcp and remains within our target range

<sup>1</sup> Excludes product line discontinuation expenses of US\$5.4 million in Q2 FY19



# NORTH AMERICA FIBER CEMENT



- FY19 strategic price increase effective April 2018
- Overall, satisfied with price positioning

- US housing conditions remain favorable
- Some signs of slightly softer market conditions

<sup>1</sup> Rolling 12 month average of seasonally adjusted estimate of housing starts by US Census Bureau

## ASIA PACIFIC FIBER CEMENT SUMMARY

	Q2'19	1H'19
Net Sales	A\$160.4M ↑ 12%	A\$315.2M ↑ 13%
Sales Volume	142.1 mmsf ↑ 9%	280.1 mmsf ↑ 12%
Average Price	A\$996 per msf ↑ 2%	A\$995 per msf ↑ 1%
US\$ EBIT	US\$27.5M ↓ 10%	US\$55.8M ↓ 2%
A\$ EBIT	A\$37.5M ↓ 3%	A\$75.0M ↑ 2%

### Volume

- Strong performance in Australian and Philippines businesses
- Gains in category share and further market penetration

### Foreign Exchange

- Segment results in US dollars impacted by unfavorable foreign exchange rate movements

### EBIT

- Higher net sales and strong volume performance
- Unfavorable FX impact, higher pulp and freight costs and one time inventory adjustment in the Philippines

## ASIA PACIFIC FIBER CEMENT (LOCAL CURRENCY)



Q2'19			1H'19		
Australia			Australia		
Volume	Net Sales	EBIT	Volume	Net Sales	EBIT
↑	↑	↑	↑	↑	↑

### Australia

- Market penetration and strong growth above the market index
- EBIT favorably impacted by higher net sales and favorable plant performance, partially offset by higher freight and pulp costs



Q2'19			1H'19		
New Zealand			New Zealand		
Volume	Net Sales	EBIT	Volume	Net Sales	EBIT
↑	↑	↓	↑	↑	↓

### New Zealand

- Higher volume and net sales
- EBIT compressed by unfavorable plant performance and higher pulp costs



Q2'19			1H'19		
Philippines			Philippines		
Volume	Net Sales	EBIT	Volume	Net Sales	EBIT
↑	↑	↓	↑	↑	↓

### Philippines

- Volume increase driven by market share gains
- EBIT unfavorably impacted by:
  - One time inventory adjustment
  - Higher pulp cost and start-up cost associated with our capacity expansion

# EUROPE BUILDING PRODUCTS SUMMARY<sup>1</sup>

	Q2'19	1H'19
Net Sales	US\$87.4M ↑	US\$182.8M ↑
Sales Volume	194.3 mmsf ↑	403.9 mmsf ↑
Average Price	US\$354 per msf ↓	US\$358 per msf ↓
EBIT	US\$3.4M ↓	US\$(1.2)M ↓
EBIT Excluding <sup>2</sup>	US\$8.5M ↑	US\$19.9M ↑
EBIT Margin Excluding <sup>2</sup>	9.7% ↑	10.9% ↑

<sup>1</sup> Includes European Fiber Cement business, as well as the newly acquired Fermacell business

<sup>2</sup> Excludes transaction & integration costs and inventory fair value adjustment

## Volume

- Increase driven by acquisition of Fermacell

## Price

- Decrease due to product mix
- Fiber Gypsum has a lower average net sales price compared to Fiber Cement

## Net Sales

- On a pro-forma basis, net sales increased 3% and 10% for quarter and half year, respectively

## EBIT

- EBIT margin excluding<sup>2</sup> of 9.7% and 10.9% for the quarter and half year, respectively

- EBIT includes:

- US\$5.1 million and US\$13.8 million of transaction and integration costs for the quarter and half year, respectively
- US\$7.3 million inventory fair value adjustment in the half year

## EUROPE BUILDING PRODUCTS PRO FORMA<sup>1</sup>

	Q2'19	1H'19
Net Sales	US\$87.4M ↑ 3%	US\$182.8M ↑ 10%
Operating profit before income taxes	US\$8.5M ↑ 18%	US\$19.9M ↑ 32%

**Net sales increased 3% and 10% for the quarter and half year, respectively, on a pro-forma basis compared to pcp**

<sup>1</sup> The unaudited pro forma information presents the results of operations of the Company as if the Fermacell Acquisition and related financing was completed on 1 April 2017. The unaudited pro forma excludes transaction and integration costs of US\$5.1 million for the Q2'19 and US\$13.8 for the 1H'19, and the US\$7.3 million inventory fair value adjustment in 1H'19



# FINANCIAL REVIEW

Matt Marsh, EVP and CFO

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## RESULTS – 2<sup>nd</sup> QUARTER FY19

### Three Months Ended 30 September

US\$ Millions	Q2'19	Q2'18	% Change
Net sales	644.6	525.8	23
Gross profit	207.1	187.2	11
EBIT	99.5	97.1	2
Net operating profit	69.5	66.4	5
Adjusted EBIT <sup>1</sup>	106.9	105.8	1
Adjusted net operating profit <sup>2</sup>	80.9	75.6	7

### Net sales increased 23%, US\$118.8 million

- The acquired Fermacell business in Europe contributed net sales of US\$77.8 million
- Higher average net sales price and volumes in the North America Fiber Cement segment
- Higher volumes in the Asia Pacific Fiber Cement segment

### Gross profit increased 11%, gross margin % down 350 bps

### Adjusted net operating profit increased 7%

<sup>1</sup> Excludes Asbestos related expenses and adjustments, Fermacell acquisition costs, and product line discontinuation expenses

<sup>2</sup> Excludes Asbestos related expenses and adjustments, tax adjustments, Fermacell acquisition costs, and product line discontinuation expenses



# RESULTS – HALF YEAR FY19

## Half Year Ended 30 September

US\$ Millions	1H'19	1H'18	% Change
Net sales	1,295.6	1,033.5	25
Gross profit	428.2	356.2	20
EBIT	231.4	181.1	28
Net operating profit	160.1	123.8	29
Adjusted EBIT <sup>1</sup>	214.0	194.1	10
Adjusted net operating profit <sup>2</sup>	160.8	137.3	17

<sup>1</sup> Excludes Asbestos related expenses and adjustments, Fermacell acquisition costs, and product line discontinuation expenses

<sup>2</sup> Excludes Asbestos related expenses and adjustments, tax adjustments, Fermacell acquisition costs, and product line discontinuation expenses

<sup>3</sup> Excludes product line discontinuation expenses

### Net sales increased 25%, US\$262.1 million

- The acquired Fermacell business in Europe contributed net sales of US\$164.0 million
- Higher average net sales price and volumes in North America Fiber Cement segment
- Higher volumes in Asia Pacific Fiber Cement segment

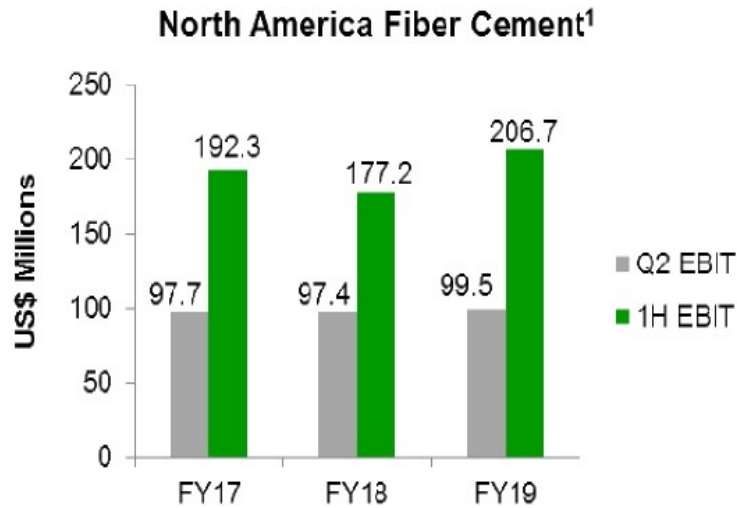
### Gross profit increased 20%, gross margin % down 140 bps

### Adjusted net operating profit increased 17%

- North America Fiber Cement EBIT excluding<sup>3</sup> increased 17% versus pcp



## SEGMENT EBIT – 2<sup>nd</sup> QUARTER FY19



### North America Fiber Cement EBIT<sup>1</sup> summary

- Q2 EBIT<sup>1</sup> and 1H EBIT<sup>1</sup> increased 2% and 17%, respectively, compared to pcp
- North America margins continue to be compressed by elevated freight and raw material costs

<sup>1</sup> Excludes product line discontinuation expenses

## PRODUCT LINE DISCONTINUATION EXPENSES

US\$ Millions	Three Months and Half Year Ended 30 September	
	Q2'19	1H'19
<b>North America Fiber Cement segment:</b>		
Discontinuation of MCT <sup>1</sup>	\$ 3.6	\$ 3.6
Discontinuation of certain ColorPlus color palettes <sup>2</sup>	1.8	1.8
<b>Other Businesses segment:</b>		
Discontinuation of Windows Business <sup>3</sup>	15.8	15.8
<b>Total product line discontinuation expenses</b>	<b>\$ 21.2</b>	<b>\$ 21.2</b>

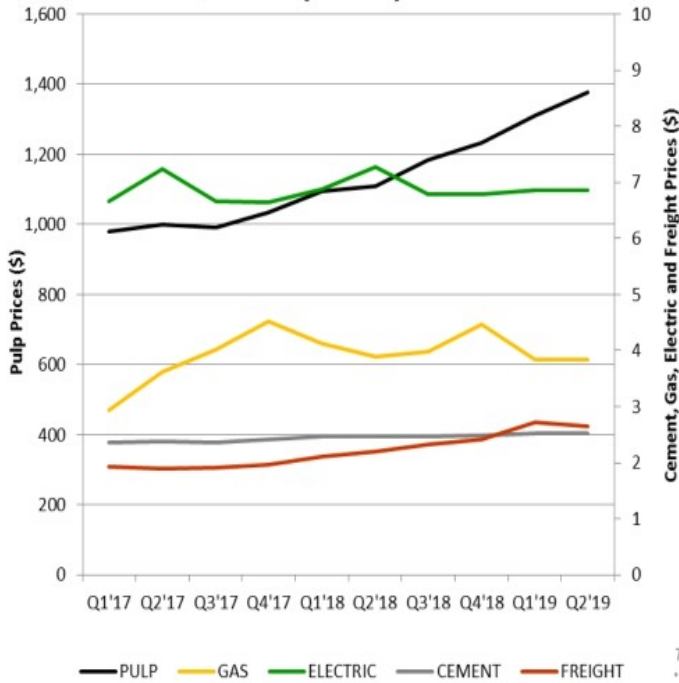
<sup>1</sup> Includes asset impairment charges of US\$3.0 million and a US\$0.6 million charge to cost of goods sold

<sup>2</sup> Includes US\$1.8 million charge to cost of goods sold

<sup>3</sup> Includes US\$10.1 million asset impairment charges and a US\$5.7 million charge related to inventory existence, inventory valuation write-down and other liability write-offs

# NORTH AMERICA INPUT COSTS

Quarterly US Input Costs



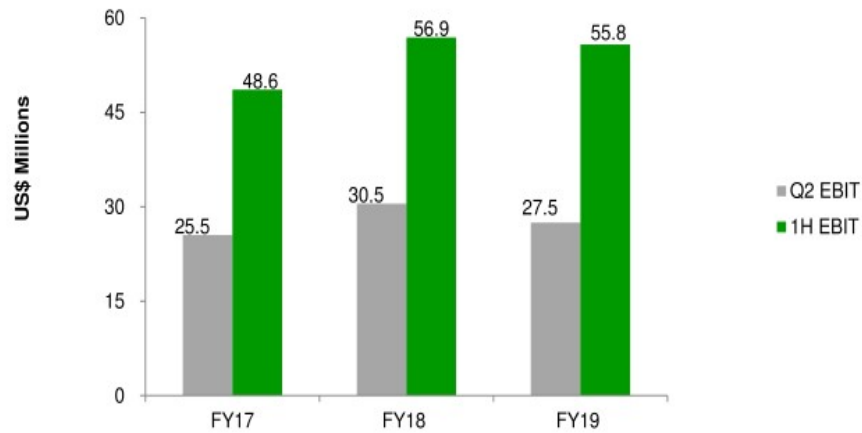
- The price of NBSK pulp **up** 24% compared to pcp
- Freight market prices **up** 20% compared to pcp
- Cement prices **up** 2% compared to pcp
- Gas prices **down** 2% compared to pcp
- Electric prices are **down** 6% compared to pcp

The information underlying the table above is sourced as follows:

- Pulp – Cost per ton – from RISI
- Gas – Cost per thousand cubic feet for industrial users – from US Energy Information Administration
- Electric – Cost per thousand kilowatt hour for industrial users – from US Energy Information Administration
- Cement – Relative index from the Bureau of Labor Statistics
- Freight – Cost per mile – from Dial-a-Truck Solutions
- Gas and Electric prices for current quarter are based on prior quarter actuals

## SEGMENT EBIT – 2<sup>nd</sup> QUARTER FY19

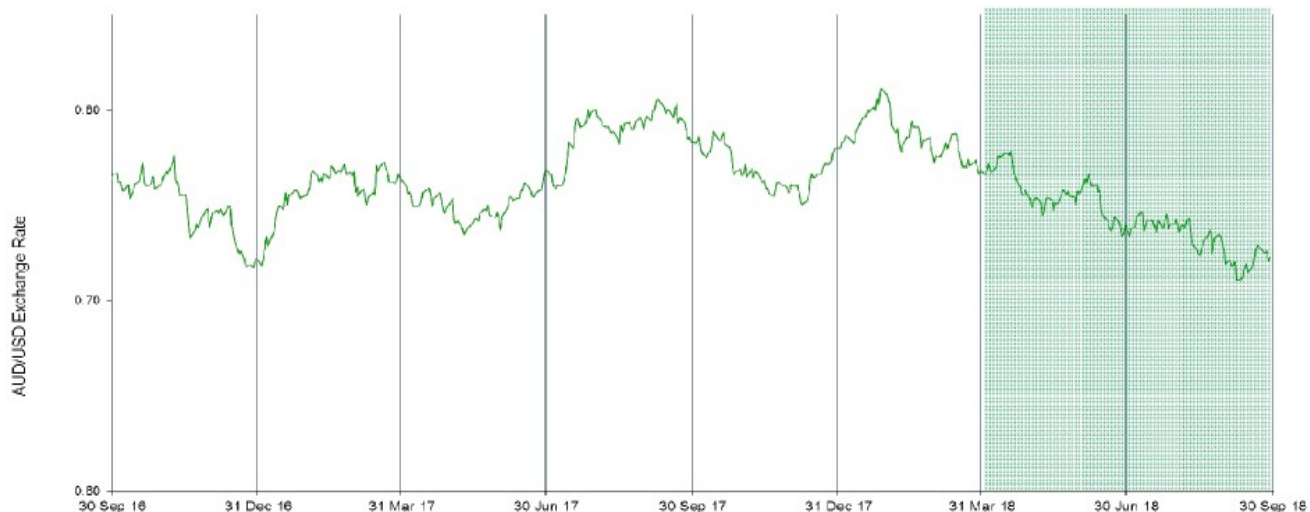
### Asia Pacific Fiber Cement



#### Asia Pacific Fiber Cement EBIT summary

- Q2 and 1H EBIT decreased 10% and 2%, respectively, compared to pcp
- Strong volume growth in Australia and the Philippines
- Unfavorably impacted by foreign translation, input costs and one-time inventory adjustment in the Philippines
- Additionally, 1H was impacted by unfavorable plant performance in New Zealand

# TRANSLATION IMPACT ON CONSOLIDATED RESULTS



% Change	As Reported		Excluding Translation Impact <sup>1</sup>	
	Q2'19	1H'19	Q2'19	1H'19
Net Sales	▲ 23%	▲ 25%	▲ 25%	▲ 26%
Gross Profit	▲ 11%	▲ 20%	▲ 12%	▲ 20%
Adjusted EBIT	▲ 1%	▲ 10%	▲ 2%	▲ 11%
Adjusted net operating profit	▲ 7%	▲ 17%	▲ 8%	▲ 18%

Translation Impact <sup>2</sup>	
Q2'19	1H'19
▼ 2%	▼ 1%
▼ 1%	-
▼ 1%	▼ 1%
▼ 1%	▼ 1%

<sup>1</sup> As Reported Q2'19 and 1H'19 figures converted using Q2'18 and 1H'18 average exchange rates, respectively

<sup>2</sup> Reflects the difference between Q2'19 As Reported and Q2'19 using Q2 FY18 average exchange rates, as well as difference between 1H'19 As Reported and 1H'19 using 1H'18 average exchange rates

## ASIA PACIFIC FIBER CEMENT RESULTS AUD vs USD

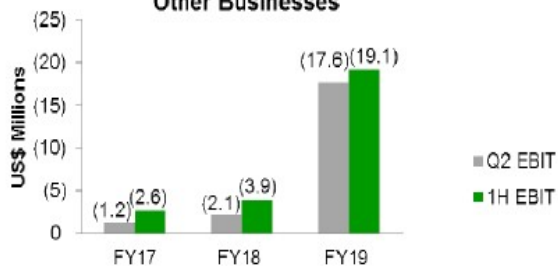
	Three months and Half Year Ended 30 September					
	Q2'19			1H'19		
	Results in AUD	Results in USD	Impact of FX	Results in AUD	Results in USD	Impact of FX
Average net sales price per unit (per msf)	+2%	-5%	<b>-7%</b>	+1%	-3%	<b>-4%</b>
Net sales	+12%	+3%	<b>-9%</b>	+13%	+9%	<b>-4%</b>
Gross Profit	-1%	-8%	<b>-7%</b>	+3%	FLAT	<b>-3%</b>
EBIT	-3%	-10%	<b>-7%</b>	+2%	-2%	<b>-4%</b>

## SEGMENT EBIT – 2<sup>nd</sup> QUARTER FY19

### Europe Building Products



### Other Businesses



<sup>1</sup> Excluding transaction and integration costs and inventory fair value adjustment

### Europe Building Products EBIT summary

- EBIT impacted by costs associated with acquisition:
  - US\$5.1 million and US\$13.8 of transaction and integration costs for the quarter and half year, respectively; and
  - US\$7.3 million inventory fair value adjustment during the half year related to purchase price accounting
  - Integration costs for the remainder of FY19 are expected to be approximately US\$10 million
- EBIT margin excluding<sup>1</sup> of 9.7% and 10.9% for the quarter and half year, respectively

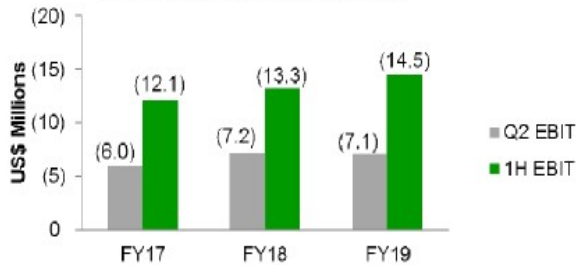
### Other Businesses

- Decision made to exit the Window business
- Resulting asset impairment charges of US\$10.1 million and adjustments related to inventory existence, inventory valuation write-downs and other liability write-offs of US\$5.7 million



## SEGMENT EBIT – 2<sup>nd</sup> QUARTER FY19

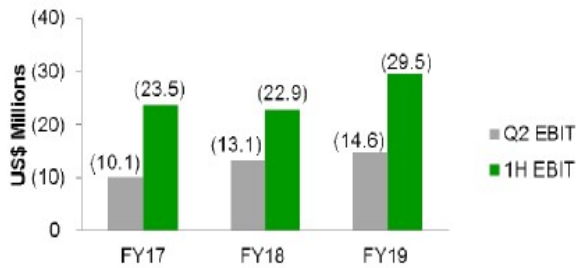
### Research and Development



### R&D

- On strategy to invest ~2-3% of net sales
- Increased spend from overall increase in number of projects

### General Corporate Costs<sup>1</sup>



### General Corporate Costs

- Increase driven by higher stock compensation expenses
- 1H was additionally impacted by:
  - Non-recurring gain of US\$3.4 million in the prior year from the sale of a storage building near our Fontana facility
  - A US\$1.6 million New Zealand weathertightness legal claim settlement

<sup>1</sup> Excludes Asbestos related expenses and adjustments, and Fermacell acquisition costs



# INCOME TAX

## Three Months and Half Year Ended 30 September

US\$ Millions	Q2'19	Q2'18	1H'19	1H'18
Operating profit before taxes	87.1	90.3	208.6	167.4
Asbestos adjustments <sup>1</sup>	(14.3)	6.4	(39.4)	10.6
Farmacell acquisition costs	-	1.7	-	1.7
Product line discontinuation	21.2	-	21.2	-
<b>Adjusted operating profit before income taxes</b>	<b>94.0</b>	<b>98.4</b>	<b>190.4</b>	<b>179.7</b>
Adjusted income tax expense <sup>2</sup>	(13.1)	(22.8)	(29.6)	(42.4)
<b>Adjusted effective tax rate</b>	<b>13.9%</b>	<b>23.2%</b>	<b>15.5%</b>	<b>23.6%</b>
Income tax expense	(17.6)	(23.9)	(48.5)	(43.6)
Income taxes paid			13.1	21.2
Income taxes payable <sup>3</sup>			37.0	4.0

## 15.5% estimated adjusted effective tax rate for the year

- Adjusted income tax expense decreased driven by adjustments related to the ongoing accounting treatment of amortization of intangible assets, and a reduction in the US statutory corporate tax rate
- Income taxes are not currently paid or payable in Australia due to tax losses. Australian tax losses primarily result from deductions relating to contributions to AICF

<sup>1</sup> Includes Asbestos adjustments, AICF SG&A expenses and net AICF interest income

<sup>2</sup> Includes tax adjustments related to Asbestos, the amortization benefit of certain US intangible assets and other tax adjustments

<sup>3</sup> Includes non-current US income taxes payable of US\$25.9 million at Q2 FY19 related to the deemed repatriation promulgated by the US Tax Cuts and Jobs Act and will be paid in annual installments through FY25

# CASHFLOWS<sup>1</sup>

US\$ Millions	1H'19	1H'18	Change (%)
<b>Net Income</b>	<b>160.1</b>	<b>123.8</b>	<b>29</b>
Adjustment for non-cash items	65.1	71.1	(8)
Annual AICF contribution	(103.0)	(102.2)	(1)
Operating working capital <sup>2</sup>	22.0	(11.7)	
Other net operating activities	(6.4)	19.3	
AICF cash flow, net	(0.2)	(2.3)	91
<b>Cash Flow from Operations</b>	<b>137.6</b>	<b>98.0</b>	<b>40</b>
Purchases of property, plant and equipment <sup>3</sup>	(142.5)	(85.4)	(67)
Proceeds from sale of property, plant and equipment	-	7.9	
Acquisition of business, net of cash acquired	(558.7)	-	
<b>Free Cash Flow<sup>4</sup></b>	<b>(563.6)</b>	<b>20.5</b>	
Dividends paid	(128.5)	(131.3)	2
Net proceeds of credit facilities	20.0	115.0	(83)
Proceeds from 364-day term loan facility	492.4	-	
Share related activities	-	0.2	
<b>Free Cash Flow after Financing Activities</b>	<b>(179.7)</b>	<b>4.4</b>	

## Increase in net operating cash flow

- Increase in net income adjusted for non-cash items
- Favorable movements in inventory driven by rebuilding inventories in the North America Fiber Cement segment in the prior year
- Partially offset by an unfavorable change in other net operating activities in the normal course of business

## Higher investing activities

- Acquisition of Fermacell in Europe
- Increase in capacity related capital expenditures

## Cash provided by financing activities

- Driven by proceeds from our 364-day term loan facility
- Partially offset by lower net proceeds from credit facilities

<sup>1</sup> Derived from supplementary statement of cash flow

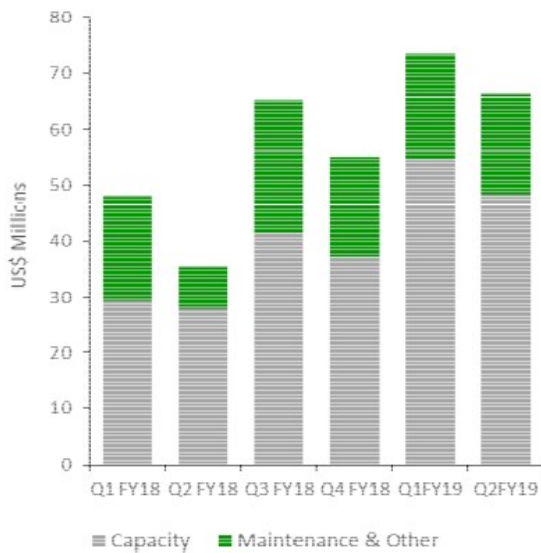
<sup>2</sup> Excludes AP related to capital expenditures

<sup>3</sup> Includes capitalized interest

<sup>4</sup> Distinct from the term defined by the AFFA for purposes of calculating our annual contribution to AICF

# CAPITAL EXPENDITURES

CAPEX Spend



Half year CAPEX spend of US\$140.0 million increased US\$56.4 million compared to pcp

- North America capacity projects:
  - Continued the start-up of our greenfield expansion in Tacoma
  - Continued the construction of our Prattville facility, expected to be commissioned in 1H FY20
  - Announced expansion project within our ColorPlus product line
    - Investing ~US\$20.6 million
    - Peru and Pulaski facilities, and a greenfield project in the Northeast of the U.S.
- Asia Pacific capacity projects:
  - Continued the start-up of the additional capacity expansion in the Philippines
  - Continued the brownfield expansion project at our Carole Park facility in Australia, expected to be commissioned by Q1 FY21

# FINANCIAL MANAGEMENT SUPPORTING GROWTH

## Strong Financial Management

- Strong margins and operating cash flows
- Strong governance and transparency
- Investment-grade financial management

Moody's

**Ba1**

affirmed Sept'18  
outlook stable

S&P

**BB**

affirmed Sept'18  
outlook stable

Fitch

**BBB-**

affirmed Sept'18  
outlook stable

## Disciplined Capital Allocation

- Invest in R&D and capacity expansion to support organic growth
- Maintain ordinary dividends within the defined payout ratio
- Flexibility for:
  - Cyclical market volatility
  - Accretive and strategic inorganic opportunities
  - Further shareholder returns when appropriate

## Liquidity and Funding

- Conservative leveraging of balance sheet at a target within 1-2 times Adjusted EBITDA excluding asbestos.
  - US\$500 million unsecured revolving credit facility;
  - US\$800 million senior unsecured notes at Q2 FY19;
  - €400 million bridge facility, refinanced with €400 million senior unsecured notes in October 2018
- At Q2 FY19, total debt had a weighted average maturity of 4.9 years and weighted average rate of 3.7%

Financial management consistent with investment grade credit  
Ability to withstand market cycles and other unanticipated events

# LIQUIDITY PROFILE AT 30 SEPTEMBER 2018

## Debt Profile Millions



<sup>1</sup> Incremental liquidity of up to US\$250 million may be accessed via an accordion feature, which is provided for under the terms of the syndicated revolving credit facility agreement, but not credit approved

<sup>2</sup> On 3 April 2018, €400m was drawn on the 364-day bridging term loan to facilitate the Fermacell acquisition. The single-draw facility amount of €400 million equates to US\$465.8 million at the exchange rate on 30 Sept 2018.

<sup>3</sup> Includes debt issuance costs (US\$15.5 million)

## Strong balance sheet

- US\$108.9 million cash
- US\$1,261.4 million net debt<sup>3</sup>
- US\$370.5 million available on revolving credit facility

## Corporate debt structure

- **US\$400 million** 4.75% senior unsecured notes **maturing 2025**
- **US\$400 million** 5.00% senior unsecured notes **maturing 2028**
- €400 (US\$465.8)<sup>2</sup> million bridge finance outstanding at 30 September which was replaced with **€400 million** 3.625% senior unsecured notes in October 2018, **maturing 2026**
- **US\$500 million** unsecured revolving credit facility, **maturing 2022**

## Leverage strategy

- ~2.2x net debt to Adjusted EBITDA excluding asbestos; temporarily outside of the 1-2x leverage target range



## FY2019 GUIDANCE

- Management notes the range of analysts' forecasts for net operating profit excluding asbestos for the year ending 31 March 2019 is between US\$313 million and US\$335 million
- Management expects full year Adjusted net operating profit to be between **US\$280 million** and **US\$320 million** assuming, among other things, housing conditions in the United States continue to improve in line with our assumed forecast of new construction starts between approximately 1.2 and 1.3 million, an average USD/AUD exchange rate that is at or near current levels for the remainder of the year and a continuation of current inflationary trends for input costs
- Management cautions that although US housing activity has been improving, market conditions remain somewhat uncertain and input costs remain volatile
- Management is unable to forecast the comparable US GAAP financial measure due to uncertainty regarding the impact of actuarial estimates on asbestos-related assets and liabilities in future periods



# QUESTIONS

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# APPENDIX

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# FINANCIAL SUMMARY

## Three Months and Half Year Ended 30 September

US\$ Millions	Q2'19	Q2'18	% Change	1H'19	1H'18	% Change
<b>Net Sales</b>						
North America Fiber Cement	\$ 435.6	\$ 398.1	9	\$ 869.4	\$ 791.2	10
Asia Pacific Fiber Cement	117.3	113.4	3	234.4	215.0	9
Europe Building Products	87.4	10.5		182.8	19.7	
Other Businesses	4.3	3.8	13	9.0	7.6	18
<b>Total Net Sales</b>	<b>\$ 644.6</b>	<b>\$ 525.8</b>	<b>23</b>	<b>\$ 1,295.6</b>	<b>\$ 1,033.5</b>	<b>25</b>
<b>EBIT</b>						
North America Fiber Cement <sup>1</sup>	\$ 99.5	\$ 97.4	2	\$ 206.7	\$ 177.2	17
Asia Pacific Fiber Cement	27.5	30.5	(10)	55.8	56.9	(2)
Europe Building Products <sup>2</sup>	3.4	0.3		(1.2)	0.1	
Other Businesses <sup>1</sup>	(1.8)	(2.1)	14	(3.3)	(3.9)	15
Research & Development	(7.1)	(7.2)	1	(14.5)	(13.3)	(9)
General Corporate <sup>3</sup>	(14.6)	(13.1)	(11)	(29.5)	(22.9)	(29)
<b>Adjusted EBIT</b>	<b>\$ 106.9</b>	<b>\$ 105.8</b>	<b>1</b>	<b>\$ 214.0</b>	<b>\$ 194.1</b>	<b>10</b>
Net interest expense <sup>4</sup>	(13.0)	(7.4)	(76)	(23.9)	(14.0)	(71)
Other income (expense)	0.1	-		0.3	(0.4)	
Adjusted income tax expense	(13.1)	(22.8)	43	(29.6)	(42.4)	30
<b>Adjusted net operating profit</b>	<b>\$ 80.9</b>	<b>\$ 75.6</b>	<b>7</b>	<b>\$ 160.8</b>	<b>\$ 137.3</b>	<b>17</b>

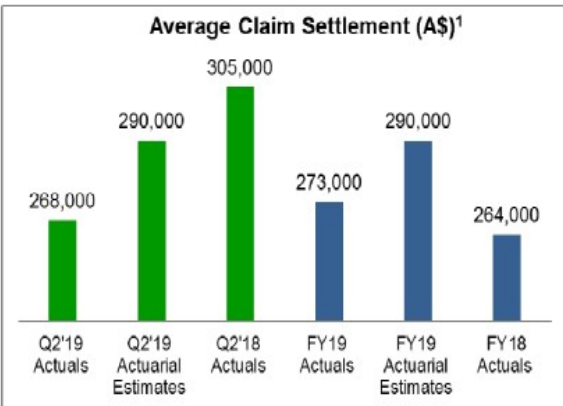
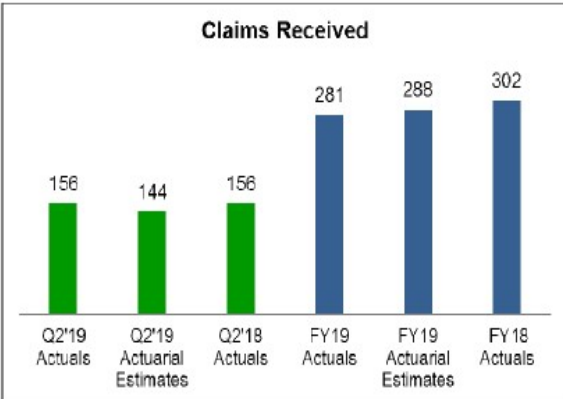
<sup>1</sup> Excludes product line discontinuation expenses

<sup>2</sup> Includes Europe transaction and integration costs and inventory fair value adjustment

<sup>3</sup> Excludes Asbestos related expenses and adjustments, and Fermacell acquisition costs

<sup>4</sup> Excludes AICF interest income

## ASBESTOS CLAIMS DATA



- Quarter and half year claims received were 8% above and 2% below actuarial estimates, respectively
- Quarter and half year claims received were flat and 7% lower, respectively, compared to pcp
- Claims reporting during the half year for mesothelioma:
  - 3% below actuarial estimates
  - 9% lower than pcp
- Average claim settlement for the half year was 6% below actuarial estimates:
  - Average claim settlement sizes for mesothelioma were slightly above actuarial expectations for most age groups
  - Generally favorable average claim settlement sizes across all other disease types

<sup>1</sup> Average claim settlement is derived as the total amount paid divided by the number of non-nil claims

## DEPRECIATION AND AMORTIZATION

US\$ Millions	Three Months and Half Year Ended 30 September			
	Q2'19	Q2'18	1H'19	1H'18
<b>Depreciation and amortization</b>				
North America Fiber Cement	\$ 19.5	\$ 18.2	\$ 37.6	\$ 35.3
Asia Pacific Fiber Cement	3.3	3.3	6.4	6.4
Europe Building Products	5.7	-	10.4	-
Other Businesses	0.6	0.6	1.2	1.1
Research and Development	0.3	0.4	0.6	0.8
General Corporate	1.4	0.9	2.7	1.6
<b>Total depreciation and amortization</b>	<b>\$ 30.8</b>	<b>\$ 23.4</b>	<b>\$ 58.9</b>	<b>\$ 45.2</b>

## Income Taxes

- **How ETR is calculated under US GAAP changed in 1H FY19**
  - Recorded a net deferred tax asset of US\$1,028.5 million arising from all previous intragroup transfers, including an internal restructuring which took place in Q4 FY18 to align certain intangible assets with our US business
  - Effective 1 April 2018, amortization of these intangible assets will reduce the deferred tax asset instead of reducing income tax expense
- **Economic (cash taxes paid) impact of tax expected to remain constant or improve**
  - Future Adjusted ETR may be more volatile because of:
    - New US GAAP standards
    - Ongoing impacts of US Tax Reform

## NON-US GAAP FINANCIAL MEASURES AND TERMS

This Management Presentation forms part of a package of information about the company's results. It should be read in conjunction with the other parts of this package, including the Management's Analysis of Results, Media Release and Consolidated Financial Statements

### Definitions

**EBIT** – Earnings before interest and taxes

**EBIT margin** – EBIT margin is defined as EBIT as a percentage of net sales

### Sales Volumes

**mmsf** – million square feet, where a square foot is defined as a standard square foot of 5/16" thickness

**msf** – thousand square feet, where a square foot is defined as a standard square foot of 5/16" thickness

### Non-financial Terms

**AFFA** – Amended and Restated Final Funding Agreement

**AICF** – Asbestos Injuries Compensation Fund Ltd

**Legacy New Zealand weathertightness claims ("New Zealand weathertightness")** – Expenses arising from defending and resolving claims in New Zealand that allege poor building design, inadequate certification of plans, inadequate construction review and compliance certification and deficient work by sub-contractors

**New South Wales loan facility ("NSW Loan")** – AICF has access to a secured loan facility made available by the New South Wales Government, which can be used by AICF to fund the payment of asbestos claims and certain operating and legal costs

## NON-US GAAP FINANCIAL MEASURES

### Financial Measures – US GAAP equivalents

This document contains financial statement line item descriptions that are considered to be non-US GAAP, but are consistent with those used by Australian companies. Because the company prepares its Consolidated Financial Statements under US GAAP, the following table cross-references each non-US GAAP line item description, as used in Management's Analysis of Results and Media Release, to the equivalent US GAAP financial statement line item description used in the company's Consolidated Financial Statements:

<b>Management's Analysis of Results and Media Release</b>	<b>Consolidated Statements of Operations and Other Comprehensive Income (Loss) (US GAAP)</b>
Net sales	Net sales
Cost of goods sold	Cost of goods sold
Gross profit	Gross profit
Selling, general and administrative expenses	Selling, general and administrative expenses
Research and development expenses	Research and development expenses
Asbestos adjustments	Asbestos adjustments
EBIT*	Operating income (loss)
Net interest income (expense)*	Sum of interest expense and interest income
Other income (expense)	Other income (expense)
Operating profit (loss) before income taxes*	Income (loss) before income taxes
Income tax (expense) benefit	Income tax (expense) benefit
Net operating profit (loss)*	Net income (loss)

\*- Represents non-US GAAP descriptions used by Australian companies.



# NON-US GAAP FINANCIAL MEASURES

## Financial Measures – US GAAP equivalents

### Adjusted EBIT

US\$ Millions	Three Months and Half Year Ended 30 September			
	Q2'19	Q2'18	1H'19	1H'18
<b>EBIT</b>	\$ 99.5	\$ 97.1	\$ 231.4	\$ 181.1
Asbestos:				
Asbestos adjustments	(14.2)	6.6	(39.3)	10.5
AICF SG&A expenses	0.4	0.4	0.7	0.8
Fermacell acquisition costs	-	1.7	-	1.7
Product line discontinuation	21.2	-	21.2	-
<b>Adjusted EBIT</b>	\$ 106.9	\$ 105.8	\$ 214.0	\$ 194.1
Net sales	\$ 644.6	\$ 525.8	\$ 1,295.6	\$ 1,033.5
<b>Adjusted EBIT margin</b>	16.6%	20.1%	16.5%	18.8%

### Adjusted net operating profit

US\$ Millions	Three Months and Half Year Ended 30 September			
	Q2'19	Q2'18	1H'19	1H'18
<b>Net operating profit</b>	\$ 69.5	\$ 66.4	\$ 160.1	\$ 123.8
Asbestos:				
Asbestos adjustments	(14.2)	6.6	(39.3)	10.5
AICF SG&A expenses	0.4	0.4	0.7	0.8
AICF interest income, net	(0.5)	(0.6)	(0.8)	(0.7)
Fermacell acquisition costs	-	1.7	-	1.7
Product line discontinuation	21.2	-	21.2	-
Tax adjustments <sup>1</sup>	4.5	1.1	18.9	1.2
<b>Adjusted net operating profit</b>	\$ 80.9	\$ 75.6	\$ 160.8	\$ 137.3

<sup>1</sup> Includes tax adjustments related to Asbestos, the amortization benefit of certain US intangible assets and other tax adjustments

## NON-US GAAP FINANCIAL MEASURES

### Europe Building Products Segment Adjusted EBIT excluding costs associated with the acquisition

US\$ Millions	Three Months and Half Year Ended 30 September	
	Q2'19	1H'19
<b>EBIT</b>	\$ 3.4	\$ (1.2)
Inventory fair value adjustment	-	7.3
Transaction costs	-	7.2
Integration costs	5.1	6.6
<b>Europe Building Products Segment Adjusted EBIT excluding costs associated with the acquisition</b>	<b>\$ 8.5</b>	<b>\$ 19.9</b>
Europe Building Products Segment net sales	\$ 87.4	\$ 182.8
<b>Europe Building Products Segment Adjusted EBIT margin excluding costs associated with the acquisition</b>	<b>9.7%</b>	<b>10.9%</b>



## NON-US GAAP FINANCIAL MEASURES

### Adjusted diluted earnings per share

	Three Months and Half Year Ended 30 September			
	Q2'19	Q2'18	1H'19	1H'18
<b>Adjusted net operating profit (US\$ Millions)</b>	\$ 80.9	\$ 75.6	\$ 160.8	\$ 137.3
Weighted average common shares outstanding - Diluted (millions)	443.1	441.5	443.1	441.5
<b>Adjusted diluted earnings per share (US cents)</b>	<b>18</b>	<b>17</b>	<b>36</b>	<b>31</b>

### Adjusted effective tax rate

US\$ Millions	Three Months and Half Year Ended 30 September			
	Q2'19	Q2'18	1H'19	1H'18
<b>Operating profit before income taxes</b>	\$ 87.1	\$ 90.3	\$ 208.6	\$ 167.4
Asbestos:				
Asbestos adjustments	(14.2)	6.6	(39.3)	10.5
AICF SG&A expenses	0.4	0.4	0.7	0.8
AICF interest income, net	(0.5)	(0.6)	(0.8)	(0.7)
Fermacell acquisition costs	-	1.7	-	1.7
Product line discontinuation	21.2	-	21.2	-
<b>Adjusted operating profit before income taxes</b>	\$ <b>94.0</b>	\$ <b>98.4</b>	\$ <b>190.4</b>	\$ <b>179.7</b>
Income tax expense	\$ (17.6)	\$ (23.9)	\$ (48.5)	\$ (43.6)
Tax adjustments <sup>1</sup>	4.5	1.1	18.9	1.2
<b>Adjusted income tax expense</b>	\$ <b>(13.1)</b>	\$ <b>(22.8)</b>	\$ <b>(29.6)</b>	\$ <b>(42.4)</b>
Effective tax rate	20.2%	26.5%	23.3%	26.0%
<b>Adjusted effective tax rate</b>	<b>13.9%</b>	<b>23.2%</b>	<b>15.5%</b>	<b>23.6%</b>

<sup>1</sup> Includes tax adjustments related to Asbestos, the amortization benefit of certain US intangible assets and other tax adjustments

## NON-US GAAP FINANCIAL MEASURES

### Adjusted EBITDA excluding Asbestos

US\$ Millions	Three Months and Half Year Ended 30 September			
	Q2'19	Q2'18	1H'19	1H'18
<b>EBIT</b>	\$ 99.5	\$ 97.1	\$ 231.4	\$ 181.1
Depreciation and amortization	30.8	23.4	58.9	45.2
<b>Adjusted EBITDA</b>	\$ 130.3	\$ 120.5	\$ 290.3	\$ 226.3
Asbestos:				
Asbestos adjustments	(14.2)	6.6	(39.3)	10.5
AICF SG&A expenses	0.4	0.4	0.7	0.8
<b>Adjusted EBITDA excluding Asbestos</b>	\$ 116.5	\$ 127.5	\$ 251.7	\$ 237.6

### Adjusted selling, general and administrative expenses ("Adjusted SG&A")

US\$ Millions	Three Months and Half Year Ended 30 September			
	Q2'19	Q2'18	1H'19	1H'18
<b>SG&amp;A expenses</b>	\$ 98.9	\$ 75.0	\$ 203.8	\$ 148.5
Excluding:				
AICF SG&A expenses	(0.4)	(0.4)	(0.7)	(0.8)
Farmacell acquisition costs	-	(1.7)	-	(1.7)
<b>Adjusted SG&amp;A expenses</b>	\$ 98.5	\$ 72.9	\$ 203.1	\$ 146.0
Net sales	\$ 644.6	\$ 525.8	\$ 1,295.6	\$ 1,033.5
SG&A expenses as a percentage of net sales	15.3%	14.3%	15.7%	14.4%
<b>Adjusted SG&amp;A expenses as a percentage of net sales</b>	<b>15.3%</b>	<b>13.9%</b>	<b>15.7%</b>	<b>14.1%</b>



# Q2 FY19 MANAGEMENT PRESENTATION

08 November 2018

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**James Hardie Industries plc**  
**Condensed Consolidated Financial Statements**  
**as of and for the Period Ended 30 September 2018**

# James Hardie Industries plc

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<a href="#"><u>Condensed Consolidated Balance Sheets as of 30 September 2018 and 31 March 2018</u></a>	<a href="#"><u>F-4</u></a>
<a href="#"><u>Condensed Consolidated Statements of Operations and Comprehensive Income for the Three and Six Months Ended 30 September 2018 and 2017</u></a>	<a href="#"><u>F-5</u></a>
<a href="#"><u>Condensed Consolidated Statements of Cash Flows for the Six Months Ended 30 September 2018 and 2017</u></a>	<a href="#"><u>F-6</u></a>
<a href="#"><u>Notes to Condensed Consolidated Financial Statements</u></a>	<a href="#"><u>F-7</u></a>

## Review Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors of  
James Hardie Industries plc

### Results of Review of Interim Financial Statements

We have reviewed the accompanying condensed consolidated balance sheet of James Hardie Industries plc ("the Company") as of 30 September 2018, the related condensed consolidated statements of operations and comprehensive income for the three and six-month periods ended 30 September 2018 and 2017, and the condensed consolidated statements of cash flows for the six-month periods ended 30 September 2018 and 2017, and the related notes (collectively referred to as the "condensed consolidated interim financial statements"). Based on our reviews, we are not aware of any material modifications that should be made to the condensed consolidated interim financial statements for them to be in conformity with U.S. generally accepted accounting principles.

We have previously audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheet of the Company as of 31 March 2018, the related consolidated statements of comprehensive income, shareholders' deficit and cash flows for the year then ended, and the related notes (not presented herein) and in our report dated 22 May 2018, we expressed an unqualified audit opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying condensed consolidated balance sheet as of 31 March 2018, is fairly stated, in all material respects, in relation to the consolidated balance sheet from which it has been derived.

### Basis for Review Results

These financial statements are the responsibility of the Company's management. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the SEC and PCAOB. We conducted our review in accordance with the standards of the PCAOB. A review of interim financial information consists principally of applying analytical procedures and making inquiries of persons responsible for financial and accounting matters. It is substantially less in scope than an audit conducted in accordance with the standards of the PCAOB, the objective of which is the expression of an opinion regarding the financial statements taken as a whole. Accordingly, we do not express such an opinion.

/s/ Ernst & Young LLP

Irvine, California  
8 November 2018

# James Hardie Industries plc

## Condensed Consolidated Balance Sheets

(Millions of US dollars)	(Unaudited)	
	30 September 2018	31 March 2018
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 108.9	\$ 281.6
Restricted cash	5.1	5.0
Restricted cash - Asbestos	19.7	26.6
Restricted short-term investments - Asbestos	86.5	38.4
Accounts and other receivables, net of provision for doubtful trade debts of US\$0.9 million and US\$1.3 million as of 30 September 2018 and 31 March 2018	238.0	202.7
Inventories	287.8	255.7
Prepaid expenses and other current assets	26.2	25.4
Insurance receivable - Asbestos	4.8	5.1
Workers' compensation - Asbestos	2.0	2.1
Total current assets	779.0	842.6
Property, plant and equipment, net	1,292.6	992.1
Goodwill	206.9	4.9
Intangible assets, net	183.3	12.3
Insurance receivable - Asbestos	47.6	52.8
Workers' compensation - Asbestos	27.0	28.8
Deferred income taxes	1,111.5	29.9
Deferred income taxes - Asbestos	346.6	382.9
Other assets	2.8	4.7
Total assets	\$ 3,997.3	\$ 2,351.0
<b>Liabilities and Shareholders' Equity (Deficit)</b>		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 274.5	\$ 193.3
Accrued payroll and employee benefits	59.4	61.8
Accrued product warranties	6.2	7.3
Income taxes payable	11.1	3.2
Asbestos liability	107.2	114.1
Workers' compensation - Asbestos	2.0	2.1
Other liabilities	13.0	12.8
Total current liabilities	473.4	394.6
Long-term debt	1,370.3	884.4
Deferred income taxes	83.0	66.4
Accrued product warranties	43.0	45.5
Income taxes payable	25.9	25.9
Asbestos liability	976.7	1,101.0
Workers' compensation - Asbestos	27.0	28.8
Other liabilities	49.1	25.9
Total liabilities	3,048.4	2,572.5
Commitments and contingencies (Note 11)		
Shareholders' equity (deficit):		
Common stock, Euro 0.59 par value, 2.0 billion shares authorized; 442,026,941 shares issued and outstanding at 30 September 2018 and 441,524,118 shares issued and outstanding at 31 March 2018	229.8	229.5
Additional paid-in capital	191.5	185.6
Accumulated shareholders' equity (deficit)	552.6	(635.3)
Accumulated other comprehensive loss	(25.0)	(1.3)
Total shareholders' equity (deficit)	948.9	(221.5)
Total liabilities and shareholders' equity (deficit)	\$ 3,997.3	\$ 2,351.0

The accompanying notes are an integral part of these condensed consolidated financial statements.



**James Hardie Industries plc**  
**Condensed Consolidated Statements of Operations and Comprehensive Income**  
(Unaudited)

(Millions of US dollars, except per share data)	Three Months Ended 30 September		Six Months Ended 30 September	
	2018	2017	2018	2017
Net sales	\$ 644.6	\$ 525.8	\$ 1,295.6	\$ 1,033.5
Cost of goods sold	(437.5)	(338.6)	(867.4)	(677.3)
Gross profit	207.1	187.2	428.2	356.2
Selling, general and administrative expenses	(98.9)	(75.0)	(203.8)	(148.5)
Research and development expenses	(9.8)	(8.5)	(19.2)	(16.1)
Asset Impairments	(13.1)	—	(13.1)	—
Asbestos adjustments	14.2	(6.6)	39.3	(10.5)
Operating income	99.5	97.1	231.4	181.1
Interest expense, net of capitalized interest	(13.3)	(7.7)	(24.7)	(14.4)
Interest income	0.8	0.9	1.6	1.1
Other income (expense)	0.1	—	0.3	(0.4)
Income before income taxes	87.1	90.3	208.6	167.4
Income tax expense	(17.6)	(23.9)	(48.5)	(43.6)
Net income	\$ 69.5	\$ 66.4	\$ 160.1	\$ 123.8
Income per share:				
Basic	\$ 0.16	\$ 0.15	\$ 0.36	\$ 0.28
Diluted	\$ 0.16	\$ 0.15	\$ 0.36	\$ 0.28
Weighted average common shares outstanding (Millions):				
Basic	441.6	440.9	441.6	440.9
Diluted	443.1	441.5	443.1	441.5
Comprehensive income, net of tax:				
Net income	\$ 69.5	\$ 66.4	\$ 160.1	\$ 123.8
Cash flow hedges	—	—	(0.1)	—
Currency translation adjustments	(5.6)	4.0	(23.6)	6.7
Comprehensive income	\$ 63.9	\$ 70.4	\$ 136.4	\$ 130.5

The accompanying notes are an integral part of these condensed consolidated financial statements.

**James Hardie Industries plc**  
**Condensed Consolidated Statements of Cash Flows**  
(Unaudited)

(Millions of US dollars)	Six Months Ended 30 September	
	2018	2017
<b>Cash Flows From Operating Activities</b>		
Net income	\$ 160.1	\$ 123.8
Adjustments to reconcile net income to net cash provided by operating activities		
Depreciation and amortization	58.9	45.2
Deferred income taxes	15.8	6.3
Stock-based compensation	6.2	4.3
Asbestos adjustments	(39.3)	10.5
Excess tax benefits from share-based awards	—	(0.5)
Asset Impairments	13.1	—
Other, net	10.4	5.3
Changes in operating assets and liabilities:		
Accounts and other receivables	0.5	10.0
Inventories	2.7	(26.9)
Prepaid expenses and other assets	(0.6)	4.5
Insurance receivable - Asbestos	2.1	2.8
Accounts payable and accrued liabilities	18.8	5.2
Claims and handling costs paid - Asbestos	(58.8)	(47.0)
Income taxes payable	7.5	2.3
Other accrued liabilities	(13.3)	12.5
<b>Net cash provided by operating activities</b>	<b>\$ 184.1</b>	<b>\$ 158.3</b>
<b>Cash Flows From Investing Activities</b>		
Purchases of property, plant and equipment	\$ (140.0)	\$ (83.6)
Proceeds from sale of property, plant and equipment	—	7.9
Capitalized interest	(2.5)	(1.8)
Acquisition of business, net of cash acquired	(558.7)	—
Purchase of restricted short-term investments - Asbestos	(89.1)	(78.4)
Proceeds from restricted short-term investments - Asbestos	38.4	—
<b>Net cash used in investing activities</b>	<b>\$ (751.9)</b>	<b>\$ (155.9)</b>
<b>Cash Flows From Financing Activities</b>		
Proceeds from credit facilities	\$ 150.0	\$ 280.0
Repayments of credit facilities	(130.0)	(165.0)
Proceeds from 364-day term loan facility	492.4	—
Proceeds from issuance of shares	—	0.2
Dividends paid	(128.5)	(131.3)
Repayments of NSW Loan - Asbestos	—	(51.9)
<b>Net cash provided by (used in) financing activities</b>	<b>\$ 383.9</b>	<b>\$ (68.0)</b>
Effects of exchange rate changes on cash and cash equivalents, restricted cash and restricted cash - Asbestos	\$ 4.4	\$ (1.7)
Net decrease in cash and cash equivalents, restricted cash and restricted cash - Asbestos	(179.5)	(67.3)
Cash and cash equivalents, restricted cash and restricted cash - Asbestos at beginning of period	313.2	192.8
<b>Cash and cash equivalents, restricted cash and restricted cash - Asbestos at end of period</b>	<b>\$ 133.7</b>	<b>\$ 125.5</b>
<b>Supplemental Disclosure of Cash Flows Activities</b>		
Cash paid to AICF	\$ 103.0	\$ 102.2

The accompanying notes are an integral part of these condensed consolidated financial statements.

# James Hardie Industries plc

## Notes to Condensed Consolidated Financial Statements

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### 1. Background and Basis of Presentation

#### Nature of Operations

James Hardie Industries plc manufactures and sells fiber cement, fiber gypsum and cement-bonded building products for interior and exterior building construction applications, primarily in the United States, Australia, Canada, New Zealand, the Philippines and Europe. On 3 April 2018, James Hardie Industries plc completed the acquisition of German-based XI (DL) Holdings GmbH and its subsidiaries (including, but not limited to, Fermacell GmbH) (collectively, "Fermacell"). Fermacell manufactures and sells fiber gypsum and cement-bonded building products primarily in continental Europe.

#### Basis of Presentation

The condensed consolidated financial statements represent the financial position, results of operations and cash flows of James Hardie Industries plc and its wholly-owned subsidiaries and variable interest entity. Except as otherwise indicated, James Hardie Industries plc is referred to as "JHI plc." JHI plc, together with its direct and indirect subsidiaries, are collectively referred to as "James Hardie" or the "Company." These interim condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and the notes thereto, included in the Company's Annual Report on Form 20-F for the fiscal year ended 31 March 2018, which was filed with the United States Securities and Exchange Commission ("SEC") on 22 May 2018.

The condensed consolidated financial statements included herein are unaudited; however, they contain all adjustments (all of which are normal and recurring) which, in the opinion of the Company's management, are necessary to state fairly the condensed consolidated balance sheet of the Company at 30 September 2018, the condensed consolidated statements of operations and comprehensive income for the three and six months ended 30 September 2018 and 2017 and the condensed consolidated statements cash flows for the six months ended 30 September 2018 and 2017.

The Company has recorded on its balance sheet certain foreign assets and liabilities, including asbestos-related assets and liabilities under the terms of the Amended and Restated Final Funding Agreement ("AFFA"), that are denominated in foreign currencies and subject to translation (foreign entities) or remeasurement (Asbestos Injuries Compensation Fund ("AICF") entity and Euro denominated debt) into US dollars at each reporting date. Unless otherwise noted, the Company converts foreign currency denominated assets and liabilities into US dollars at the current spot rate at the end of the reporting period; while revenues and expenses are converted using an average exchange rate for the period. Gains or losses resulting from transactions denominated in foreign currencies are included in selling, general and administrative expenses in the condensed consolidated statements of operations and comprehensive income, and may be offset by other transactions. The Company recorded a foreign exchange gain relating to its Euro denominated term loan which was economically offset by a foreign exchange loss on loans between subsidiaries resulting in a net translation gain of US\$0.1 million and US\$1.9 million for the three and six months ended 30 September 2018, respectively, which was recorded in *Selling, general and administrative expenses* in the condensed consolidated statements of operations and comprehensive income.

The results of operations for the three and six months ended 30 September 2018 are not necessarily indicative of the results to be expected for the full year. The balance sheet at 31 March 2018 has been derived from the audited financial statements at that date but does not include all of the information and footnotes required by accounting principles generally accepted in the United States of America ("US GAAP") for complete financial statements in this interim financial report.

#### Business combinations

The Company accounts for acquired businesses using the acquisition method of accounting. This method requires that the purchase price be allocated to the identifiable assets acquired and liabilities assumed at their estimated fair values. The excess of the purchase price over the identifiable assets acquired and liabilities assumed is recorded as goodwill.

The fair values are determined by management, taking into consideration information supplied by management of the acquired entities, and other relevant information. Such information typically includes valuations obtained from independent appraisal experts, which management reviews and considers in its estimates of fair values. The valuations are generally based upon future cash flow projections for the acquired assets, discounted to present value. The determination of fair values requires significant judgment by management, particularly with respect to the value of

## James Hardie Industries plc

### Notes to Condensed Consolidated Financial Statements (continued)

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identifiable intangible assets. This judgment could result in either a higher or lower value assigned to amortizable or depreciable assets. The impact could result in either higher or lower amortization and/or depreciation expense. Management's estimates of fair value are based upon assumptions believed to be reasonable, but due to the inherent uncertainty during the measurement period, which may be up to one year from the acquisition date, the Company records adjustments to the assets acquired and liabilities assumed, with the corresponding offset to goodwill. The purchase price allocation for the Fermacell acquisition is based upon a preliminary valuation and the estimates and assumptions are subject to change within the measurement period as additional information is obtained.

#### Goodwill and Other Intangible Assets

Goodwill is the excess of purchase price over the fair value of tangible and identifiable intangible net assets acquired in various business combinations. Goodwill is not amortized but is tested at the reporting unit level for impairment annually, or more often if indicators of impairment exist. A goodwill impairment charge is recorded for the amount by which the carrying value of the reporting unit exceeds the fair value of the reporting unit. During the quarter ended 30 September 2018, the Company recorded a US\$4.6 million Goodwill impairment charge in the Other Businesses segment due to the Company's decision to exit the Windows business in the second quarter of fiscal year 2019. The Company did not record any goodwill impairment charges for the three and six months ended 30 September 2017.

Intangible assets from acquired businesses are recognized at their estimated fair values at the date of acquisition and consist of trademarks, customer relationships and other intangible assets. Finite-lived intangibles are amortized to expense over the applicable useful lives, ranging from 2 to 13 years, based on the nature of the asset and the underlying pattern of economic benefit as reflected by future net cash inflows. The Company performs an impairment test of intangibles annually, or whenever events or changes in circumstances indicate their carrying value may be impaired. During the quarter ended 30 September 2018, the Company recorded an intangible asset impairment charge in the Other Businesses segment of US\$2.2 million due to the Company's decision to exit the Windows business in the second quarter of fiscal year 2019. Further, during the quarter ended 30 September 2018, the Company made the decision to exit its Multiple Contour Trim ("MCT") product line, and as a result, the Company recorded an impairment charge in the North America Fiber Cement segment of US\$0.4 million on the intangible assets associated with this product line. The Company did not record any intangible asset impairment charges for the three and six months ended 30 September 2017.

#### Impairment of Long-Lived Assets

Long-lived assets, such as property, plant and equipment, are evaluated each quarter for events or changes in circumstances that indicate that an asset might be impaired because the carrying amount of the asset may not be recoverable. During the quarter ended 30 September 2018, the Company recorded total impairment charges on property, plant and equipment of US\$5.9 million. An impairment charge of US\$3.3 million and US\$2.6 million was recorded in the Other Businesses segment and in the North America Fiber Cement segment, respectively.

#### Reclassifications

Within the operating activities section of the condensed consolidated statements of cash flows for the six months ended 30 September 2017, the Company reclassified the change in the *Income Taxes Payable* balance of US\$2.3 million which was previously included within a change in *Other Accrued Liabilities*, and separated these costs in the change in *Income Taxes Payable* line item, to conform to current year presentation.

The Company adopted Accounting Standards Update ("ASU") No. 2016-18 starting with the fiscal year beginning 1 April 2018, which required *Restricted Cash* and *Restricted Cash - Asbestos* to be included in the starting and ending cash balances on the condensed consolidated statements of cash flows. See Note 2 for further details on this accounting standard update, including all reclassifications made to the condensed consolidated statements of cash flows for the six months ended 30 September 2017.

Within the *Total Assets* section of the condensed consolidated balance sheet as of 31 March 2018, the Company reclassified the *Intangible Assets, Net* and *Goodwill* balance of US\$12.3 million and US\$4.9 million, respectively, which was previously included in *Other Assets* to conform to current year presentation.

#### Reporting Segments

During the first quarter of fiscal year 2019, the Company changed its reportable operating segments in conjunction with how information is evaluated by the Chief Operating Decision Maker (CODM) for the purpose of assessing segment performance and allocation of resources. The Company has revised its historical segment information at 31 March

## James Hardie Industries plc

### Notes to Condensed Consolidated Financial Statements (continued)

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2018 and for the three and six months ended 30 September 2017 to be consistent with the current reportable segment structure. The change in reportable segments had no effect on the Company's financial position, results of operations or cash flows for the periods presented. See Note 15 for further details on segment reporting.

#### 2. Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board ("FASB") issued ASU No. 2014-09, which provides guidance requiring companies to recognize revenue depicting the transfer of goods or services to customers in amounts that reflect the payment to which a company expects to be entitled in exchange for those goods or services. ASU No. 2014-09 also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. ASU No. 2014-09 was effective for annual reporting periods beginning after 15 December 2017, and interim periods within those years, with early adoption permitted for annual reporting periods beginning after 15 December 2016. Companies may use either a full retrospective or a modified retrospective approach to adopt ASU No. 2014-09. The Company adopted ASU No. 2014-09 (and related clarifying guidance issued by the FASB) starting with the fiscal year beginning 1 April 2018 using a modified retrospective approach. As a result of adopting ASU No. 2014-09, the Company recorded no adjustment to the opening retained earnings as of 1 April 2018. The impact to revenues and related deferred revenue balances as a result of applying ASU No. 2014-09 was not material as of and for the three and six months ended 30 September 2018. See Note 4 for further details.

In February 2016, the FASB issued ASU No. 2016-02, which provides guidance on the amount, timing, and uncertainty of cash flows arising from leases. The standard requires lessees to recognize lease assets and lease liabilities on the balance sheet and requires expanded disclosures about leasing arrangements. Lessor accounting will remain largely unchanged from current guidance, however ASU No. 2016-02 will provide improvements that are intended to align lessor accounting with the lessee model and with updated revenue recognition guidance. The amendments in ASU No. 2016-02 shall be applied on a modified retrospective basis, and are effective for fiscal years and interim periods within those years, beginning after 15 December 2018, with early adoption permitted. In July 2018, the FASB issued ASU No. 2018-11, which provided a second accepted transition method, which would allow companies to adopt the new lease standard as a cumulative-effect adjustment to the opening balance of retained earnings as of the beginning of the period of adoption, rather than at the beginning of the earliest period presented. The Company has begun its process for implementing this guidance, including performing a preliminary review of all active leases. The Company will adopt ASU No. 2016-02 starting with the fiscal year beginning 1 April 2019, using the second modified retrospective transition method outlined in ASU No. 2018-11, and is currently evaluating the impact of the guidance on its consolidated financial statements.

In October 2016, the FASB issued ASU No. 2016-16, which requires entities to recognize the income tax consequences of intra-entity transfers of assets other than inventory when the transfer occurs. The amendments in ASU No. 2016-16 are effective for fiscal years and interim periods within those years, beginning after 15 December 2017, with early adoption permitted. The amendments in ASU No. 2016-16 shall be applied on a modified retrospective basis, wherein the beginning retained earnings in the period in which the guidance is adopted should include a cumulative-effect adjustment to reflect the effects of applying the new guidance. The Company adopted ASU No. 2016-16 starting with the fiscal year beginning 1 April 2018, and recorded an increase in gross deferred income tax assets of US\$1,313.0 million, a valuation allowance of US\$148.2 million, a decrease in other assets of US\$4.5 million and a corresponding cumulative retained earnings adjustment of US\$1,160.3 million, resulting from all internal restructuring transactions undertaken in prior years, including the internal restructuring transaction implemented during the year ended 31 March 2018 relating to the alignment of certain intangible assets with its US business.

**James Hardie Industries plc**  
**Notes to Condensed Consolidated Financial Statements (continued)**

In November 2016, the FASB issued ASU No. 2016-18, which requires the statement of cash flows to explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. The amendments in ASU No. 2016-18 were effective for fiscal years and interim periods within those years, beginning after 15 December 2017, with early adoption permitted. The Company adopted ASU No. 2016-18 starting with the fiscal year beginning 1 April 2018 and the amendments in ASU No. 2016-18 were applied on a retrospective basis for each period presented. In accordance with disclosure requirements of this new accounting standard, the impact of adoption on the condensed consolidated statements of cash flows was as follows:

(Millions of US dollars)	As reported	31 March 2018	
		ASU 2016-18 Adjustment	As adjusted
Cash and cash equivalents	\$ 281.6	\$ 31.6	\$ 313.2

(Millions of US dollars)	As reported	Six months ended 30 September 2017	
		ASU 2016-18 Adjustment	As adjusted
Cash and cash equivalents at the beginning of the period	\$ 78.9	\$ 113.9	\$ 192.8
Cash and cash equivalents at the end of the period	78.8	46.7	125.5
Restricted cash - Asbestos	41.9	(41.9)	—
Payment to AICF	(102.2)	102.2	—
Asbestos liability	(47.0)	47.0	—
Asbestos claims paid	—	(47.0)	(47.0)
Net cash provided by operating activities	98.0	60.3	158.3
Purchase of investments - Asbestos	—	(78.4)	(78.4)
Net cash used in investing activities	(77.5)	(78.4)	(155.9)
Repayments of NSW Loan - Asbestos	—	(51.9)	(51.9)
Net cash used in financing activities	(16.1)	(51.9)	(68.0)
Effects of exchange rate changes on cash	(4.5)	2.8	(1.7)

In January 2017, the FASB issued ASU No. 2017-01, which clarifies the definition of a business to assist entities with evaluating whether transactions should be accounted for as acquisitions or disposals of either assets or of businesses. The amendments in ASU No. 2017-01 are effective for fiscal years and interim periods within those years, beginning after 15 December 2017, on a prospective basis. Early adoption of the amendments in ASU No. 2017-01 is allowable for transactions in which the acquisition date, the date of the deconsolidation of a subsidiary or the date a group of assets is derecognized occurs before the report issuance date. The Company adopted ASU No. 2017-01 starting with the fiscal year beginning 1 April 2018 and the adoption of this standard did not have a material impact on the consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-04, which removes step 2 from the goodwill impairment test. Under the new guidance, if a reporting unit's carrying amount exceeds its fair value, an entity will record an impairment charge based on that difference. The impairment charge will be limited to the amount of goodwill allocated to that reporting unit. The amendments in ASU No. 2017-04 are effective for fiscal years and interim periods within those years, beginning after 15 December 2019, with early adoption permitted. The Company adopted ASU No. 2017-04 prospectively on 1 April 2018, and the adoption of this standard did not have a material impact on the consolidated financial statements.

In March 2018, the FASB issued ASU No. 2018-05, which provides the SEC Staff's guidance when preparing the initial accounting for the income tax effects of the US Tax Cuts and Jobs Act ("TCJ Act"), which was enacted on 22 December 2017. The staff guidance addresses the specific situation in which the initial accounting for certain income tax effects of the TCJ Act will not be complete at the time that financial statements are issued. ASU No. 2018-05 is effective for financial statements that include the reporting period in which the TCJ Act was enacted. Therefore, the Company implemented the guidance in ASU No. 2018-05 in its financial statements for the fiscal year ending 31 March 2018.

## James Hardie Industries plc

### Notes to Condensed Consolidated Financial Statements (continued)

The Company completed or provisionally estimated all of the effects of the TCJ Act during the fiscal year ended 31 March 2018. The final impact of the TCJ Act may differ from these provisionally estimated tax effects, including the effects of, among other things, the estimate of available foreign tax credits and additional guidance or regulations that may be issued including state tax conformity impacts.

In July 2018, the FASB issued ASU No. 2018-09, which clarifies, corrects errors in, and makes minor improvements to a wide variety of topics in the Accounting Standards Codification ("ASC"). The transition and effective date of this guidance is based on the facts and circumstances of each amendment. Some of the amendments in ASU No. 2018-09 do not require transition guidance and were effective upon issuance of ASU No. 2018-09. The Company adopted these specific amendments during the three months ended 30 June 2018 and noted no material impact on its consolidated financial statements. However, many of the amendments do have transition guidance with effective dates for annual periods beginning after 15 December 2018. For these specific amendments, the Company will follow the specific transition guidance for each relevant amendment, and does not expect the adoption of these amendments to have a material impact on its consolidated financial statements.

In August 2018, the FASB issued ASU No. 2018-15, which clarifies the accounting treatment for implementation costs incurred in a cloud computing arrangement that is a service contract. ASU No. 2018-15 aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). The guidance provides criteria for determining which implementation costs to capitalize as an asset related to the service contract and which costs to expense. The amendments in ASU No. 2018-15 should be applied either retrospectively or prospectively to all implementation costs incurred after the date of adoption, and are effective for fiscal years and interim periods within those years, beginning after 15 December 2019, with early adoption permitted. The Company adopted ASU No. 2018-15 during the quarter ended 30 September 2018 based on the prospective transition method, and does not expect the adoption of this amendments to have a material impact on its consolidated financial statements .

### 3. Earnings Per Share

The Company discloses basic and diluted earnings per share ("EPS"). Basic EPS is calculated using net income divided by the weighted average number of common shares outstanding during the period. Diluted EPS is similar to basic EPS except that the weighted average number of common shares outstanding is increased to include the number of additional common shares calculated using the Treasury Method that would have been outstanding if the dilutive potential common shares, such as stock options and restricted stock units ("RSUs"), had been issued.

Basic and diluted common shares outstanding used in determining net income per share are as follows:

(Millions of shares)	Three Months Ended 30 September		Six Months Ended 30 September	
	2018	2017	2018	2017
Basic common shares outstanding	441.6	440.9	441.6	440.9
Dilutive effect of stock awards	1.5	0.6	1.5	0.6
Diluted common shares outstanding	443.1	441.5	443.1	441.5
(US dollars)			2018	2017
Net income per share - basic	\$ 0.16	\$ 0.15	\$ 0.36	\$ 0.28
Net income per share - diluted	\$ 0.16	\$ 0.15	\$ 0.36	\$ 0.28

There were no potential common shares which would be considered anti-dilutive for the three and six months ended 30 September 2018 and 2017.

**James Hardie Industries plc**  
**Notes to Condensed Consolidated Financial Statements (continued)**

Unless they are anti-dilutive, RSU's which vest solely based on continued employment are considered to be outstanding as of their issuance date for purposes of computing diluted EPS and are included in the calculation of diluted EPS using the Treasury Method. Once these RSU's vest, they are included in the basic EPS calculation on a weighted-average basis.

RSU's which vest based on performance or market conditions are considered contingent shares. At each reporting date prior to the end of the contingency period, the Company determines the number of contingently issuable shares to include in the diluted EPS calculation, as the number of shares that would be issuable under the terms of the RSU arrangement, if the end of the reporting period were the end of the contingency period. Once these RSU's vest, they are included in the basic EPS calculation on a weighted-average basis.

Potential common shares of 2.1 million and 1.9 million for the three and six months ended 30 September 2018, respectively, and 2.7 million and 2.5 million for the three and six months ended 30 September 2017, respectively, have been excluded from the calculation of diluted common shares outstanding as they are considered contingent shares which are not expected to vest.

**4. Revenues**

The following represents the Company's disaggregated revenues for the three months ended 30 September 2018 and 2017:

(Millions of US dollars)	Three Months Ended 30 September 2018				
	North America Fiber Cement	Asia Pacific Fiber Cement	Europe Building Products	Other Businesses	Consolidated
Fiber cement revenues	\$ 435.6	\$ 117.3	\$ 9.6	\$ —	\$ 562.5
Fiber gypsum revenues	—	—	77.8	—	77.8
Other revenues	—	—	—	4.3	4.3
Total revenues	\$ 435.6	\$ 117.3	\$ 87.4	\$ 4.3	\$ 644.6

(Millions of US dollars)	Three Months Ended 30 September 2017				
	North America Fiber Cement	Asia Pacific Fiber Cement	Europe Building Products	Other Businesses	Consolidated
Fiber cement revenues	\$ 398.1	\$ 113.4	\$ 10.5	\$ —	\$ 522.0
Fiber gypsum revenues	—	—	—	—	—
Other revenues	—	—	—	3.8	3.8
Total revenues	\$ 398.1	\$ 113.4	\$ 10.5	\$ 3.8	\$ 525.8

The following represents the Company's disaggregated revenues for the six months ended 30 September 2018 and 2017:

(Millions of US dollars)	Six Months Ended 30 September 2018				
	North America Fiber Cement	Asia Pacific Fiber Cement	Europe Building Products	Other Businesses	Consolidated
Fiber cement revenues	\$ 869.4	\$ 234.4	\$ 18.8	\$ —	\$ 1,122.6
Fiber gypsum revenues	—	—	164.0	—	164.0
Other revenues	—	—	—	9.0	9.0
Total revenues	\$ 869.4	\$ 234.4	\$ 182.8	\$ 9.0	\$ 1,295.6



**James Hardie Industries plc**  
**Notes to Condensed Consolidated Financial Statements (continued)**

(Millions of US dollars)	Six Months Ended 30 September 2017				
	North America Fiber Cement	Asia Pacific Fiber Cement	Europe Building Products	Other Businesses	Consolidated
Fiber cement revenues	\$ 791.2	\$ 215.0	\$ 19.7	\$ —	\$ 1,025.9
Fiber gypsum revenues	—	—	—	—	—
Other revenues	—	—	—	7.6	7.6
Total revenues	\$ 791.2	\$ 215.0	\$ 19.7	\$ 7.6	\$ 1,033.5

The process by which the Company recognizes revenues is similar across each of the Company's reportable segments and is described in further detail below. Fiber cement and fiber gypsum revenues are primarily generated from the sale of siding and various boards used in internal and external applications, as well as accessories. Fiber gypsum revenues also includes the sale of cement-bonded boards in the Europe Building Products segment. Other revenues in the Other Businesses segment are generated from the sale of fiberglass products and windows in North America.

The Company recognizes revenues when the requisite performance obligation has been met, that is, when the Company transfers control of its products to customers, which depending on the terms of the underlying contract, is generally upon delivery. The Company considers shipping and handling activities that it performs as activities to fulfill the sales of its products, with amounts billed for such costs included in net sales and the associated costs incurred for such services recorded in cost of sales, in accordance with the practical expedient provided by ASC 606.

Certain of the Company's customers receive discounts and rebates as sales incentives, amounts which are recorded as a reduction to revenue at the time the revenue is recognized. These amounts are an estimate recorded by the Company based on historical experience and contractual obligations, the underlying assumptions of which are periodically reviewed and adjusted by the Company as necessary.

The Company's contracts are generally short-term in nature, generally not exceeding twelve months, with payment terms varying by the type and location of products or services offered; however, the period of time between invoicing and when payment is due is not significant.

**5. Cash and Cash Equivalents, Restricted Cash and Restricted Cash - Asbestos**

The following table provides a reconciliation of *Cash and cash equivalents, Restricted cash and Restricted cash - Asbestos* reported within the condensed consolidated balance sheets that sum to the total of the same such amounts shown in the condensed consolidated statements of cash flows:

(Millions of US dollars)	30 September	31 March
	2018	2018
Cash and cash equivalents	\$ 108.9	\$ 281.6
Restricted cash	5.1	5.0
Restricted cash - Asbestos	19.7	26.6
Total cash and cash equivalents, restricted cash and restricted cash - Asbestos	\$ 133.7	\$ 313.2

Included in *Restricted cash* is US\$5.1 million and US\$5.0 million related to an insurance policy at 30 September 2018 and 31 March 2018, respectively, which restricts the cash from general corporate purposes.

Included in *Restricted cash - Asbestos* is US\$19.7 million and US\$26.6 million at 30 September 2018 and 31 March 2018, respectively. The use of these assets is restricted to the settlement of asbestos claims and for the payment of the operating costs of AICF.

**James Hardie Industries plc**  
**Notes to Condensed Consolidated Financial Statements (continued)**

**6. Inventories**

*Inventories* consist of the following components:

(Millions of US dollars)	30 September 2018	31 March 2018
Finished goods	\$ 208.5	\$ 190.3
Work-in-process	9.2	8.1
Raw materials and supplies	81.1	65.3
Provision for excess and obsolete finished goods and raw materials	(11.0)	(8.0)
<b>Total inventories</b>	<b>\$ 287.8</b>	<b>\$ 255.7</b>

As of 30 September 2018 and 31 March 2018, US\$29.9 million and US\$30.2 million, respectively, of the Company's finished goods inventory balance was held at vendor managed inventory locations.

**7. Goodwill and Other Intangible Assets**

Intangible assets from acquired businesses are recognized at their estimated fair values at the date of acquisition and consist of trademarks, customer relationships and other intangible assets. Finite-lived intangibles are amortized to expense over the applicable useful lives, ranging from 2 to 13 years, based on the nature of the asset and the underlying pattern of economic benefit as reflected by future net cash inflows. The Company performs an impairment test of intangibles annually, or whenever events or changes in circumstances indicate their carrying value may be impaired.

Indefinite-Lived Intangible Assets

The following are the changes in the carrying value of indefinite-lived intangible assets for the six months ended 30 September 2018:

(Millions of US dollars)	Goodwill <sup>1</sup>	Trade names <sup>2</sup>	Other <sup>3</sup>
Balance - 31 March 2018	\$ 4.9	\$ —	\$ 7.4
Acquired during the period	218.4	126.8	—
Impairment	(4.6)	—	—
Foreign exchange impact	(11.8)	(6.8)	—
<b>Balance - 30 September 2018</b>	<b>\$ 206.9</b>	<b>\$ 120.0</b>	<b>\$ 7.4</b>

1 At 30 September 2018, Goodwill of US\$206.6 million and US\$0.3 million was included in the Europe Building Products segment and Asia Pacific Fiber Cement segment, respectively. At 31 March 2018, Goodwill of US\$4.6 million and US\$0.3 million was included in the Other Businesses segment and the Asia Pacific Fiber Cement segment, respectively. During the quarter ended 30 September 2018, the Company recorded a US\$4.6 million Goodwill impairment charge in the Other Businesses segment due to the Company's decision to exit the Windows business.

2 Trade names are included in the Europe Building Products segment at 30 September 2018.

3 Other indefinite-lived intangible assets are included in the North America Fiber Cement segment at 30 September 2018 and 31 March 2018.

**James Hardie Industries plc**  
**Notes to Condensed Consolidated Financial Statements (continued)**

Amortizable Intangible Assets

The following are the changes in the carrying value of amortizable intangible assets primarily held in the Europe Building Products segment for the six months ended 30 September 2018:

(Millions of US dollars)	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
<b>Customer relationships:</b>			
Balance - 31 March 2018	\$ —	\$ —	\$ —
Acquired during the period	57.8	—	57.8
Amortization	—	(2.4)	(2.4)
Foreign exchange impact	(3.3)	0.1	(3.2)
Balance - 30 September 2018	<u>\$ 54.5</u>	<u>\$ (2.3)</u>	<u>\$ 52.2</u>

(Millions of US dollars)	Gross Carrying Amount	Accumulated Amortization and Impairment	Net Carrying Amount
<b>Other intangibles:</b>			
Balance - 31 March 2018	\$ 9.7	\$ (4.8)	\$ 4.9
Acquired during the period	2.4	—	2.4
Amortization	—	(0.8)	(0.8)
Impairment	—	(2.6)	(2.6)
Foreign exchange impact	(0.2)	—	(0.2)
Balance - 30 September 2018	<u>\$ 11.9</u>	<u>\$ (8.2)</u>	<u>\$ 3.7</u>

The amortization of intangible assets was US\$ 1.7 million and US\$0.3 million for the three months ended 30 September 2018 and 2017, respectively. The amortization of intangible assets was US\$3.2 million and US\$0.5 million for the six months ended 30 September 2018 and 2017, respectively.

During the quarter ended 30 September 2018, the Company recorded total impairment charges on amortizable intangible assets of US\$2.6 million. An impairment charge of US\$2.2 million was recorded to the intangible assets associated with the Other Businesses segment due to the Company's decision to exit the Windows business in the second quarter of fiscal year 2019. Also, the Company made the decision that it would discontinue its MCT product line, and as such, recorded an impairment charge of US\$0.4 million on intangible assets associated with this product line.

At 30 September 2018 and 31 March 2018, the weighted-average remaining useful life of the Company's amortizable intangible assets is as follows:

(In Years)	30 September 2018	31 March 2018
Customer Relationships	12.5	—
Other Intangibles	7.4	6.1
Total	12.2	6.1

## James Hardie Industries plc

### Notes to Condensed Consolidated Financial Statements (continued)

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At 30 September 2018, the estimated future amortization of intangible assets is as follows:

Years ended 31 March (Millions of US dollars):

2019	\$	3.0
2020		3.3
2021		2.9
2022		3.7
2023		4.5

#### 8. Long-Term Debt

At 30 September 2018 and 31 March 2018, the Company had three forms of debt: an unsecured revolving credit facility; a 364-day term loan facility (the "Term Loan Facility"); and senior notes due 2025 and 2028. The effective weighted average interest rate on the Company's total debt was 3.7% and 4.7% at 30 September 2018 and 31 March 2018, respectively. The weighted average term of all debt, including undrawn facilities, was 4.9 years and 6.9 years at 30 September 2018 and 31 March 2018, respectively.

##### Unsecured Revolving Credit Facility

In December 2015, James Hardie International Finance Designated Activity Company ("JHIF") and James Hardie Building Products Inc. ("JHBP"), each a wholly-owned subsidiary of JHI plc, entered into a US\$500.0 million unsecured revolving credit facility (the "Revolving Credit Facility") with certain commercial banks and HSBC Bank USA, National Association, as administrative agent. The Revolving Credit Facility's original expiration date was December 2020 and the size of the facility may be increased by up to US\$250.0 million. In December 2017, JHIF amended the Revolving Credit Facility to among other things, extend the maturity date to December 2022.

Debt issuance costs in connection with the Revolving Credit Facility are recorded as an offset to *Long-Term Debt* in the Company's condensed consolidated balance sheets and are being amortized as interest expense using the effective interest method over the stated term of 5 years. At 30 September 2018 and 31 March 2018, the Company's total debt issuance costs have an unamortized balance of US\$2.9 million and US\$3.3 million, respectively.

The amount drawn under the Revolving Credit Facility was US\$120.0 million and US\$100.0 million at 30 September 2018 and 31 March 2018, respectively.

The effective weighted average interest rate on the Company's total outstanding Revolving Credit Facility was 3.8% and 3.2% at 30 September 2018 and 31 March 2018, respectively.

Borrowings under the Revolving Credit Facility bear interest at per annum rates equal to, at the borrower's option, either: (i) the London Interbank Offered Rate ("LIBOR") plus an applicable margin for LIBOR loans; or (ii) a base rate plus an applicable margin for base rate loans. The base rate is calculated as the highest of (x) the rate that the administrative agent announces from time to time as its prime lending rate, as in effect from time to time, (y) 1/2 of 1% in excess of the overnight Federal Funds Rate, and (z) LIBOR for an interest period of one month plus 1.00%. The applicable margin is calculated based on a pricing grid that in each case is linked to our consolidated net leverage ratio. For LIBOR Loans, the applicable margin ranges from 1.25% to 2.00%, and for base rate loans it ranges from 0.25% to 1.00%. The Company also pays a commitment fee of between 0.20% and 0.35% on the actual daily amount of the unutilized revolving loans. The applicable commitment fee percentage is based on a pricing grid linked to the Company's consolidated net leverage ratio.

The Revolving Credit Facility is guaranteed by each of James Hardie International Group Limited's ("JHIGL") and James Hardie Technology Limited ("JHTL"), each of which are wholly-owned subsidiaries of JHI plc.

## James Hardie Industries plc

### Notes to Condensed Consolidated Financial Statements (continued)

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The Revolving Credit Facility agreement contains certain covenants that, among other things, restrict JHIGL and its restricted subsidiaries' ability to incur indebtedness and grant liens other than certain types of permitted indebtedness and permitted liens, make certain restricted payments, and undertake certain types of mergers or consolidations actions. In addition, the Company: (i) must not exceed a maximum ratio of net debt to earnings before interest, tax, depreciation and amortization, excluding all asbestos-related liabilities, assets, income, gains, losses and charges other than AICF payments, all AICF selling, general and administrative ("SG&A") expenses, all Australian Securities and Investment Commission ("ASIC")-related expenses, all recoveries and asset impairments, and all New Zealand product liability expenses and (ii) must meet or exceed a minimum ratio of earnings before interest, tax, depreciation and amortization to interest charges, excluding all income, expense and other income statement impacts of asbestos income, gains, losses and charges, all AICF SG&A expenses, all ASIC-related expenses, all recoveries and asset impairments, and all New Zealand product liability expenses. At 30 September 2018, the Company was in compliance with all covenants contained in the Revolving Credit Facility agreement.

#### Term Loan Facility

In December 2017, JHIF and JHBP entered into a 364-day term loan facility (the "Term Loan Facility") with certain commercial banks and HSBC Bank USA, National Association, as administrative agent. On 3 April 2018, the Company drew €400.0 million (US\$492.4 million based on the exchange rate on 3 April 2018) on this Term Loan Facility, and used these funds to complete the Fermacell acquisition. Pursuant to its terms, the Term Loan Facility provided for a single drawing, and any undrawn amounts are no longer available. Further, amounts drawn under the Term Loan Facility may not be re-borrowed once repaid or prepaid. Subsequent to 30 September 2018, JHIF repaid all €400.0 million aggregate principal amount and accrued interest of its Term Loan Facility following the completion of the sale of €400.0 million aggregate principal amount of 3.625% senior unsecured notes due 2026. Consequently, the Company has classified the Term Loan Facility as *Long-term debt* on the condensed consolidated balance sheet at 30 September 2018.

Debt issuance costs in connection with the Term Loan Facility are recorded as an offset to *Long-Term Debt* in the Company's condensed consolidated balance sheets and are being amortized as interest expense using the effective interest method over the stated term of one year. At 30 September 2018 and 31 March 2018, the Company's total debt issuance costs have an unamortized balance of US\$1.0 million and nil, respectively.

Borrowings under the Term Loan Facility will bear interest at per annum rates equal to, at borrower's option, either: (i) the LIBOR plus an applicable margin for LIBOR loans; or (ii) a base rate plus an applicable margin for base rate loans. The base rate is calculated as the highest of (x) the rate that the administrative agent announces from time to time as its prime lending rate, as in effect from time to time, (y) 1/2 of 1% in excess of the overnight Federal Funds Rate, and (z) LIBOR for an interest period of one month plus 1.00%. The applicable margin is calculated based on a pricing grid that in each case is linked to our consolidated net leverage ratio. For LIBOR loans, the applicable margin ranges from 1.25% to 2.00%, and for base rate loans it ranges from 0.25% to 1.00%.

The Term Loan Facility is guaranteed by each of JHIGL and JHTL, each of which are wholly-owned subsidiaries of JHI plc.

The Term Loan Facility agreement contains certain covenants that, among other things, restrict JHIGL and its restricted subsidiaries' ability to incur indebtedness and grant liens other than certain types of permitted indebtedness and permitted liens, make certain restricted payments, and undertake certain types of mergers or consolidations actions. In addition, the Company: (i) must not exceed a maximum of net debt to earnings before interest, tax, depreciation and amortization, excluding all asbestos-related liabilities, assets, income, gains, losses and charges other than AICF payments, all AICF SG&A expenses, all ASIC-related expenses, all recoveries and asset impairments, and all New Zealand product liability expenses and (ii) must meet or exceed a minimum ratio of earnings before interest, tax, depreciation and amortization to interest charges, excluding all income, expense and other income statement impacts of asbestos income, gains, losses and charges, all AICF SG&A expenses, all ASIC-related expenses, all recoveries and asset impairments, and all New Zealand product liability expenses. At 30 September 2018, the Company was in compliance with all covenants contained in the Term Loan Facility agreement.

## James Hardie Industries plc

### Notes to Condensed Consolidated Financial Statements (continued)

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#### 2025 and 2028 Senior Notes

In December 2017, JHIF completed the sale of US\$800.0 million aggregate principal amount of senior unsecured notes. The sale of the senior notes were issued at par with US\$400.0 million due 15 January 2025 (the "2025 Notes") and the remaining US\$400.0 million due 15 January 2028 (the "2028 Notes").

Debt issuance costs in connection with the 2025 and 2028 Notes are recorded as an offset to *Long-Term Debt* on the Company's condensed consolidated balance sheets.

Debt issuance costs in connection with the 2025 Notes have an unamortized balance of US\$5.7 million and US\$6.1 million at 30 September 2018 and 31 March 2018, respectively. The debt issuance costs are being amortized as interest expense using the effective interest method over the stated term of 7 years. Interest is payable semi-annually in arrears on 15 January and 15 July of each year at a rate of 4.75% with first payment on 15 July 2018.

Debt issuance costs in connection with the 2028 Notes have an unamortized balance of US\$5.9 million and US\$6.2 million at 30 September 2018 and 31 March 2018, respectively. The debt issuance costs are being amortized as interest expense using the effective interest method over the stated term of 10 years. Interest is payable semi-annually in arrears on 15 January and 15 July of each year at a rate of 5.00% with first payment on 15 July 2018.

The 2025 and 2028 Notes are guaranteed by JHIGL, JHBP and JHTL, each of which are wholly-owned subsidiaries of JHI plc.

The indenture governing the 2025 and 2028 Notes contains covenants that, among other things, limit the ability of the guarantors and their restricted subsidiaries to incur liens on assets, make certain restricted payments, engage in certain sale and leaseback transactions and merge or consolidate with or into other companies. These covenants are subject to certain exceptions and qualifications as described in the indenture. At 30 September 2018, the Company was in compliance with all of its requirements under the indenture related to the 2025 and 2028 Notes.

The Company's 2025 and 2028 Notes have an estimated fair value of US\$760.0 million and US\$787.5 million at 30 September 2018 and 31 March 2018, respectively, based on the trading price observed in the market at or near the balance sheet date and are categorized as Level 1 within the fair value hierarchy.

#### 2026 Senior Notes

In October 2018, JHIF completed the sale of €400.0 million aggregate principal amount of 3.625% senior unsecured notes due 1 October 2026 (the "2026 Notes"). The 2026 Notes were issued at par and the proceeds from the offering were used to repay the outstanding borrowings under the Term Loan Facility, and to pay related transaction fees and expenses.

Interest is payable semi-annually in arrears on 1 October and 1 April of each year at a rate of 3.625% with first payment due on 1 April 2019.

The 2026 Notes are guaranteed by JHIGL, JHBP and JHTL, each of which are wholly-owned subsidiaries of JHI plc.

The indenture governing the 2026 Notes contains covenants that, among other things, limit the ability of the guarantors and their restricted subsidiaries to incur liens on assets, make certain restricted payments, engage in certain sale and leaseback transactions and merge or consolidate with or into other companies. These covenants are subject to certain exceptions and qualifications as described in the indenture.

#### Off Balance Sheet Arrangements

As of 30 September 2018, the Company had a total borrowing base capacity under the Revolving Credit Facility of US\$500.0 million with outstanding borrowings of US\$120.0 million, and US\$9.5 million of drawn letters of credit and bank guarantees. These letters of credit and bank guarantees relate to various operational matters including insurance, performance bonds and other items, leaving the Company with US\$370.5 million of available borrowing capacity under the Revolving Credit Facilities.

**James Hardie Industries plc**  
**Notes to Condensed Consolidated Financial Statements (continued)**

**9. Asbestos**

In February 2007, the Company's shareholders approved the AFFA, an agreement pursuant to which the Company provides long-term funding to the AICF.

Asbestos Adjustments

Asbestos-related assets and liabilities are denominated in Australian dollars. The reported values of these asbestos-related assets and liabilities in the Company's condensed consolidated balance sheets in US dollars are subject to adjustment depending on the closing exchange rate between the two currencies at the balance sheet dates, the effect of which is included in *Asbestos adjustments* in the condensed consolidated statements of operations and comprehensive income.

Adjustments in insurance receivables are due to changes in the Company's assessment of recoverability and are reflected as *Asbestos adjustments* on the condensed consolidated statements of operations and comprehensive income during the period in which the adjustments occur.

The following table sets forth the *Asbestos adjustments* included in the condensed consolidated statements of operations and comprehensive income for the three and six months ended 30 September 2018 and 2017:

(Millions of US dollars)	Three Months Ended 30 September		Six Months Ended 30 September	
	2018	2017	2018	2017
Effect of foreign exchange on other Asbestos net liabilities	\$ 14.1	\$ (10.6)	\$ 40.4	\$ (15.3)
Adjustments in insurance receivables	(0.3)	4.5	(0.3)	4.5
Gain (Loss) on foreign currency forward contracts	0.4	(0.3)	(0.8)	1.4
Asbestos research education fund	—	(0.2)	—	(1.1)
<b>Asbestos adjustments</b>	<b>\$ 14.2</b>	<b>\$ (6.6)</b>	<b>\$ 39.3</b>	<b>\$ (10.5)</b>

Claims Data

The following table shows the activity related to the numbers of open claims, new claims and closed claims during each of the past five years and the average settlement per settled claim and case closed:

	Six Months					
	Ended 30 September 2018	2018	2017	For the Years Ended 31 March		
		2016	2015	2014		
Number of open claims at beginning of period	336	352	426	494	466	462
Number of new claims	281	562	557	577	665	608
Number of closed claims	315	578	631	645	637	604
Number of open claims at end of period	302	336	352	426	494	466
Average settlement amount per settled claim	A\$272,636	A\$253,431	A\$223,535	A\$248,138	A\$254,209	A\$253,185
Average settlement amount per case closed	A\$238,016	A\$217,038	A\$167,563	A\$218,900	A\$217,495	A\$212,944
Average settlement amount per settled claim	US\$202,930	US\$196,093	US\$168,300	US\$182,763	US\$222,619	US\$236,268
Average settlement amount per case closed	US\$177,161	US\$167,934	US\$126,158	US\$161,229	US\$190,468	US\$198,716

Under the terms of the AFFA, the Company has rights of access to actuarial information produced for AICF by the actuary appointed by AICF, which is currently KPMG Actuarial. The Company's disclosures with respect to claims statistics are subject to it obtaining such information, however, the AFFA does not provide the Company an express right to audit or otherwise require independent verification of such information or the methodologies to be adopted by the approved actuary. As such, the Company relies on the accuracy and completeness of the information provided by AICF to the approved actuary and the resulting information and analysis of the approved actuary when making disclosures with respect to claims statistics.

**James Hardie Industries plc**  
**Notes to Condensed Consolidated Financial Statements (continued)**

Asbestos-Related Assets and Liabilities

The Company has included on its condensed consolidated balance sheets the asbestos-related assets and liabilities of AICF under the terms of the AFFA. These amounts are detailed in the table below, and the net total of these asbestos-related assets and liabilities is referred to by the Company as the "Net AFFA Liability."

(Millions of US dollars)	30 September 2018	31 March 2018
Asbestos liability – current	\$ (107.2)	\$ (114.1)
Asbestos liability – non-current	(976.7)	(1,101.0)
<b>Asbestos liability – Total</b>	<b>(1,083.9)</b>	<b>(1,215.1)</b>
Insurance receivable – current	4.8	5.1
Insurance receivable – non-current	47.6	52.8
<b>Insurance receivable – Total</b>	<b>52.4</b>	<b>57.9</b>
Workers' compensation asset – current	2.0	2.1
Workers' compensation asset – non-current	27.0	28.8
Workers' compensation liability – current	(2.0)	(2.1)
Workers' compensation liability – non-current	(27.0)	(28.8)
<b>Workers' compensation – Total</b>	<b>—</b>	<b>—</b>
Other net liabilities	(2.6)	(2.2)
Restricted cash - Asbestos	19.7	26.6
Restricted short-term investments - Asbestos	86.5	38.4
<b>Net Unfunded AFFA liability</b>	<b>\$ (927.9)</b>	<b>\$ (1,094.4)</b>
Deferred income taxes – non-current	346.6	382.9
Income tax payable	12.9	21.1
<b>Net Unfunded AFFA liability, net of tax</b>	<b>\$ (568.4)</b>	<b>\$ (690.4)</b>



**James Hardie Industries plc**  
**Notes to Condensed Consolidated Financial Statements (continued)**

The following is a detailed rollforward of the Net Unfunded AFFA liability, net of tax, for the year ended 30 September 2018:

(Millions of US dollars)	Asbestos Liability	Insurance Receivables	Restricted Cash and Investments	Other Assets and Liabilities	Net Unfunded AFFA Liability	Deferred Tax Assets	Income Tax Payable	Net Unfunded AFFA Liability, net of tax
Balance - 31 March 2018	\$ (1,215.1)	\$ 57.9	\$ 65.0	\$ (2.2)	\$ (1,094.4)	\$ 382.9	\$ 21.1	\$ (690.4)
Asbestos claims paid <sup>1</sup>	58.3	—	(58.3)	—	—	—	—	—
Payment received in accordance with AFFA	—	—	103.0	—	103.0	—	—	103.0
AICF claims-handling costs incurred (paid)	0.5	—	(0.5)	—	—	—	—	—
AICF operating costs paid - non claims-handling	—	—	(0.7)	—	(0.7)	—	—	(0.7)
Insurance recoveries	—	(2.1)	2.1	—	—	—	—	—
Movement in income tax payable	—	—	—	—	—	(13.2)	(7.5)	(20.7)
Other movements	—	—	0.9	(0.5)	0.4	(0.1)	(0.3)	—
Effect of foreign exchange	72.4	(3.4)	(5.3)	0.1	63.8	(23.0)	(0.4)	40.4
<b>Balance - 30 September 2018</b>	<b>\$ (1,083.9)</b>	<b>\$ 52.4</b>	<b>\$ 106.2</b>	<b>\$ (2.6)</b>	<b>\$ (927.9)</b>	<b>\$ 346.6</b>	<b>\$ 12.9</b>	<b>\$ (568.4)</b>

1 Claims paid of US\$58.3 million reflects A\$78.3 million converted at the average exchange rate for the period based on the assumption that these transactions occurred evenly throughout the period.

AICF Funding

On 2 July 2018, the Company made a payment of A\$138.4 million (US\$103.0 million translated at the exchange rate set five days before the day of payment) to AICF. This amount represents 35% of its free cash flow for fiscal year 2018 which is equivalent to the operating cash flows of US\$295.0 million less an adjustment of US\$0.8 million, resulting in free cash flow of US\$294.2 million for fiscal year 2018, as defined by the AFFA. For the three and six months ended 30 September 2018, the Company did not provide financial or other support to AICF that it was not previously contractually required to provide.

Free cash flow as defined in the AFFA, for purposes of the 35% funding, for the six months ended 30 September 2018 is US\$ 137.6 million.

Restricted Short-Term Investments

In July 2017, AICF invested A\$100.0 million of its excess cash in time deposits. In fiscal year 2018, A\$50.0 million of these time deposits matured, with the remaining A\$50.0 million outstanding as of 31 March 2018. During the six months ended 30 September 2018, the remaining A\$50.0 million of time deposits matured and were reclassified to *Restricted cash - Asbestos* on the condensed consolidated balance sheets.

In July 2018, AICF invested A\$120.0 million (US\$86.5 million, based on the exchange rate at 30 September 2018) of its excess cash in time deposits. These time deposits are reflected within *Restricted short-term investments - Asbestos* on the condensed consolidated balance sheet as of 30 September 2018 and have been classified as available-for-sale. At 30 September 2018, AICF's short-term investments were revalued resulting in a mark-to-market fair value adjustment of nil.

## James Hardie Industries plc

### Notes to Condensed Consolidated Financial Statements (continued)

These time deposits bear a fixed interest rate and have a maturity as follows:

Maturity Date	Interest Rate	A\$ Millions Total Amount
31 October 2018	2.60%	15.0
30 November 2018	2.60%	15.0
31 December 2018	2.60%	15.0
31 January 2019	2.61%	15.0
31 May 2019	2.50%	60.0

#### AICF – New South Wales Government Secured Loan Facility

AICF may borrow, subject to certain conditions, up to an aggregate amount of A\$320.0 million (US\$ 230.8 million, based on the exchange rate at 30 September 2018). The AICF Loan Facility is available to be drawn for the payment of claims through 1 November 2030, at which point, all outstanding borrowings must be repaid. Borrowings made under the AICF Loan Facility are classified as current, as AICF intends to repay the debt within one year.

Interest accrues daily on amounts outstanding, is calculated based on a 365-day year and is payable monthly. AICF may, at its discretion, elect to accrue interest payable on amounts outstanding under the AICF Loan Facility on the date interest becomes due and payable.

At 30 September 2018 and 31 March 2018, AICF had an outstanding balance under the AICF Loan Facility of nil.

#### **10. Derivative Instruments**

The Company uses derivatives for risk management purposes and does not engage in speculative activity. A risk management objective for the Company is to mitigate interest rate risk associated with the Company's external credit facilities and foreign currency risk primarily with respect to forecasted transactions denominated in foreign currencies. The determination of whether the Company enters into a derivative transaction to achieve these risk management objectives depends on a number of factors, including an evaluation of the extent to which derivative instruments will achieve such risk management objectives of the Company.

The Company may from time to time enter into interest rate swap contracts to protect against upward movements in US Dollar LIBOR and the associated interest the Company pays on its external credit facilities. Interest rate swaps are recorded in the financial statements at fair value. Changes in fair value are recorded in the condensed consolidated statements of operations and comprehensive income in *Other income (expense)*.

#### Interest Rate Swaps

The fair value of interest rate swap contracts is calculated based on the fixed rate, notional principal, settlement date and present value of the future cash inflows and outflows based on the terms of the agreement and the future floating interest rates as determined by a future interest rate yield curve. The model used to value the interest rate swap contracts is based upon well recognized financial principles, and interest rate yield curves can be validated through readily observable data by external sources. Although readily observable data is used in the valuations, different valuation methodologies could have an effect on the estimated fair value. Accordingly, the interest rate swap contracts are categorized as Level 2.

For interest rate swap contracts, the Company has agreed to pay fixed interest rates while receiving a floating interest rate. These contracts have a fair value of US\$0.7 million and US\$0.4 million receivable at 30 September 2018 and at 31 March 2018, respectively, which are included in *Accounts and other receivables*.

At 30 September 2018, the weighted average fixed interest rate of these contracts is 2.2% and the weighted average remaining life is 1.3 years.

**James Hardie Industries plc**  
**Notes to Condensed Consolidated Financial Statements (continued)**

For the three months ended 30 September 2018, the Company included in *Other income (expense)* an unrealized gain of nil and a realized gain of US\$0.1 million on interest rate swap contracts. For the six months ended 30 September 2018, the Company included in *Other income (expense)* an unrealized gain of US\$0.3 million and a realized gain of nil on interest rate swap contracts.

For the three months ended 30 September 2017, the Company included in *Other income (expense)* an unrealized gain of US\$0.2 million and a realized loss US\$0.2 million on interest rate swap contracts. For the six months ended 30 September 2017, the Company included in *Other income (expense)* an unrealized gain of nil and a realized loss US\$0.4 million on interest rate swap contracts.

Foreign Currency Forward Contracts

The Company's foreign currency forward contracts are valued using models that maximize the use of market observable inputs including interest rate curves and both forward and spot prices for currencies and are categorized as Level 2 within the fair value hierarchy.

Changes in the fair value of forward contracts that are not designated as hedges are recorded in earnings within *Other income (expense)* at each measurement date. As discussed above, these derivatives are typically entered into as economic hedges of changes in currency exchange rates.

At 30 September 2018 and 2017, the Company did not have any forward currency contracts.

The following table sets forth the total outstanding notional amount and the fair value of the Company's derivative instruments:

(Millions of US dollars)	Notional Amount		Fair Value as of			
			30 September 2018		31 March 2018	
	30 September 2018	31 March 2018	Assets	Liabilities	Assets	Liabilities
<b>Derivatives not accounted for as hedges</b>						
Interest rate swap contracts	\$ 75.0	\$ 100.0	\$ 0.7	\$ —	\$ 0.4	\$ —
Foreign currency forward contracts	—	0.8	—	—	—	—
<b>Total</b>	<b>\$ 75.0</b>	<b>\$ 100.8</b>	<b>\$ 0.7</b>	<b>\$ —</b>	<b>\$ 0.4</b>	<b>\$ —</b>

**11. Commitments and Contingencies**

The Company is involved from time to time in various legal proceedings and administrative actions related to the normal conduct of its business, including general liability claims, putative class action lawsuits and litigation concerning its products.

Although it is impossible to predict the outcome of any pending legal proceeding, management believes that such proceedings and actions should not, individually or in the aggregate, have a material adverse effect on the Company's condensed consolidated financial position, results of operations or cash flows, except as they relate to asbestos as described in these condensed consolidated financial statements.

Environmental and Legal

The operations of the Company, like those of other companies engaged in similar businesses, are subject to a number of laws and regulations on air and water quality, waste handling and disposal. The Company's policy is to accrue for environmental costs when it is determined that it is probable that an obligation exists and the amount can be reasonably estimated.

**James Hardie Industries plc**  
**Notes to Condensed Consolidated Financial Statements (continued)**

**12. Income Taxes**

*Income taxes payable* represents taxes currently payable which are computed at statutory income tax rates applicable to taxable income derived in each jurisdiction in which the Company conducts business. During the six months ended 30 September 2018, the Company paid tax, net of any refunds received, of US\$13.1 million.

*Income tax expense* differs from the statutory rate primarily due to the Company's mix of pre-tax income by jurisdiction, foreign taxes on domestic income, and foreign exchange on asbestos.

Deferred tax balances consist of the following components:

(Millions of US dollars)	30 September 2018	31 March 2018
<b>Deferred tax assets:</b>		
Intangible assets	\$ 1,255.2	\$ —
Asbestos liability	346.6	382.9
Other provisions and accruals	36.0	37.7
Net operating loss carryforwards	55.0	25.5
Foreign tax credit carryforwards	119.1	126.1
<b>Total deferred tax assets</b>	<b>1,811.9</b>	<b>572.2</b>
Valuation allowance	(270.9)	(129.6)
<b>Total deferred tax assets net of valuation allowance</b>	<b>1,541.0</b>	<b>442.6</b>
<b>Deferred tax liabilities:</b>		
Depreciable and amortizable assets	(122.2)	(81.6)
Other	(43.7)	(14.6)
<b>Total deferred tax liabilities</b>	<b>(165.9)</b>	<b>(96.2)</b>
<b>Total deferred taxes, net</b>	<b>\$ 1,375.1</b>	<b>\$ 346.4</b>

The Company adopted ASU No. 2016-16 starting with the fiscal year beginning 1 April 2018, and recorded an increase in gross deferred income tax assets of US\$1,313.0 million, a valuation allowance of US\$148.2 million and a decrease in other assets of US\$4.5 million. The deferred income tax asset is a result of all internal restructuring transactions involving intangible assets undertaken in prior years, including the internal restructuring transaction implemented during the year ended 31 March 2018 relating to the alignment of certain intangible assets with its US business. Intangible assets have an amortizable life of 15 years for US federal tax purposes.

*Deferred income taxes* include European, Australian and US net operating loss carry-forwards. At 30 September 2018, the Company had European tax loss carry-forwards of approximately US\$9.1 million, Australian tax loss carry-forwards of approximately US\$20.0 million and US tax loss carry-forwards of approximately US\$25.9 million that are available to offset future taxable income in the respective jurisdiction.

At 30 September 2018, the Company had a valuation allowance against a portion of the European tax loss carry-forwards in respect of which realization is not more likely than not.

The Australian tax loss carry-forwards primarily result from current and prior year tax deductions for contributions to AICF. James Hardie 117 Pty Limited, the performing subsidiary under the AFFA, is able to claim a tax deduction for its contributions to AICF over a five-year period commencing in the year the contribution is incurred. At 30 September 2018, the Company recognized a tax deduction of US\$44.3 million (A\$59.5 million) for the current year relating to total contributions to AICF of US\$472.1 million (A\$595.3 million) incurred in fiscal years 2015 through 2018.

Due to the size and nature of its business, the Company is subject to ongoing reviews by taxing jurisdictions on various tax matters. The Company accrues for tax contingencies based upon its best estimate of the taxes ultimately expected to be paid, which it updates over time as more information becomes available. Such amounts are included in taxes

## James Hardie Industries plc

### Notes to Condensed Consolidated Financial Statements (continued)

payable or other non-current liabilities, as appropriate. If the Company ultimately determines that payment of these amounts is unnecessary, the Company reverses the liability and recognizes a tax benefit during the period in which the Company determines that the liability is no longer necessary. The Company records additional tax expense in the period in which it determines that the recorded tax liability is less than the ultimate assessment it expects.

Taxing authorities from various jurisdictions in which the Company operates are in the process of reviewing and auditing the Company's respective jurisdictional tax returns for various ranges of years. The Company accrues tax liabilities in connection with ongoing audits and reviews based on knowledge of all relevant facts and circumstances, taking into account existing tax laws, its experience with previous audits and settlements, the status of current tax examinations and how the tax authorities view certain issues.

#### Unrecognized Tax Benefits

At 30 September 2018 and 31 March 2018, the total amount of unrecognized tax benefits accrued by the Company related to unrecognized tax benefits that, if recognized, would affect the tax expense is US\$0.7 million.

The Company recognizes penalties and interest accrued related to unrecognized tax benefits in *Income tax expense*. During the three and six months ended 30 September 2018, the total amount of interest and penalties recognized in *Income tax expense* was US\$0.1 million. The liabilities associated with uncertain tax benefits are included in *Other liabilities* on the Company's condensed consolidated balance sheets.

### 13. Stock-Based Compensation

Total stock-based compensation expense consists of the following:

(Millions of US dollars)	Three Months Ended 30 September		Six Months Ended 30 September	
	2018	2017	2018	2017
Liability Awards Expense	\$ 1.3	\$ 0.6	\$ 0.4	\$ 0.4
Equity Awards Expense	2.4	1.4	6.2	4.3
<b>Total stock-based compensation expense</b>	<b>\$ 3.7</b>	<b>\$ 2.0</b>	<b>\$ 6.6</b>	<b>\$ 4.7</b>

As of 30 September 2018, the unrecorded future stock-based compensation expense related to outstanding equity awards was US\$20.7 million and will be recognized over an estimated weighted average amortization period of 2.3 years.

### 14. Capital Management and Dividends

The following table summarizes the dividends declared or paid during the fiscal years 2019, 2018 and 2017:

(Millions of US dollars)	US Cents/Security	US\$ Millions Total Amount	Announcement Date	Record Date	Payment Date
FY 2018 second half dividend	0.30	128.5	22 May 2018	7 June 2018	3 August 2018
FY 2018 first half dividend	0.10	46.2	9 November 2017	13 December 2017	23 February 2018
FY 2017 second half dividend	0.28	131.3	18 May 2017	8 June 2017	4 August 2017
FY 2017 first half dividend	0.10	46.6	17 November 2016	21 December 2016	24 February 2017
FY 2016 second half dividend	0.29	130.2	19 May 2016	9 June 2016	5 August 2016

Subsequent to 30 September 2018, the Company announced an ordinary dividend of US10.0 cents per security, with a record date of 12 December 2018 and a payment date of 22 February 2019.

**James Hardie Industries plc**  
**Notes to Condensed Consolidated Financial Statements (continued)**

**15. Operating Segment Information and Concentrations of Risk**

During the first quarter of fiscal year 2019, the Company changed its reportable operating segments. Previously, the Company maintained four operating segments: (i) North America Fiber Cement; (ii) International Fiber Cement; (iii) Other Businesses; and (iv) Research and Development. Beginning in the first quarter of fiscal year 2019, the Company replaced the International Fiber Cement segment with two new segments: (i) Asia Pacific Fiber Cement; and (ii) Europe Building Products. There were no changes to the North America Fiber Cement; Other Businesses; and Research and Development segments. The Company has revised its historical segment information at 31 March 2018 and for the three and six months ended 30 September 2017 to be consistent with the current reportable segment structure. The change in reportable segments had no effect on the Company's financial position, results of operations or cash flows for the periods presented.

The North America Fiber Cement segment manufactures fiber cement interior linings, exterior siding products and related accessories in the United States; these products are sold in the United States and Canada. The Asia Pacific Fiber Cement segment includes all fiber cement products manufactured in Australia, New Zealand and the Philippines, and sold in Australia, New Zealand, Asia, the Middle East and various Pacific Islands. The Europe Building Products segment includes the newly acquired Fermacell business and fiber cement product manufactured in the United States that is sold in Europe. The Other Businesses segment includes certain non-fiber cement manufacturing and sales activities in North America, including fiberglass windows. The Research and Development segment represents the cost incurred by the research and development centers. General Corporate costs primarily consist of *Asbestos adjustments*, officer and employee compensation and related benefits, professional and legal fees, administrative costs and rental expense, net of rental income, on the Company's corporate offices.

**Operating Segments**

The following is the Company's operating segment information:

(Millions of US dollars)	Net Sales to Customers Three Months Ended 30 September		Net Sales to Customers Six Months Ended 30 September	
	2018	2017	2018	2017
	North America Fiber Cement	\$ 435.6	\$ 398.1	\$ 869.4
Asia Pacific Fiber Cement	117.3	113.4	234.4	215.0
Europe Building Products	87.4	10.5	182.8	19.7
Other Businesses	4.3	3.8	9.0	7.6
Worldwide total	<u>\$ 644.6</u>	<u>\$ 525.8</u>	<u>\$ 1,295.6</u>	<u>\$ 1,033.5</u>

(Millions of US dollars)	Income Before Income Taxes Three Months Ended 30 September		Income Before Income Taxes Six Months Ended 30 September	
	2018	2017	2018	2017
	North America Fiber Cement <sup>1,9</sup>	\$ 94.1	\$ 97.4	\$ 201.3
Asia Pacific Fiber Cement <sup>†</sup>	27.5	30.5	55.8	56.9
Europe Building Products <sup>1,7</sup>	3.4	0.3	(1.2)	0.1
Other Businesses <sup>9</sup>	(17.6)	(2.1)	(19.1)	(3.9)
Research and Development <sup>†</sup>	(7.1)	(7.2)	(14.5)	(13.3)
Segments total	100.3	118.9	222.3	217.0
General Corporate <sup>2,6</sup>	(0.8)	(21.8)	9.1	(35.9)
Total operating income	99.5	97.1	231.4	181.1
Net interest expense <sup>3</sup>	(12.5)	(6.8)	(23.1)	(13.3)
Other income (expense)	0.1	—	0.3	(0.4)
Worldwide total	<u>\$ 87.1</u>	<u>\$ 90.3</u>	<u>\$ 208.6</u>	<u>\$ 167.4</u>

**James Hardie Industries plc**  
**Notes to Condensed Consolidated Financial Statements (continued)**

(Millions of US dollars)	Total Identifiable Assets	
	30 September	31 March
	2018	2018
North America Fiber Cement	\$ 1,165.5	\$ 1,070.7
Asia Pacific Fiber Cement	310.7	328.8
Europe Building Products	716.7	22.8
Other Businesses	19.1	30.1
Research and Development	7.9	7.5
Segments total	2,219.9	1,459.9
General Corporate <sup>4,5</sup>	1,777.4	891.1
Worldwide total	\$ 3,997.3	\$ 2,351.0

The following is the Company's geographical information:

(Millions of US dollars)	Net Sales to Customers Three Months Ended 30 September		Net Sales to Customers Six Months Ended 30 September	
	2018	2017	2018	2017
	North America	\$ 439.8	\$ 402.0	\$ 878.3
Australia	84.5	80.1	168.4	151.1
Germany	33.3	0.7	68.3	1.3
New Zealand	19.9	21.1	40.5	40.1
Other Countries <sup>8</sup>	67.1	21.9	140.1	42.1
Worldwide total	\$ 644.6	\$ 525.8	\$ 1,295.6	\$ 1,033.5

(Millions of US dollars)	Total Identifiable Assets	
	30 September	31 March
	2018	2018
North America	\$ 1,188.1	\$ 1,103.6
Australia	228.3	242.6
Germany	513.7	0.5
New Zealand	34.2	34.8
Other Countries	255.6	78.4
Segments total	2,219.9	1,459.9
General Corporate <sup>4,5</sup>	1,777.4	891.1
Worldwide total	\$ 3,997.3	\$ 2,351.0

**James Hardie Industries plc**  
**Notes to Condensed Consolidated Financial Statements (continued)**

1 The following table summarizes research and development costs by segment:

(Millions of US dollars)	Three Months Ended 30 September		Six Months Ended 30 September	
	2018	2017	2018	2017
North America Fiber Cement	\$ 1.6	\$ 1.5	\$ 3.1	\$ 3.1
Asia Pacific Fiber Cement	0.6	0.4	1.1	0.8
Europe Building Products	0.8	—	1.3	—
Research and Development <sup>a</sup>	6.8	6.6	13.7	12.2
	<u>\$ 9.8</u>	<u>\$ 8.5</u>	<u>\$ 19.2</u>	<u>\$ 16.1</u>

<sup>a</sup> For the three months ended 30 September 2018 and 2017, the Research and Development segment also included *Selling, general and administrative expenses* of US\$0.3 million and US\$0.6 million, respectively. For the six months ended 30 September 2018 and 2017, the Research and Development segment also included *Selling, general and administrative expenses* of US\$0.8 million and US\$1.1 million, respectively.

2 Included in General Corporate costs are the following:

(Millions of US dollars)	Three Months Ended 30 September		Six Months Ended 30 September	
	2018	2017	2018	2017
Asbestos adjustments	\$ 14.2	\$ (6.6)	\$ 39.3	\$ (10.5)
AICF SG&A expenses	(0.4)	(0.4)	(0.7)	(0.8)
Gain on sale of Fontana building	—	—	—	3.4
Fermacell acquisition costs	—	(1.7)	—	(1.7)

3 The Company does not report net interest expense for each operating segment as operating segments are not held directly accountable for interest expense. All net interest expense is included in General Corporate costs. Included in net interest expense is AICF net interest income of US\$0.5 million and US\$0.6 million for the three months ended 30 September 2018 and 2017, respectively. Included in net interest expense is AICF net interest income of US\$0.8 million and US\$0.7 million for the six months ended 30 September 2018 and 2017, respectively. See note 9 for more information.

4 The Company does not report deferred tax assets and liabilities for each operating segment as operating segments are not held directly accountable for deferred income taxes. All deferred income taxes are included in General Corporate costs.

5 Asbestos-related assets at 30 September 2018 and 31 March 2018 are US\$35.1 million and US\$537.7 million, respectively, and are included in General Corporate costs.

6 Included in General Corporate costs is the settlement of New Zealand weathertightness legal claim of US\$1.6 million for the six months ended 30 September 2018.

7 Included in the Europe Building Products segment are Fermacell transaction and integration costs of US\$5.1 million and US\$13.8 million for the three and six months ended 30 September 2018, respectively. Also, included in the Europe Building Products segment is the amortization of the inventory fair value adjustment of nil and US\$7.3 million for the three and six months ended 30 September 2018, respectively. As this inventory was sold during the first quarter of fiscal year 2019, the entire adjustment was recognized into cost of goods sold during the same period.

8 Included are all other countries that account for less than 5% of net sales individually.



**James Hardie Industries plc**  
**Notes to Condensed Consolidated Financial Statements (continued)**

9 The following table summarizes asset impairment costs by segment:

(Millions of US dollars)	Three Months Ended 30 September		Six Months Ended 30 September	
	2018	2017	2018	2017
North America Fiber Cement <sup>a</sup>	\$ 3.0	\$ —	\$ 3.0	\$ —
Other Businesses <sup>b</sup>	10.1	—	10.1	—
	<u>\$ 13.1</u>	<u>\$ —</u>	<u>\$ 13.1</u>	<u>\$ —</u>

<sup>a</sup> For the three and six months ended 30 September 2018, the Company recorded impairment charges of US\$2.6 million and US\$0.4 million to *Property, plant and equipment, net* and *Intangible assets, net*, respectively, related to the discontinuance of its MCT product line.

<sup>b</sup> For the three and six months ended 30 September 2018, the Company recorded impairment charges of US\$4.6 million, US\$3.3 million and US\$2.2 million to the *Goodwill, Property, Plant and equipment, net* and *Intangible assets, net*, respectively, due to the Company's decision to exit the Windows business in the second quarter of fiscal year 2019.

**16. Accumulated Other Comprehensive Loss**

During the six months ended 30 September 2018 there were the following reclassifications out of *Accumulated other comprehensive loss*:

(Millions of US dollars)	Cash Flow Hedges	Foreign Currency Translation Adjustments	Total
Balance at 31 March 2018	\$ 0.3	\$ (1.6)	\$ (1.3)
Other comprehensive loss	(0.1)	(23.6)	(23.7)
<b>Balance at 30 September 2018</b>	<u>\$ 0.2</u>	<u>\$ (25.2)</u>	<u>\$ (25.0)</u>

**17. Business Combinations**

**Fermacell Acquisition**

On 3 April 2018, the Company completed its acquisition of the Fermacell business with Xella International S.A. for a purchase price of €516.4 million (US\$635.6 based on the exchange rate at 3 April 2018). The acquisition was pursuant to the Sales and Purchase Agreement dated 7 November 2017, and was structured as a stock purchase, resulting in 100% ownership of Fermacell. The Company financed the acquisition through a combination of cash on hand and borrowings of €400.0 million (US\$492.4 million based on the exchange rate at 3 April 2018) from the Term Loan Facility. See note 8 for more information.

Headquartered in Duisburg, Germany, Fermacell operates six manufacturing plants across Germany, the Netherlands and Spain, with a sales force in 12 countries and revenues generated primarily from countries in Western Europe. Fermacell is a provider of innovative building solutions, producing and distributing high quality fiber gypsum boards and cement-bonded boards, which are two complementary products in the high performance board space. Management believes this acquisition will generate significant value by providing the Company with a significant European presence and a differentiated platform to position the Company for meaningful long-term growth in Europe.

In connection with this acquisition, the Company incurred related transaction and integration costs of approximately US\$5.1 million and US\$13.8 million for the three and six months ended 30 September 2018, which have been recorded in the condensed consolidated statements of operations and comprehensive income in *Selling, general and administrative expenses*.

**James Hardie Industries plc**  
**Notes to Condensed Consolidated Financial Statements (continued)**

The following is the purchase price allocation for Fermacell:

(Millions of US dollars)		
Cash and cash equivalents	\$	76.9
Accounts and other receivable, net		43.7
Inventories		39.7
Other assets		4.1
Property, plant and equipment		231.5
Intangible assets		187.0
Accounts payable		(40.5)
Other liabilities		(40.0)
Deferred tax liabilities		(85.2)
Net assets acquired	\$	417.2
Goodwill		218.4
Total consideration	\$	635.6

The purchase price allocation set forth above reflects preliminary fair value estimates based on preliminary work and analyses performed and is subject to change as additional information to assist in determining the fair value of the net assets acquired at the closing date is obtained during the post-closing measurement period of up to one year.

The following table summarizes the estimated fair value of acquired identifiable intangible assets:

(Millions of US dollars)	Estimated remaining useful life (years)	Fair Value
Trade name	Indefinite	\$ 126.8
Customer relationships	13	57.8
Other intangible assets	2 - 13	2.4
Total		\$ 187.0

Intangible assets will be evaluated for impairment annually or more frequently if an event occurs or circumstances change that indicate it may be impaired, by comparing its fair value to its carrying amount to determine if a write-down to fair value is required.

Goodwill is attributable primarily to the benefits from the increased scale of the Company as a result of the Fermacell acquisition. Goodwill arising from the Fermacell acquisition is not deductible for income tax purposes.

Supplemental Pro Forma Results of Operations

The following unaudited supplemental pro forma information presents the results of operations of the Company, after giving effect to the Fermacell acquisition, as if the Company had completed the Fermacell acquisition and related financing (as described in Note 8) on 1 April 2017, but using the preliminary estimates of the fair values of the assets acquired and liabilities assumed as of the closing dates of the acquisition. These unaudited pro forma results are presented for informational purposes only and are not necessarily indicative of what the actual results of operations of the Company would have been if the Fermacell acquisition and related financing had occurred on the date assumed, nor are they indicative of future results of operations.

**James Hardie Industries plc**  
**Notes to Condensed Consolidated Financial Statements (continued)**

*James Hardie Industries Consolidated Pro Forma*

(Millions of US dollars)	Three Months Ended 30 September		Six Months Ended 30 September	
	2018 (Unaudited)	2017 (Unaudited)	2018 (Unaudited)	2017 (Unaudited)
Net sales	\$ 644.6	\$ 600.2	\$ 1,295.6	\$ 1,180.2
Income before income taxes	92.2	94.8	229.7	177.8

*Europe Building Products Pro Forma*

(Millions of US dollars)	Three Months Ended 30 September		Six Months Ended 30 September	
	2018 (Unaudited)	2017 (Unaudited)	2018 (Unaudited)	2017 (Unaudited)
Net sales	\$ 87.4	\$ 84.6	\$ 182.8	\$ 166.1
Income before income taxes	8.5	7.2	19.9	15.1

The unaudited pro forma results include the depreciation and amortization of the fair value of the acquired property, plant and equipment, customer relationships and other intangible assets and interest expense on the 364-day term loan used to acquire Fermacell. The unaudited pro forma results exclude the impact of the transaction and integration costs of US\$5.1 million and US\$13.8 million for three and six months ended 30 September 2018, respectively. The unaudited pro forma results also excludes the impact of the inventory fair value adjustment of US\$7.3 million for the six months ended 30 September 2018.

**James Hardie Industries plc (Company)**

**Directors' Report**

for the half year ended 30 September 2018

**Directors**

As of the date of this report the members of the Board are: MN Hammes (Chairman), BP Anderson, R Chenu, A Gisle Joosen, D Harrison, P Lisboa, A Littlely, A Lloyd, RMJ van der Meer and L Gries (CEO).

There have been two changes to the composition of the Board between 1 April 2018 and the date of this report. A Lloyd was appointed as a director on 4 November 2018 and S Simms resigned as a director on 23 August 2018.

**Review of Operations**

Please see Management's Analysis of Results relating to the period ended 30 September 2018.

**Auditor's Independence**

The Directors obtained an annual independence declaration from the Company's auditors, Ernst & Young LLP.

This report is made in accordance with a resolution of the Board.

/s/ Mike Hammes

/s/ L. Gries

MN Hammes  
Chairman

L. Gries  
Chief Executive Officer

Dublin, Ireland, 8 November 2018

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**Board of Directors' Declaration**  
for the half year ended 30 September 2018

The Board declares that with regard to the attached financial statements and notes:

- a) the financial statements and notes comply with the accounting standards in accordance with which they were prepared;
- b) the information contained in the financial statements and notes fairly presents, in all material respects, the financial condition and results of operations of the Company; and
- c) in the Directors' opinion, there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.

This declaration is made in accordance with a resolution of the Board.

/s/ Mike Hammes

/s/ L. Gries

MN Hammes  
Chairman

L. Gries  
Chief Executive Officer

Dublin, Ireland, 8 November 2018



**James Hardie Appoints New Non-Executive Director**

The Board of James Hardie Industries plc (James Hardie) has appointed Anne Lloyd as an independent non-executive director of James Hardie effective 4 November 2018.

Ms Lloyd, an experienced corporate and finance executive, served as Chief Financial Officer of Martin Marietta Materials, Inc. a leading supplier of aggregates and heavy building materials, for over 12 years from June 2005 until her retirement in August 2017. She joined Martin Marietta in 1998 as Vice President and Controller and was promoted to Chief Accounting Officer in 1999. She was subsequently appointed Treasurer (2006-2013) and promoted to Executive Vice President in 2009. Earlier in her career, Ms Lloyd spent 14 years with Ernst & Young LLP (1984-1998), latterly as a senior manager and client service executive for the natural resources, mining, insurance and healthcare industries. She is a resident of the United States.

Commenting on the appointment, Michael Hammes, Chairman of James Hardie, said "I am delighted that Anne has agreed to join our Board. With her extensive public company financial and business experience, she will be a valuable addition to the Board.

- End -

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## *Forward Looking Statements*

This Media Release contains forward-looking statements. James Hardie Industries plc (the “Company”) may from time to time make forward-looking statements in its periodic reports filed with or furnished to the Securities and Exchange Commission, on Forms 20-F and 6-K, in its annual reports to shareholders, in offering circulars, invitation memoranda and prospectuses, in media releases and other written materials and in oral statements made by the Company’s officers, directors or employees to analysts, institutional investors, existing and potential lenders, representatives of the media and others. Statements that are not historical facts are forward-looking statements and such forward-looking statements are statements made pursuant to the Safe Harbor Provisions of the Private Securities Litigation Reform Act of 1995.

Examples of forward-looking statements include:

- statements about the Company’s future performance;
- projections of the Company’s results of operations or financial condition;
- statements regarding the Company’s plans, objectives or goals, including those relating to strategies, initiatives, competition, acquisitions, dispositions and/or its products;
- expectations concerning the costs associated with the suspension or closure of operations at any of the Company’s plants and future plans with respect to any such plants;
- expectations concerning the costs associated with the significant capital expenditure projects at any of the Company’s plants and future plans with respect to any such projects;
- expectations regarding the extension or renewal of the Company’s credit facilities including changes to terms, covenants or ratios;
- expectations concerning dividend payments and share buy-backs;
- statements concerning the Company’s corporate and tax domiciles and structures and potential changes to them, including potential tax charges;
- statements regarding tax liabilities and related audits, reviews and proceedings;
- statements regarding the possible consequences and/or potential outcome of legal proceedings brought against us and the potential liabilities, if any, associated with such proceedings;
- expectations about the timing and amount of contributions to Asbestos Injuries Compensation Fund (AICF), a special purpose fund for the compensation of proven Australian asbestos-related personal injury and death claims;
- expectations concerning the adequacy of the Company’s warranty provisions and estimates for future warranty-related costs;
- statements regarding the Company’s ability to manage legal and regulatory matters (including but not limited to product liability, environmental, intellectual property and competition law matters) and to resolve any such pending legal and regulatory matters within current estimates and in anticipation of certain third-party recoveries; and
- statements about economic conditions, such as changes in the US economic or housing recovery or changes in the market conditions in the Asia Pacific region, the levels of new home construction and home renovations, unemployment levels, changes in consumer income, changes or stability in housing values, the availability of mortgages and other financing, mortgage and other interest rates, housing affordability and supply, the levels of foreclosures and home resales, currency exchange rates, and builder and consumer confidence.

Words such as “believe,” “anticipate,” “plan,” “expect,” “intend,” “target,” “estimate,” “project,” “predict,” “forecast,” “guideline,” “aim,” “will,” “should,” “likely,” “continue,” “may,” “objective,” “outlook” and similar expressions are intended to identify forward-looking statements but are not the exclusive means of identifying such statements. Readers are cautioned not to place undue reliance on these forward-looking statements and all such forward-looking statements are qualified in their entirety by reference to the following cautionary statements.

Forward-looking statements are based on the Company’s current expectations, estimates and assumptions and because forward-looking statements address future results, events and conditions, they, by their very nature, involve inherent risks and uncertainties, many of which are unforeseeable and beyond the Company’s control. Such known and unknown risks, uncertainties and other factors may cause actual results, performance or other achievements to differ materially from the anticipated results, performance or achievements expressed, projected or implied by these forward-looking statements. These factors, some of which are discussed under “Risk Factors” in Section 3 of the Form 20-F filed with the Securities and Exchange Commission on 22 May 2018, include, but are not limited to: all matters relating to or arising out of the prior manufacture of products that contained asbestos by current and former Company subsidiaries; required



contributions to AICF, any shortfall in AICF and the effect of currency exchange rate movements on the amount recorded in the Company's financial statements as an asbestos liability; the continuation or termination of the governmental loan facility to AICF; compliance with and changes in tax laws and treatments; competition and product pricing in the markets in which the Company operates; the consequences of product failures or defects; exposure to environmental, asbestos, putative consumer class action or other legal proceedings; general economic and market conditions; the supply and cost of raw materials; possible increases in competition and the potential that competitors could copy the Company's products; reliance on a small number of customers; a customer's inability to pay; compliance with and changes in environmental and health and safety laws; risks of conducting business internationally; compliance with and changes in laws and regulations; currency exchange risks; dependence on customer preference and the concentration of the Company's customer base on large format retail customers, distributors and dealers; dependence on residential and commercial construction markets; the effect of adverse changes in climate or weather patterns; possible inability to renew credit facilities on terms favorable to the Company, or at all; acquisition or sale of businesses and business segments; changes in the Company's key management personnel; inherent limitations on internal controls; use of accounting estimates; the integration of Fermacell into our business; and all other risks identified in the Company's reports filed with Australian, Irish and US securities regulatory agencies and exchanges (as appropriate). The Company cautions you that the foregoing list of factors is not exhaustive and that other risks and uncertainties may cause actual results to differ materially from those referenced in the Company's forward-looking statements. Forward-looking statements speak only as of the date they are made and are statements of the Company's current expectations concerning future results, events and conditions. The Company assumes no obligation to update any forward-looking statements or information except as required by law.



*Execution Version*

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JAMES HARDIE INTERNATIONAL FINANCE DESIGNATED ACTIVITY COMPANY

as Issuer,

the Guarantors named herein,

DEUTSCHE BANK TRUST COMPANY AMERICAS

as Trustee,

DEUTSCHE BANK AG, LONDON BRANCH

as Paying Agent,

DEUTSCHE BANK AG, LONDON BRANCH

as Transfer Agent

and

DEUTSCHE BANK TRUST COMPANY AMERICAS

as Registrar

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INDENTURE

Dated as of October 4, 2018

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3.625% Senior Notes due 2026

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INDENTURE, dated as of October 4, 2018 among James Hardie International Finance Designated Activity Company, a private designated activity company duly incorporated under the laws of Ireland (the “Issuer”), the Guarantors (as defined below) and Deutsche Bank Trust Company Americas, a New York banking corporation, as trustee (the “Trustee”).

Each party agrees as follows for the benefit of the other parties and for the equal and ratable benefit of the Holders of the Notes.

## ARTICLE ONE

### DEFINITIONS AND INCORPORATION BY REFERENCE

#### SECTION 1.01. Definitions.

“Acceptable Commitment” has the meaning set forth in Section 4.09(a)(3).

“Acquired EBITDA” means, with respect to any Acquired Entity or Business or any Converted Restricted Subsidiary for any period, the amount for such period of Consolidated Adjusted EBITDA of such Pro Forma Entity (determined as if references to the Consolidated Group in the definition of “Consolidated Adjusted EBITDA” were references to such Pro Forma Entity and its subsidiaries that will become Restricted Subsidiaries), all as determined on a consolidated basis for such Pro Forma Entity in accordance with GAAP.

“Acquired Entity or Business” has the meaning specified in the definition of “Consolidated Adjusted EBITDA.”

“Additional Amounts” means, in the event any withholding or deduction (including, without limitation, because the Notes are not listed on Euronext Dublin) is required for or on account of Taxes imposed by a Relevant Taxing Jurisdiction from any payments made under or with respect to the Notes or under any Note Guarantee (including payments of principal, redemption price, interest or premium (if any)), such additional amounts the payment of which by the Issuer or a Guarantor, as applicable, may be necessary so that the net amount received by each Holder or beneficial owner of the Notes after such withholding or deduction (including any withholding or deduction attributable to the Additional Amounts) will equal the amount such Holder or beneficial owner would have received if such Taxes had not been required to be withheld or deducted; *provided* that, notwithstanding the foregoing, Additional Amounts shall not include amounts payable in respect of, or on account of, the following:

(1) any Taxes that would not have been imposed but for the existence of any present or former connection between a Holder or the beneficial owner of Notes and the Relevant Taxing Jurisdiction (including being a citizen, resident or national of, or being engaged in business in, the Relevant Taxing Jurisdiction), other than a connection arising from the acquisition, ownership, holding or disposition of the Notes, or enforcement of rights under the Notes or any Note Guarantee, or the receipt of payments under or in respect of the Notes or any Note Guarantee;

(2) any Taxes that are imposed by reason of the failure of a Holder or beneficial owner of Notes to satisfy any certification, identification or other reporting requirements concerning the nationality, residence, identity or connection with the Relevant Taxing Jurisdiction of such Holder or beneficial owner that is required by applicable law, regulation or administrative practice of the Relevant Taxing Jurisdiction as a precondition to exemption from, or reduction in the rate of deduction or withholding of, such Taxes, but in each case only to the extent such Holder or beneficial owner is legally eligible to provide such certification or other documentation; *provided, however*, that the Issuer has delivered a request to such Holder to comply with such requirements at least 30 days prior to the date by which such compliance is required;

(3) any Taxes that would not have been imposed if the presentation of Notes (where presentation is required) for payment had occurred within 30 days after the date such payment was due and payable or was duly provided for, whichever is later, except to the extent that a Holder or beneficial owner of Notes would have been entitled to Additional Amounts had the Note been presented within such 30-day period;

(4) any Taxes payable otherwise than by deduction or withholding in respect of a payment on the Notes or any Note Guarantee;

(5) any estate, inheritance, gift, value-added, personal property or similar Taxes;

(6) any Tax imposed pursuant to Sections 1471 through 1474 of the U.S. Internal Revenue Code of 1986, as amended (the "Code") as of the Issue Date (or any amended or successor version that is substantially comparable and not materially more onerous to comply with), any regulations promulgated thereunder or official interpretations thereof, any agreement entered into pursuant to Section 1471 of the Code as of the Issue Date (or any amended or successor version described above), or any intergovernmental agreement between the United States and another jurisdiction (and any related law) implementing the foregoing; or

(7) any combination of items (1) through (6) above.

"Additional Assets" means:

(1) any assets (other than Indebtedness and Capital Stock) to be used by Holdings or a Restricted Subsidiary;

(2) the Capital Stock of a Person that becomes a Subsidiary as a result of the acquisition of such Capital Stock by Holdings or another Restricted Subsidiary; or

(3) Capital Stock constituting a non-controlling interest in any Person that at such time is a Subsidiary.

"Additional Notes" has the meaning set forth in Section 2.01.

"Adjusted Net Income" means in respect of a Fiscal Year, the consolidated net income for the Parent and any Person which Parent is required to consolidate in its audited



financial statements (which shall, for the avoidance of doubt, deduct any tax expense or add any tax credit arising in such Fiscal Year) (but excluding any Excluded Entity) for such Fiscal Year as set out in the Parent's audited financial statements for such Fiscal Year, adjusted, to the extent included in calculating such consolidated net income, by excluding, without duplication:

(a) non-cash provisions (including asbestos provisions) required under GAAP pursuant to which such audited financial statements are prepared with respect to the payments by the Performing Subsidiary to AICF pursuant to the terms of the AFFA; and

(b) the portion of consolidated net income allocable to minority interests.

"Additional Obligor" has the meaning set forth in Section 4.14(2).

"AFFA" means (i) the Amended and Restated Final Funding Agreement dated as of November 21, 2006 (as amended prior to the Issue Date and as further amended, restated or replaced from time to time) between AICF, James Hardie Industries SE, James Hardie 117 Pty Limited, and any other Performing Subsidiary party thereto from time to time, and the State of New South Wales together with (ii) the Amending Agreement – Parent Guarantee dated as of June 23, 2009 between AICF, the State of New South Wales and the Parent (as amended, restated or replaced from time to time).

"Affiliate" of any specified Person means any other Person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified Person. For purposes of this definition, "control" (including, with correlative meanings, the terms "controlling," "controlled by" and "under common control with"), as used with respect to any Person, shall mean the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of such Person, whether through the ownership of voting securities, by agreement or otherwise.

"Agent" means any Registrar, Paying Agent, Transfer Agent, Authentication Agent or agent for service or notices and demands.

"Agent Members" has the meaning set forth in Section 2.16(a).

"AICF" means Asbestos Injuries Compensation Fund Limited in its personal capacity and as trustee for the Asbestos Injuries Compensation Fund.

"AICF Payments" means amounts paid by any member of the Consolidated Group (x) to the Performing Subsidiary in connection with the Performing Subsidiary's payments to AICF pursuant to the terms of the AFFA (including, for the avoidance of doubt, amounts paid in respect of intercompany obligations from time to time owed by a member of the Consolidated Group to the Performing Subsidiary) or (y) under any Guarantee in connection therewith.

"amend" means to amend, supplement, restate, amend and restate or otherwise modify; and "amendment" shall have a correlative meaning.

“Applicable Bund Rate” for any Make-Whole Redemption Date means, in connection with the calculation of any Make-Whole Premium, the yield to maturity at the time of computation of direct obligations of the Federal Republic of Germany (*Bunds* or *Bundesanleihen*) with a constant maturity (as compiled and published in the most recent financial statistics that have become publicly available at least two Business Days prior to such Make-Whole Redemption Date (or, if such financial statistics are not so published, any publicly available source of similar market data) most nearly equal to the period from the Make-Whole Redemption Date to October 1, 2021; *provided, however*, that if the period from the Make-Whole Redemption Date to October 1, 2021 is not equal to the constant maturity of a direct obligation of the Federal Republic of Germany for which a weekly average yield is given, the Applicable Bund Rate shall be obtained by the Issuer by linear interpolation (calculated to the nearest one-twelfth of a year) from the weekly average yields of direct obligations of the Federal Republic of Germany for which such yields are given, except that if the period from the Make-Whole Redemption Date to October 1, 2021 is less than one year, the weekly average yield on actually traded direct obligations of the Federal Republic of Germany adjusted to a constant maturity of one year shall be used.

“Applicable Law” has the meaning set forth in Section 11.17.

“asset” means any asset or property, whether real, personal or mixed, tangible or intangible.

“Asset Disposition” means any sale, transfer or other disposition (or series of related sales, transfers or dispositions) by Holdings or any Restricted Subsidiary, including any disposition by means of a merger, consolidation or similar transaction (each referred to for the purposes of this definition as a “disposition”), of:

- (1) any shares of Capital Stock of a Restricted Subsidiary (other than directors’ qualifying shares or shares required by applicable law to be held by a Person other than Holdings or a Restricted Subsidiary);
- (2) all or substantially all the assets of any division or line of business of Holdings or any Restricted Subsidiary; or
- (3) any other assets of Holdings or any Restricted Subsidiary outside of the ordinary course of business of Holdings or such Restricted Subsidiary.

Notwithstanding the foregoing, none of the following shall be deemed to be an Asset Disposition:

- (1) a disposition by a Restricted Subsidiary to Holdings or by Holdings or a Restricted Subsidiary to a Restricted Subsidiary, including through any Permitted Reorganization;
- (2) for purposes of Section 4.09 only, a disposition of all or substantially all the assets of Holdings or the Issuer in compliance with Section 5.01 or a disposition that constitutes a Change of Control pursuant to this Indenture;

- (3) a sale, contribution, conveyance or other transfer of accounts receivable and related assets of the type specified in the definition of Qualified Receivables Transaction by or to a Receivables Entity in a Qualified Receivables Transaction;
- (4) the license, sublicense or cross-license of intellectual property or other intangibles;
- (5) the lease, assignment or sublease of any real or personal property in the ordinary course of business;
- (6) any surrender or waiver of contract rights or settlement, release, recovery on or surrender of contract, tort or other claims in the ordinary course of business;
- (7) the granting of Security Interests not prohibited by Section 4.11;
- (8) the disposition by Holdings or any of its Restricted Subsidiaries in the ordinary course of business of (i) cash and cash equivalents, (ii) inventory and other assets acquired and held for resale in the ordinary course of business, (iii) damaged, worn out or obsolete assets or assets that, in Holdings' reasonable judgment, are no longer used or useful in the business of Holdings or its Restricted Subsidiaries, or (iv) rights granted to others pursuant to leases or licenses, to the extent not materially interfering with the operations of Holdings or its Restricted Subsidiaries;
- (9) a Restricted Payment that does not violate Section 4.10 or any Investment by Holdings or a Restricted Subsidiary that does not constitute a Restricted Payment;
- (10) any exchange of assets for assets (including a combination of assets) (which assets may include Equity Interests or any securities convertible into, or exercisable or exchangeable for, Equity Interests, but which assets may not include any Indebtedness) of comparable or greater market value or usefulness to the business of Holdings and its Restricted Subsidiaries, taken as a whole, which in the event of an exchange of assets with a fair market value in excess of (a) \$50.0 million shall be evidenced by an Officer's Certificate and (b) \$100.0 million shall be set forth in a resolution approved by at least a majority of the members of the Board of Directors of Holdings; *provided* that Holdings shall apply any cash or cash equivalents received in any such exchange of assets as described in Section 4.09(a);
- (11) dispositions of receivables in connection with the compromise, settlement or collection thereof in the ordinary course of business or in bankruptcy or similar proceedings and exclusive of factoring or similar arrangements;
- (12) the issuance by Holdings or a Restricted Subsidiary of preferred stock or any convertible securities;
- (13) any sale of assets received by Holdings or any Restricted Subsidiary upon foreclosure on a Security Interest;

- (14) the unwinding of any Hedging Obligations (including sales under forward contracts);
- (15) any dispositions to the extent required by, or made pursuant to customary buy/sell arrangements between the joint venture parties set forth in joint venture arrangements and similar binding agreements;
- (16) the lease or sublease of office space;
- (17) the abandonment, farm-out, lease, assignment, sub-lease, license or sub-license of any real or personal property in the ordinary course of business;
- (18) dispositions of property pursuant to casualty events;
- (19) a single transaction or series of related transactions that involve the disposition of assets with a fair market value (as determined in good faith by Holdings) of less than \$50.0 million; and
- (20) any sale or disposition of Equity Interests in, or Indebtedness or other securities of, an Unrestricted Subsidiary.

“Attributable Indebtedness,” when used with respect to any Sale and Leaseback Transaction, means, as at the time of determination, the present value (discounted at the weighted average interest rate borne by the Notes, compounded on a semiannual basis) of the total obligations of the lessee for rental payments during the remaining term of the lease included in any such Sale and Leaseback Transaction.

“Bankruptcy Law” means Title 11 of the United States Code, as amended, or any similar federal, state, local or foreign law for the relief of debtors.

“Board of Directors” means, with respect to any Person, the board of directors or comparable governing body of such Person or any committee thereof duly authorized to act on behalf of such board of directors (or comparable body).

“Business Day” has the meaning set forth in Section 11.07.

“Capital Expenditures” means, with respect to any Person for any period, any expenditure in respect of the purchase or other acquisition of any fixed or capital asset (excluding normal replacements and maintenance which are properly charged to current operations). For purposes of this definition, the purchase price of equipment that is purchased simultaneously with the trade-in of existing equipment or with insurance proceeds shall be included in Capital Expenditures only to the extent of the gross amount by which such purchase price exceeds the credit granted by the seller of such equipment for the equipment being traded in at such time or the amount of such insurance proceeds, as the case may be.

“Capital Stock” means:

- (1) in the case of a corporation, corporate stock;
- (2) in the case of an association or business entity, any and all shares, interests, participations, rights or other equivalents (however designated) of corporate stock; and
- (3) in the case of a partnership or limited liability company, partnership or membership interests (whether general or limited).

“Capitalized Lease” means a lease required to be capitalized for financial reporting purposes in accordance with GAAP.

“Capitalized Lease Obligations” of any Person means the obligations of such Person to pay rent or other amounts under a Capitalized Lease, and the amount of such obligation shall be the capitalized amount thereof determined in accordance with GAAP.

“Cash Consideration” has the meaning set forth in Section 4.09(a)(2).

“Change in Tax Law” means the occurrence of either of the following:

- (1) any change in, or amendment to, the law (or any regulations or rulings promulgated thereunder) of a Relevant Taxing Jurisdiction, which change or amendment was publicly announced and became effective after the Issue Date (or, if the Relevant Taxing Jurisdiction became a Relevant Taxing Jurisdiction on a date after the Issue Date, after such later date); or
- (2) any change in, or amendment to, the official application, administration, or interpretation of such laws, regulations or rulings (including by virtue of a holding, judgment or order by a court of competent jurisdiction) of a Relevant Taxing Jurisdiction, which change or amendment was publicly announced and became effective after the Issue Date (or, if the Relevant Taxing Jurisdiction became a Relevant Taxing Jurisdiction on a date after the Issue Date, after such later date).

“Change of Control” means the occurrence of any of the following:

- (1) any Transfer (other than by way of merger or consolidation) of all or substantially all of the assets of Parent and its Subsidiaries taken as a whole to any “person” (as defined in Section 13(d) of the Exchange Act) or “group” (as defined in Sections 13(d)(3) and 14(d)(2) of the Exchange Act), other than any Transfer to Holdings or one or more Restricted Subsidiaries of Holdings;
- (2) the adoption of a plan for the liquidation or dissolution of the Issuer (other than in a transaction that complies with Section 5.01);

(3) the Parent, Holdings or any Restricted Subsidiary of Holdings becomes aware (by way of a report or any other filing pursuant to Section 13(d) of the Exchange Act, proxy, vote, written notice or otherwise) that a “person” (as defined above) or “group” (as defined above) has become, directly or indirectly, the “beneficial owner” (as defined in Rules 13d-3 and 13d-5 under the Exchange Act) of more than 50% of the voting power of the Voting Stock of the Parent, other than as a result of (i) any transaction where the voting power of the Voting Stock of the Parent immediately prior to such transaction constitutes or is converted into or exchanged for a majority of the voting power of the Voting Stock of such beneficial owner (a “Permitted Parent”) or (ii) any merger or consolidation of the Parent with or into any “person” (as defined above) (a “Permitted Person”) or a Subsidiary of a Permitted Person, in each case, if immediately after such transaction no person (as defined above) is the beneficial owner (as defined above), directly or indirectly, of more than 50% of the voting power of the Voting Stock of such Permitted Person; or

(4) the Parent ceases to own, directly or indirectly, 100% of the voting power of the Voting Stock of the Issuer.

For purposes of this definition and any related definition to the extent used for purposes of this definition, a “person” or “group” shall not be deemed to beneficially own securities subject to an equity or asset purchase agreement, merger agreement or similar agreement (or voting or option or similar agreement related thereto) until the consummation of the transactions contemplated by such agreement.

“Change of Control Triggering Event” means the occurrence of both a Change of Control and a Rating Decline.

“Change of Control Offer” has the meaning set forth in Section 4.08(a).

“Change of Control Payment” has the meaning set forth in Section 4.08(a).

“Change of Control Payment Date” has the meaning set forth in Section 4.08(b).

“Clearstream” means Clearstream Banking, a *société anonyme*, or any successor securities clearing agency.

“Commission” means the United States Securities and Exchange Commission.

“Common Depositary” means, with respect to the Notes, Deutsche Bank AG, London Branch, as common depositary of Euroclear and Clearstream until a successor replaces it and, thereafter, means the successor serving hereunder.

“Consolidated Adjusted EBITDA” means, with respect to any Person for any period:

(1) the sum of, without duplication, the amounts for such period, taken as a single accounting period, of:

- (a) Consolidated Net Income;
- (b) Consolidated Interest Expense;
- (c) Consolidated Income Tax Expense (other than income tax expense (either positive or negative) attributable to extraordinary gains or losses);
- (d) Consolidated Depreciation and Amortization Expense; and
- (e) Consolidated Non-cash Charges; *less*

(2) non-cash items increasing Consolidated Net Income for such period, other than (a) the accrual of revenue consistent with past practice, and (b) reversals of prior accruals or reserves for cash items previously excluded in the calculation of Consolidated Non-cash Charges;

*provided*, that the calculation of Consolidated Adjusted EBITDA shall (i) exclude any Excluded Amounts and (ii) be reduced by the aggregate amount of AICF Payments during such period, in each case, to the extent such exclusion or reduction, as applicable, is not already reflected in the component definitions of the calculation of Consolidated Adjusted EBITDA. In addition:

(1) there shall be included in determining Consolidated Adjusted EBITDA for any period, without duplication, the Acquired EBITDA of any Person, property business or asset acquired by any member of the Consolidated Group during such period (other than any Unrestricted Subsidiary) to the extent not subsequently sold, transferred or otherwise disposed of during such period (but not including the Acquired EBITDA of any related Person, property, business or assets to the extent not so acquired) (each such Person, property, business or asset acquired, or pursuant to a transaction consummated prior to the Closing Date, and not subsequently so disposed of, an “Acquired Entity or Business”), and the Acquired EBITDA of any Unrestricted Subsidiary that is converted into a Restricted Subsidiary during such period (each, a “Converted Restricted Subsidiary”), in each case based on the Acquired EBITDA of such Pro Forma Entity for such period (including the portion thereof occurring prior to such acquisition or conversion) determined on a historical pro forma basis; and

(2) there shall be excluded in determining Consolidated Adjusted EBITDA for any period the Disposed EBITDA of any Person, property, business or asset sold, transferred or otherwise disposed of by any member of the Consolidated Group to the extent not subsequently reacquired, in each case, during such period (each such Person (other than an Unrestricted Subsidiary), property, business or asset so sold, transferred or otherwise disposed of, closed or classified, a “Sold Entity or Business”), and the Disposed EBITDA of any Restricted Subsidiary that is converted into an Unrestricted Subsidiary during such period (each, a “Converted Unrestricted Subsidiary”), in each case based on the Disposed EBITDA of such Sold Entity or Business or Converted Unrestricted Subsidiary for such period (including the portion thereof occurring prior to such disposition) determined on a historical pro forma basis.

In calculating Consolidated Adjusted EBITDA for any period, if any Asset Disposition or Asset Acquisition (whether pursuant to a stock or an asset transaction), in each case with a fair market value (as determined in good faith by Holdings) greater than \$10.0 million, shall have occurred since the first day of any twelve month period for which Consolidated Adjusted EBITDA is being calculated, such calculation shall give pro forma effect to such Asset Disposition or Asset Acquisition including, for the avoidance of doubt, any Indebtedness incurred in connection with such Asset Disposition or Asset Acquisition.

For the purposes of calculating Consolidated Adjusted EBITDA, "Asset Acquisition" means any acquisition of property or series of related acquisitions of property that constitutes all or substantially all of the assets of a business, unit or division of a Person or constitutes all or substantially all of the common stock (or equivalent) of a Person; and "Asset Disposition" means any disposition of property or series of related dispositions of property that involves all or substantially all of the assets of a business, unit or division of a Person or constitutes all or substantially all of the common stock (or equivalent) of a Subsidiary.

"Consolidated Depreciation and Amortization Expense" means with respect to the Consolidated Group for any period, the total amount of depreciation and amortization expense, including amortization of deferred financing fees, of the Consolidated Group for such period on a consolidated basis and otherwise in accordance with GAAP.

"Consolidated Fixed Charge Coverage Ratio" means the ratio of Consolidated Adjusted EBITDA of the Consolidated Group during the most recent four consecutive full fiscal quarters for which consolidated financial statements are available (the "Four-Quarter Period") ending on or prior to the date of the transaction giving rise to the need to calculate the Consolidated Fixed Charge Coverage Ratio (the "Transaction Date") to Consolidated Fixed Charges of the Consolidated Group for the Four-Quarter Period. Notwithstanding anything to the contrary set forth in the definitions of Consolidated Adjusted EBITDA and Consolidated Interest Expense (and all component definitions referenced in such definitions), whenever pro forma effect is to be given to the incurrence or repayment of Indebtedness or the issuance or redemption of Preferred Stock, the pro forma calculations shall be determined in good faith by a responsible officer of the Parent or Holdings.

For purposes of this definition, Consolidated Adjusted EBITDA and Consolidated Fixed Charges shall be calculated after giving effect on a pro forma basis for the period of such calculation to the incurrence of any Indebtedness or the issuance of any Preferred Stock of any Consolidated Group member (and the application of the proceeds thereof) and any repayment of Indebtedness or redemption of other Preferred Stock (and the application of the proceeds therefrom) (other than the incurrence or repayment of Indebtedness in the ordinary course of business for working capital purposes pursuant to any revolving credit arrangement) occurring during the Four-Quarter Period or at any time subsequent to the last day of the Four-Quarter Period and on or prior to the Transaction Date, as if such incurrence, repayment, issuance or redemption, as the case may be (and the application of the proceeds thereof), occurred on the first day of the Four-Quarter Period.



In calculating Consolidated Fixed Charges for purposes of determining the denominator (but not the numerator) of this Consolidated Fixed Charge Coverage Ratio:

(a) interest on outstanding Indebtedness determined on a fluctuating basis as of the Transaction Date and which will continue to be so determined thereafter shall be deemed to have accrued at a fixed rate per annum equal to the rate of interest on such Indebtedness in effect on the Transaction Date (although interest with respect to any Indebtedness for periods while the same was actually outstanding during the respective period shall be calculated using the actual rates applicable thereto while the same was actually outstanding);

(b) if interest on any Indebtedness actually incurred on the Transaction Date may optionally be determined at an interest rate based upon a factor of a prime or similar rate, a eurocurrency interbank offered rate, or other rates, then the interest rate in effect on the Transaction Date will be deemed to have been in effect during the Four-Quarter Period (although interest with respect to any Indebtedness for periods while the same was actually outstanding during the respective period shall be calculated using the actual rates applicable thereto while the same was actually outstanding); and

(c) notwithstanding clause (a) or (b) above, interest on Indebtedness determined on a fluctuating basis, to the extent such interest is covered by agreements relating to Hedging Obligations, shall be deemed to accrue at the rate per annum resulting after giving effect to the operation of these agreements.

“Consolidated Fixed Charges” means, for any period, the sum, without duplication, of (a) Consolidated Interest Expense of the Consolidated Group for such period, *plus* (b) the product of (x) all dividend payments on any series of Disqualified Equity Interests of the Consolidated Group or any Preferred Stock of any Restricted Subsidiary (other than any such Disqualified Equity Interests or any Preferred Stock held by any Consolidated Group member or to the extent paid in Qualified Equity Interests) for such period, *multiplied by* (y) a fraction, the numerator of which is one and the denominator of which is one *minus* the then current combined federal, state and local statutory tax rate of the Consolidated Group, expressed as a decimal.

“Consolidated Group” means Holdings and its Restricted Subsidiaries; *provided* that the Consolidated Group shall exclude, for the avoidance of doubt, (a) any Unrestricted Subsidiary and (b) any Excluded Entity.

“Consolidated Income Tax Expense” means, for any period, the provision for federal, state, local and foreign income, franchise, excise, value added and similar taxes based on income, profit, revenue or capital (including any interest and penalties related thereto) of the Consolidated Group for such period as determined on a consolidated basis in accordance with GAAP.

“Consolidated Interest Expense” means, for any period, the interest expense of the Consolidated Group for such period, on a consolidated basis, determined in accordance with GAAP (including amortization of original issue discount and deferred financing costs, non-cash

interest payments, the interest component of all payments associated with Capitalized Lease Obligations, capitalized interest, net payments, if any, pursuant to interest rate-related Hedging Obligations and imputed interest with respect to Attributable Indebtedness but excluding write-offs associated with the amendment and restatement or repayment of Indebtedness and excluding, to the extent otherwise included therein, any Excluded Amounts).

“Consolidated Net Income” means, for any period, the consolidated net income (or loss) of the Consolidated Group for such period as determined in accordance with GAAP (net of the aggregate amount of AICF Payments made during such period), adjusted, to the extent included in calculating such net income, by excluding, without duplication:

- (1) all extraordinary gains or losses (net of fees and expenses relating to the transaction giving rise thereto);
- (2) the portion of net income of the Consolidated Group members allocable to minority interests in unconsolidated Persons to the extent that cash dividends or distributions have not actually been received by such Consolidated Group members;
- (3) gains or losses in respect of any sales of capital stock or asset sales outside the ordinary course of business (including in a Sale and Leaseback Transaction) by such Consolidated Group members;
- (4) any gain or loss realized as a result of the cumulative effect of a change in accounting principles;
- (5) any fees, expenses and other costs incurred or paid (and write-offs recorded) in connection with the offering of the Notes, the Unsecured Revolving Credit Facility, or other Indebtedness;
- (6) nonrecurring or unusual gains or losses;
- (7) the net after-tax effects of adjustments in the inventory, property and equipment, goodwill and intangible assets line items in the Consolidated Group’s consolidated financial statements pursuant to GAAP resulting from the application of purchase accounting or the amortization or write-off of any amounts thereof;
- (8) any fees and expenses incurred (and write-offs recorded) during such period, or any amortization thereof for such period, in connection with any acquisition, investment, asset sale, issuance or repayment or amendment or restatement of indebtedness, issuance of stock, stock options or other equity-based awards, refinancing transaction or amendment or modification of any debt instrument (including without limitation any such transaction undertaken but not completed);
- (9) any gain or loss recorded in connection with the designation of a discontinued operation (exclusive of its operating income or loss);

(10) any non-cash compensation or other non-cash expenses or charges arising from the grant of or issuance or repricing of stock, stock options or other equity-based awards or any amendment, modification, substitution or change of any such stock, stock options or other equity-based awards;

(11) any expenses or charges (including any break costs, redemption premium, make-whole payments, liquidated damages or other penalties) related to any Equity Offering, Asset Disposition, merger, amalgamation, consolidation, arrangement, acquisition, disposition, recapitalization or the incurrence of Indebtedness permitted to be incurred by this Indenture (including an exchange or refinancing thereof or amendment or modification of any debt instrument or issuance of stock) (whether or not successful);

(12) any non-cash impairment, restructuring or special charge or asset write-off or write-down, and the amortization or write-off of intangibles;

(13) Excluded Amounts; and

(14) any swap break or reset costs incurred and paid as part of any termination of any Hedging Obligations.

Consolidated Net Income for such period of any Unrestricted Subsidiary shall be included only to the extent of the amount of dividends or distributions or other payments in respect of equity that are actually paid in cash (or to the extent converted into cash) by such Unrestricted Subsidiary to a Consolidated Group member in respect of such period.

Notwithstanding the foregoing, for the purpose of Section 4.10 only (other than clause (c)(4) of the first paragraph of Section 4.10), there shall be excluded from Consolidated Net Income any income arising from any sale of the stock of an Unrestricted Subsidiary or any distribution or dividend from an Unrestricted Subsidiary, in each case only to the extent such amounts increase the amount of Restricted Payments permitted under clause (c)(4) of the first paragraph of Section 4.10.

“Consolidated Net Tangible Assets” means, in each case, with respect to the Consolidated Group the total amount of assets (less applicable reserves and other properly deductible items) after deducting therefrom (i) all liabilities and liability items, except for Indebtedness payable by its terms more than one year from the date of incurrence thereof (or renewable or extendable at the option of the obligor for a period ending more than one year after such date of incurrence), capitalized rent, capital stock (including redeemable preferred stock) and surplus, surplus reserves and deferred income taxes and credits and other non-current liabilities, and (ii) all goodwill, trade names, trademarks, patents, unamortized debt discount, unamortized expenses incurred in the issuance of debt, and other like intangibles which, in each case, in accordance with GAAP would be included on a consolidated balance sheet of the Consolidated Group; *provided*, that the calculation of Consolidated Net Tangible Assets shall exclude, to the extent otherwise included therein, any Excluded Amounts.

“Consolidated Non-cash Charges” means, with respect to the Consolidated Group for any period, the aggregate non-cash expenses of the Consolidated Group and its Subsidiaries

(including without limitation any minority interest) reducing Consolidated Net Income for such period, determined on a consolidated basis in accordance with GAAP.

“Converted Restricted Subsidiary” has the meaning specified in the definition of “Consolidated Adjusted EBITDA.”

“Converted Unrestricted Subsidiary” has the meaning specified in the definition of “Consolidated Adjusted EBITDA.”

“Corporate Trust Office” means the designated office of the Trustee at which any time its corporate trust business in relation to this Indenture shall be administered, which at the date hereof is located at 60 Wall Street, 16th Floor, New York, New York 10005, Attention: Corporates Team Deal Manager – James Hardie International Finance Designated Activity Company, or such other address as the Trustee may designate from time to time by notice to the Holders and the Issuer, or the principal corporate trust office of any successor Trustee (or such other address as such successor Trustee may designate from time to time by notice to the Holders and the Issuer).

“Covenant Defeasance” has the meaning set forth in Section 9.03.

“Covenant Termination Event” has the meaning set forth in Section 4.15(a).

“Credit Facilities” means one or more debt facilities (including, without limitation, the Unsecured Revolving Credit Facility, commercial paper facilities, note purchase agreements or indentures providing for the sale of debt securities), in each case with banks, trustees or other lenders, note holders or investors providing for revolving credit loans, term loans, letters of credit or debt securities (including, without limitation, additional debt securities permitted under any such note purchase agreement or indenture), in each case as any such agreement may be amended, restated, amended and restated, modified, renewed, refunded, replaced or refinanced, in whole or in part, including any agreement(s) extending the maturity of or refinancing (including increasing the amount of available borrowings thereunder or adding Holdings or Restricted Subsidiaries of Holdings as borrowers or guarantors thereunder) all or any portion of the Indebtedness under such agreement(s) or any successor or replacement agreement and whether by the same or any other agent, trustee, lender, investor, note holder or group of lenders, investors or note holders or other creditor or group of creditors.

“Default” means (1) any Event of Default or (2) any event, act or condition that, after notice or the passage of time or both, would be an Event of Default.

“Designated Non-cash Consideration” means the fair market value of non-cash consideration received by Holdings or any of its Restricted Subsidiaries in connection with an Asset Disposition that is designated as “Designated Non-cash Consideration” pursuant to an Officer’s Certificate, setting forth the basis of such valuation, less the amount of cash or cash equivalents received in connection with a subsequent sale, redemption or payment of, on or with respect to such Designated Non-cash Consideration. A particular item of Designated Non-Cash Consideration will no longer be considered to be outstanding when and to the extent it has been

paid, redeemed or otherwise retired or sold or otherwise disposed of in exchange for consideration in the form of cash or cash equivalents in compliance with Section 4.09.

“Disposed EBITDA” means, with respect to any Sold Entity or Business or Converted Unrestricted Subsidiary for any period, the amount for such period of Consolidated Adjusted EBITDA of such Sold Entity or Business or Converted Unrestricted Subsidiary (determined as if references to the Consolidated Group in the definition of “Consolidated Adjusted EBITDA” (and in the component financial definitions used therein) were references to such Sold Entity or Business and its Subsidiaries or to such Converted Unrestricted Subsidiary and its Subsidiaries), all as determined on a consolidated basis for such Sold Entity or Business.

“Disqualified Equity Interests” of any Person means any class of Equity Interests of such Person that, by its terms, or by the terms of any related agreement or of any security into which it is convertible, puttable or exchangeable, is, or upon the happening of any event or the passage of time would be, required to be redeemed by such Person, whether or not at the option of the holder thereof, or matures or is mandatorily redeemable, pursuant to a sinking fund obligation or otherwise, in whole or in part, on or prior to the date which is 91 days after the final maturity date of the Notes; *provided, however*, that any class of Equity Interests of such Person that, by its terms, authorizes such Person to satisfy in full its obligations with respect to the payment of dividends or upon maturity, redemption (pursuant to a sinking fund or otherwise) or repurchase thereof or otherwise by the delivery of Equity Interests that are not Disqualified Equity Interests, and that is not convertible, puttable or exchangeable for Disqualified Equity Interests or Indebtedness, will not be deemed to be Disqualified Equity Interests so long as such Person satisfies its obligations with respect thereto solely by the delivery of Equity Interests that are not Disqualified Equity Interests; *provided, further, however*, that any Equity Interests that would not constitute Disqualified Equity Interests but for provisions thereof giving holders thereof (or the holders of any security into or for which such Equity Interests are convertible, exchangeable or exercisable) the right to require the Issuer to redeem such Equity Interests upon the occurrence of a Change of Control or an Asset Disposition occurring prior to the 91st day after the final maturity date of the Notes shall not constitute Disqualified Equity Interests if the change of control or asset disposition provisions applicable to such Equity Interests are no more favorable to such holders than the provisions of Section 4.08 and Section 4.09, respectively, and such Equity Interests specifically provide that the Issuer will not redeem any such Equity Interests pursuant to such provisions prior to the Issuer’s purchase of the Notes as required pursuant to Section 4.08 and Section 4.09, respectively.

“Dividend Period” has the meaning set forth in clause (g) of the second paragraph of Section 4.10.

“Equity Interests” of any Person means (1) any and all shares or other equity interests (including common stock, preferred stock, limited liability company interests and partnership interests) in such Person and (2) all rights to purchase, warrants or options (whether or not currently exercisable), participations or other equivalents of or interests in (however designated) such shares or other interests in such Person, but excluding any debt securities that are convertible into, or exchangeable for, such shares or other interests in such Person.

“Equity Offering” means a public or private sale for cash of common stock of Holdings (or any direct or indirect parent company of Holdings to the extent the net cash proceeds therefrom are contributed to Holdings), other than (i) public offerings with respect to common stock of Holdings (or such parent) registered on Form F-4, Form S-4 or Form S-8 or (ii) any sale to any Subsidiary of Holdings.

“Euroclear” means Euroclear Bank SA/NV or any successor securities clearing agency.

“Euronext Dublin” means the Irish Stock Exchange plc, trading as Euronext Dublin.

“European Government Obligations” means any security that is (1) a direct obligation of any country that is a member of the European Monetary Union on the Issue Date, for the payment of which the full faith and credit of such country is pledged or (2) an obligation of a person controlled or supervised by and acting as an agency or instrumentality of any such country the payment of which is unconditionally guaranteed as a full faith and credit obligation by such country, which, in either case under the preceding clause (1) or (2), is not callable or redeemable at the option of the issuer thereof.

“Event of Default” has the meaning set forth in Section 6.01.

“Excess Proceeds” has the meaning set forth in Section 4.09(c).

“Exchange Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations of the Commission promulgated thereunder.

“Excluded Amounts” means with respect to any Person and its Restricted Subsidiaries, without duplication, the total amount of (i) asbestos-related liabilities, assets, income, gains, losses and charges, other than AICF Payments, (ii) AICF selling, general & administrative expenses, (iii) Australian Securities and Investments Commission-related expenses, recoveries and asset impairments and (iv) New Zealand product liability expenses incurred by such Persons for such period on a consolidated basis and otherwise in accordance with GAAP.

“Excluded Entities” means AICF (and Asbestos Injuries Compensation Fund Limited in its personal capacity) and each of the following entities: (i) Amaba Pty Limited (ACN 000 387 342), (ii) Amaca Pty Limited (ACN 000 035 512), (iii) ABN 60 Pty Limited (ACN 000 009 263), and (iv) Marlew Mining Pty Limited (formerly known as Asbestos Mines Pty Limited) (ACN 000 049 650).

“Fiscal Year” means the fiscal year of the Parent, which at the date hereof ends on March 31.

“Fitch” means Fitch Ratings, Inc. and any successor to its rating agency business.

“GAAP” means generally accepted accounting principles set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or in such other statements by such other entity as may be approved by a significant segment of the accounting profession of the United States, which are in effect from time to time; *provided* that any leases that are not or would not be characterized as Capitalized Leases under GAAP as in effect on the Issue Date shall not be reclassified as Capitalized Leases and additional liabilities associated with such leases shall not be classified as Indebtedness as a result of any changes in interpretive releases or literature regarding GAAP. At any time after the Issue Date, Holdings may elect to apply International Financial Reporting Standards (“IFRS”) accounting principles in lieu of GAAP and, upon any such election, references herein to GAAP and GAAP concepts shall thereafter be construed to refer to IFRS and corresponding IFRS concepts (except as otherwise provided in this Indenture); *provided* that any such election, once made, shall be irrevocable; *provided further*, any calculation or determination in this Indenture that requires the application of GAAP for periods that include fiscal quarters ended prior to Holdings’ election to apply IFRS shall remain as previously calculated or determined in accordance with GAAP. For purposes of this Indenture, the term “consolidated” with respect to any Person means such Person consolidated with its Restricted Subsidiaries and does not include any Unrestricted Subsidiary.

“Global Note Legend” means the legend substantially in the form set forth in Exhibit D.

“Global Notes” has the meaning set forth in Section 2.16(a).

“Guarantee” means a guarantee (other than by endorsement of negotiable instruments for collection in the ordinary course of business), direct or indirect, in any manner (including, without limitation, through letters of credit and reimbursement agreements in respect thereof), of all or any part of any Indebtedness. “Guarantee” when used as a verb shall have a corresponding meaning.

“Guarantor” means (and shall include, for the avoidance of doubt, any successor Person):

- (1) Holdings;
- (2) each Subsidiary that executes and delivers a Note Guarantee pursuant to Section 4.14; and
- (3) each Subsidiary that otherwise executes and delivers a Note Guarantee,

in each case, until such time as such Person is released from its Note Guarantee in accordance with the provisions of this Indenture.

“Hedging Obligations” of any Person means the obligations of such Person under swap, cap, collar, forward purchase or similar agreements or arrangements dealing with interest rates, currency exchange rates or commodity prices or availability, either generally or under specific contingencies, and including both physical and financial settlement transactions.

“Holder” or “Noteholder” means any registered holder, from time to time, of any Notes, which shall initially be the respective nominee of Euroclear or Clearstream, as applicable.

“Holding Company” means any Person that does not conduct any material operations or own directly any material assets other than the Equity Interests or Indebtedness of any other Person.

“Holdings” means James Hardie International Group Limited, a private limited company duly incorporated under the laws of Ireland, or its Replacement Entity.

“Indebtedness” of any Person at any date means, without duplication:

- (a) all liabilities, contingent or otherwise, of such Person for borrowed money;
- (b) all obligations of such Person evidenced by bonds, debentures, notes or other similar instruments;
- (c) all reimbursement obligations of such Person in respect of letters of credit, letters of guaranty, bankers’ acceptances and similar credit transactions;
- (d) all obligations of such Person to pay the deferred and unpaid purchase price of property or services, except trade payables and accrued expenses incurred by such Person in the ordinary course of business in connection with obtaining goods, materials or services and except obligations to pay a contingent purchase price as long as such obligation remains contingent;
- (e) the maximum fixed redemption or repurchase price of all Disqualified Equity Interests of such Person (but excluding any accrued but unpaid dividends);
- (f) all Capitalized Lease Obligations of such Person;
- (g) all Indebtedness of others secured by a Security Interest on any asset of such Person, whether or not such Indebtedness is assumed by such Person;
- (h) all Indebtedness of others guaranteed by such Person to the extent of such guarantee; *provided* that Indebtedness of (i) the Consolidated Group that is guaranteed by any Consolidated Group member shall only be counted once in the calculation of the amount of Indebtedness of the Consolidated Group on a consolidated basis and (ii) Holdings or the Restricted Subsidiaries that is guaranteed by Holdings or a Restricted Subsidiary shall only be counted once in the calculation of the amount of Indebtedness of Holdings and the Restricted Subsidiaries on a consolidated basis; and



(i) all obligations of such Person under conditional sale or other title retention agreements relating to assets purchased by such Person.

The amount of Indebtedness of any Person at any date shall be the outstanding balance at such date of all unconditional obligations as described above, the maximum liability of such Person for any such contingent obligations at such date and, in the case of clause (g), the lesser of (a) the fair market value (as determined in good faith by Holdings) of any asset subject to a Security Interest securing the Indebtedness of others on the date that the Security Interest attaches and (b) the amount of the Indebtedness secured. For purposes of clause (e), the “maximum fixed redemption or repurchase price” of any Disqualified Equity Interests that do not have a fixed redemption or repurchase price shall be calculated in accordance with the terms of such Disqualified Equity Interests as if such Disqualified Equity Interests were redeemed or repurchased on any date on which an amount of Indebtedness outstanding shall be required to be determined pursuant to this Indenture. For the avoidance of doubt, the obligations and liabilities in respect to AICF Payments do not constitute Indebtedness.

“Indenture” means this Indenture as amended, restated or supplemented from time to time.

“Initial Notes” means the €400,000,000 aggregate principal amount of 3.625% Senior Notes due 2026 issued by the Issuer pursuant to this Indenture on the date hereof.

“Initial Purchasers” means HSBC Bank plc, Commonwealth Bank of Australia, Merrill Lynch International, U.S. Bancorp Investments, Inc. and Wells Fargo Securities International Limited.

“interest” means interest payable with respect to the Notes.

“Interest Payment Date” means the stated maturity of an installment of interest on the Notes.

“Investment Grade Rating” means a rating equal to or higher than Baa3 (or the equivalent) by Moody’s, a rating equal to or higher than BBB- (or the equivalent) by S&P or a rating equal to or higher than BBB- (or the equivalent) by Fitch, in each case with stable outlook, or an equivalent rating by any other Rating Agency.

“Investments” means, with respect to any Person, all investments by such Person in other Persons (including Affiliates) in the form of loans (including guarantees), advances or capital contributions (excluding accounts receivable, trade credit and advances to customers and commission, travel and similar advances to officers, employees and consultants made in the ordinary course of business and any assets or securities received in satisfaction or partial satisfaction thereof from financially troubled account debtors and any prepayments and other credits to suppliers made in the ordinary course of business), purchases or other acquisitions for consideration of Indebtedness, Equity Interests or other securities issued by any other Person and investments that are required by GAAP to be classified on the balance sheet of such Person in the same manner as the other investments included in this definition to the extent such transactions involve the transfer of cash or other property.

For purposes of the definition of Unrestricted Subsidiary and Section 4.10, (a) “Investments” shall include the portion (proportionate to Holdings’ equity interest in such Subsidiary) of the fair market value of the net assets of a Subsidiary at the time that such Subsidiary is designated an Unrestricted Subsidiary; (b) any property transferred to or from an Unrestricted Subsidiary shall be valued at its fair market value at the time of such transfer, in each case as determined in good faith by Holdings; and (c) any transfer of Capital Stock that results in an entity which became a Restricted Subsidiary after the Issue Date ceasing to be a Restricted Subsidiary shall be deemed to be an Investment in an amount equal to the fair market value (as determined by Holdings in good faith as of the date of initial acquisition) of the Capital Stock of such entity owned by Holdings and the Restricted Subsidiaries immediately after such transfer.

“Issue Date” means October 4, 2018.

“Issuer” means James Hardie International Finance Designated Activity Company or any successor obligor to its obligations under this Indenture and the Notes pursuant to Section 5.01.

“Legal Defeasance” has the meaning set forth in Section 9.02.

“Legal Holiday” has the meaning set forth in Section 11.07.

“Losses” has the meaning set forth in Section 7.07.

“Make-Whole Premium” means an amount equal to the greater of (i) 1.0% of the principal amount of a Note and (ii) the excess, if any, of (x) the present value of the sum of the principal amount and premium that would be payable on such Note on October 1, 2021 and all remaining interest payments to and including October 1, 2021 (but excluding any interest accrued to the Make-Whole Redemption Date), discounted on a semiannual basis (assuming a 360-day year consisting of twelve 30-day months) from October 1, 2021 to the Make-Whole Redemption Date at a per annum interest rate equal to the Applicable Bund Rate plus 50 basis points, over (y) the outstanding principal amount of such Note, as calculated by the Issuer. For the avoidance of doubt, calculation of the Make-Whole Premium shall not be an obligation or duty of the Trustee or Agent.

“Make-Whole Redemption Date” with respect to a redemption of Notes at the Make-Whole Premium, means the date such redemption is effectuated.

“Maturity Date” when used with respect to any Note, means the date on which the principal amount of such Note becomes due and payable as therein or herein provided.

“Moody’s” means Moody’s Investors Service, Inc. and any successor to its rating agency business.

“Net Available Cash” from an Asset Disposition means cash payments received therefrom (including any cash payments received by way of deferred payment of principal pursuant to a note or installment receivable or otherwise, but only as and when received, but

excluding any other consideration received in the form of assumption by the acquiring Person of Indebtedness or other obligations relating to such properties or assets or received in any other noncash form), in each case net of:

(1) all legal, accounting, investment banking, title and recording tax expenses, commissions and other fees (including financial and other advisory fees) and expenses incurred, and all Federal, state, provincial, foreign and local taxes required to be paid or accrued as a liability under GAAP, as a consequence of such Asset Disposition;

(2) all payments made on any Indebtedness which is secured by any assets subject to such Asset Disposition, in accordance with the terms of any lien upon or other security agreement of any kind with respect to such assets, or which must by its terms, or in order to obtain a necessary consent to such Asset Disposition, or by applicable law, be repaid out of the proceeds from such Asset Disposition;

(3) all distributions and other payments required to be made to non-controlling interest holders in Subsidiaries or joint ventures as a result of such Asset Disposition; and

(4) appropriate amounts provided by the seller as a reserve, in accordance with GAAP, against any liabilities associated with the property or other assets disposed in such Asset Disposition and retained by Holdings or any Restricted Subsidiary after such Asset Disposition.

“Non-U.S. Person” means a Person who is not a U.S. Person.

“Note Guarantee” means the Guarantee by each Guarantor of the Issuer’s obligations under this Indenture and the Notes, pursuant to the provisions of this Indenture.

“Notes” means the notes issued by the Issuer pursuant to this Indenture. The Notes issued on the Issue Date and any Additional Notes issued under this Indenture shall be treated as a single class for all purposes under this Indenture, including with respect to voting, and unless the context otherwise requires, all references to the Notes shall include the Notes issued on the Issue Date and any Additional Notes.

“Offer” has the meaning set forth in Section 4.09(c).

“Offering Memorandum” means the Offering Memorandum of the Issuer, dated September 27, 2018, relating to the offering of the Notes on the Issue Date.

“Officer’s Certificate” means a certificate signed by an Officer of Holdings or the Issuer, as the case may be.

“Officers” means, with respect to any Person, the Chairman, President, Chief Executive Officer, Chief Financial Officer, Treasurer, Controller, any Senior Vice President, any Vice President of such Person or any other authorized officer or director of such Person.

“Opinion of Counsel” means a written opinion from legal counsel, who may be an employee of or counsel to Holdings or any of its Subsidiaries, or other counsel, which is reasonably acceptable to the Trustee. Each such opinion shall include the statements provided for in Section 11.05, if and to the extent required by the provisions thereof.

“Parent” means James Hardie Industries plc, a public limited company duly incorporated under the laws of Ireland, and, following any transaction involving a Permitted Parent or Permitted Person, shall instead mean such Permitted Parent or Permitted Person, as the case may be.

“Pari Passu Indebtedness” means any Indebtedness of the Issuer or any Guarantor that ranks *pari passu* in right of payment with the Notes or the Note Guarantees, as applicable (without giving effect to collateral arrangements).

“Paying Agent” has the meaning set forth in Section 2.04.

“Payment Default” has the meaning set forth in Section 6.01.

“Performing Subsidiary” means any Subsidiary of the Parent primarily liable to make funding payments to AICF under the AFFA, it being understood that the Performing Subsidiary, as of the Issue Date, is James Hardie 117 Pty Limited.

“Permitted Parent” has the meaning specified in the definition of “Change of Control.”

“Permitted Person” has the meaning specified in the definition of “Change of Control.”

“Permitted Reorganization” means any amalgamation, merger, plan or scheme of arrangement, exchange offer, business combination, reincorporation, reorganization, consolidation, continuation, discontinuation, domestication, re-domestication, conversion, division or similar action (including, without limitation, pursuant to a dissolution, liquidation or winding up), or a sale, distribution or other disposition of all or substantially all of the assets (or any combination thereof), in each case, involving the assets of (including, as applicable, Equity Interests in), Parent and its subsidiaries, including any steps in a plan adopted in good faith by the Board of Directors of the Parent, whether or not such steps occur before, concurrently with or after other steps in such plan (a “Reorganization”) where:

- (a) all of the assets of (including Equity Interests in) the relevant Subsidiary of the Consolidated Group (but excluding any Holding Companies) continue to be owned directly or indirectly by James Hardie International Group Limited (or its Replacement Entity) in the same or a greater percentage as prior to such Reorganization, except for:

(i) the Equity Interests in any Subsidiary of the Consolidated Group which has been Reorganized with or into another Subsidiary of the Consolidated Group or which has otherwise ceased to exist as a result of such Reorganization; or

(ii) the assets of (including Equity Interests in) Subsidiaries of the Consolidated Group which cease, in connection with such Reorganization, to be owned as a result of a transaction that otherwise is, or would be, permitted under this Indenture (but for the inclusion of this definition); and

(b) immediately after giving effect to any Reorganization, including the release of any Guarantor or the addition of any Guarantor, the Issuer and the Guarantors will own, directly or indirectly, all or substantially all of the assets (other than any Holding Companies) as they collectively owned before such Reorganization; *provided* that in connection with any release of the Note Guarantee of James Hardie International Group Limited, a direct or indirect Wholly Owned Subsidiary of the Parent, which shall be a Person organized and existing under the laws of the United States or a state thereof, Australia or a state thereof, Canada or a province thereof, a member state of the European Union, the United Kingdom or any other jurisdiction (other than The Philippines) in which the Issuer, a Guarantor or a Wholly Owned Subsidiary of Holdings is organized as of the Issue Date (the "Replacement Entity"), provides a Note Guarantee substantially concurrently with such release and such Replacement Entity owns directly or indirectly 100% of the Equity Interests of the Restricted Subsidiaries (other than any Holding Companies) immediately following the provision by the Replacement Entity of such Note Guarantee.

The Issuer will provide written notice to the Trustee upon the completion of any Permitted Reorganization.

"Permitted Security Interest" shall mean:

- (1) Security Interests on property acquired, constructed, developed or improved after the Issue Date by Holdings or a Restricted Subsidiary and created prior to or contemporaneously with, or within 180 days after such acquisition, construction, development or improvement;
- (2) Security Interests on property at the time of the acquisition thereof, which secure obligations assumed by Holdings or a Restricted Subsidiary, or on the property or on the outstanding shares or indebtedness of a corporation or firm at the time it becomes a Restricted Subsidiary or is merged into or consolidated with Holdings or a Restricted Subsidiary, or on properties of a corporation or firm acquired by Holdings or a Restricted Subsidiary as an entirety or substantially as an entirety; *provided* that the Security Interests may not extend to any other property of Holdings or such Restricted Subsidiary other than proceeds and products of such property, shares or indebtedness and accessions thereto;
- (3) Security Interests arising from conditional sales agreements or title retention agreements with respect to property acquired by Holdings or any Restricted Subsidiary;

- (4) Security Interests securing indebtedness of Holdings or a Restricted Subsidiary owing to Holdings or to another Restricted Subsidiary;
- (5) Security Interests (a) to secure obligations under the Credit Facilities or other Indebtedness or (b) in accounts receivable and related assets of the types specified in the definition of "Qualified Receivables Transaction" incurred in connection with a Qualified Receivables Transaction, in an aggregate principal amount under clauses (a) and (b) combined not to exceed the greater of (x) \$1,000.0 million and (y) the maximum amount that would not cause the Senior Secured Net Leverage Ratio to exceed 3.50 to 1.00 after giving effect to the incurrence of the obligations to be secured by such Security Interests;
- (6) Security Interests existing on the Issue Date;
- (7) any Security Interest arising by reason of deposits with, or the giving of any form of security to, any governmental agency or any body created or approved by law or governmental regulations, which is required by law or governmental regulation as a condition to the transaction of any business, or the exercise of any privilege, franchise or license;
- (8) carriers', warehousemen's, mechanics' and other statutory liens arising in the ordinary course of business (including construction of facilities) in respect of obligations that are not more than 90 days overdue or that are being contested in good faith;
- (9) Security Interests for taxes, assessments or governmental charges that are not more than 90 days overdue or for taxes, assessments or governmental charges that are being contested in good faith;
- (10) Security Interests (including judgment liens) arising in connection with legal proceedings so long as such proceedings are being contested in good faith and, in the case of judgment liens, execution thereon is stayed or does not give rise to an Event of Default;
- (11) landlords' liens on fixtures on premises leased in the ordinary course of business;
- (12) Security Interests to secure the performance of statutory obligations, insurance, surety or appeal bonds, performance bonds, or other obligations of a like nature incurred in the ordinary course of business (including Security Interests to secure letters of credit issued to assure payment of such obligations);
- (13) Security Interests on assets of Holdings or any of its Restricted Subsidiaries securing Hedging Obligations or Treasury Management Arrangements;
- (14) survey exceptions, easements or reservations of, or rights of others for, licenses, rights-of-way, sewers, electric lines, telegraph and telephone lines and other similar purposes, or zoning or other restrictions as to the use of real property that were not incurred in connection with Indebtedness and that do not in the aggregate materially impair the use of said properties in the operation of the business of Holdings and its Restricted Subsidiaries;

(15) Security Interests on insurance policies and proceeds thereof, or other deposits, to secure insurance premium financings;

(16) filing of Uniform Commercial Code financing statements as a precautionary measure in connection with operating leases;

(17) bankers' liens and rights of setoff;

(18) Security Interests in cash, cash equivalents or other property arising in connection with the defeasance, discharge or redemption of Indebtedness;

(19) Security Interests on specific items of inventory or other goods (and the proceeds thereof) of Holdings or a Restricted Subsidiary securing such Person's obligations in respect of bankers' acceptances or trade-related letters of credit issued or created in the ordinary course of business for the account of such Person to facilitate the purchase, shipment or storage of such inventory or other goods;

(20) grants of intellectual property licenses (including software and other technology licenses) in the ordinary course of business;

(21) Security Interests incurred or pledges or deposits made in the ordinary course of business in connection with workers' compensation, unemployment insurance and other types of social security and employee health and disability benefits (including pledges or deposits securing liability to insurance carriers under insurance or self-insurance arrangements);

(22) pledges and deposits made in the ordinary course of business to secure liability to insurance carriers;

(23) Security Interests to secure partial, progress, advance or other payments or any indebtedness incurred for the purpose of financing all or any part of the purchase price or the cost of construction, development, or substantial repair, alteration or improvement of the property subject to such Security Interests if the commitment for the financing is obtained not later than 180 days after the later of the completion of or the placing into operation (exclusive of test and start-up periods) of such property;

(24) Security Interests on the Capital Stock of any Unrestricted Subsidiary or joint venture which secures Indebtedness or other obligations of such Unrestricted Subsidiary or joint venture;

(25) Security Interests on the assets of any Restricted Subsidiary that is not a Guarantor and which secures Indebtedness or other obligations of such Restricted Subsidiary (or of another Restricted Subsidiary that is not a Guarantor);

(26) Security Interests to secure any refinancing, refunding, extension, renewal or replacement (or successive refinancing, refunding, extensions, renewals or replacements) as a whole, or in part, of any Indebtedness secured by any Security Interest referred to in the foregoing clauses (1), (2), (5), (6) or (23) above or this clause (26); *provided* that (x) such new

Security Interest shall be limited to all or part of the same property that secured the original Security Interest (plus improvements thereof, accessions thereto and proceeds and products thereof) and (y) the Indebtedness secured by such Security Interest at such time is not increased to any amount greater than the sum of (A) the outstanding principal amount or, if greater, committed amount of the Indebtedness described under clauses (1), (2), (5), (6) or (23) above at the time the original Security Interest became a Permitted Security Interest under this Indenture and in the case of this clause (26) at the time of refinancing, refunding, extending, renewing or replacing such Permitted Security Interest, and (B) an amount necessary to pay any fees and expenses, including premiums, related to such refinancing, refunding, extension, renewal or replacement; or

(27) other Security Interests securing Indebtedness, in an aggregate principal amount for Holdings and its Restricted Subsidiaries together with the amount of Attributable Indebtedness incurred in connection with Sale and Leaseback Transactions, not exceeding at the time such Security Interest is created or assumed the greater of \$150.0 million and 7.5% of Consolidated Net Tangible Assets (provided that any Indebtedness incurred to refinance, refund, extend, renew or replace Indebtedness secured by Security Interests pursuant to this clause (27) shall be permitted to be secured by Security Interests pursuant to this clause (27) notwithstanding that at the time of incurrence thereof, such Indebtedness may exceed the amount that would then be permitted to be secured under this clause (27) due to a diminution in the amount of Consolidated Net Tangible Assets).

Additionally, any permitted Secured Debt includes (with certain limitations) any extension, renewal or refunding, in whole or in part, of any Secured Debt permitted at the time of the original incurrence thereof.

For purposes of determining compliance with Section 4.11, a Security Interest need not be permitted solely by one category of Permitted Security Interests but may be permitted in part under any combination thereof, and if a Permitted Security Interest (or any portion thereof) meets the criteria or more than one of the exceptions described in clauses (1) through (27) above, Holdings may, in its sole discretion, classify or reclassify the Permitted Security Interest (or any portion thereof) in any manner that complies with Section 4.11.

“Person” means an individual, partnership, corporation, limited liability company, trust, unincorporated organization, trust or joint venture, association, or a governmental agency or political subdivision thereof or other entity.

“Physical Notes” means certificated Notes in registered form that are not Global Notes.

“Preferred Stock” means, with respect to any Person, any and all preferred or preference stock or other equity interests (however designated) of such Person having a preference or priority over other Equity Interests (however designated) of such Person, whether outstanding as of, or issued after, the Issue Date.



“principal” of a Note means the principal of the Note plus the premium, if any, payable on the Note which is due or overdue or is to become due at the relevant time.

“Principal Facility” means any land, building, machinery or equipment, or leasehold interests and improvements in respect of the foregoing, owned, on the date of this Indenture or thereafter, by Holdings or a Restricted Subsidiary, which has a gross book value (without deduction for any depreciation reserves) at the date as of which the determination is being made in excess of 1.0% of Consolidated Net Tangible Assets, other than any such land, building, machinery or equipment, or leasehold interests and improvements in respect of the foregoing which, in the opinion of the Board of Directors of Holdings (evidenced by a board resolution), is not of material importance to the business conducted by Holdings and its Restricted Subsidiaries taken as a whole.

“Private Placement Legend” means the legend substantially in the form set forth in Exhibit B.

“Pro Forma Entity” means any Acquired Entity or Business, any Sold Entity or Business, any Converted Restricted Subsidiary or any Converted Unrestricted Subsidiary.

“Qualified Equity Interests” of any Person means Equity Interests of such Person other than Disqualified Equity Interests; *provided* that such Equity Interests shall not be deemed Qualified Equity Interests to the extent sold to a Subsidiary of such Person or financed, directly or indirectly, using funds (1) borrowed from such Person or any Subsidiary of such Person until and to the extent such borrowing is repaid or (2) contributed, extended, guaranteed or advanced by such Person or any Subsidiary of such Person (including, without limitation, in respect of any employee stock ownership or benefit plan). Unless otherwise specified, Qualified Equity Interests refer to Qualified Equity Interests of Holdings.

“Qualified Institutional Buyer” shall have the meaning specified in Rule 144A promulgated under the Securities Act.

“Qualified Receivables Transaction” means any transaction or series of transactions that may be entered into by Holdings or any of its Restricted Subsidiaries pursuant to which Holdings or any of its Restricted Subsidiaries may sell, convey or otherwise transfer to:

- (1) a Receivables Entity (in the case of a transfer by Holdings or any of its Restricted Subsidiaries); or
- (2) any other Person (in the case of a transfer by a Receivables Entity),

or may grant a security interest in, any accounts receivable (whether now existing or arising in the future) of Holdings or any of its Restricted Subsidiaries, and any assets related thereto, including all collateral securing such accounts receivable, all contracts and all Guarantees or other obligations in respect of such accounts receivable, proceeds of such accounts receivable and other assets which are customarily transferred or in respect of which security interests are customarily granted in connection with asset securitization transactions involving accounts receivable; *provided, however*, that the financing terms, covenants, termination events and other

provisions thereof shall be market terms in all material respects at the time of such transaction (as determined in good faith by Holdings). The grant of a Security Interest in any accounts receivable of Holdings or any of its Restricted Subsidiaries to secure Indebtedness under Credit Facilities shall not be deemed a Qualified Receivables Transaction.

“Rating Agencies” means Moody’s, S&P and Fitch or if any or all of Moody’s, S&P or Fitch cease to rate the Notes for reasons outside of the control of the Issuer, a nationally recognized statistical rating organization or organizations, as the case may be, within the meaning of Section 3(a)(62) of the Exchange Act, selected by the Parent which shall be substituted for any or all of Moody’s, S&P or Fitch with respect to the Notes, as the case may be.

“Rating Decline” means, with respect to the Notes, the occurrence of a decrease in the rating of the Notes by one or more gradations by any of the Rating Agencies (including gradations within the rating categories, as well as between categories), within 60 days after the earliest of (x) a Change of Control, (y) the date of public notice of the occurrence of a Change of Control or (z) public notice of the intention by the Parent, the Issuer or Holdings to effect a Change of Control (which 60-day period shall be extended so long as the rating of the Notes is under publicly announced consideration for possible downgrade by each such Rating Agency); *provided, however*, that a Rating Decline otherwise arising by virtue of a particular reduction in rating will not be deemed to have occurred in respect of a particular Change of Control (and thus will not be deemed a Rating Decline for purposes of the definition of Change of Control Triggering Event) unless the Rating Agency making the reduction in rating to which this definition would otherwise apply announces or publicly confirms or informs the Trustee in writing at the Parent’s, the Issuer’s or Holdings’ or its request that the reduction was the result, in whole or in part, of any event or circumstance comprised of or arising as a result of, or in respect of, the applicable Change of Control (whether or not the applicable Change of Control has occurred at the time of the Rating Decline); *provided, further*, that notwithstanding the foregoing, a Ratings Decline shall not be deemed to have occurred so long as the Notes have an Investment Grade Rating from two Rating Agencies.

“Receivables Entity” means (a) a Wholly Owned Subsidiary of Holdings that is designated by the Board of Directors of Holdings (as provided below) as a Receivables Entity or (b) another Person engaging in a Qualified Receivables Transaction with Holdings, which Person engages in the business of the financing of accounts receivable, and in the case of either clause (a) or (b):

(I) no portion of the Indebtedness or any other obligations (contingent or otherwise) of such entity:

(A) is Guaranteed by Holdings or any Restricted Subsidiary of Holdings (excluding Guarantees of obligations (other than the principal of, and interest on, Indebtedness) pursuant to Standard Securitization Undertakings);

(B) is recourse to or obligates Holdings or any Restricted Subsidiary of Holdings in any way (other than pursuant to Standard Securitization Undertakings); or

(C) subjects any asset of Holdings or any Restricted Subsidiary of Holdings, directly or indirectly, contingently or otherwise, to the satisfaction thereof (other than pursuant to Standard Securitization Undertakings);

(2) the entity is not an Affiliate of Holdings or is an entity with which neither Holdings nor any Restricted Subsidiary of Holdings has any material contract, agreement, arrangement or understanding other than on terms that Holdings reasonably believes to be no less favorable to Holdings or such Restricted Subsidiary than those that might be obtained at the time from Persons that are not Affiliates of Holdings; and

(3) is an entity to which neither Holdings nor any Restricted Subsidiary of Holdings has any obligation to maintain or preserve such entity's financial condition or cause such entity to achieve certain levels of operating results.

Any such designation by the Board of Directors of Holdings shall be evidenced to the Trustee by providing the Trustee a certified copy of the resolution of the Board of Directors of Holdings giving effect to such designation and an Officer's Certificate certifying that such designation complied with the foregoing conditions.

"Redemption Date" when used with respect to any Note to be redeemed pursuant to paragraph 5 of the Notes, means the date fixed for such redemption pursuant to the terms of this Indenture and the Notes.

"Registrar" has the meaning set forth in Section 2.04.

"Regulation S" means Regulation S promulgated under the Securities Act.

"Regulation S Global Note" has the meaning set forth in Section 2.16(a).

"Regulation S Legend" means the legend substantially in the form set forth in Exhibit E.

"Regulation S Notes" has the meaning set forth in Section 2.02.

"Relevant Taxing Jurisdiction" means any of the following, including any political subdivision or governmental authority thereof or therein:

- (1) Ireland;
- (2) any jurisdiction from or through which any payment made by or on behalf of the Issuer or any Guarantor under or with respect to the Notes or any Note Guarantee is made; or
- (3) any other jurisdiction in which the Issuer or any Guarantor is incorporated, organized, engaged in business for tax purposes or otherwise resident for tax purposes.

“Reorganization” has the meaning specified in the definition of “Permitted Reorganization.”

“Replacement Entity” has the meaning specified in the definition of “Permitted Reorganization.”

“Responsible Officer” means, when used with respect to the Trustee, any officer in the corporate trust department of the Trustee including any director, vice president, assistant vice president or any other officer of the Trustee who customarily performs functions similar to those performed by the Persons who at the time shall be such officers, respectively, in each case having direct responsibility for the administration of this Indenture, and any other officer to whom any corporate trust matter is referred because of such officer’s knowledge of and familiarity with the particular subject.

“Restricted Global Note” means a Global Note that is a Restricted Note.

“Restricted Note” has the same meaning as “restricted security” set forth in Rule 144(a)(3) promulgated under the Securities Act; *provided* that the Trustee shall be entitled to request (at the expense of the Issuer) and conclusively rely upon an Opinion of Counsel with respect to whether any Note is a Restricted Note.

“Restricted Payment” means any of the following:

- (a) the declaration or payment of any dividend or any other distribution on Equity Interests of Holdings or any payment made to the direct or indirect holders (in their capacities as such) of Equity Interests of Holdings, including, without limitation, any payment in connection with any merger or consolidation involving Holdings but excluding dividends or distributions payable solely in Qualified Equity Interests of Holdings or through accretion or accumulation of such dividends on such Equity Interests;
- (b) the redemption of any Equity Interests of Holdings, including, without limitation, any payment in connection with any merger or consolidation involving Holdings; or
- (c) any Investment in an Unrestricted Subsidiary.

“Restricted Payments Basket” has the meaning set forth in clause (c) of the first paragraph of Section 4.10.

“Restricted Period” has the meaning set forth in Section 2.17(b)(i).

“Restricted Physical Note” means a Physical Note that is a Restricted Note.

“Restricted Subsidiary” means, at any time, any direct or indirect Subsidiary of Holdings that is not then an Unrestricted Subsidiary; *provided, however*, that upon the

occurrence of an Unrestricted Subsidiary ceasing to be an Unrestricted Subsidiary, such Subsidiary shall be included in the definition of Restricted Subsidiary.

“Rule 144” means Rule 144 promulgated under the Securities Act.

“Rule 144A” means Rule 144A promulgated under the Securities Act.

“Rule 144A Global Note” has the meaning set forth in Section 2.16(a).

“Rule 144A Notes” has the meaning set forth in Section 2.02.

“S&P” means Standard & Poor’s Ratings Service, and any successor to its rating agency business.

“Sale and Leaseback Transaction” means any sale or transfer made by Holdings or one or more Restricted Subsidiaries (except a sale or transfer made to Holdings or one or more Restricted Subsidiaries) of any Principal Facility that (in the case of a Principal Facility which is a building or equipment) has been in operation, use or commercial production (exclusive of test and start-up periods) by Holdings or any Restricted Subsidiary for more than 180 days prior to such sale or transfer, or that (in the case of a Principal Facility that is a parcel of real property not containing a building) has been owned by Holdings or any Restricted Subsidiary for more than 180 days prior to such sale or transfer, if such sale or transfer is made with the intention of leasing, or as part of an arrangement involving the lease of such Principal Facility to Holdings or a Restricted Subsidiary (except a lease for a period not exceeding 36 months made with the intention that the use of the leased Principal Facility by Holdings or such Restricted Subsidiary will be discontinued on or before the expiration of such period); *provided, however*, that the creation of any Secured Debt permitted under Section 4.11 shall not be deemed to create or be considered a Sale and Leaseback Transaction.

“Secured Debt” means outstanding Indebtedness of Holdings or a Restricted Subsidiary which is secured by (a) a Security Interest in any assets of Holdings or any Restricted Subsidiary, or (b) a Security Interest in any shares of stock owned directly or indirectly by Holdings in a Restricted Subsidiary. The securing in the foregoing manner of any previously unsecured debt shall be deemed to be the creation of Secured Debt at the time such security is given. The amount of Secured Debt at any time outstanding shall be the aggregate principal amount then owing thereon by Holdings and the Restricted Subsidiaries.

“Securities Act” means the Securities Act of 1933, as amended, and the rules and regulations of the Commission promulgated thereunder.

“Security Interest” means any mortgage, pledge, lien, encumbrance or other security interest which secures payment or performance of an obligation.

“Senior Secured Net Leverage Ratio” means, as of the date of determination, the ratio of (a) the Total Net Debt of the Consolidated Group secured by a Security Interest as of the last day of the most recently ended four quarter period ended immediately prior to such date of determination for which consolidated financial statements are available to (b) Consolidated

Adjusted EBITDA of the Consolidated Group for the most recently ended four fiscal quarter period ending immediately prior to such date for which consolidated financial statements are available. In the event that any Consolidated Group member incurs, redeems, retires, defeases or extinguishes any Total Net Debt (other than Indebtedness under a revolving credit facility unless such Indebtedness has been permanently paid and not replaced) subsequent to the commencement of the period for which the Senior Secured Net Leverage Ratio is being calculated but prior to or simultaneously with the event for which the calculation of the Senior Secured Net Leverage Ratio is made, then the Senior Secured Net Leverage Ratio shall be calculated giving pro forma effect to such incurrence, redemption, retirement, defeasance or extinguishment of Total Net Debt as if the same had occurred at the beginning of the applicable four-quarter period. Notwithstanding anything to the contrary set forth in the definition of "Consolidated Adjusted EBITDA" (and all component definitions referenced in such definitions), whenever pro forma effect is to be given to any Asset Acquisition, Asset Disposition (in each case with a fair market value (as determined in good faith by Holdings) greater than \$10.0 million) or incurrence, redemption, retirement, defeasance or extinguishment of Total Net Debt, the pro forma calculations shall be determined in good faith by a responsible officer of the Parent or Holdings.

"Significant Subsidiary" means any Subsidiary that would be a "significant subsidiary" as defined in Article 1, Rule 1-02 of Regulation S-X, promulgated pursuant to the Securities Act, as such Regulation was in effect on the Issue Date.

"Sold Entity or Business" has the meaning specified in the definition of Consolidated Adjusted EBITDA."

"Standard Securitization Undertakings" means representations, warranties, covenants and indemnities entered into by Holdings or any Restricted Subsidiary of Holdings that, taken as a whole, are customary in an accounts receivable transaction (as determined in good faith by Holdings).

"Subject Security Interest" has the meaning set forth in Section 4.11.

"Subordinated Indebtedness" means Indebtedness of Holdings or any Restricted Subsidiary that is expressly subordinated in right of payment to the Notes or the Note Guarantees by Holdings or such Restricted Subsidiary, as the case may be.

"Subsidiary" of a Person means a corporation, association, partnership, limited liability company or other entity of which more than 50% of the outstanding Voting Stock is owned, directly or indirectly, by such Person or by one or more other Subsidiaries of such Person. Unless otherwise specified, all references herein to a "Subsidiary" or to "Subsidiaries" shall refer to a Subsidiary or Subsidiaries of Holdings.

"Tax" means any tax, duty, levy, impost, assessment, deduction, withholding or other charge imposed by any governmental authority (including penalties, additions to tax, interest and any other liabilities related thereto).

"Terminated Covenants" has the meaning set forth in Section 4.15(a).

“Third Party Claim” has the meaning set forth in Section 7.07.

“Total Net Debt” means, at any date of determination, the aggregate amount of all outstanding indebtedness of the types described in clauses (a), (b) or (f) of the definition of “Indebtedness” (less any unrestricted cash and cash equivalents to the extent not constituting Excluded Amounts) of the Consolidated Group determined on a consolidated basis in accordance with GAAP. Notwithstanding the foregoing, for purposes of Section 4.11, a binding commitment to lend under a revolving credit facility shall be deemed to be an incurrence of Indebtedness in the full amount of such commitment on the date that such commitment is entered into, regardless of whether the full amount of such revolving credit facility is actually borrowed, and thereafter the amount of such commitment shall be deemed fully borrowed at all times.

“Total Net Leverage Ratio” means, as of the date of determination, the ratio of (a) the Total Net Debt of the Consolidated Group as of the last day of the most recently ended four fiscal quarter period ended immediately prior to such date of determination for which consolidated financial statements are available to (b) Consolidated Adjusted EBITDA of the Consolidated Group for the most recently ended four fiscal quarter period ending immediately prior to such date for which consolidated financial statements are available. In the event that any Consolidated Group member incurs, redeems, retires, defeases or extinguishes any Total Net Debt (other than Indebtedness under a revolving credit facility unless such Indebtedness has been permanently paid and not replaced) subsequent to the commencement of the period for which the Total Net Leverage Ratio is being calculated but prior to or simultaneously with the event for which the calculation of the Total Net Leverage Ratio is made, then the Total Net Leverage Ratio shall be calculated giving pro forma effect to such incurrence, redemption, retirement, defeasance or extinguishment of Total Net Debt as if the same had occurred at the beginning of the applicable four-quarter period. Notwithstanding anything to the contrary set forth in the definition of Consolidated Adjusted EBITDA (and all component definitions referenced in such definitions), whenever pro forma effect is to be given to any Asset Acquisition, Asset Disposition (in each case with a fair market value (as determined in good faith by Holdings) greater than \$10.0 million) or incurrence, redemption, retirement, defeasance or extinguishment of Total Net Debt, the pro forma calculations shall be determined in good faith by a responsible officer of the Parent or Holdings.

“Transfer” means to sell, assign, transfer, lease (other than pursuant to an operating lease entered into in the ordinary course of business), convey or otherwise dispose of, including by Sale and Leaseback Transaction, consolidation, merger, liquidation, dissolution or otherwise, in one transaction or a series of transactions.

“Treasury Management Arrangement” means any agreement or other arrangement governing the provision of treasury or cash management services, including deposit accounts, overdraft, credit or debit card, funds transfer, automated clearinghouse, zero balance accounts, returned check concentration, controlled disbursement, lockbox, account reconciliation and reporting and trade finance services and other cash management services.

“Trustee” means the party named as such in this Indenture until a successor replaces it pursuant to this Indenture and thereafter means such successor.



“Unsecured Revolving Credit Facility” means that certain Credit and Guaranty Agreement, dated December 10, 2015, by and among James Hardie International Finance Designated Activity Company and James Hardie Building Products Inc., as borrowers, James Hardie International Group Limited and James Hardie Technology Limited, as guarantors, James Hardie Industries plc, as parent, HSBC Bank USA, National Association, as administrative agent, and the other lender parties thereto (as may be amended, restated, amended and restated, supplemented, waived or otherwise modified, renewed, refunded, replaced or refinanced in whole or in part from time to time in one or more agreements or indentures (in each case, with the same or new agents, lenders, creditors or groups of lenders or creditors, trustees or note holders), including in connection with a Permitted Reorganization, and including any agreement or indenture extending the maturity of or otherwise restructuring all or any portion of the Indebtedness thereunder or increasing the amount loaned or issued thereunder or altering the maturity thereof (including increasing the amount of available borrowings thereunder or adding Subsidiaries of Holdings as borrowers or guarantors thereunder).

“Unrestricted Global Note” means a Global Note that is not a Restricted Note.

“Unrestricted Notes” means Notes that are not Restricted Notes.

“Unrestricted Physical Note” means a Physical Note that is not a Restricted Note.

“Unrestricted Subsidiary” means (a) James Hardie 117 Pty Ltd (unless, such Person has been designated as a Restricted Subsidiary after the Issue Date as provided below) and (b) any other Subsidiary of Holdings other than the Issuer that at the time of determination is an Unrestricted Subsidiary (as designated by the Board of Directors of Holdings after the Issue Date, as provided below) and (c) any Subsidiary of an Unrestricted Subsidiary. The Board of Directors of Holdings may designate any Subsidiary of Holdings (including any existing Subsidiary and any newly acquired or newly formed Subsidiary) to be an Unrestricted Subsidiary after the Issue Date unless such Subsidiary or any of its Subsidiaries owns any Equity Interests or Indebtedness of, or owns or holds any lien on, any property of, Holdings or any Restricted Subsidiary of Holdings (other than any Subsidiary of the Subsidiary to be so designated), *provided* that (i) such designation complies with Section 4.10 and (ii) each of (1) the Subsidiary to be so designated and (2) its Subsidiaries has not at the time of designation, and does not thereafter, create, incur, issue, assume, guarantee or otherwise become directly or indirectly liable with respect to any Indebtedness pursuant to which the lender has recourse to any of the assets of Holdings or any Restricted Subsidiary. The Board of Directors of Holdings may designate any Unrestricted Subsidiary to be a Restricted Subsidiary; *provided* that, such designation will be deemed to be an incurrence of Indebtedness by a Restricted Subsidiary of Holdings of any outstanding Indebtedness of such Unrestricted Subsidiary, and such designation will only be permitted if immediately after giving effect to such designation, no Default or Event of Default shall have occurred and be continuing. Any such designation by the Board of Directors shall be notified by Holdings to the Trustee by promptly filing with the Trustee a copy of the board resolution giving effect to such designation and an Officer’s Certificate certifying that such designation complied with the foregoing provisions. For the avoidance of doubt, Unrestricted Subsidiaries will not be subject to any of the restrictive covenants set forth in this Indenture.



“U.S. Person” means a “U.S. person” as defined in Rule 902(k) under the Securities Act.

“Voting Stock” means any class or classes of Capital Stock pursuant to which the holders thereof have power to vote in the election of directors, managers or trustees of any Person (irrespective of whether or not, at the time, stock of any other class or classes shall have, or might have, voting power by reason of the happening of any contingency).

“Wholly Owned Subsidiary” of any Person means a Subsidiary of such Person all of the outstanding Capital Stock or other ownership interests of which (other than directors’ qualifying shares) shall at the time be owned by such Person or by one or more Wholly Owned Subsidiaries of such Person or by such Person and one or more Wholly Owned Subsidiaries of such Person.

SECTION 1.02. Rules of Construction.

Unless the context otherwise requires:

- (1) a term has the meaning assigned to it herein, whether defined expressly or by reference;
- (2) “or” is not exclusive;
- (3) words in the singular include the plural, and in the plural include the singular;
- (4) words used herein implying any gender shall apply to both genders;
- (5) “herein,” “hereof” and other words of similar import refer to this Indenture as a whole and not to any particular Article, Section or other clause;
- (6) unless otherwise specified herein, all accounting terms used herein shall be interpreted, all accounting determinations hereunder shall be made, and all financial statements required to be delivered hereunder shall be prepared in accordance with GAAP;
- (7) “\$” and “U.S. dollars” each refer to United States dollars, or such other money of the United States of America that at the time of payment is legal tender for payment of public and private debts;
- (8) “€” and “euros” each refer to the single currency introduced at the third stage of the European Monetary Union pursuant to the Treaty establishing the European Community, as amended;
- (9) “will” shall be interpreted to express a command; and
- (10) “including” means including without limitation.

## ARTICLE TWO

### THE SECURITIES

#### SECTION 2.01. Amount of Notes.

The Trustee or Authentication Agent shall initially authenticate €400,000,000 aggregate principal amount of Initial Notes for original issue on the Issue Date upon a written order of the Issuer signed by one Officer, together with an Officer's Certificate of the Issuer and an Opinion of Counsel, which opinion shall cover the enforceability of such Notes as well as what is required by Sections 11.04 and 11.05 hereof. The Trustee or Authentication Agent shall authenticate additional notes in an unlimited amount having identical terms and conditions as the Notes other than the issue date, the issue price, the first interest payment date and the first date from which interest will accrue (the "Additional Notes") thereafter from time to time, *provided* that unless such Additional Notes are fungible with the existing Notes for U.S. federal income tax purposes, such Additional Notes will be issued with a separate ISIN or Common Code, in unlimited amount for original issue upon a written order of the Issuer in the form of an Officer's Certificate in aggregate principal amount as specified in such order together with an Opinion of Counsel, which opinion shall cover the enforceability of such Notes as well as what is required by Sections 11.04 and 11.05 hereof. The Trustee or Authentication Agent shall also authenticate (i) replacement Notes as provided in Section 2.08, (ii) temporary Notes as provided in Section 2.11, (iii) Notes issued in connection with certain transfers and exchanges as provided in Sections 2.07, 2.16 and 2.17, (iv) Notes issued in connection with a partial redemption of the Notes as provided in Section 3.06 or a partial repurchase of a Note as provided in Section 4.08 and (v) Notes exchanged as provided in Section 8.05, in each case upon a written order of the Issuer in the form of an Officer's Certificate in aggregate principal amount as specified in such order. Each such written order shall specify the principal amount of Notes to be authenticated and the date on which the Notes are to be authenticated.

#### SECTION 2.02. Form and Dating; Legends.

The Notes and the Trustee's or Authentication Agent's certificate of authentication with respect thereto shall be substantially in the form set forth in (i) Exhibit A-1 (in the case of the Restricted Notes) and (ii) Exhibit A-2 (in the case of Unrestricted Notes), each of which is incorporated in and forms a part of this Indenture. Each Note shall be dated the date of its authentication.

The Notes may have notations, legends or endorsements required by law, rule or usage to which the Issuer is subject. Without limiting the generality of the foregoing, Notes offered and sold to Qualified Institutional Buyers in reliance on Rule 144A ("Rule 144A Notes"), Notes offered and sold in offshore transactions in reliance on Regulation S ("Regulation S Notes") and all other Restricted Notes shall bear the Private Placement Legend. All Global Notes shall bear the Global Note Legend. Regulation S Notes shall bear the Regulation S Legend.

The terms and provisions contained in the Notes shall constitute, and are expressly made, a part of this Indenture and, to the extent applicable, the Issuer, the Guarantors and the Trustee, by their execution and delivery of this Indenture, expressly agree to such terms and provisions and agree to be bound thereby. If there is a conflict between the terms of the Notes and this Indenture, the terms of this Indenture shall govern.

The Notes may be presented for registration of transfer and exchange at the offices of the Registrar.

SECTION 2.03. Execution and Authentication.

The Notes shall be executed on behalf of the Issuer by an Officer of the Issuer. The signature of the Officer on the Notes may be manual or facsimile.

If the Officer whose signature is on a Note was an Officer at the time of such execution but no longer holds that office at the time the Trustee authenticates the Note, the Note shall be valid nevertheless.

No Note shall be entitled to any benefit under this Indenture or be valid or obligatory for any purpose unless there appears on such Note a certificate of authentication substantially in the form provided for herein executed by the Trustee by manual signature, and such certificate upon any Note shall be conclusive evidence, and the only evidence, that such Note has been duly authenticated and delivered hereunder. Notwithstanding the foregoing, if any Note shall have been authenticated and delivered hereunder but never issued and sold by the Issuer, and the Issuer shall deliver such Note to the Trustee for cancellation as provided in Section 2.12, for all purposes of this Indenture such Note shall be deemed never to have been authenticated and delivered hereunder and shall never be entitled to the benefits of this Indenture.

The Trustee may appoint one or more authenticating agents, at the expense of the Issuer, to authenticate the Notes. Unless otherwise provided in the appointment, an authenticating agent may authenticate the Notes whenever the Trustee may do so. Each reference in this Indenture to authentication by the Trustee includes authentication by such agent. An authenticating agent has the same rights as an Agent to deal with the Issuer and Affiliates of the Issuer. Each Paying Agent is designated as an authenticating agent for purposes of this Indenture.

Notes shall be issuable only in registered form without coupons in denominations of €100,000 and any integral multiple of €1,000 in excess thereof.

SECTION 2.04. Registrar and Paying Agent.

The Issuer shall maintain (a) an office or agency where Notes may be presented for registration of transfer or for exchange (the "Registrar"), (b) an office or agency in London, United Kingdom where Notes may be presented for payment (the "Paying Agent") and (c) an office or agency where notices and demands to or upon the Issuer, if any, in respect of the Notes and this Indenture may be served. The Registrar shall keep a register of the Notes and of their

transfer and exchange. The Registrar shall provide a copy of such register from time to time upon request of the Issuer. The Issuer may appoint one or more co-registrars and one or more additional Paying Agents. The term "Registrar" includes any co-registrars. The term "Paying Agents" means the Paying Agent and any additional Paying Agents. The Issuer or any Affiliate thereof may act as Registrar or a Paying Agent.

The Issuer shall enter into an appropriate agency agreement with any Agent that is not a party to this Indenture. The agreement shall implement the provisions of this Indenture that relate to such Agent. The Issuer shall notify the Trustee in writing of the name and address of any such Agent. If the Issuer fails to maintain a Registrar or any required co-registrar or Paying Agent, or fails to give the foregoing notice, the Trustee shall act as such and shall be entitled to appropriate compensation in accordance with Section 7.07.

The Issuer initially appoints the Trustee as Registrar.

The Issuer initially appoints Deutsche Bank AG, London Branch, as Paying Agent, Transfer Agent and Authentication Agent.

The Issuer shall be responsible for making calculations called for under the Notes, including but not limited to determination of redemption price, premium (including the Make-Whole Premium), if any, and any additional amounts, defaulted interest or other amounts payable on the Notes. The Issuer will make the calculations in good faith and, absent manifest error, its calculations will be final and binding on the Holders. The Issuer will provide a schedule of its calculations to the Trustee when reasonably requested by the Trustee. The Trustee is entitled to rely conclusively on the accuracy of the Issuer's calculations without independent verification. The Trustee shall forward the Issuer's calculations referred to above in this paragraph to any Holder of the Notes upon the written request of such Holder.

SECTION 2.05. Paying Agent To Hold Money.

The Issuer will require each Paying Agent, other than the Trustee and the initial Paying Agent as of the date of this Indenture, to agree in writing that each Paying Agent will hold, for the benefit of Holders or the Trustee, all money held by the Paying Agent for the payment of principal of, premium or Additional Amounts, if any, or interest on, the Notes, and will notify the Trustee of any default by the Issuer in making any such payment. While any such default continues, the Trustee may require a Paying Agent to pay all money held by it to the Trustee. The Issuer at any time may require a Paying Agent to pay all money held by it to the Trustee. Upon payment over to the Trustee, the Paying Agent (if other than the Issuer or a Subsidiary of the Issuer) will have no further liability for the money. If the Issuer or a Subsidiary of the Issuer acts as Paying Agent, it will segregate and hold, in a separate trust fund for the benefit of the Holders, all money held by it as Paying Agent. Upon any insolvency, bankruptcy or reorganization proceedings relating to the Issuer (including, without limitation, its bankruptcy, voluntary or judicial liquidation, composition with creditors, reprieve from payment, controlled management, fraudulent conveyance, general settlement with creditors, reorganization or similar laws affecting the rights of creditors generally), the Paying Agent will serve as an agent of the Trustee as Paying Agent for the Notes in accordance with Section 7.11. The Issuer shall, no later

than 10:00 A.M., London time, on the Business Day prior to the day on which the Paying Agent is to receive payment, procure that the bank effecting payment for it confirms via fax or tested SWIFT MT100 message to the Paying Agent the payment instructions relating to such payment. A Paying Agent shall not be obliged to pay the Holders of the Notes (or make any other payment) unless and until such time as it has confirmed receipt of funds sufficient to make the relevant payment.

SECTION 2.06. Noteholder Lists.

The Trustee shall preserve in as current a form as is reasonably practicable the most recent list available to it of the names and addresses of the Noteholders. If the Trustee is not the Registrar, the Issuer shall furnish to the Trustee at least five Business Days before each Interest Payment Date, and at such other times as the Trustee may request in writing, a list in such form and as of such date as the Trustee may reasonably require of the names and addresses of the Noteholders.

SECTION 2.07. Transfer and Exchange.

Subject to Sections 2.16 and 2.17, when Notes are presented to the Registrar with a request from the Holder of such Notes to register a transfer or to exchange them for an equal principal amount of Notes of other authorized denominations, the Registrar shall register the transfer as requested. Every Note presented or surrendered for registration of transfer or exchange shall be duly endorsed or be accompanied by a written instrument of transfer in form satisfactory to the Issuer and the Registrar, duly executed by the Holder thereof or his attorneys duly authorized in writing. To permit registrations of transfers and exchanges, the Issuer shall issue and execute and, upon receipt of a written order of the Issuer in the form of an Officer's Certificate in accordance with Section 2.01, the Trustee shall authenticate new Notes (and the Guarantors shall execute the Guarantees thereon) evidencing such transfer or exchange. No service charge shall be made to the Noteholder for any registration of transfer or exchange. The Issuer or the Trustee may require from the Noteholder payment of a sum sufficient to cover any transfer taxes or other governmental charge that may be imposed in relation to a transfer or exchange, but this provision shall not apply to any exchange pursuant to Section 2.11, 3.06, 4.08 or 8.05 (in which events the Issuer shall be responsible for the payment of such taxes). The Issuer and the Registrar shall not be required to exchange or register a transfer of any Note for a period of 15 days immediately preceding the mailing of notice of redemption of Notes to be redeemed or of any Note selected, called or being called for redemption except the unredeemed portion of any Note being redeemed in part.

Any Holder of a Global Note shall, by acceptance of such Global Note, agree that transfers of the beneficial interests in such Global Note may be effected only through a book entry system maintained by the Holder of such Global Note (or its agent), and that ownership of a beneficial interest in the Global Note shall be required to be reflected in a book entry. By its acceptance of any Note bearing the Private Placement Legend, each Holder of such Note acknowledges the restrictions on transfer of such Note set forth in this Indenture and in the Private Placement Legend and agrees that it will transfer such Note only as provided in this Indenture.

SECTION 2.08. Replacement Notes.

If a mutilated Note is surrendered to the Registrar or the Trustee, or if the Holder of a Note claims that the Note has been lost, destroyed or wrongfully taken, the Issuer shall issue and, upon receipt of a written order of the Issuer in the form of an Officer's Certificate in accordance with Section 2.01, the Trustee shall authenticate a replacement Note (and the Guarantors shall execute the Guarantees thereon) if the Holder of such Note furnishes to the Issuer and the Trustee evidence reasonably acceptable to them of the ownership and the destruction, loss or theft of such Note and if the requirements of Section 8-405 of the New York Uniform Commercial Code as in effect on the date of this Indenture are met. An indemnity bond shall also be posted, sufficient in the judgment of all to protect the Issuer, the Guarantors, the Trustee, the Registrar and any Paying Agent from any loss that any of them may suffer if such Note is replaced. The Issuer may charge such Holder for the Issuer's reasonable out-of-pocket expenses in replacing such Note and the Trustee may charge the Issuer for the Trustee's reasonable out-of-pocket expenses (including, without limitation, attorneys' fees and disbursements) in replacing such Note and may require the payment of a sum sufficient to cover any tax, assessment, fee or other charge that may be imposed in relation thereto and any other expenses (including the reasonable out-of-pocket fees and expenses of the Trustee) connected therewith. Every replacement Note shall constitute a contractual obligation of the Issuer. The provisions of this Section 2.08 are exclusive and will preclude (to the extent lawful) all other rights and remedies with respect to the replacement or payment of lost, destroyed, mutilated or wrongfully taken Notes.

SECTION 2.09. Outstanding Notes.

The Notes outstanding at any time are all Notes that have been authenticated by the Trustee except for (a) those canceled by or on behalf of the Trustee, (b) those accepted by the Trustee for cancellation, (c) to the extent set forth in Sections 9.01 and 9.02, on or after the date on which the conditions set forth in Section 9.01 or 9.02 have been satisfied, those Notes theretofore authenticated by the Trustee hereunder and (d) those described in this Section 2.09 as not outstanding. Subject to Section 2.10, a Note does not cease to be outstanding because the Issuer or one of its Affiliates holds the Note.

If a Note is replaced pursuant to Section 2.08, it ceases to be outstanding unless the Trustee receives proof satisfactory to the Trustee and the Issuer that the replaced Note is held by a bona fide purchaser in whose hands such Note is a legal, valid and binding obligation of the Issuer.

If a Paying Agent holds, in its capacity as such, on any Maturity Date, euros sufficient to pay all accrued interest and principal with respect to the Notes payable on that date and is not prohibited from paying such money to the Holders thereof pursuant to the terms of this Indenture, then on and after that date such Notes shall cease to be outstanding and interest on them shall cease to accrue.

SECTION 2.10. Treasury Notes.

In determining whether the Holders of the required principal amount of Notes have concurred in any declaration of acceleration or notice of default or direction, waiver or consent or any amendment, modification or other change to this Indenture, Notes owned by the Issuer or any other Affiliate of the Issuer shall be disregarded as though they were not outstanding, except that for the purposes of determining whether the Trustee shall be protected in relying on any such direction, waiver or consent or any amendment, modification or other change to this Indenture, only Notes as to which a Responsible Officer of the Trustee has actually received an Officer's Certificate stating that such Notes are so owned shall be so disregarded. Notes so owned which have been pledged in good faith shall not be disregarded if the pledgee established to the satisfaction of the Trustee the pledgee's right so to act with respect to the Notes and that the pledgee is not the Issuer, a Guarantor, any other obligor on the Notes or any of their respective Affiliates.

SECTION 2.11. Temporary Notes.

Until definitive Notes are prepared and ready for delivery, the Issuer may prepare and, upon receipt of a written order of the Issuer in the form of an Officer's Certificate in accordance with Section 2.01, the Trustee shall authenticate temporary Notes. Temporary Notes shall be substantially in the form of definitive Notes but may have variations that the Issuer considers appropriate for temporary Notes. Without unreasonable delay, the Issuer shall prepare and, upon receipt of a written order of the Issuer in the form of an Officer's Certificate in accordance with Section 2.01, the Trustee shall authenticate definitive Notes in exchange for temporary Notes. Until such exchange, temporary Notes shall be entitled to the same rights, benefits and privileges as definitive Notes.

SECTION 2.12. Cancellation.

The Issuer at any time may deliver Notes to the Trustee for cancellation. The Registrar and the Paying Agent shall forward to the Trustee any Notes surrendered to them for registration of transfer, exchange or payment. The Trustee shall cancel all Notes surrendered for registration of transfer, exchange, payment, replacement or cancellation and shall dispose of such canceled Notes in its customary manner. The Issuer may not reissue or resell or issue new Notes to replace Notes that the Issuer has redeemed or paid, or that have been delivered to the Trustee for cancellation.

SECTION 2.13. Defaulted Interest.

If the Issuer defaults on a payment of interest on the Notes, the Issuer shall pay the defaulted interest then borne by the Notes plus (to the extent permitted by law) any interest payable on the defaulted interest, in accordance with the terms hereof, to the Persons who are Holders thereof on a subsequent special record date, which date shall be at least five Business Days prior to the payment date. If such default continues for thirty (30) days, the Issuer shall fix such special record date and payment date. At least 10 days before such special record date, the Issuer (or upon the written request of the Issuer, the Trustee, in the name and at the expense of



the Issuer) shall mail to each affected Noteholder a notice that states the special record date, the payment date and the amount of defaulted interest, and interest payable on defaulted interest, if any, to be paid. The Issuer may make payment of any defaulted interest in any other lawful manner not inconsistent with the requirements (if applicable) of any securities exchange on which the Notes may be listed and, upon such notice as may be required by such exchange, if, after written notice given by the Issuer to the Trustee of the proposed payment pursuant to this sentence, such manner of payment shall be deemed practicable by the Trustee. If the Issuer elects for the Trustee to send such notice to the Holders then the Issuer shall provide such notice to the Trustee along with a written notice to the Trustee instructing the Trustee to send such notice to the Holders at least five (5) days (or such shorter time as may be agreed by the Trustee in its discretion) before such notice is required to be mailed to the Holders.

Notwithstanding the foregoing, any interest which is paid prior to the expiration of the 30-day period set forth in Section 6.01(1) shall be paid to Holders as of the record date for the Interest Payment Date for which interest has not been paid.

In the event that the Issuer is required to pay defaulted interest to Holders of Notes, the Issuer will provide written notice to the Trustee of its obligation to pay such defaulted interest no later than fifteen (15) days prior to the proposed payment date for the defaulted interest and such notice shall set forth the amount of defaulted interest to be paid by the Issuer on such payment date. The Trustee shall not at any time be under any duty or responsibility to the Holders to determine the defaulted interest, or with respect to the nature, extent, or calculation of the amount of defaulted interest owed, or with respect to the method employed in such calculation of the defaulted interest.

**SECTION 2.14. Common Codes and ISIN Numbers.**

The Issuer in issuing the Notes may use “Common Codes” and “ISIN” numbers, and if so used, such Common Codes and ISIN numbers shall be included in notices as a convenience to Holders; *provided* that any such notice may state that no representation is made as to the correctness or accuracy of the Common Codes or ISIN numbers printed in the notice or on the Notes, that reliance may be placed only on the other identification numbers printed on the Notes, and any such notice shall not be affected by any defect in or omission of such Common Codes or ISIN numbers. The Issuer shall promptly notify the Trustee, in writing, of any such Common Code or ISIN number used by the Issuer in connection with the issuance of the Notes and of any change in any such Common Code or ISIN number.

**SECTION 2.15. Deposit of Moneys.**

No later than 10:00 A.M., London time, on each Interest Payment Date and Maturity Date, the Issuer shall deposit with the Paying Agents, in immediately available funds, money in euros sufficient to make cash payments, if any, due on such day or date, as the case may be. Subject to actual receipt of such funds as provided by this Section 2.15 by the designated Paying Agent, such Paying Agent shall remit such payment in a timely manner to the Holders on such day or date, as the case may be, to the Persons and in the manner set forth in



paragraph 2 of the Global Notes. The Issuer shall promptly notify the Trustee and the Paying Agent of its failure to so act.

SECTION 2.16. Book-Entry Provisions for Global Notes.

(a) Rule 144A Notes initially shall be represented by one or more Notes in registered, global form without interest coupons (the "Rule 144A Global Note"). Regulation S Notes initially shall be represented by one or more Notes in registered, global form without interest coupons (the "Regulation S Global Note"). The term "Global Notes" means the Rule 144A Global Note and the Regulation S Global Note. The Global Notes shall bear the Global Note Legend. The Global Notes initially shall (i) be registered in the name of the applicable Common Depositary or a nominee of such Common Depositary, (ii) be delivered to the Common Depositary as custodian for Euroclear or Clearstream and (iii) bear the Private Placement Legend.

Members of, or direct or indirect participants in, Euroclear or Clearstream ("Agent Members") shall have no rights under this Indenture with respect to any Global Note held on their behalf by the applicable Common Depositary or under the Global Notes. Such Common Depositary may be treated by the Issuer, the Trustee and any agent of the Issuer or the Trustee as the absolute owner of the Global Notes for all purposes whatsoever. Notwithstanding the foregoing, nothing herein shall prevent the Issuer, the Trustee or any agent of the Issuer or the Trustee from giving effect to any written certification, proxy or other authorization furnished by Euroclear or Clearstream or impair, as between Euroclear or Clearstream and its Agent Members, the operation of customary practices governing the exercise of the rights of a Holder of any Note. None of the Issuer, the Trustee, the Paying Agent nor the Registrar shall have any responsibility or liability for any acts or omissions of the Common Depositary with respect to such Global Note, for the records of the Common Depositary, including records in respect of the beneficial owners of any such Global Note, for any transactions between the Common Depositary and any Agent Member or between or among the Common Depositary, any such Agent Member and/or any Holder or beneficial owner of such Global Note, or for any transfers of beneficial interests in any such Global Note. Neither the Trustee nor any agent shall have any responsibility or liability for any actions taken or not taken by the Common Depositary.

(b) Transfers of Global Notes shall be limited to transfer in whole, but not in part, to the applicable Common Depositary, its successors or their respective nominees. Interests of beneficial owners in the Global Notes may be transferred or exchanged for Physical Notes only in accordance with the applicable rules and procedures of the Common Depositary and the provisions of Section 2.17. In addition, a Global Note shall be exchangeable for Physical Notes (i) if requested by a holder of such interests upon receipt by the Trustee of written instructions from the Common Depositary or its nominee on behalf of any beneficial owner and in accordance with the rules and procedures of the Common Depositary and provisions of this Section 2.16 or (ii) if the Common Depositary notifies the Issuer that it is unwilling or unable to continue as depository for such Global Note and the Issuer thereupon fails to appoint a successor depository within 120 days or (iii) if Euroclear and Clearstream has ceased to be a clearing agency registered under the Exchange Act or (iv) if there shall have occurred and be continuing an Event of Default with respect to such Global Note and the Common Depositary has requested

such exchange. In all cases, Physical Notes delivered in exchange for any Global Note or beneficial interests therein shall be registered in the names, and issued in any approved denominations, requested by or on behalf of the Common Depositary in accordance with its customary procedures.

(c) In connection with the transfer of a Global Note as an entirety to beneficial owners pursuant to clause (b) of this Section 2.16, such Global Note shall be deemed to be surrendered to the Trustee for cancellation in accordance with its customary procedures, and the Issuer shall execute and, upon receipt of a written order of the Issuer in the form of an Officer's Certificate in accordance with Section 2.01, the Trustee shall authenticate and deliver, to each beneficial owner identified by the Common Depositary in writing in exchange for its beneficial interest in such Global Note, an equal aggregate principal amount of Physical Notes of authorized denominations.

(d) Any Restricted Physical Note delivered in exchange for an interest in a Global Note pursuant to Section 2.17 shall, except as otherwise provided in Section 2.17, bear the Private Placement Legend.

(e) The Holder of any Global Note may grant proxies and otherwise authorize any Person, including Agent Members and Persons that may hold interests through Agent Members, to take any action which a Holder is entitled to take under this Indenture or the Notes.

**SECTION 2.17. Transfer and Exchange of Notes.**

(a) Transfer and Exchange of Global Notes. A Global Note may not be transferred as a whole except as set forth in Section 2.16(b). Global Notes will not be exchanged by the Issuer for Physical Notes except under the circumstances described in Section 2.16(b). Global Notes also may be exchanged or replaced, in whole or in part, as provided in Sections 2.08 and 2.11. Beneficial interests in a Global Note may be transferred and exchanged as provided in Section 2.17(b) or 2.17(f).

(b) Transfer and Exchange of Beneficial Interests in Global Notes. The transfer and exchange of beneficial interests in the Global Notes shall be effected through the applicable Common Depositary, in accordance with the provisions of this Indenture and the applicable rules and procedures of Euroclear and Clearstream. Beneficial interests in Restricted Global Notes shall be subject to restrictions on transfer comparable to those set forth herein to the extent required by the Securities Act. Beneficial interests in Global Notes shall be transferred or exchanged only for beneficial interests in Global Notes. Transfers and exchanges of beneficial interests in the Global Notes also shall require compliance with either subparagraph (i) or (ii) below, as applicable, as well as one or more of the other following subparagraphs, as applicable:

(i) Transfer of Beneficial Interests in the Same Global Note. Beneficial interests in any Restricted Global Note may be transferred to Persons who take delivery thereof in the form of a beneficial interest in the same Restricted Global Note in accordance with the transfer restrictions set forth in the Private Placement Legend;

*provided, however*, that prior to the 40th day after the later of the commencement of the offering of the Notes represented by a Regulation S Global Note and the issue date of such Notes (such period through and including such 40th day, the “Restricted Period”), transfers of beneficial interests in a Regulation S Global Note may not be made to a U.S. Person or for the account or benefit of a U.S. Person (other than an Initial Purchaser). A beneficial interest in an Unrestricted Global Note may be transferred to Persons who take delivery thereof in the form of a beneficial interest in an Unrestricted Global Note. No written orders or instructions shall be required to be delivered to the Registrar to effect the transfers described in this Section 2.17(b)(i).

(ii) All Other Transfers and Exchanges of Beneficial Interests in Global Notes. In connection with all transfers and exchanges of beneficial interests in any Global Note that is not subject to Section 2.17(b)(i), the transferor of such beneficial interest must deliver to the Registrar or Transfer Agent either:

(A) both:

(1) a written order from an Agent Member given to the Common Depository in accordance with the applicable rules and procedures of Euroclear or Clearstream, as the case may be, directing such Common Depository to credit or cause to be credited a beneficial interest in another Global Note in an amount equal to the beneficial interest to be transferred or exchanged; and

(2) instructions given in accordance with the applicable rules and procedures of Euroclear or Clearstream, as the case may be, containing information regarding the Agent Member account to be credited with such increase; or

(B) both:

(1) a written order from an Agent Member given to the Common Depository in accordance with the applicable rules and procedures of Euroclear or Clearstream, as the case may be, directing such Common Depository to cause to be issued a definitive Note in an amount equal to the beneficial interest to be transferred or exchanged; and

(2) instructions given by the Common Depository to the Registrar containing information specifying the identity of the Person in whose name such definite Note shall be registered to effect the transfer or exchange referred to in (1) above, the principal amount of such securities and the ISIN, Common Code or other similar number identifying the Notes,

*provided* that any such transfer or exchange is made in accordance with the transfer restrictions set forth in the Private Placement Legend. Upon satisfaction of all of the requirements for transfer or exchange of beneficial interests in Global Notes contained in

this Indenture and the Notes, the Trustee shall adjust the principal amount of the relevant Global Note(s) pursuant to Section 2.17(f).

(iii) Transfer of Beneficial Interests to Another Restricted Global Note. A beneficial interest in a Restricted Global Note may be transferred to a Person who takes delivery thereof in the form of a beneficial interest in another Restricted Global Note if the transfer complies with the requirements of Section 2.17(b)(ii) above and the Registrar receives the following:

(A) if the transferee will take delivery in the form of a beneficial interest in a Rule 144A Global Note, then the transferor must deliver a certificate in the form of Exhibit F, including the certifications in item (1) thereof; and

(B) if the transferee will take delivery in the form of a beneficial interest in a Regulation S Global Note, then the transferor must deliver a certificate in the form of Exhibit F, including the certifications in item (2) thereof.

(iv) Transfer and Exchange of Beneficial Interests in a Restricted Global Note for Beneficial Interests in an Unrestricted Global Note. A beneficial interest in a Restricted Global Note may be exchanged by any holder thereof for a beneficial interest in an Unrestricted Global Note or transferred to a Person who takes delivery thereof in the form of a beneficial interest in an Unrestricted Global Note if the exchange or transfer complies with the requirements of Section 2.17(b)(ii) above and the Registrar receives the following:

(A) if the holder of such beneficial interest in a Restricted Global Note proposes to exchange such beneficial interest for a beneficial interest in an Unrestricted Global Note, a certificate from such holder in the form of Exhibit G, including the certifications in item (1)(a) thereof; or

(B) if the holder of such beneficial interest in a Restricted Global Note proposes to transfer such beneficial interest to a Person who shall take delivery thereof in the form of a beneficial interest in an Unrestricted Global Note, a certificate from such holder in the form of Exhibit F, including the certifications in item (4) thereof,

and, in each such case, an Opinion of Counsel in form reasonably acceptable to the Registrar to the effect that such exchange or transfer is in compliance with the Securities Act and that the restrictions on transfer contained herein and in the Private Placement Legend are no longer required in order to maintain compliance with the Securities Act. If any such transfer or exchange is effected pursuant to this subparagraph (iv) at a time when an Unrestricted Global Note has not yet been issued, the Issuer shall issue and, upon receipt of a written order of the Issuer in the form of an Officer's Certificate in accordance with Section 2.01, the Trustee shall authenticate one or more Unrestricted Global Notes in an aggregate principal amount equal to the aggregate principal amount of beneficial interests transferred or exchanged pursuant to this subparagraph (iv).

(v) Transfer and Exchange of Beneficial Interests in an Unrestricted Global Note for Beneficial Interests in a Restricted Global Note. Beneficial interests in an Unrestricted Global Note cannot be exchanged for, or transferred to Persons who take delivery thereof in the form of, a beneficial interest in a Restricted Global Note.

(c) Transfer and Exchange of Beneficial Interests in Global Notes for Physical Notes. A beneficial interest in a Global Note may not be exchanged for a Physical Note except under the circumstances described in Section 2.16(b). A beneficial interest in a Global Note may not be transferred to a Person who takes delivery thereof in the form of a Physical Note except under the circumstances described in Section 2.16(b).

(d) Transfer and Exchange of Physical Notes for Beneficial Interests in Global Notes. Transfers and exchanges of beneficial interests in the Global Notes also shall require compliance with subparagraphs (i), (ii), (iii) or (iv) below, as applicable:

(i) Restricted Physical Notes to Beneficial Interests in Restricted Global Notes. If any Holder of a Restricted Physical Note proposes to exchange such Restricted Physical Note for a beneficial interest in a Restricted Global Note or to transfer such Restricted Physical Note to a Person who takes delivery thereof in the form of a beneficial interest in a Restricted Global Note, then, upon receipt by the Registrar of the following documentation:

(A) if the Holder of such Restricted Physical Note proposes to exchange such Restricted Physical Note for a beneficial interest in a Restricted Global Note, a certificate from such Holder in the form of Exhibit G, including the certifications in item (2)(a) thereof;

(B) if such Restricted Physical Note is being transferred to a Qualified Institutional Buyer in accordance with Rule 144A under the Securities Act, a certificate to the effect set forth in Exhibit F, including the certifications in item (1) thereof;

(C) if such Restricted Physical Note is being transferred to a Non-U.S. Person in an offshore transaction in accordance with Rule 903 or Rule 904 under the Securities Act, a certificate to the effect set forth in Exhibit F, including the certifications in item (2) thereof;

(D) if such Restricted Physical Note is being transferred pursuant to an exemption from the registration requirements of the Securities Act in accordance with Rule 144 under the Securities Act, a certificate to the effect set forth in Exhibit F, including the certifications in item (3)(a) thereof;

(E) [reserved]; or

(F) if such Restricted Physical Note is being transferred to the Issuer or a Subsidiary thereof, a certificate to the effect set forth in Exhibit F, including the certifications in item (3)(b) thereof,

the Trustee shall cancel the Restricted Physical Note in accordance with its customary procedures, and increase or cause to be increased the aggregate principal amount of the appropriate Restricted Global Note.

(ii) Restricted Physical Notes to Beneficial Interests in Unrestricted Global Notes. A Holder of a Restricted Physical Note may exchange such Restricted Physical Note for a beneficial interest in an Unrestricted Global Note or transfer such Restricted Physical Note to a Person who takes delivery thereof in the form of a beneficial interest in an Unrestricted Global Note only if the Registrar receives the following:

(A) if the Holder of such Restricted Physical Note proposes to exchange such Restricted Physical Note for a beneficial interest in an Unrestricted Global Note, a certificate from such Holder in the form of Exhibit G, including the certifications in item (1)(b) thereof; or

(B) if the Holder of such Restricted Physical Notes proposes to transfer such Restricted Physical Note to a Person who shall take delivery thereof in the form of a beneficial interest in an Unrestricted Global Note, a certificate from such Holder in the form of Exhibit F, including the certifications in item (4) thereof,

and, in each such case, an Opinion of Counsel in form reasonably acceptable to the Registrar to the effect that such exchange or transfer is in compliance with the Securities Act and that the restrictions on transfer contained herein and in the Private Placement Legend are no longer required in order to maintain compliance with the Securities Act. Upon satisfaction of the conditions of this subparagraph (ii), the Trustee shall cancel the Restricted Physical Notes in accordance with its customary procedures and increase or cause to be increased the aggregate principal amount of the Unrestricted Global Note. If any such transfer or exchange is effected pursuant to this subparagraph (ii) at a time when an Unrestricted Global Note has not yet been issued, the Issuer shall issue and, upon receipt of a written order of the Issuer in the form of an Officer's Certificate in accordance with Section 2.01, the Trustee shall authenticate one or more Unrestricted Global Notes in an aggregate principal amount equal to the aggregate principal amount of Restricted Physical Notes transferred or exchanged pursuant to this subparagraph (ii).

(iii) Unrestricted Physical Notes to Beneficial Interests in Unrestricted Global Notes. A Holder of an Unrestricted Physical Note may exchange such Unrestricted Physical Note for a beneficial interest in an Unrestricted Global Note or transfer such Unrestricted Physical Note to a Person who takes delivery thereof in the form of a beneficial interest in an Unrestricted Global Note at any time. Upon receipt of a request for such an exchange or transfer, the Trustee shall cancel the applicable Unrestricted Physical Note in accordance with its customary procedures and increase or cause to be increased the aggregate principal amount of one of the Unrestricted Global Notes. If any such transfer or exchange is effected pursuant to this subparagraph (iii) at a time when an Unrestricted Global Note has not yet been issued, the Issuer shall issue and, upon receipt of a written order of the Issuer in the form of an Officer's Certificate in accordance with

Section 2.01, the Trustee shall authenticate one or more Unrestricted Global Notes in an aggregate principal amount equal to the aggregate principal amount of Unrestricted Physical Notes transferred or exchanged pursuant to this subparagraph (iii).

(iv) Unrestricted Physical Notes to Beneficial Interests in Restricted Global Notes. An Unrestricted Physical Note cannot be exchanged for, or transferred to a Person who takes delivery thereof in the form of, a beneficial interest in a Restricted Global Note.

(e) Transfer and Exchange of Physical Notes for Physical Notes. Upon written request by a Holder of Physical Notes and such Holder's compliance with the provisions of this Section 2.17(e), the Registrar shall register the transfer or exchange of Physical Notes. Prior to such registration of transfer or exchange, the requesting Holder shall present or surrender to the Registrar the Physical Notes duly endorsed or accompanied by a written instruction of transfer in form satisfactory to the Registrar duly executed by such Holder or by its attorney, duly authorized in writing. In addition, the requesting Holder shall provide any additional certifications, documents and information, as applicable, required pursuant to the following provisions of this Section 2.17(e).

(i) Restricted Physical Notes to Restricted Physical Notes. A Restricted Physical Note may be transferred to and registered in the name of a Person who takes delivery thereof in the form of a Restricted Physical Note if the Registrar receives the following:

(A) if the transfer will be made pursuant to Rule 144A under the Securities Act, then the transferor must deliver a certificate in the form of Exhibit F, including the certifications in item (1) thereof;

(B) if the transfer will be made pursuant to Rule 903 or Rule 904 under the Securities Act, then the transferor must deliver a certificate in the form of Exhibit F, including the certifications in item (2) thereof;

(C) if the transfer will be made pursuant to an exemption from the registration requirements of the Securities Act in accordance with Rule 144 under the Securities Act, a certificate to the effect set forth in Exhibit F, including the certifications in item (3)(a) thereof;

(D) [reserved]; and

(E) if such transfer will be made to the Issuer or a Subsidiary thereof, a certificate to the effect set forth in Exhibit F, including the certifications in item (3)(b) thereof.

(ii) Restricted Physical Notes to Unrestricted Physical Notes. Any Restricted Physical Note may be exchanged by the Holder thereof for an Unrestricted Physical Note or transferred to a Person who takes delivery thereof in the form of an Unrestricted Physical Note if the Registrar receives the following:



(1) if the Holder of such Restricted Physical Note proposes to exchange such Restricted Physical Note for an Unrestricted Physical Note, a certificate from such Holder in the form of Exhibit G, including the certifications in item (1)(c) thereof; or

(2) if the Holder of such Restricted Physical Note proposes to transfer such Notes to a Person who shall take delivery thereof in the form of an Unrestricted Physical Note, a certificate from such Holder in the form of Exhibit F, including the certifications in item (4) thereof,

and, in each such case, an Opinion of Counsel in form reasonably acceptable to the Issuer to the effect that such exchange or transfer is in compliance with the Securities Act and that the restrictions on transfer contained herein and in the Private Placement Legend are no longer required in order to maintain compliance with the Securities Act.

(iii) Unrestricted Physical Notes to Unrestricted Physical Notes. A Holder of an Unrestricted Physical Note may transfer such Unrestricted Physical Notes to a Person who takes delivery thereof in the form of an Unrestricted Physical Note at any time. Upon receipt of a written request to register such a transfer, the Registrar shall register such Unrestricted Physical Notes pursuant to the instructions from the Holder thereof.

(iv) Unrestricted Physical Notes to Restricted Physical Notes. An Unrestricted Physical Note cannot be exchanged for, or transferred to a Person who takes delivery thereof in the form of, a Restricted Physical Note.

(f) Cancellation and/or Adjustment of Global Notes. At such time as all beneficial interests in a particular Global Note have been exchanged for Physical Notes or a particular Global Note has been redeemed, repurchased or canceled in whole and not in part, each such Global Note shall be returned to or retained and canceled by the Trustee in accordance with Section 2.12. At any time prior to such cancellation, if any beneficial interest in a Global Note is exchanged for or transferred to a Person who will take delivery thereof in the form of a beneficial interest in another Global Note or for Physical Notes, the principal amount of Notes represented by such Global Note shall be reduced accordingly and an endorsement shall be made on such Global Note by the Registrar to reflect such reduction; and if the beneficial interest is being exchanged for or transferred to a Person who will take delivery thereof in the form of a beneficial interest in another Global Note, such other Global Note shall be increased accordingly and an endorsement shall be made on such Global Note by the Registrar to reflect such increase.

(g) Private Placement Legend. Upon the registration of transfer, exchange or replacement of Notes not bearing the Private Placement Legend, the Registrar shall deliver Notes that do not bear the Private Placement Legend. Upon the registration of transfer, exchange or replacement of Notes bearing the Private Placement Legend, the Registrar shall deliver only Notes that bear the Private Placement Legend unless (i) there is delivered to the Registrar an Opinion of Counsel reasonably satisfactory to the Issuer to the effect that neither such legend nor the related restrictions on transfer are required in order to maintain compliance with the provisions of the Securities Act or (ii) such Note has been sold pursuant to an effective



registration statement under the Securities Act and the Registrar has received an Officer's Certificate from the Issuer to such effect.

(h) General. All Global Notes and Physical Notes issued upon any registration of transfer or exchange of Global Notes or Physical Notes shall be the valid obligations of the Issuer, evidencing the same debt, and entitled to the same benefits under this Indenture, as the Global Notes or Physical Notes surrendered upon such registration of transfer or exchange.

The Registrar shall retain for a period of two years copies of all letters, notices and other written communications received pursuant to Section 2.16 or this Section 2.17. The Issuer shall have the right to inspect and make copies of all such letters, notices or other written communications at any reasonable time upon the giving of reasonable notice to the Registrar.

None of the Issuer, the Trustee, Paying Agent nor any Agent of the Issuer shall have any responsibility or liability in any respect of the records relating to or payment made on account of beneficial interests in a Global Note, or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

Neither the Trustee nor the Registrar shall have any obligation or duty to monitor, determine or inquire as to compliance with any restrictions on transfer imposed under this Indenture or under applicable law with respect to any transfer of any interest in any Note (including any transfers between or among Agent Members or beneficial owners of interests in any Global Note) other than to require delivery of such certificates and other documentation or evidence as are expressly required by, and to do so if and when expressly required by the terms of, this Indenture, and to examine the same to determine substantial compliance as to form with the express requirements hereof.

SECTION 2.18. Computation of Interest.

Interest on the Notes shall be computed on the basis of a 360-day year of twelve 30-day months and, in the case of an incomplete month, the actual days elapsed.

SECTION 2.19. Currency.

The euro is the sole currency of account and payment for all sums payable by the Issuer and any Guarantor under or in connection with the Notes, the relevant Guarantees, or this Indenture, as the case may be, including damages. Any amount received or recovered in a currency other than euro, whether as a result of, or the enforcement of, a judgment or order of a court of any jurisdiction, in the winding up or dissolution of the Issuer, any Guarantor or otherwise by any Holder or by the Trustee, in respect of any sum expressed to be due to it from the Issuer or a Guarantor will only constitute a discharge to the Issuer or such Guarantor, as applicable, to the extent of the euro amount, which the recipient is able to purchase with the amount so received or recovered in that other currency on the date of that receipt or recovery (or, if it is not practicable to make that purchase on that date, on the first date on which it is practicable to do so).

If that euro amount is less than the euro amount expressed to be due to the recipient or the Trustee under any Note, Guarantee or this Indenture (as applicable) the Issuer and each Guarantor will indemnify them against any loss sustained by such recipient or the Trustee as a result. In any event, the Issuer and each Guarantor will indemnify the recipient or the Trustee on a joint and several basis against the cost of making any such purchase. For the purposes of this Section 2.19, it will be *prima facie* evidence of the matter stated therein for the Holder of a Note or the Trustee to certify in a manner reasonably satisfactory to the Issuer (indicating the sources of information used) the loss it incurred in making any such purchase. These indemnities constitute a separate and independent obligation from the Issuer's and such Guarantor's other obligations, will give rise to a separate and independent cause of action, will apply irrespective of any waiver granted by any Holder of a Note or the Trustee (other than a waiver of the indemnities set out herein) and will continue in full force and effect despite any other judgment, order, claim or proof for a liquidated amount in respect of any sum due under any Note, any Guarantee or to the Trustee.

Except as otherwise specifically set forth herein, for purposes of determining compliance with any U.S. dollar-denominated restriction herein, the U.S. dollar equivalent amount for purposes hereof that is denominated in a non-U.S. dollar currency shall be calculated based on the relevant currency exchange rate in effect on the date such non-U.S. dollar amount is incurred, in the case of term Indebtedness, or first committed or first incurred (whichever yields the lower euro equivalent) or made, as the case may be.

## ARTICLE THREE

### REDEMPTION

#### SECTION 3.01. Election To Redeem; Notices to Trustee.

If the Issuer elects to redeem Notes pursuant to paragraph 5 of the Notes at least 15 days prior to the Redemption Date but not more than 60 days before the Redemption Date, the Issuer shall notify the Trustee in writing of the Redemption Date, the principal amount of such Notes to be redeemed and the redemption price(s) (or manner of calculation if not then known), and deliver to the Trustee (1) an Officer's Certificate stating that such redemption will comply with the conditions contained in paragraph 5 of the Notes; *provided*, that if the basis for such redemption is a Change in Tax Law, such Officer's Certificate (A) shall be delivered to the Trustee by the Issuer prior to the giving of any notice of such redemption and (B) shall further set forth a statement of facts showing that the conditions precedent to the right of the Issuer to so redeem have occurred (including that the obligation to pay Additional Amounts cannot be avoided by the Issuer or an applicable Guarantor taking reasonable measures available to it) and (2) in the case of a redemption due to a Change in Tax Law only, an opinion of independent tax counsel of recognized standing qualified under the laws of the Relevant Taxing Jurisdiction and reasonably satisfactory to the Trustee to the effect that the Issuer is or would be obligated to pay Additional Amounts as a result of a Change in Tax Law. Notice given to the Trustee pursuant to this Section 3.01 may not be revoked after the time that notice is given to Noteholders pursuant to Section 3.03. If the redemption price is not known at the time such notice is to be given, the actual redemption price, calculated as described in the terms of the Notes, will be set forth in an

Officer's Certificate delivered to the Trustee no later than two Business Days prior to the Redemption Date.

SECTION 3.02. Selection by Trustee of Notes To Be Redeemed.

If less than all of the Notes are to be redeemed at any time, selection of such Notes for redemption will be made by the Trustee on a *pro rata* basis (or, in the case of Global Notes, the Notes will be selected for redemption based on the applicable procedures of Euroclear and/or Clearstream, as the case may be); *provided* that no Notes with a principal amount of €100,000 or less shall be redeemed in part. For all purposes of this Indenture unless the context otherwise requires, provisions of this Indenture that apply to Notes called for redemption also apply to portions of Notes called for redemption. In the case of Physical Notes, redemption amounts shall only be paid upon presentation and surrender of any such Notes to be redeemed at the office or agency of the Issuer maintained for such purpose in London, United Kingdom.

SECTION 3.03. Notice of Redemption.

At least 15 days, and no more than 60 days, before a Redemption Date, the Issuer shall send, or cause to be sent, a notice of redemption electronically or by first-class mail to each Holder of Notes to be redeemed at his or her last address as the same appears on the registry books maintained by the Registrar pursuant to Section 2.06, in accordance with paragraph 6 of the Notes except that notices of redemption may be delivered or mailed more than 60 days prior to a Redemption Date if the notice is issued in connection with a defeasance of the Notes pursuant to Section 9.02 of this Indenture, a satisfaction and discharge of the Indenture with respect to the Notes pursuant to Section 9.01 of this Indenture or as specified in Section 3.04 of this Indenture. Notwithstanding the foregoing, no such notice of redemption as a result of a Change in Tax Law will be given (a) earlier than 90 days prior to the earliest date on which the Issuer would be obligated to pay Additional Amounts as a result of a Change in Tax Law, and (b) unless, at the time such notice is given, such obligation to pay such Additional Amounts remains in effect. The Issuer may instruct the Trustee in writing to send the notice of redemption in the name of and at the expense of the Issuer provided the Trustee receives such written instruction at least 15 days (or such shorter time as the Trustee may agree) prior to the date such notice of redemption is to be sent.

The notice shall identify the Notes to be redeemed (including the Common Codes and/or ISIN numbers thereof) and shall state:

- (1) the Redemption Date;
- (2) the redemption price and the amount of premium (or manner of calculation if not then known) and accrued interest to be paid;
- (3) if any Note is being redeemed in part, the portion of the principal amount of such Note to be redeemed and that, after the Redemption Date and upon surrender of such Note, a new Note or Notes in principal amount equal to the unredeemed portion will be issued;
- (4) the name and address of the Paying Agent;

- (5) that Notes called for redemption must be surrendered to the Paying Agent to collect the redemption price;
- (6) that unless the Issuer defaults in making the redemption payment, interest on Notes called for redemption ceases to accrue on and after the Redemption Date;
- (7) that paragraph 5 of the Notes is the provision of the Notes pursuant to which the redemption is occurring;
- (8) the aggregate principal amount of Notes that are being redeemed;
- (9) any conditions precedent to such redemption in reasonable detail; and
- (10) that no representation is made as to the correctness or accuracy of the Common Codes or ISIN numbers printed in the notice or on the Notes, and that reliance may be placed only on the other identification numbers printed on the Notes.

If any notice of redemption is subject to one or more conditions precedent, any such redemption may be rescinded in whole and not in part at any time prior to the close of business on the Business Day prior to the Redemption Date if the Issuer delivers an Officer's Certificate to the Trustee describing the failure of the condition in reasonable detail and rescinding the redemption and instructing the Trustee to provide such Officer's Certificate to the Holders. The Trustee shall promptly provide a copy of such Officer's Certificate to the Holders in the same manner in which the notice of redemption was given.

The Issuer may provide in any notice of redemption that payment of the redemption price and performance of the Issuer's obligations with respect to such redemption may be performed by a Person or Persons other than the Issuer.

**SECTION 3.04. Effect of Notice of Redemption.**

Once the notice of redemption described in Section 3.03 is sent and subject to the proviso to this sentence, Notes called for redemption become due and payable on the Redemption Date and at the redemption price, including any premium, plus interest accrued to the Redemption Date; *provided, however*, that any redemption and notice thereof pursuant to this Indenture may, in the Issuer's discretion, be subject to the satisfaction of one or more conditions precedent described in such notice and in which case if and/or to the extent such condition(s) precedent is/are not satisfied the Issuer shall have no obligation to redeem Notes on such Redemption Date, including completion of an Equity Offering or other corporate transaction. In addition, if such redemption or purchase is subject to satisfaction of one or more conditions precedent, such notice shall describe each such condition, and if applicable, shall state that, in the Issuer's discretion, the Redemption Date may be delayed until such time (including more than 60 days after the date the notice of redemption was mailed or delivered, including by electronic transmission) as any or all such conditions shall be satisfied or waived, or such redemption may not occur and such notice may be rescinded in the event that any or all such conditions shall not have been satisfied or waived by the Redemption Date or by the Redemption Date as so delayed, or such notice or offer may be rescinded at any time in the Issuer's discretion if the Issuer

reasonably believes that any or all of such conditions will not be satisfied or waived. Upon surrender to the Paying Agent, such Notes shall be paid at the redemption price, including any premium, plus interest accrued to the Redemption Date; *provided* that if the Redemption Date is after a regular record date and on or prior to the Interest Payment Date, the accrued interest shall be payable to the Holder of the redeemed Notes registered on the relevant record date; and *provided, further*, that if a Redemption Date is a Legal Holiday, payment shall be made on the next succeeding Business Day and no interest shall accrue for the period from such Redemption Date to such succeeding Business Day.

SECTION 3.05. Deposit of Redemption Price.

On or prior to 10:00 A.M., London time, on each Redemption Date, the Issuer shall deposit with the Paying Agent euros sufficient to pay the redemption price of, including premium, if any, and accrued interest on any and all Notes to be redeemed on that date (other than Notes or portions thereof called for redemption on that date which have been delivered by the Issuer to the Trustee for cancellation).

On and after any Redemption Date, if money sufficient to pay the redemption price of, including premium, if any, and accrued interest on all Notes called for redemption shall have been made available in accordance with the immediately preceding paragraph, the Notes called for redemption will cease to accrue interest and the only right of the Holders of such Notes will be to receive payment of the redemption price of and, subject to the first proviso in Section 3.04, accrued and unpaid interest on such Notes to the Redemption Date. If any Note surrendered for redemption shall not be so paid, interest will be paid, from the Redemption Date until such redemption payment is made, on the unpaid principal of the Note and (to the extent permitted by applicable law) any interest not paid on such unpaid principal, in each case at the rate and in the manner provided in the Notes.

SECTION 3.06. Notes Redeemed in Part.

Upon surrender of a Physical Note that is redeemed in part, the Issuer shall execute and, upon receipt of a written order of the Issuer in the form of an Officer's Certificate in accordance with Section 2.01, the Trustee shall authenticate for the Holder thereof a new Note equal in principal amount to the unredeemed portion of the Physical Note surrendered.

SECTION 3.07. Mandatory Redemption, Etc.

Except as set forth in Sections 4.08 and 4.09, the Issuer shall not be required to make any mandatory redemption or sinking fund payments with respect to the Notes.

In addition, notwithstanding anything to the contrary herein, the Issuer shall be permitted to acquire or repurchase the Notes by means other than as set forth in this Article Three, including by tender offers, open market purchases, negotiated transactions or otherwise, in each case in accordance with applicable securities laws; *provided* that such acquisitions or repurchases do not otherwise violate the terms of this Indenture.

## ARTICLE FOUR

### COVENANTS

#### SECTION 4.01. Payment of Notes.

(a) The Issuer shall pay the principal of and interest on the Notes on the dates and in the manner provided in the Notes and this Indenture. An installment of principal or interest shall be considered paid on the date it is due if the Trustee or the Paying Agents hold by 10:00 A.M., London time, on that date euros designated for and sufficient to pay such installment and is not prohibited from paying such money to the Holders pursuant to the terms of this Indenture.

(b) The Issuer shall pay interest on overdue principal (including post-petition interest in a proceeding under any Bankruptcy Law), and overdue interest, to the extent lawful, at the rate specified in the Notes.

(c) (1) All payments made by or on behalf of the Issuer or any Guarantor under or with respect to the Notes or any Note Guarantee will be made free and clear of and without withholding or deduction for or on account of any present or future Taxes unless required by law or by the interpretation or administration thereof. The Issuer or the applicable Guarantor, as the case may be, will pay any applicable Additional Amounts.

(2) The applicable withholding agent will (i) make any required withholding or deduction, and (ii) remit the full amount deducted or withheld to the Relevant Taxing Jurisdiction in accordance with applicable law. The Issuer or any Guarantor, as applicable, will use all reasonable efforts to obtain certified copies of tax receipts evidencing the payment of Taxes so deducted or withheld from each Relevant Taxing Jurisdiction imposing such Taxes and will provide such certified copies to the Trustee. If certified copies of such tax receipts are not reasonably obtainable, the Issuer or such Guarantor, as applicable, shall provide the Trustee with other reasonable evidence of payment. Such certified copies or other evidence shall be made available to Holders of Notes upon written request.

(3) Whenever in this Indenture there is mentioned, in any context, the payment of amounts based upon the principal amount of the Notes or of principal, premium (if any), interest or of any other amount payable under or with respect to any of the Notes, such mention shall be deemed to include mention of the payment of Additional Amounts to the extent that, in such context, Additional Amounts are, were, or would be payable in respect thereof.

(4) In addition, the Issuer shall pay any present or future stamp, issue, registration, court, documentary, excise, property, or similar Taxes (i) imposed by any Relevant Taxing Jurisdiction in respect of the execution, issuance, delivery, or registration of the Notes, any Note Guarantee, this Indenture, or any other document or instrument referred to therein or herein, or the receipt of any payments with respect to the

Notes, or (ii) imposed by any jurisdiction in respect of the enforcement of the Notes, any Note Guarantee, this Indenture, or any other document or instrument referred to therein or herein.

(5) If the Issuer or any Guarantor is required to pay Additional Amounts with respect to the Notes, Holdings will notify the Trustee pursuant to an Officer's Certificate that specifies the Additional Amounts payable and when the Additional Amounts are payable. Without limiting any obligation of the Issuer or any Guarantor to pay Additional Amounts, if the Trustee does not receive such Officer's Certificate, the Trustee may rely on the absence of such an Officer's Certificate in assuming that no such Additional Amounts are payable.

(6) The preceding provisions of this Section 4.01(c) shall survive any termination, defeasance, or discharge of this Indenture and shall apply *mutatis mutandis* to any successor of the Issuer or any Guarantor, and to any jurisdiction in which such successor is incorporated, organized, engaged in business for tax purposes or otherwise resident for tax purposes, and any political subdivision or governmental authority thereof or therein.

**SECTION 4.02. Maintenance of Office or Agency.**

(a) The Issuer shall maintain an office or agency (which may be an office of the Trustee or an Affiliate of the Trustee or Registrar) in the City of London in the United Kingdom where Notes may be surrendered for registration of transfer or for exchange and where notices and demands to or upon the Issuer in respect of the Notes and this Indenture may be served. The Issuer shall give prompt written notice to the Trustee of the location, and any change in the location, of such office or agency. If at any time the Issuer shall fail to maintain any such required office or agency or shall fail to furnish the Trustee with the address thereof, such presentations, surrenders, notices and demands may be made or served at the office or agency of the Issuer maintained for such purpose in London, United Kingdom.

(b) The Issuer may also from time to time designate one or more other offices or agencies where the Notes may be presented or surrendered for any or all such purposes and may from time to time rescind such designations; *provided, however*, that no such designation or rescission shall in any manner relieve the Issuer of its obligation to maintain an office or agency in the City of London in the United Kingdom. The Issuer shall give prompt written notice to the Trustee of any such designation or rescission and of any change in the location of any such other office or agency.

(c) The Issuer hereby designates the Corporate Trust Office of the Trustee as 60 Wall Street, 16th Floor, New York, NY 10005 as such office or agency of the Issuer in accordance with Section 2.04.

**SECTION 4.03. Legal Existence.**

Except as permitted by Article Five, Holdings shall do or cause to be done all things necessary to preserve and keep in full force and effect (i) its legal existence, and the



corporate, partnership or other existence of each of its Restricted Subsidiaries, in accordance with the respective organizational documents (as the same may be amended from time to time) of Holdings and each such Restricted Subsidiary and (ii) the material rights (charter and statutory) and franchises of Holdings and such Restricted Subsidiaries; *provided* that Holdings shall not be required to preserve any such right, franchise, or the corporate, partnership or other existence of any of its Restricted Subsidiaries if the Board of Directors of Holdings shall determine that the preservation thereof is no longer desirable in the conduct of the business of Holdings and its Restricted Subsidiaries, taken as a whole, or that the loss thereof is not adverse in any material respect to the Holders.

SECTION 4.04. [Reserved].

SECTION 4.05. Waiver of Stay, Extension or Usury Laws.

The Issuer and each of the Guarantors covenants (to the extent that it may lawfully do so) that it shall not at any time insist upon, or plead (as a defense or otherwise) or in any manner whatsoever claim or take the benefit or advantage of, any stay or extension law or any usury law or other law which would prohibit or forgive the Issuer and the Guarantors from paying all or any portion of the principal of, premium, if any, and/or interest on the Notes as contemplated herein, wherever enacted, now or at any time hereafter in force, or which may affect the covenants or the performance of this Indenture; and (to the extent that they may lawfully do so) the Issuer and each of the Guarantors hereby expressly waives all benefit or advantage of any such law, and covenants that it will not hinder, delay or impede the execution of any power herein granted to the Trustee, but will suffer and permit the execution of every such power as though no such law had been enacted.

SECTION 4.06. Compliance Certificate.

(a) The Issuer shall deliver to the Trustee, within 120 days after the end of each Fiscal Year, an Officer's Certificate stating that the Officer has conducted or supervised a review of the activities of Holdings and its Restricted Subsidiaries and the performance of Holdings and its Restricted Subsidiaries under this Indenture during such Fiscal Year, and further stating, as to such Officer signing such certificate, that, to the best of such Officer's knowledge, based upon such review, Holdings has fulfilled all obligations under this Indenture or, if there has been a Default under this Indenture that is continuing, a description of the event and what action Holdings and its Restricted Subsidiaries are taking or propose to take with respect thereto.

(b) The Issuer shall deliver, or cause to be delivered, to the Trustee, within 15 Business Days after an executive officer of Holdings becomes aware of any Default or Event of Default, a statement in the form of an Officer's Certificate specifying such Default or Event of Default and the action which Holdings proposes to take with respect thereto.

SECTION 4.07. Taxes.

Holdings shall, and shall cause each of its Restricted Subsidiaries to, pay prior to delinquency all material Taxes, assessments, and governmental levies; *provided, however*, that, neither Holdings nor any of its Restricted Subsidiaries shall be required to pay or discharge or



cause to be paid or discharged any such Tax, assessment, charge or claim whose amount, applicability or validity is being contested in good faith by appropriate proceedings and for which adequate reserves are being maintained in accordance with GAAP or where the failure to effect such payment is not adverse in any material respects to the Holders of the Notes.

**SECTION 4.08. Repurchase at the Option of Holders upon Change of Control Triggering Event.**

(a) Upon the occurrence of a Change of Control Triggering Event with respect to the Notes, each Holder of the Notes shall have the right to require the Issuer to repurchase all or any part (equal to €100,000 or an integral multiple of €1,000 in excess thereof) of such Holder's Notes pursuant to the offer described below (the "Change of Control Offer") at an offer price in cash equal to 101% of the aggregate principal amount thereof plus accrued and unpaid interest, if any, thereon to, but excluding, the date of purchase (the "Change of Control Payment").

(b) Within 30 days following any Change of Control Triggering Event or, at the Issuer's option, prior to the consummation of such Change of Control Triggering Event but after the public announcement of a Change of Control (in which case, the notice shall state that the Change of Control Offer is conditional on the occurrence of such Change of Control Triggering Event or such other conditions specified therein), the Issuer will mail (or to the extent permitted or required by applicable Euroclear and/or Clearstream procedures or regulations with respect to Global Notes, sent electronically in .pdf format), a written notice to each Holder and the Trustee. The notice shall describe the transaction or transactions that constitute the Change of Control Triggering Event and offer to repurchase Notes on the purchase date specified in such notice (which must be no earlier than 20 days nor later than 60 days from the date such notice is sent (provided that the Change of Control Payment Date may be delayed, in the Issuer's discretion, until such time (including more than 60 days after the date notice is sent) as any or all conditions to such Change of Control Offer are satisfied or waived), other than as required by law) (the "Change of Control Payment Date") pursuant to the procedures required by this Indenture and described in such notice. Such notice shall state:

- (1) that the Change of Control Offer is being made pursuant to this Section 4.08 and that all Notes validly tendered and not validly withdrawn will be accepted for payment;
- (2) the offer price and the Change of Control Payment Date;
- (3) that any Note not tendered will continue to accrue interest;
- (4) that, unless the Issuer defaults in making payment therefor, any Notes accepted for payment pursuant to the Change of Control Offer shall cease to accrue interest after the Change of Control Payment Date;
- (5) that Holders electing to have a Note purchased pursuant to the Change of Control Offer will be required to surrender the Note, with the form entitled "Option of Holder to Elect Purchase" on the reverse of the Note completed, to the Paying Agent and

Registrar for the Note at the address specified in the notice prior to the close of business on the third Business Day prior to the Change of Control Payment Date;

(6) that Holders will be entitled to withdraw their election if the Paying Agent receives, not later than the third Business Day prior to the Change of Control Payment Date, a telegram, telex, facsimile transmission or letter setting forth the name of the Holder, the principal amount of the Notes the Holder delivered for purchase and a statement that such Holder is withdrawing its election to have such Note purchased;

(7) that Holders whose Notes are purchased only in part will be issued new Notes in a principal amount equal to the unpurchased portion of the Notes surrendered; *provided, however*, that each Note purchased and each new Note issued shall be in a principal amount of €100,000 or integral multiples of €1,000 in excess thereof; and

(8) the material circumstances and relevant facts regarding such Change of Control.

(c) On the Change of Control Payment Date, the Issuer shall, to the extent lawful:

(1) accept for payment all Notes or portions thereof (in minimum amounts of €100,000 or an integral multiple of €1,000 in excess thereof) properly tendered pursuant to the Change of Control Offer;

(2) deposit with the Paying Agent an amount equal to the Change of Control Payment in respect of all Notes or portions thereof so tendered; and

(3) deliver or cause to be delivered to the Trustee for cancellation all Notes so accepted together with an Officer's Certificate stating the aggregate principal amount of Notes (or portions thereof) being purchased by the Issuer.

The Paying Agent will promptly remit to each Holder of Notes so tendered the Change of Control Payment for such Notes, and the Issuer shall execute and, upon receipt of a written order of the Issuer in the form of an Officer's Certificate in accordance with Section 2.01, the Trustee shall promptly authenticate and deliver (or cause to be transferred by book entry) to each Holder of Notes a new Note equal in principal amount to any unpurchased portion of the Notes surrendered, if any; *provided* that each such new Note shall be in a principal amount of €100,000 or an integral multiple of €1,000 in excess thereof.

If the Change of Control Payment Date is on or after an interest record date and on or before the related interest payment date, any accrued and unpaid interest to the Change of Control Payment Date will be paid on the Change of Control Payment Date to the Person in whose name a Note is registered at the close of business on such record date.

With respect to the Notes, if Holders of not less than 90% in aggregate principal amount of the then outstanding Notes validly tender and do not withdraw such Notes in a Change of Control Offer and the Issuer, or any other Person making a Change of Control Offer in lieu of the Issuer

as described below, purchases all of the Notes validly tendered and not withdrawn by such Holders, the Issuer will have the right, upon not less than 15 nor more than 60 days' prior notice, given not more than 30 days following such purchase pursuant to the Change of Control Offer described above, to redeem all Notes that remain outstanding following such purchase at a redemption price in cash equal to the applicable Change of Control Payment plus, to the extent not included in the Change of Control Payment, accrued and unpaid interest to, but excluding, the Change of Control Payment Date (subject to the right of Holders of record of Notes on a record date to receive interest due on the Redemption Date).

Upon the payment of the Change of Control Payment, the Trustee shall, subject to the provisions of Section 2.16, return the Notes purchased to the Issuer for cancellation. The Trustee may act as the Paying Agent for purposes of any Change of Control Offer.

(d) The Issuer will not be required to make a Change of Control Offer upon a Change of Control Triggering Event if (1) a third party makes the Change of Control Offer in the manner, at the times and otherwise in compliance with the requirements set forth in this Section 4.08 with respect to a Change of Control Offer made by the Issuer and purchases all Notes validly tendered and not withdrawn under such Change of Control Offer or (2) notice of redemption has been given or will be given pursuant to this Indenture as described in Article Three, prior to the date the Issuer is required to send notice of the Change of Control Offer to the Holders of the Notes, unless and until there is a default in payment of the applicable redemption price. Notwithstanding anything to the contrary contained herein, a Change of Control Offer may be made in advance of a Change of Control Triggering Event, conditioned upon the consummation of such Change of Control Triggering Event or such other conditions as specified therein, if a definitive agreement is in place for the Change of Control at the time the Change of Control Offer is made and such Change of Control Offer is otherwise made in compliance with the provisions of this Section 4.08.

(e) The Issuer shall comply with the requirements of Rule 14e-1 under the Exchange Act and any other securities laws and regulations thereunder to the extent such laws and regulations are applicable in connection with the repurchase of the Notes as a result of a Change of Control. To the extent that the provisions of any securities laws or regulations conflict with provisions of this Section 4.08, the Issuer shall comply with the applicable securities laws and regulations and shall not be deemed to have breached its obligations under this Section 4.08 by virtue thereof.

**SECTION 4.09. Limitation on Asset Disposition.**

(a) Holdings shall not, and shall not permit the Issuer or any other Restricted Subsidiary to, directly or indirectly, consummate any Asset Disposition unless:

(1) Holdings or such Restricted Subsidiary receives consideration at least equal to the fair market value (such fair market value to be determined in good faith by Holdings on the date of contractually agreeing to such Asset Disposition) of the assets subject to such Asset Disposition;

(2) at least 75% of the consideration received by Holdings or such Restricted Subsidiary is in the form of cash or cash equivalents, Additional Assets or any combination thereof (collectively, the “Cash Consideration”); and

(3) within 365 days from the later of the date of the consummation of such Asset Disposition or the receipt of the related Net Available Cash, an amount equal to 100% of the Net Available Cash from such Asset Disposition may be applied by Holdings (or such Restricted Subsidiary, as the case may be):

(A) to the extent Holdings elects (or is required by the terms of any applicable Indebtedness), (i) to prepay, repay, redeem or purchase Secured Debt of Holdings, the Issuer or any Subsidiary Guarantor or Indebtedness of a Wholly Owned Subsidiary of Holdings that is a Restricted Subsidiary but is not a Guarantor (in each case, other than Indebtedness owed to Holdings or an Affiliate of Holdings), *provided* such prepayment, repayment, redemption or purchase permanently retires, or reduces the related loan commitment (if any) for, such Indebtedness in an amount equal to the principal amount so prepaid, repaid, redeemed or purchased or (ii) prepay, pay or otherwise satisfy or discharge obligations under or in connection with the AFFA;

(B) to the extent Holdings elects, to acquire Additional Assets or to make any other Capital Expenditures;

(C) to make an offer to the Holders of the Notes (and to holders of other Pari Passu Indebtedness designated by the Issuer) to purchase Notes (and such other Pari Passu Indebtedness) pursuant to and subject to the conditions contained herein, as set forth below, and in the instruments governing such Pari Passu Indebtedness; or

(D) to the extent of the balance of such Net Available Cash after application in accordance with clauses (A), (B) and (C), for any purpose permitted by the terms of this Indenture.

In the case of Section 4.09(a)(3)(B), a binding commitment to acquire Additional Assets or to make any other Capital Expenditures shall be treated as a permitted application of the Net Available Cash from the date of such commitment so long as Holdings or a Restricted Subsidiary enters into such commitment with the good faith expectation that such Net Available Cash will be applied to satisfy such commitment within 180 days of such commitment (an “Acceptable Commitment”) and such Net Available Cash is actually applied in such manner within the later of (i) 365 days from the date of the consummation of the Asset Disposition or the receipt of the related Net Available Cash and (ii) 180 days from the date of the Acceptable Commitment, it being understood that if any Acceptable Commitment is later canceled or terminated for any reason after the 365<sup>th</sup> day from the date of the consummation of the Asset Disposition or the receipt of the related Net Available Cash and before such Net Available Cash is applied, then such Net Available Cash shall constitute Excess Proceeds.

Pending application of Net Available Cash pursuant to this Section 4.09, such Net Available Cash may be applied to temporarily reduce revolving credit Indebtedness or in any manner not prohibited by this Indenture.

(b) For the purposes of this Section 4.09, the following are deemed to be Cash Consideration:

(1) any liabilities (as reflected on the Consolidated Group's most recent consolidated balance sheet or in the footnotes thereto, or if incurred, accrued or increased subsequent to the date of such balance sheet, such liabilities that would have been reflected on the Consolidated Group's consolidated balance sheet or in the footnotes thereto if such incurrence, accrual or increase had taken place on or prior to the date of such balance sheet, as determined in good faith by Holdings) of Holdings or such Restricted Subsidiary (other than contingent liabilities) that are assumed by the transferee of any such assets (or are otherwise extinguished in connection with the transactions relating to such Asset Disposition);

(2) any securities, notes or other obligations received by Holdings or any Restricted Subsidiary from such transferee that are converted by Holdings or such Restricted Subsidiary into cash or cash equivalents within 180 days after such Asset Disposition, to the extent of the cash and cash equivalents received in that conversion; and

(3) any Designated Non-cash Consideration received by Holdings or any of its Restricted Subsidiaries in such Asset Disposition having an aggregate fair market value, taken together with all other Designated Non-cash Consideration received pursuant to this clause that has at that time not been converted into cash or a cash equivalent, not to exceed the greater of \$100.0 million and 5.0% of Consolidated Net Tangible Assets (with the fair market value of each item of Designated Non-cash Consideration being measured at the time received and without giving effect to subsequent changes in value).

(c) The amount of Net Available Cash not applied or invested as provided and within the time period set forth above will constitute "Excess Proceeds." When the aggregate amount of Excess Proceeds equals or exceeds \$100.0 million, within 20 Business Days thereof, the Issuer shall make an offer (an "Offer") to all Holders of Notes and to holders of Pari Passu Indebtedness that contemporaneously requires the purchase, prepayment or redemption of such Pari Passu Indebtedness with the proceeds of sales of assets, to purchase the maximum aggregate principal amount (or accreted value, as applicable) of the Notes and such Pari Passu Indebtedness that may be purchased out of the Excess Proceeds, at a purchase price of 100% of the principal amount thereof without premium, plus accrued but unpaid interest to, but excluding, such date of purchase (subject to the right of Holders of record on a record date to receive interest due on the purchase date) (or, in respect of such other Pari Passu Indebtedness of the Issuer, such lesser price, if any, as may be provided for by the terms of such Pari Passu Indebtedness) in accordance with the procedures (including prorating in the event of oversubscription) set forth in this Indenture and the terms of such other Pari Passu Indebtedness. If any Excess Proceeds remain after consummation of an Offer contemplated above, the Issuer may use those Excess Proceeds for any purpose not otherwise prohibited by this Indenture. If the aggregate principal amount (or accreted value, as applicable) of the Notes or Pari Passu Indebtedness tendered pursuant to an

Offer exceeds the amount of Excess Proceeds, the Issuer shall allocate the Excess Proceeds between such Notes and Pari Passu Indebtedness on a *pro rata* basis and the Trustee will select the Notes to be purchased on a *pro rata* basis but in denominations of €100,000 principal amount or integral multiples of €1,000 in excess thereof and in accordance with the applicable procedures of Euroclear and/or Clearstream, as the case may be, if the Notes are in global form. The remainder of the Excess Proceeds allocable to the Pari Passu Indebtedness will be repurchased as provided pursuant to the terms of such Indebtedness. Upon completion of such an Offer, Excess Proceeds will be deemed to be reset to zero (regardless of whether there are any remaining Excess Proceeds upon such completion).

(d) The Issuer shall comply, to the extent applicable, with the requirements of Rule 14e-1 under the Exchange Act and any other securities laws and regulations thereunder to the extent such laws and regulations are applicable in connection with the repurchase of Notes pursuant to this Section 4.09. To the extent that the provisions of any securities laws or regulations conflict with provisions of this Section 4.09, the Issuer shall comply with the applicable securities laws and regulations and shall not be deemed to have breached its obligations under this Section 4.09 by virtue of its compliance with such securities laws or regulations.

#### SECTION 4.10. Limitation on Restricted Payments.

Holdings will not, and will not permit any Restricted Subsidiary to, directly or indirectly, make any Restricted Payment if at the time of such Restricted Payment:

- (a) a Default shall have occurred and be continuing or shall occur as a consequence thereof;
- (b) after giving effect to such Restricted Payment (including, without limitation, the incurrence of any Indebtedness to finance such Restricted Payment), the Consolidated Fixed Charge Coverage Ratio would be less than 2:00 to 1:00; or
- (c) the amount of such Restricted Payment, when added to the aggregate amount of all other Restricted Payments made after the Issue Date (other than Restricted Payments made pursuant to clauses (b), (c), (d), (e), (f), (i), (k), (l), (n) or (o) of the next paragraph), exceeds the sum (the “Restricted Payments Basket”) of (without duplication):
  - (1) 50% of Consolidated Net Income determined in accordance with GAAP for the period (taken as one accounting period) commencing on the first day of the fiscal quarter during which the Issue Date occurs to and including the last day of the fiscal quarter ended immediately prior to the date of such calculation for which consolidated financial statements are available (or, if such Consolidated Net Income shall be a deficit, minus 100% of such aggregate deficit), *plus*
  - (2) 100% of the aggregate net cash proceeds and the fair market value, as determined in good faith by Holdings, of property and marketable securities, in each case received by Holdings from (a) the issuance and sale of Qualified Equity

Interests of Holdings (or any direct or indirect parent company of Holdings) after the Issue Date or (b) the issuance or sale of convertible or exchangeable Disqualified Equity Interests of Holdings (or any direct or indirect parent company of Holdings) or convertible or exchangeable debt securities of Holdings (or any direct or indirect parent company of Holdings), in each case that have been converted into or exchanged for Qualified Equity Interests of Holdings (or any direct or indirect parent company of Holdings), plus the aggregate net cash proceeds received by Holdings at the time of such conversion or exchange, or (c) any capital contribution made to Holdings, in each case other than (A) any such proceeds which are used to effect a Make-Whole Redemption (as defined in paragraph 5 of the Notes) of Notes, (B) any such proceeds or assets received from a Subsidiary of Holdings or (C) contributions to the extent such amounts have been applied to Restricted Payments made in accordance with clause (c) of the next succeeding paragraph, *plus*

(3) the aggregate amount by which Indebtedness (other than any Subordinated Indebtedness) of Holdings or any Restricted Subsidiary is reduced on the consolidated balance sheet of the Consolidated Group upon the conversion or exchange subsequent to the Issue Date into Qualified Equity Interests of Holdings (or any direct or indirect parent company of Holdings) (less the amount of any cash, or the fair value of assets, distributed by Holdings or any Restricted Subsidiary upon such conversion or exchange), *plus*

(4) to the extent not already included in Consolidated Net Income, 100% of the aggregate amount received in cash and the fair market value, as determined in good faith by Holdings, of property and marketable securities received by means of the sale (other than to Holdings or a Restricted Subsidiary) of the Capital Stock of an Unrestricted Subsidiary or a distribution from an Unrestricted Subsidiary (other than, in each case, to the extent the Investment in such Unrestricted Subsidiary was made by a Restricted Subsidiary pursuant to clause (h) of the next succeeding paragraph) or a dividend from an Unrestricted Subsidiary, *plus*

(5) in the case of the redesignation of an Unrestricted Subsidiary as a Restricted Subsidiary or the merger or consolidation of an Unrestricted Subsidiary into Holdings or a Restricted Subsidiary or the transfer of assets of an Unrestricted Subsidiary to Holdings or a Restricted Subsidiary, the fair market value of the Investment in such Unrestricted Subsidiary, as determined by Holdings in good faith at the time of the redesignation of such Unrestricted Subsidiary as a Restricted Subsidiary or at the time of such merger, consolidation or transfer of assets (other than an Unrestricted Subsidiary to the extent the Investment in such Unrestricted Subsidiary was made by a Restricted Subsidiary pursuant to clause (h) of the next succeeding paragraph).

The foregoing provisions will not prohibit:



(a) the payment by Holdings of any dividend or the consummation of any redemption within 60 days after the date of declaration thereof or the giving of the redemption notice, as the case may be, if on the date of declaration or notice, the dividend or redemption payment would have complied with the provisions of this Indenture;

(b) the redemption of any Equity Interests of Holdings in exchange for, or out of the net cash proceeds of the substantially concurrent issuance and sale of, Qualified Equity Interests of Holdings;

(c) payments by Holdings (including indirectly through any direct or indirect parent) to redeem Equity Interests of Holdings (or any direct or indirect parent company thereof) held by officers, directors or employees or former officers, directors or employees (or their transferees, estates or beneficiaries under their estates) of Holdings or its Subsidiaries (or any direct or indirect parent company thereof), upon their death, disability, retirement, severance or termination of employment or service or other repurchase event pursuant to any management equity plan or stock option plan, shareholders' agreement or any other management or employee benefit plan or agreement or arrangement; *provided* that the aggregate cash consideration paid for all such redemptions shall not exceed (A) \$25.0 million during any calendar year (with unused amounts being available to be used in the next succeeding two calendar years) plus (B) the amount of any net cash proceeds received by Holdings from the issuance and sale after the Issue Date of Qualified Equity Interests of Holdings (or any direct or indirect parent company thereof) to officers, directors or employees of Holdings or the Subsidiaries (or any direct or indirect parent company thereof) that have not been applied to the payment of Restricted Payments pursuant to this clause (c), plus (C) the net cash proceeds of any "key-man" life insurance policies that have not been applied to the payment of Restricted Payments pursuant to this clause (c); *provided*, that neither (x) cancellation of Indebtedness owing to Holdings (or any direct or indirect parent company thereof) from any current or former officer, director or employee (or any permitted transferees thereof) of Holdings or any of its Subsidiaries (or any direct or indirect parent company thereof), in connection with a repurchase of Equity Interests of Holdings (or any direct or indirect parent company thereof) from such Persons nor (y) any payments or other obligations arising in respect of Equity Interests of Holdings (or any direct or indirect parent company thereof) held by officers, directors or employees or former officers, directors or employees (or their transferees, estates or beneficiaries under their estates) in connection with or resulting from the announcement or consummation of a Change of Control, will be deemed to constitute a Restricted Payment for purposes of this Section 4.10 or any other provisions of this Indenture;

(d) repurchases, acquisitions or retirements for value of Equity Interests deemed to occur upon the exercise, conversion or exchange of stock options, warrants, other rights to acquire Equity Interests or other convertible or exchangeable securities if the Equity Interests represent all or a portion of the exercise, conversion or exchange price thereof, or in connection with the withholding of a portion of the Equity Interests granted or awarded to an employee to pay for the taxes payable by such employee upon



such grant or award or in connection with any such exercise, conversion or exchange (and related payments by Holdings or any Restricted Subsidiary in respect thereof);

(e) the payment of (and Restricted Payments to any direct or indirect parent company of Holdings to allow the payment of) cash in lieu of the issuance of fractional shares upon (i) the exercise of options or warrants, (ii) the conversion or exchange of any convertible or exchangeable debt securities, or (iii) the conversion or exchange of Equity Interests of any Person (including in a merger, consolidation, amalgamation or similar transaction) and payments of cash to dissenting shareholders in connection with a merger, consolidation, amalgamation, or transfer of assets;

(f) the payment of any dividend (or, in the case of any partnership or limited liability company, any similar distribution) by a Restricted Subsidiary of Holdings to any class or classes of holders of its Equity Interests on a *pro rata* basis;

(g) dividends or distributions to the Parent in connection with the making by the Parent of ordinary dividend payments in respect of its common stock in an aggregate amount not to exceed, in any period of two consecutive Fiscal Years (the "Dividend Period"), 75% of the aggregate Adjusted Net Income in respect of the two Fiscal Years ending at the end of the first Fiscal Year of the Dividend Period (and after deducting from the dividends included in that calculation any dividends to the extent such dividends are reinvested by the Parent in the Parent or any Subsidiary thereof (for the avoidance of any doubt, excluding the Excluded Entities) or are replaced pursuant to an underwritten dividend reinvestment plan or equivalent program);

(h) Investments in Unrestricted Subsidiaries having an aggregate fair market value, taken together with all other Investments made pursuant to this clause (h) that are at the time outstanding, without giving effect to the sale of an Unrestricted Subsidiary to the extent the proceeds of such sale do not consist of cash and/or marketable securities, not to exceed \$250.0 million at the time of such Investment (with the fair market value of each Investment being measured at the time made and without giving effect to subsequent changes in value);

(i) to the extent constituting Restricted Payments, any AICF Payments;

(j) other Restricted Payments if, at the time of the making of such payments, and after giving effect thereto (including, without limitation, the incurrence of any Indebtedness to finance such payment), the Total Net Leverage Ratio would not exceed 3.50 to 1.00;

(k) Restricted Payments under or in respect of hedge and warrant transactions entered into in connection with a convertible notes offering of Holdings or any Restricted Subsidiary (or any direct or indirect parent company of Holdings); *provided* that the proceeds of such offering are contributed to Holdings or such Restricted Subsidiary;

(l) the declaration and payment of dividends by Holdings to, or the making of loans to, any direct or indirect parent company of Holdings in amounts required for any direct or indirect parent company to pay:

(i) franchise and excise taxes and other fees and expenses required to maintain its organizational existence;

(ii) with respect to any taxable year (or portion thereof) with respect to which Holdings is a member of a consolidated, combined or similar income tax group of which a direct or indirect parent of Holdings is the common parent, foreign, federal, state and local income and similar taxes (including any interest or penalties related thereto) of such tax group, to the extent such taxes are attributable to the income, revenue, receipts, capital or margin of Holdings and its Restricted Subsidiaries and, to the extent of the amount actually received from its Unrestricted Subsidiaries in amounts required to pay such taxes to the extent attributable to the income of such Unrestricted Subsidiaries; *provided* that in each case the amount of such payments in any fiscal year does not exceed the amount that Holdings, its Restricted Subsidiaries and its Unrestricted Subsidiaries (to the extent described above) would be required to pay in respect of such foreign, federal, state and local income and similar taxes for such fiscal year had Holdings, its Restricted Subsidiaries and its Unrestricted Subsidiaries (to the extent described above) been a stand-alone taxpayer (separate from any such direct or indirect parent company of Holdings) for all fiscal years ending after the Issue Date;

(iii) customary salary, bonus, severance and other benefits payable to, and indemnities provided on behalf of, future, current or former officers, employees, directors and managers and consultants of any direct or indirect parent company of Holdings to the extent such salaries, bonuses, severance and other benefits and indemnities are attributable to the ownership or operation of Holdings and the Restricted Subsidiaries, including Holdings' and the Restricted Subsidiaries' proportionate share of such amount relating to such parent company being a public company;

(iv) general corporate or other operating (including, without limitation, expenses related to auditing or other accounting matters and listing fees and other costs and expenses attributable to being a public company) and overhead costs and expenses, of any direct or indirect parent company of Holdings;

(v) amounts required for any direct or indirect parent company of Holdings to pay fees and expenses incurred by any direct or indirect parent company of Holdings related to transactions of such parent company of Holdings of the type described in clauses (8) and (11) of the definition of "Consolidated Net Income"; and

(vi) amounts required for the purpose of enabling any direct or indirect parent company of Holdings to pay interest on Indebtedness issued by such Person after the Issue Date to the extent the net cash proceeds therefrom are contributed to the Issuer;

(m) the distribution, as a dividend or otherwise, of shares of Capital Stock of, or Indebtedness owed to Holdings or a Restricted Subsidiary by, Unrestricted Subsidiaries;

(n) other Restricted Payments in an aggregate amount not to exceed \$50.0 million; or

(o) any Restricted Payments made in connection with a Permitted Reorganization (other than any Investments in Unrestricted Subsidiaries).

*Provided* that (i) in the case of any Restricted Payment pursuant to clause (j) of the second paragraph of this Section 4.10, no Default shall have occurred and be continuing or occur as a consequence thereof, (ii) no issuance and sale of Qualified Equity Interests of Holdings (or any direct or indirect parent company thereof) that are used to make a payment pursuant to clause (b) of the second paragraph of this Section 4.10 shall increase the Restricted Payments Basket; and (iii) in the case of any Restricted Payment pursuant to clause (j) of the second paragraph of this Section 4.10, such Restricted Payment shall not be made prior to the utilization of any amount available under clause (c) of the first paragraph of this Section 4.10 or, to the extent applicable, clause (g) of the second paragraph of this Section 4.10.

For purposes of determining compliance with this Section 4.10, in the event that a proposed Restricted Payment (or a portion thereof) meets the criteria of more than one of the categories of Restricted Payments described in the preceding clauses (a) through (o) of the second paragraph of this Section 4.10 and/or is entitled to be made pursuant to the first paragraph of this Section 4.10, Holdings will be entitled to divide or classify (or later divide, classify or reclassify in whole or in part in its sole discretion) such Restricted Payment (or a portion thereof) among such clauses (a) through (o) of the second paragraph of this Section 4.10 and/or such first paragraph of this Section 4.10 in a manner that otherwise complies with this covenant.

#### SECTION 4.11. Limitation on Liens.

Holdings will not, and will not permit any of its Restricted Subsidiaries to, directly or indirectly, create, incur, assume or suffer to exist any Security Interest (except Permitted Security Interests) (each, a "Subject Security Interest") that secures any Indebtedness on any of their assets (including Capital Stock of Subsidiaries), whether owned on the Issue Date or acquired after that date, unless the Notes and the related Note Guarantees and any other indebtedness of or guaranteed by Holdings or such Restricted Subsidiary then entitled thereto, subject to applicable priorities of payment, are equally and ratably secured with (or, at Holdings' option or if such Subject Security Interest secures Subordinated Indebtedness, on a senior basis to) the Indebtedness secured by such Subject Security Interest.

Any Security Interest created for the benefit of the Holders of the Notes pursuant to this Section 4.11 shall provide by its terms that such Security Interest shall be unconditionally and automatically released and discharged upon the release and discharge of the Security Interest that gave rise to the obligation to secure the Notes. In addition, in the event that a Subject Security Interest is or becomes a Permitted Security Interest, Holdings may, at its option and without consent from any Holder, elect to release and discharge any Security Interest created for the benefit of the Holders pursuant to the preceding paragraph in respect of such Subject Security Interest.

SECTION 4.12. Limitation on Sale and Leaseback Transactions.

Holdings will not, and will not permit any Restricted Subsidiary to, engage in any Sale and Leaseback Transaction unless:

(1) Holdings or such Restricted Subsidiary would be permitted to incur Secured Debt pursuant to Section 4.11 equal in amount to the net proceeds of the property sold or transferred or to be sold or to be transferred pursuant to such Sale and Leaseback Transaction and secured by a Security Interest on the property to be leased, without equally and ratably securing the Notes as provided under Section 4.11; or

(2) Holdings or a Restricted Subsidiary shall apply, within 180 days after the effective date of such sale or transfer, an amount equal to such net proceeds to (i) the acquisition, construction, development or improvement of properties, facilities or equipment which are, or upon such acquisition, construction, development or improvement will be, a Principal Facility or Principal Facilities or a part thereof or (ii) the repurchase or redemption of Notes issued under this Indenture or to the repayment or redemption of long-term Indebtedness of the Issuer, Holdings or of any Restricted Subsidiary, or in part to such acquisition, construction, development or improvement and in part to such redemption, repurchase and/or repayment. In lieu of applying an amount equal to such net proceeds to such redemption, repurchase or repayment the Issuer may, within 180 days after such sale or transfer, deliver to the appropriate indenture trustee Notes issued under this Indenture or long-term Indebtedness for cancellation and thereby reduce the amount to be applied to the redemption, repurchase or repayment of such Notes or long-term Indebtedness by an amount equivalent to the aggregate principal amount of Notes or long-term Indebtedness.

SECTION 4.13. Reports to Holders.

(a) Whether or not the Issuer or the Parent is subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act or otherwise reports on an annual and quarterly basis on forms provided for such annual and quarterly reporting pursuant to the rules and regulations of the Commission, so long as any Notes are outstanding under this Indenture, the Issuer or the Parent will furnish to the Trustee and Holders the following:

(1) within the time period specified in the Commission's rules and regulations for non-accelerated filers, annual reports of the Parent on Form 20-F or 10-K (as then applicable to

the Parent) (or any successor or comparable form) containing the information required to be contained therein (or required in such successor or comparable form);

(2) within the time period specified in the Commission's rules and regulations for non-accelerated filers, quarterly reports of the Parent on Form 6-K or 10-Q (as then applicable to the Parent) (or any successor or comparable form) containing the information required to be contained in such Form (or required in such successor or comparable form); and

(3) at or prior to such times as would be required to be filed or furnished to the Commission if the Parent was then a "foreign private issuer" subject to Section 13(a) or 15(d) of the Exchange Act, all such other reports and information of the Parent that the Parent would have been required to file or furnish pursuant thereto;

*provided* that, in the case of clauses (1) and (2) above, to the extent such reports are being provided by the Parent, such reports shall include, or the Issuer shall otherwise deliver at the time of delivery of such reports, a qualitative disclosure of differences between the Parent's consolidated financial statements and Holdings' consolidated financial statements consistent with such disclosure set forth in the Offering Memorandum; *provided, further*, that to the extent that the Parent ceases to qualify as a "foreign private issuer" within the meaning of the Exchange Act, whether or not the Parent is then subject to Section 13(a) or 15(d) of the Exchange Act, the Issuer or the Parent will furnish to the Trustee and the Holders, so long as any Notes are outstanding, within 30 days of the respective dates on which the Parent would be required to file such documents with the Commission if it was required to file such documents under the Exchange Act, all reports and other information of the Parent that would be required to be filed with (or furnished to) the Commission pursuant to Section 13(a) or 15(d) of the Exchange Act.

(b) In addition, whether or not required by the rules and regulations of the Commission, the Issuer or the Parent will make all such reports and other information of the Parent that it would be required to file as a foreign private issuer or otherwise as set forth in Section 4.13(a) with the Commission publicly available (including via a non-password protected website) within the time periods specified above (unless the Commission will not accept such a filing) and make such information available to the Trustee and Holders of the Notes upon request. In addition, the Issuer (or the Parent) and the Guarantors shall, for so long as any Notes remain outstanding, furnish to the Holders of such Notes and to securities analysts and prospective investors, upon their request, the information required to be delivered pursuant to Rule 144A(d)(4) under the Securities Act.

(c) Whether the Parent files such reports with the Commission or posts such reports on its website, the public posting of such reports shall satisfy any requirement hereunder to deliver such reports to the Trustee and Holders of the Notes; *provided*, that the Trustee shall have no obligation whatsoever to determine whether or not such reports and information have been so filed or posted. The terms of this Indenture shall not impose any duty on the Issuer of the Parent under the Sarbanes-Oxley Act of 2002 and the related Commission rules that would not otherwise be applicable to it.

(d) Any direct or indirect parent company of the Parent (including a Permitted Parent or a Permitted Person) may satisfy the obligations of the Parent set forth in this Section 4.13 by providing the requisite reports and other information of such parent company instead of the Parent.

(e) Delivery of such reports and information to the Trustee shall be for informational purposes only, and the Trustee's receipt of them shall not constitute constructive notice of any information contained therein or determinable from information contained therein, including the Issuer's or the Parent's compliance with any of its covenants hereunder (as to which the Trustee is entitled to rely exclusively on Officer's Certificates delivered pursuant to this Indenture, including without limitation Officer's Certificates delivered pursuant to Section 4.06(a)).

SECTION 4.14. Additional Note Guarantees.

If, on or after the Issue Date:

(1) Holdings or any of its Restricted Subsidiaries acquires or creates another Subsidiary that Guarantees any Indebtedness under Credit Facilities of the Issuer or a Guarantor (other than Indebtedness owing to Holdings or any of its Restricted Subsidiaries) in an aggregate principal amount greater than or equal to \$150.0 million; or

(2) any Subsidiary of Holdings that Guarantees any Indebtedness under Credit Facilities of the Issuer or a Guarantor (other than Indebtedness owing to Holdings or any of its Restricted Subsidiaries) in an aggregate principal amount greater than or equal to \$150.0 million, and that Subsidiary was not a Guarantor immediately prior to such Guarantee (an "Additional Obligor"),

then that newly acquired or created Subsidiary or Additional Obligor, as the case may be (i) shall become a Guarantor and (ii) execute a supplemental indenture substantially in the form of Exhibit I within 30 Business Days of the date on which it was acquired or created or became an Additional Obligor.

In addition, in the event of the release of the Note Guarantee given by James Hardie International Group Limited in connection with a Permitted Reorganization, its Replacement Entity shall promptly thereafter become a Guarantor and execute a supplemental indenture substantially in the form of Exhibit I.

In addition, the Issuer shall have delivered to the Trustee an Officer's Certificate and an Opinion of Counsel, each stating that such supplemental indenture complies with the applicable provisions of this Indenture, that all conditions precedent in this Indenture relating to such transaction have been satisfied, and such Opinion of Counsel shall additionally state that such supplemental indenture is enforceable against the new Guarantor, subject to customary qualifications.

SECTION 4.15. Termination of Covenants.

(a) If on any date following the Issue Date, with respect to the Notes, (i) the Notes have Investment Grade Ratings from any two of the three Rating Agencies, and (ii) no Default has occurred and is continuing under this Indenture (the occurrence of the events described in the foregoing clauses (i) and (ii) being collectively referred to as a "Covenant Termination Event"), Holdings and its Restricted Subsidiaries will not be subject to Sections 4.09, 4.10, 4.12 and 4.14 hereof with respect to the Notes (collectively, the "Terminated Covenants").

(b) In the event that a Covenant Termination Event occurs with respect to the Notes, (x) the Issuer shall deliver, or cause to be delivered, to the Trustee an Officer's Certificate stating that such Covenant Termination Event has occurred, and (y) Holdings and its Restricted Subsidiaries will no longer be subject to the Terminated Covenants with respect to the Notes, regardless of whether on any subsequent date any Rating Agency withdraws its Investment Grade Rating or downgrades the rating assigned to the Notes below an Investment Grade Rating.

(c) The Trustee shall have no responsibility to monitor any change in the rating of the Notes or to determine whether a Covenant Termination Event has occurred. The Trustee may deliver a copy of any Officer's Certificate delivered pursuant to Section 4.15(b)(x) above to the Holders upon written request.

ARTICLE FIVE

SUCCESSOR CORPORATION

SECTION 5.01. Consolidation, Merger and Sale of Assets.

(a) Neither Holdings nor the Issuer will consolidate or merge with or into any other Person or, in a single transaction or a series of related transactions, Transfer all or substantially all of its assets, in each case, to another Person unless:

(1) Holdings or the Issuer, as the case may be, shall be the continuing Person, or the successor or transferee shall be a Person organized and existing under the laws of the United States or a state thereof, Australia or a state thereof, Canada or a province thereof, a member state of the European Union or any other jurisdiction (other than The Philippines) in which the Issuer, a Guarantor or a Wholly Owned Subsidiary of Holdings is organized as of the Issue Date, and the successor or transferee Person expressly assumes by a supplemental indenture or amendment of the relevant documents Holdings' or the Issuer's obligations under the Note Guarantee or the Notes, as the case may be, and under this Indenture;

(2) Holdings or the Issuer, or the successor or transferee Person, as the case may be, shall not immediately after such transaction, be in default in the performance of any covenant or condition under this Indenture; and

(3) after giving effect to the transaction, no Event of Default, and no event which, after notice or lapse of time or both, would become an Event of Default, shall have occurred or be continuing.

(b) Holdings shall deliver, or cause to be delivered, to the Trustee an Officer's Certificate and an Opinion of Counsel, each to the effect that such consolidation, merger or Transfer complies with the requirements of this Indenture, and an Opinion of Counsel stating that the Notes and this Indenture constitute valid and binding obligations of the successor or transferee entity, if any, subject to customary exceptions.

(c) Notwithstanding the preceding clauses (a) and (b) of this Section 5.01, (x) Holdings or any of its Subsidiaries (including the Issuer) may Transfer assets (other than by means of a liquidation or dissolution of the Issuer) to or among Holdings or any one or more of its Subsidiaries and (y) a Permitted Reorganization shall be permitted at any time.

(d) Notwithstanding the preceding clauses (a)(2), (a)(3), (b) and (c) of this Section 5.01, (x) the Issuer may liquidate, dissolve or merge or consolidate with or into one of Holdings' Subsidiaries for any purpose and (y) Holdings, the Issuer or a Subsidiary may merge or consolidate solely for the purpose of reincorporating Holdings, the Issuer or a Subsidiary, as the case may be, in another jurisdiction.

(e) For purposes of this Section 5.01, the Transfer of all or substantially all of the assets of one or more Subsidiaries of Holdings, which assets, if held by Holdings or the Issuer instead of such Subsidiaries, would constitute all or substantially all of the assets of Holdings on a consolidated basis, will be deemed to be the disposition of all or substantially all of the assets of Holdings.

SECTION 5.02. Successor Person Substituted.

Upon any consolidation, combination or merger of Holdings or the Issuer, or any Transfer of all or substantially all of its assets in accordance with the foregoing provisions of Section 5.01, in which Holdings or the Issuer is not the continuing obligor under this Indenture and the Note Guarantee or the Notes, as the case may be, the surviving entity formed by such consolidation or into which Holdings or the Issuer is merged or to which such Transfer of all or substantially all of its assets is made will succeed to, and be substituted for, and may exercise every right and power of Holdings or the Issuer under this Indenture and the Note Guarantee or the Notes, as the case may be, with the same effect as if such surviving entity had been named therein as Holdings or the Issuer and Holdings or the Issuer, as the case may be, will be released from the obligation to pay the principal of and interest on such Note Guarantee or such Notes, and from all of Holdings' or the Issuer's other obligations and covenants under such Note Guarantee or such Notes and this Indenture.



ARTICLE SIX  
DEFAULTS AND REMEDIES

SECTION 6.01. Events of Default.

Each of the following constitutes an “Event of Default” with respect to the Notes:

- (1) default for 30 consecutive days in the payment when due of interest with respect to the Notes;
- (2) default in payment when due of principal or premium, if any, on the Notes at maturity, upon redemption or otherwise;
- (3) failure by the Issuer for 60 consecutive days after receipt of notice from the Trustee or Holders of at least 25% in aggregate principal amount of the Notes then outstanding under this Indenture (with a copy to the Trustee) to comply with any of the provisions under Section 4.08;
- (4) failure by the Issuer, Holdings or any Restricted Subsidiary for 60 consecutive days after receipt of notice from the Trustee or the Holders of at least 25% in aggregate principal amount of the Notes then outstanding under this Indenture (with a copy to the Trustee) to comply with any covenant or agreement contained in this Indenture (other than the covenants and agreements specified in clauses (1) through (3) of this Section 6.01);
- (5) default under any mortgage, indenture or instrument under which there may be issued or by which there may be secured or evidenced any Indebtedness of Holdings or any Restricted Subsidiary or the payment of which is Guaranteed by Holdings or any Restricted Subsidiary (other than Indebtedness owed to the Parent, Holdings or a Restricted Subsidiary), whether such Indebtedness or Guarantee existed as of, or was created after, the Issue Date, which default (a) is caused by a failure to pay when due at final stated maturity (giving effect to any grace period related thereto) principal of such Indebtedness (a “Payment Default”) or (b) results in the acceleration of such Indebtedness prior to its stated maturity, and, in each case, the principal amount of any such Indebtedness, together with the principal amount of any such Indebtedness under which there has been a Payment Default or the maturity of which has been so accelerated, aggregates \$100.0 million or more;
- (6) failure by Holdings or any Restricted Subsidiary that is a Significant Subsidiary (or group of Restricted Subsidiaries that, together, (as of the date of the latest audited consolidated financial statements of the Parent) would constitute a Significant Subsidiary) to pay final and non-appealable judgments (net of any amounts covered by insurance and as to which such insurer has not denied responsibility or coverage in writing) aggregating \$100.0 million or more, which judgments are not paid, discharged, bonded, stayed or waived within 60 days after such judgment becomes final, and in the event such judgment is covered in full by insurance, an enforcement proceeding has been commenced by any creditor upon such judgment or decree which is not promptly stayed;

(7) (A) a court of competent jurisdiction over the Issuer, Holdings or any Restricted Subsidiary enters (x) a decree or order for relief in respect of the Issuer, Holdings or any Restricted Subsidiary that is a Significant Subsidiary or group of Restricted Subsidiaries that, taken together, would constitute a Significant Subsidiary (as of the date of the latest audited consolidated financial statements of the Parent) in an involuntary case or proceeding under any Bankruptcy Law or (y) a decree or order adjudging the Issuer, Holdings or any Restricted Subsidiary that is a Significant Subsidiary or group of Restricted Subsidiaries that, taken together, would constitute a Significant Subsidiary as bankrupt or insolvent, or approving as properly filed a petition seeking reorganization, arrangement, adjustment or composition of or in respect of the Issuer, Holdings or any such Restricted Subsidiary or group of Restricted Subsidiaries under any Bankruptcy Law, or appointing a custodian, receiver, liquidator, assignee, examiner, trustee, sequestrator or other similar official of the Issuer, Holdings or any such Restricted Subsidiary or group of Restricted Subsidiaries or of any substantial part of its property, or ordering the winding up or liquidation of its affairs, and the continuance of any such decree or order for relief or any such other decree or order unstayed and in effect for a period of 60 consecutive days or (B) the Issuer, Holdings or any Restricted Subsidiary that is a Significant Subsidiary or group of Restricted Subsidiaries that, taken together, would constitute a Significant Subsidiary (as of the date of the latest audited consolidated financial statements of the Parent) (i) commences a voluntary case under any Bankruptcy Law or consents to the entry of an order for relief in an involuntary case under any Bankruptcy Law, (ii) consents to the appointment of or taking possession by a receiver, examiner, liquidator, assignee, custodian, trustee, sequestrator or similar official of the Issuer, Holdings or any such Restricted Subsidiary or group of Restricted Subsidiaries or for all or substantially all the property and assets of the Issuer, Holdings or any such Restricted Subsidiary or group of Restricted Subsidiaries, (iii) effects any general assignment for the benefit of creditors or (iv) generally is not paying its debts as they become due; and

(8) any Note Guarantee of any Guarantor that is a Significant Subsidiary ceases to be in full force and effect in all material respects (other than in accordance with the terms of such Note Guarantee and this Indenture) or is declared null and void and unenforceable or found to be invalid or any Guarantor denies its liability under its Note Guarantee of Notes (other than by reason of release of a Guarantor from its Note Guarantee of Notes in accordance with the terms of this Indenture and such Note Guarantee).

SECTION 6.02. Acceleration of Maturity; Rescission.

If any Event of Default occurs and is continuing under this Indenture with respect to the Notes, either the Trustee or the Holders of at least 25% in aggregate principal amount of the Notes then outstanding, may declare all Notes to be due and payable by notice in writing to the Issuer and the Trustee, in the case of notice by Holders, specifying the respective Event of Default and that it is a "notice of acceleration" and the same shall become immediately due and payable; *provided, however*, that, notwithstanding the foregoing, if an Event of Default specified in Section 6.01(7) occurs with respect to the Issuer, all outstanding Notes shall become due and payable without further action or notice.

Notwithstanding the foregoing, if after such acceleration but before a judgment or decree based on such acceleration is obtained by the Trustee, the Holders of a majority in aggregate principal amount of outstanding Notes may rescind and annul such acceleration if:

- (1) all Events of Default, other than nonpayment of principal, premium, if any, or interest that has become due solely because of the acceleration, have been cured or waived;
- (2) to the extent the payment of such interest is lawful, interest on overdue installments of interest and overdue principal, which has become due otherwise than by such declaration of acceleration, has been paid;
- (3) the Issuer has paid the Trustee its reasonable compensation and reimbursed the Trustee for its expenses, disbursements, indemnities and advances; and
- (4) in the event of the cure or waiver of an Event of Default of the type described in Section 6.01(7), the Trustee shall have received an Officer's Certificate and an Opinion of Counsel that such Event of Default has been cured or waived.

No such rescission shall affect any subsequent Default or impair any right consequent thereto.

**SECTION 6.03. Other Remedies.**

If an Event of Default occurs and is continuing in respect of the Notes, the Trustee may pursue any available remedy by proceeding at law or in equity to collect the payment of principal of, or premium, if any, and interest on the Notes or to enforce the performance of any provision of such Notes or this Indenture and may take any necessary action requested in writing by the Holders of a majority of the principal amount outstanding of the Notes to settle, compromise, adjust or otherwise conclude any proceedings to which it is a party.

The Trustee may maintain a proceeding even if it does not possess any of the Notes or does not produce any of them in the proceeding. A delay or omission by the Trustee or any Noteholder in exercising any right or remedy accruing upon an Event of Default shall not impair the right or remedy or constitute a waiver of or acquiescence in the Event of Default. No remedy is exclusive of any other remedy. All available remedies are cumulative. Any costs associated with actions taken by the Trustee under this Section 6.03 shall be reimbursed to the Trustee by the Issuer and the Guarantors.

**SECTION 6.04. Waiver of Existing Defaults and Events of Default.**

(a) Subject to Sections 2.10, 6.02, 6.08 and 8.02, the Holders of a majority in principal amount of the Notes then outstanding shall have the right to waive any existing Defaults or Events of Default under this Indenture *except* a Default or Event of Default in the payment of principal of, or interest or premium, if any, on any Note as specified in clauses (1) and (2) of Section 6.01. The Issuer shall deliver to the Trustee an Officer's Certificate stating that the requisite percentage of Holders have consented to such waiver and attaching copies of

such consents. In case of any such waiver, the Issuer, the Trustee and the Holders shall be restored to their former positions and rights hereunder and under the Notes, respectively.

(b) Upon any such waiver with respect to such Notes, such Default shall cease to exist, and any Event of Default arising therefrom shall be deemed to have been cured for every purpose of this Indenture, but no such waiver shall extend to any subsequent or other Default or Event of Default or impair any right consequent thereto.

SECTION 6.05. Control by Majority.

Subject to Sections 2.10 and 7.01, the Holders of a majority in aggregate principal amount of the outstanding Notes have the right to direct the time, method and place of conducting any proceeding for exercising any remedy available to the Trustee or exercising any trust or power conferred on the Trustee by this Indenture with respect to the Notes. The Trustee, however, may refuse to follow any direction that conflicts with law or this Indenture or that the Trustee determines may be unduly prejudicial to the rights of another Holder not taking part in such direction, and the Trustee shall have the right to decline to follow any such direction (it being understood that the Trustee does not have an affirmative duty to ascertain whether or not any such directions are unduly prejudicial to such Holders) if the Trustee, being advised by counsel, determines that the action so directed may not lawfully be taken or if the Trustee in good faith shall, by a Responsible Officer, determine that the proceedings so directed may involve it in personal liability; *provided* that the Trustee may take any other action deemed proper by the Trustee which is not inconsistent with such direction. In the event the Trustee takes any action or follows any direction pursuant to this Indenture, the Trustee shall be entitled to indemnification and security satisfactory to it against any cost, liability or expense that might be caused by taking such action or following such direction.

SECTION 6.06. Limitation on Suits.

Subject to Section 6.07, a Holder may not pursue any remedy with respect to this Indenture or the Notes unless:

- (1) the Holder has previously given the Trustee written notice of a continuing Event of Default;
- (2) the Holders of at least 25% in principal amount of the Notes then outstanding make a written request to the Trustee to pursue the remedy;
- (3) such Holder or Holders offer the Trustee security or indemnity satisfactory to the Trustee against any costs, liability or expense;
- (4) the Trustee does not comply with the request within 60 days after receipt of the request and the offer of security or indemnity against any cost, liability or expense that might be caused by complying with such request; and

(5) during such 60-day period, the Holders of a majority in aggregate principal amount of the outstanding Notes do not give the Trustee a direction that is inconsistent with the request.

A Noteholder may not use any provision of this Indenture to disturb or prejudice the rights of another Noteholder or to obtain a preference or priority over another Noteholder.

**SECTION 6.07. Rights of Holders To Receive Payment.**

Notwithstanding any other provision of this Indenture, the right of any Holder of a Note to receive payment of the principal of or premium, if any, or interest, if any, on such Note on or after the respective due dates expressed in such Note, or to bring suit for the enforcement of any such payment, on or after such respective due dates, is absolute and unconditional and shall not be impaired or affected without the consent of the Holder.

**SECTION 6.08. Collection Suit by Trustee.**

If an Event of Default pursuant to clause (1) or (2) of Section 6.01 occurs and is continuing, the Trustee may recover judgment in its own name and as trustee of an express trust against the Issuer or any Guarantor (or any other obligor on the Notes) for the whole amount of unpaid principal and accrued interest remaining unpaid, together with interest on overdue principal and, to the extent that payment of such interest is lawful, interest on overdue installments of interest, in each case at the rate set forth in the Notes, and such further amounts as shall be sufficient to cover the costs and expenses of collection, including the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel.

**SECTION 6.09. Trustee May File Proofs of Claim.**

The Trustee may file such proofs of claim and other papers or documents as may be necessary or advisable in order to have the claims of the Trustee (including any claim for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, and any other amounts due the Trustee under Section 7.07) and the Noteholders allowed in any judicial proceedings relative to the Issuer or any Guarantor (or any other obligor upon the Notes), its creditors or its property and shall be entitled and empowered to collect and receive any monies or other property payable or deliverable on any such claims and to distribute the same after deduction of its charges and expenses to the extent that any such charges and expenses are not paid out of the estate in any such proceedings and any custodian in any such judicial proceeding is hereby authorized by each Noteholder to make such payments to the Trustee, and in the event that the Trustee shall consent to the making of such payments directly to the Noteholders, to pay to the Trustee any amount due to it for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, and any other amounts due the Trustee under Section 7.07.

Nothing herein contained shall be deemed to authorize the Trustee to authorize or consent to or accept or adopt on behalf of any Noteholder any plan or reorganization, arrangement, adjustment or composition affecting the Notes or the rights of any Noteholder

thereof, or to authorize the Trustee to vote in respect of the claim of any Noteholder in any such proceedings.

SECTION 6.10. Priorities.

If the Trustee collects any money or property pursuant to this Article Six, and after an Event of Default any money or other property distributable in respect of the Company's or Guarantors' obligations under this Indenture, such money or property shall be paid out or distributed in the following order:

FIRST: to the Trustee, its agents and any predecessor Trustee for amounts due under Section 7.07;

SECOND: to Noteholders for amounts due and unpaid on the Notes for principal, premium, if any, and interest, ratably, without preference or priority of any kind, according to the amounts due and payable on the Notes; and

THIRD: to the Issuer or, to the extent the Trustee collects any amount from any Guarantor, to such Guarantor.

The Trustee may fix a record date and payment date for any payment to Noteholders pursuant to this Section 6.10.

SECTION 6.11. Undertaking for Costs.

In any suit for the enforcement of any right or remedy under this Indenture or in any suit against the Trustee for any action taken or omitted by it as Trustee, a court in its discretion may require the filing by any party litigant in the suit of an undertaking to pay the costs of the suit, and the court in its discretion may assess reasonable costs, including reasonable attorneys' fees and expenses, against any party litigant in the suit, having due regard to the merits and good faith of the claims or defenses made by the party litigant. This Section 6.11 does not apply to a suit by the Trustee, a suit by a Noteholder pursuant to Section 6.07 or a suit by Noteholders of more than 10% in principal amount of the Notes then outstanding.

## ARTICLE SEVEN

### TRUSTEE

#### SECTION 7.01. Duties of Trustee.

(a) If a Default or Event of Default actually known to a Responsible Officer of the Trustee has occurred and is continuing, the Trustee shall exercise such of the rights and powers vested in it by this Indenture and use the same degree of care and skill in their exercise as a prudent person under the circumstances would exercise or use under the same circumstances in the conduct of his or her own affairs.

Except for an Event of Default pursuant to Section 6.01(1) or 6.01(2) (upon the occurrence of which the Trustee if then acting as Paying Agent will be deemed to have knowledge thereof), the Trustee shall not be deemed to have notice or be charged with knowledge of any Default or Event of Default unless a Responsible Officer of the Trustee has received written notice of any event which is in fact such a Default or Event of Default by the Issuer or by the Holders of at least 25% of the aggregate principal amount of the Notes by written notice of such event sent to the Trustee in accordance with Section 11.02, and such notice references the Notes and this Indenture.

(b) Except during the continuance of a Default or Event of Default of which a Responsible Officer of the Trustee has actual knowledge:

(1) The Trustee need perform only those duties that are specifically set forth in this Indenture and no others, and no implied covenants or obligations shall be read into this Indenture against the Trustee.

(2) In the absence of gross negligence on its part, the Trustee may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon certificates or opinions furnished to the Trustee and conforming to the requirements of this Indenture but, in the case of any such certificates or opinions which by any provision hereof are specifically required to be furnished to the Trustee, the Trustee shall be under a duty to examine the same to determine whether or not they conform on their face to the requirements of this Indenture (but need not confirm or investigate the accuracy of mathematical calculations or other facts stated therein). Whenever in the administration of this Indenture the Trustee shall deem it desirable that a matter be proved or established prior to taking, suffering or omitting any action hereunder, the Trustee (unless other evidence be herein specifically prescribed) may require and, in the absence of gross negligence on its part, conclusively rely upon an Officer's Certificate.

(c) The Trustee may not be relieved from liability for its own grossly negligent action, its own grossly negligent failure to act, or its own willful misconduct, except that:

(1) This paragraph does not limit the effect of clause (b) of this Section 7.01.

(2) The Trustee shall not be liable for any error of judgment made in good faith by a Responsible Officer, unless it is proved that the Trustee was negligent in ascertaining the pertinent facts.

(3) The Trustee shall not be liable with respect to any action it takes or omits to take in good faith in accordance with a direction received by it from a majority in aggregate principal amount of the Notes outstanding pursuant to the terms of this Indenture.

(4) No provision of this Indenture shall require the Trustee to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its rights, powers or duties. The Trustee shall not be required to give any bond or surety in respect of the performance of its powers or duties hereunder.

(d) Whether or not therein expressly so provided, clauses (a), (b), (c) and (e) of this Section 7.01 shall govern every provision of this Indenture that in any way relates to the Trustee.

(e) The Trustee shall be under no obligation to exercise any of the rights or powers vested in it by this Indenture at the request or direction of any of the Holders pursuant to this Indenture, unless such Holders shall have offered to the Trustee security and indemnity satisfactory to the Trustee against the costs, expenses and liabilities which might be incurred by it in compliance with such request or direction (including, but in no way limited to, the fees and disbursements of agents and attorneys). The Trustee's fees, expenses and indemnities (in each of its capacities under this Indenture) (including, but in no way limited to, the fees and disbursements of agents and attorneys) are included in the amounts guaranteed by the Note Guarantees.

(f) The Trustee shall not be liable for interest on any money received by it except as the Trustee may agree in writing with the Issuer or any Guarantor. Money held in trust by the Trustee need not be segregated from other funds except to the extent required by the law.

SECTION 7.02. Rights of Trustee.

Subject to Section 7.01:

(1) The Trustee may conclusively rely and shall be protected in acting or refraining from acting upon any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, bond, debenture, note, other evidence of indebtedness or other paper or document (whether in its original or facsimile form) believed by it to be genuine and to have been signed or presented by the proper person. The Trustee need not investigate any fact or matter stated in the document.

(2) Before the Trustee acts or refrains from acting, it may require and shall be entitled to receive an Officer's Certificate or an Opinion of Counsel, or both, which shall conform to the provisions of Sections 11.04 and 11.05. The Trustee shall be protected and shall not be liable for any action it takes or omits to take in good faith in reliance on such certificate or opinion.



(3) The Trustee may execute any of the trusts or powers hereunder or perform any duties hereunder directly or indirectly or by or through its attorneys and agents and shall not be responsible for the misconduct or negligence of any attorney or agent appointed by it with due care.

(4) The Trustee shall not be liable for any action it takes or omits to take in good faith which it reasonably believes to be authorized or within its rights or powers; *provided* that the Trustee's conduct does not constitute gross negligence or willful misconduct.

(5) The Trustee may consult with counsel of its selection, at the expense of the Issuer, and the advice or opinion of such counsel as to matters of law shall be full and complete authorization and protection from liability in respect of any action taken, omitted or suffered by it hereunder in good faith and in accordance with the advice or opinion of such counsel.

(6) The rights, privileges, protections, immunities and benefits given to the Trustee, including, without limitation, its right to be compensated, reimbursed and indemnified, are extended to, and shall be enforceable by, the Trustee in each of its capacities hereunder (including but not limited to as Registrar, Paying Agent and Transfer Agent), and each agent, custodian and other person employed to act hereunder.

(7) The right of the Trustee to perform any discretionary act enumerated in this Indenture shall not be construed as a duty, and the Trustee shall not be answerable for other than its own gross negligence or willful misconduct in the performance of such act.

(8) The Trustee may from time to time request that the Issuer deliver an Officer's Certificate setting forth the names of individuals and/or titles of officers authorized at such time to take specified actions pursuant to this Indenture, which Officer's Certificate may be signed by any persons authorized to sign an Officer's Certificate, including any person specified as so authorized in any such certificate previously delivered and not superseded.

(9) In no event shall the Trustee be responsible or liable for special, indirect, punitive or consequential loss or damage of any kind whatsoever (including, but not limited to, loss of profit) irrespective of whether the Trustee has been advised of the likelihood of such loss or damage and regardless of the form of action.

(10) The Trustee will not be bound to make any investigation into the facts or matters stated in any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, bond, debenture, note, other evidence of indebtedness, or other paper or document, or inquire as to the performance by the Issuer or the Guarantors of any of their covenants in this Indenture, but the Trustee, in its discretion, may make such further inquiry or investigation into such facts or matters as it may see fit, and, if the Trustee shall determine to make such further inquiry or investigation, it shall be entitled to examine the books, records and premises of the Issuers or the Guarantors, personally or by agent or attorney at the sole cost of the Issuers and shall incur no liability or additional liability of any kind by reason of such inquiry or investigation.

SECTION 7.03. Individual Rights of Trustee.

The Trustee in its individual or any other capacity may become the owner or pledgee of Notes and may make loans to, accept deposits from, perform services for or otherwise deal with either the Issuer or any Guarantor, or any Affiliates thereof, with the same rights it would have if it were not Trustee. Any Agent may do the same with like rights and duties. However, in the event that the Trustee acquires any conflicting interest it must eliminate such conflict within 90 days, or resign. The Trustee shall also be subject to Sections 7.10 and 7.11.

SECTION 7.04. Trustee's Disclaimer.

The Trustee shall not be responsible for and makes no representation as to the validity or adequacy of this Indenture or the Notes or any Note Guarantee, it shall not be accountable for the Issuer's or any Guarantor's use of the proceeds from the sale of Notes, it will not be responsible for the use or application of any money received by any Paying Agent (other than itself as Paying Agent) or any money paid to the Issuer or any Guarantor pursuant to the terms of this Indenture and it shall not be responsible for any statement in the Notes, the Note Guarantees or this Indenture other than its certificate of authentication. The Trustee shall not be responsible for any statement in the Offering Memorandum or any other document utilized by the Issuer in connection with the sale of the Notes, and shall not be responsible for any rating on the Notes or any action or omission of any Rating Agency.

SECTION 7.05. Notice of Defaults.

If a Default or Event of Default occurs and is continuing (which shall not be cured or waived) and if it is actually known to a Responsible Officer of the Trustee (pursuant to Section 7.01(a) hereof), the Trustee shall give to each Noteholder a notice of the Default or Event of Default within 90 days after it occurs in the manner and to the extent otherwise provided in this Indenture. Except in the case of a Default or Event of Default relating to the payment of the principal of or interest on any Note (including payments pursuant to a redemption or repurchase of such Notes pursuant to the provisions of this Indenture), the Trustee may withhold from the Holders of the Notes the notice, and shall be fully protected in so withholding, if and so long as it in good faith determines that withholding the notice is in the interests of such Holders.

SECTION 7.06. [Reserved].

SECTION 7.07. Compensation and Indemnity.

The Issuer and the Guarantors shall pay to the Trustee from time to time compensation as agreed upon in writing for its services hereunder (which compensation shall not be limited by any provision of law in regard to the compensation of a trustee of an express trust). The Issuer and the Guarantors shall reimburse the Trustee upon request for all properly incurred disbursements, expenses and advances incurred or made by it in connection with the Trustee's duties under this Indenture, including the properly incurred compensation, disbursements and expenses of the Trustee's agents and external counsel.

The Issuer and the Guarantors, jointly and severally, shall indemnify each of the Trustee and its agents, employees, stockholders, directors and officers and any predecessor Trustee for, and hold each of them harmless against, any and all loss, damage, claim, liability or expense, including without limitation taxes (other than taxes based on the income of the Trustee) and reasonable attorneys' fees and expenses (collectively, "Losses") incurred by each of them in connection with the acceptance or administration of this Indenture or the performance of its duties under this Indenture or the exercise of its rights and powers under the Notes and the Guarantees, including the costs and expenses of enforcing this Indenture (including this Section 7.07), the Notes and the Guarantees or otherwise arising under this Indenture and including the properly incurred costs and expenses of defending itself against any claim (whether asserted by any Holder, the Issuer, any Guarantor or otherwise) or liability in connection with the exercise or performance of any of its rights, powers or duties hereunder (including, without limitation, settlement costs). The Trustee shall notify the Issuer and the Guarantors in writing promptly of any third party claim of which a Responsible Officer of the Trustee has actual knowledge asserted against the Trustee for which it may seek indemnity (each, a "Third Party Claim"); *provided* that the failure by the Trustee to so notify the Issuer and the Guarantors shall not relieve the Issuer and Guarantors of their obligations hereunder except to the extent the Issuer and the Guarantors are actually prejudiced thereby. Neither the Issuer nor any Guarantor need pay for any settlement or provide any indemnification for any other Losses associated therewith to the extent such settlement is made in connection with any Third Party Claim without its consent, which consent may be withheld in its sole discretion. The Trustee shall have the right to its own counsel and the Issuer shall pay the reasonable fees and expenses of such counsel in connection with any Third Party Claim to the extent the Trustee reasonably determines that a conflict of interest exists or is required in connection with the performance of its duties under this Indenture.

Notwithstanding the foregoing, the Issuer and the Guarantors need not reimburse the Trustee for any expense or indemnify it against any loss or liability to have been incurred by the Trustee through its own gross negligence or willful misconduct.

To secure the payment obligations of the Issuer and the Guarantors in this Section 7.07, the Trustee shall have a lien prior to the Notes on all money or property held or collected by the Trustee except for such money or property held in trust to pay principal of and interest on particular Notes. Such lien shall survive the satisfaction and discharge of this Indenture.

The obligations of the Issuer and the Guarantors under this Section 7.07 to compensate and indemnify the Trustee and Agents and each predecessor Trustee and Agents and to pay or reimburse the Trustee and Agents and each predecessor Trustee and Agents for expenses, disbursements and advances shall be joint and several liabilities of each Issuer and each of the Guarantors and shall survive the resignation or removal of the Trustee or the Agents and the satisfaction, discharge or other termination of this Indenture, including any termination or rejection hereof under any Bankruptcy Law.

When the Trustee incurs expenses or renders services after an Event of Default specified in Section 6.01(7) occurs, the expenses and the compensation for the services are intended to constitute expenses of administration under any applicable Bankruptcy Law.

For purposes of this Section 7.07, the term "Trustee" shall include any trustee appointed pursuant to this Article Seven, *provided, however*, that the negligence or willful misconduct of any Trustee hereunder shall not affect the rights of any other Trustee hereunder. The provisions of this Section 7.07 shall apply to Trustee in its capacity as Paying Agent, Registrar and any other Agent under this Indenture.

SECTION 7.08. Replacement of Trustee.

The Trustee may resign at any time by so notifying the Issuer and the Guarantors in writing. The Holders of a majority in principal amount of the outstanding Notes may remove the Trustee by notifying the Issuer and the removed Trustee in writing and may appoint a successor Trustee with the Issuer's written consent, which consent shall not be unreasonably withheld. The Issuer may remove the Trustee at its election if:

- (1) the Trustee fails to comply with Section 7.10;
- (2) the Trustee is adjudged a bankrupt or an insolvent or an order for relief is entered with respect to the Trustee under any Bankruptcy Law;
- (3) a receiver or other public officer takes charge of the Trustee or its property; or
- (4) the Trustee otherwise becomes incapable of acting.

If the Trustee resigns or is removed or if a vacancy exists in the office of Trustee for any reason, the Issuer shall promptly appoint a successor Trustee.

If a successor Trustee does not take office within 30 days after the retiring Trustee resigns or is removed, the retiring Trustee, the Issuer or the Holders of a majority in principal amount of the outstanding Notes may petition at the expense of the Issuer any court of competent jurisdiction for the appointment of a successor Trustee.

If the Trustee fails to comply with Section 7.10, Noteholders holding at least 10% in principal amount of the Notes may petition any court of competent jurisdiction for the removal of the Trustee and the appointment of a successor Trustee.

A successor Trustee shall deliver a written acceptance of its appointment to the retiring Trustee and to the Issuer. Immediately following such delivery, the retiring Trustee shall, subject to its rights under Section 7.07, transfer all property held by it as Trustee in respect of the Notes to the successor Trustee, the resignation or removal of the retiring Trustee shall become effective, and the successor Trustee shall have all the rights, powers and duties of the Trustee in respect of the Notes under this Indenture. A successor Trustee shall mail notice of its succession to each Noteholder. Notwithstanding replacement of the Trustee pursuant to this Section 7.08, the Issuer's obligations under Section 7.07 shall continue for the benefit of the retiring Trustee.

SECTION 7.09. Successor Trustee by Consolidation, Merger, etc.

If the Trustee consolidates with, merges or converts into, or transfers all or substantially all of its corporate trust assets to, another corporation, subject to Section 7.10, the successor corporation without any further act shall be the successor Trustee; *provided* that such entity shall be otherwise qualified and eligible under this Article Seven.

SECTION 7.10. Eligibility; Disqualification.

There shall at all times be a Trustee hereunder that is a corporation or national banking association organized and doing business under the laws of the United States of America or of any state thereof that is authorized under such laws to exercise corporate trustee power, that is subject to supervision or examination by federal or state authorities and that has a combined capital and surplus of at least \$50,000,000 as set forth in its most recent published annual report of condition.

SECTION 7.11. Paying Agents.

The Issuer shall cause each Paying Agent other than the Trustee to execute and deliver to it and the Trustee an instrument in which such Paying Agent shall agree with the Trustee, subject to the provisions of this Section 7.11:

- (1) that it will hold all sums held by it as agent for the payment of principal of, or premium, if any, or interest on, the Notes (whether such sums have been paid to it by the Issuer or by any obligor on the Notes) for the benefit of Holders of the Notes or the Trustee;
- (2) that it will at any time during the continuance of any Event of Default, upon written request from the Trustee, deliver to the Trustee all sums so held by it together with a full accounting thereof; and
- (3) that it will give the Trustee written notice within three Business Days of any failure of the Issuer (or by any obligor on the Notes) in the payment of any installment of the principal of, premium, if any, or interest on, the Notes when the same shall be due and payable.

SECTION 7.12. Agent Provisions

The rights, powers, duties and obligations and actions of each Agent under this Indenture are several and not joint or joint and several.

Money held by a Paying Agent need not be segregated, except as required by law, and in no event shall any Paying Agent be liable for interest on any money received by it hereunder.

The Agents shall have no obligation to act or to take any action if they believe they will incur costs, expenses or liabilities for which they will not be reimbursed.

The Issuer and the Agents acknowledge and agree that in the event of an Event of Default, the Trustee may, by notice in writing to the Issuer and the Agents, require that the Agents act as agents of, and take instructions exclusively from, the Trustee. Until they have received such written notice from the Trustee, the Agents shall act solely as agents of the Issuer and need have no concern for the interests of the Holders.

The Agents hold all funds as banker subject to the terms of this Indenture, and, as a result, such money will not be held in accordance with the rules established by the UK Financial Services Authority in the UK Financial Services Authority's Handbook of Rules and Guidance from time to time in relation to client money.

The roles, duties and functions of the Agents are of a mechanical nature, and each Agent shall only perform those acts and duties as specifically set out in this Indenture and no other acts, covenants, obligations or duties shall be implied or read into this Indenture against any of the Agents.

The Agents shall act solely as agents of the Issuer and shall have no fiduciary or other obligation towards, or have any relationship of agency or trust, for or with any person other than the Issuer, except as expressly stated elsewhere in this Indenture.

No Agent shall be required to make any payment of the principal, premium or interest payable pursuant to this Indenture unless and until it has received, and been able to identify or confirm receipt of, the full amount to be paid in accordance with the terms of this Indenture. To the extent that an Agent has made such payment with the prior written consent of the Issuer and for which it did not receive the full amount, the Issuer will reimburse the Agent the full amount of any shortfall.

If the Agent consolidates, merges or converts into, or transfers all or substantially all of its corporate trust business to, another corporation, the successor corporation without any further act will be the successor Agent.

In the event that instructions given to any Agent are not reasonably clear, then such Agent shall be entitled to seek clarification from the Issuer or other party entitled to give the Agents instructions under this Indenture by written request promptly and in any event within five Business Days of receipt by such Agent of such instructions. If an Agent has sought clarification in accordance with this Section 7.12, then such Agent shall be entitled to take no action until such clarification is provided, and shall not incur any liability for not taking any action pending receipt of such clarification.

No Agent shall be required to make any payment under this Indenture unless and until it has received the full amount to be paid in accordance with the terms of this Indenture. To the extent that an Agent has made a payment for which it did not receive the full amount, the Issuer will reimburse the Agent the full amount of any shortfall.

The Issuer shall notify each Agent in the event that it determines that any payment to be made by an Agent under the Notes is a payment which could be subject to FATCA Withholding if such payment were made to a recipient that is generally unable to receive

payments free from FATCA Withholding, and the extent to which the relevant payment is so treated, *provided, however*, that the Issuer's obligation under this Indenture shall apply only to the extent that such payments are so treated by virtue of characteristics of the Issuer, the Notes, or both. For the purposes of section, "FATCA Withholding" means any withholding or deduction required pursuant to an agreement described in section 1471(b) of the Code, or otherwise imposed pursuant to sections 1471 through 1474 of the Code, any regulations or agreements thereunder, any official interpretations thereof, or any law implementing an intergovernmental approach thereto.

SECTION 7.13. Resignation of Agents.

Any Agent may resign its appointment hereunder at any time without the need to give any reason and without being responsible for any costs associated therewith by giving notice to the Issuer and the Trustee 30 days' prior written notice (waivable by the Issuer and the Trustee); *provided* that in the case of resignation of the Paying Agent no such resignation shall take effect until a new Paying Agent shall have been appointed by the Issuer to exercise the powers and undertake the duties hereby conferred and imposed upon the Paying Agent. Following receipt of a notice of resignation from any Agent, the Issuer shall promptly give notice thereof to the Holders.

If any Agent gives notice of its resignation in accordance with this Section and a replacement Agent is required and by the tenth day before the expiration of such notice such replacement has not been duly appointed, such Agent may itself appoint as its replacement any reputable and experienced financial institution or may petition a court of competent jurisdiction to appoint a replacement, with properly incurred costs and expenses by the Agent in relation to such petition to be paid by the Issuer. Immediately following such appointment, the Issuer shall give notice of such appointment to the Trustee, the remaining Agents and the Holders whereupon the Issuer, the Trustee, the remaining Agents and the replacement Agent shall acquire and become subject to the same rights and obligations between themselves as if they had entered into an agreement in the form *mutatis mutandis* of this Indenture.

Upon its resignation becoming effective the Paying Agent shall forthwith transfer all moneys held by it hereunder, if any, to the successor Paying Agent or, if none, the Trustee or to the Trustee's order, but shall have no other duties or responsibilities hereunder, and shall be entitled to the payment by the Issuer of its remuneration for the services previously rendered hereunder and to the reimbursement of all properly incurred expenses (including legal fees) incurred in connection therewith.

## ARTICLE EIGHT

### AMENDMENT, SUPPLEMENT AND WAIVER

#### SECTION 8.01. Without Consent of Noteholders.

Notwithstanding Section 8.02, the Issuer, the Guarantors and the Trustee may modify and amend or supplement this Indenture, the Notes or the Note Guarantees without the consent of any Holder of Notes for any of the following purposes:

- (1) to cure any ambiguity, omission, defect or inconsistency;
- (2) to provide for uncertificated Notes in addition to or in place of Physical Notes;
- (3) to provide for the assumption of the Issuer's or any Guarantor's obligations to the Holders of Notes pursuant to the terms of this Indenture;
- (4) to secure the Notes and the Note Guarantees;
- (5) to release and discharge any Security Interest securing the Notes and the Note Guarantees when permitted by this Indenture (including pursuant to the second paragraph under Section 4.11);
- (6) to evidence and provide for the acceptance and appointment under this Indenture of a successor Trustee or a successor paying agent thereunder pursuant to the requirements thereof;
- (7) to add any Guarantor or release any Guarantor from its Note Guarantee of Notes if such release is in accordance with the terms of this Indenture;
- (8) to conform the text of this Indenture, the Notes, or the Note Guarantees to any provision of the "Description of the Notes" set forth in the Offering Memorandum to the extent that such provision in the "Description of the Notes" set forth in the Offering Memorandum was intended to be a verbatim recitation of a provision of this Indenture, the Notes, or the Note Guarantees, which intent may be evidenced by an Officer's Certificate to that effect;
- (9) to make any amendment to the provisions of this Indenture relating to the transfer and legending of Notes as permitted by this Indenture, including, without limitation, to facilitate the issuance and administration of the Notes; *provided, however*, that such amendment does not materially and adversely affect the rights of Holders to transfer Notes;
- (10) to add covenants for the benefit of the Holders or to surrender any right or power conferred upon Holdings, the Issuer or any other Guarantor with respect to the Notes;
- (11) to provide for the issuance of Additional Notes in accordance with the limitations set forth in this Indenture as of the date hereof;



(12) to make any change that would provide any additional rights or benefits to the Holders of Notes or that does not adversely affect the rights under this Indenture of any Holder of Notes in any material respect; or

(13) to comply with the rules of any applicable securities depository.

After an amendment or supplement under this Section 8.01 becomes effective, the Issuer shall send to the Holders a notice briefly describing the amendment or supplement. Any failure of the Issuer to send such notice, or any defect therein, shall not, however, in any way impair or affect the validity of any such amendment or supplement.

SECTION 8.02. With Consent of Noteholders.

(a) Except to the extent provided in Section 8.01 and clauses (b) and (c) of this Section 8.02, this Indenture, the Notes or any Note Guarantee may be amended or supplemented with the consent of the Holders of at least a majority in aggregate principal amount of the then outstanding Notes voting as a single class (including, without limitation, consents obtained in connection with a purchase of, tender offer or exchange offer for Notes), and any existing Default or compliance with any provision of this Indenture, the Notes or any Note Guarantee may be waived with the consent of the Holders of a majority in aggregate principal amount of the then outstanding Notes voting as a single class (including, without limitation, consents obtained in connection with a purchase of, tender offer or exchange offer for Notes).

(b) Except as provided in Section 8.02(a), without the consent of each Holder of Notes issued under this Indenture affected thereby, an amendment or waiver may not (with respect to any Note held by a non-consenting Holder):

(1) reduce the principal amount of such Notes issued under this Indenture whose Holders must consent to an amendment, supplement or waiver;

(2) reduce the principal amount of or change the Maturity Date of any such Notes, or alter the provisions with respect to the redemption of any such Notes other than, except as set forth in clause (7) of this Section 8.02(b), the provisions of Sections 4.08 and 4.09;

(3) reduce the rate of or change the time for payment of interest on any such Notes;

(4) waive a Default or Event of Default in the payment of principal of or premium, if any, or interest on any such Notes (except a rescission of acceleration of the Notes by the Holders of at least a majority in aggregate principal amount of the then outstanding Notes and a waiver of the payment default that resulted from such acceleration);

(5) make any such Note payable in currency other than that stated in such Note;

(6) make any change to the provisions of this Indenture relating to waiver of past Defaults or the rights of Holders of the Notes issued hereunder to receive payments of principal of or interest on the Notes;

(7) after the Issuer's obligation to purchase Notes arises hereunder, amend, change or modify in any material respect the obligations of the Issuer to make and consummate a Change of Control Offer with respect to a Change of Control Triggering Event that has occurred with respect to such Notes, including, without limitation, in each case, by amending, changing or modifying any of the definitions relating thereto;

(8) release the Issuer or any Guarantor that is a Significant Subsidiary from any of its obligations under its Note Guarantee or this Indenture with respect to such Notes otherwise than in accordance with the terms of this Indenture; or

(9) modify or change any provision of this Indenture affecting the ranking of the Notes or the Note Guarantees in a manner adverse to the Holders of Notes.

(c) It shall not be necessary for the consent of the Holders under this Section 8.02 to approve the particular form of any proposed amendment or waiver, but it shall be sufficient if such consent approves the substance thereof.

(d) After an amendment, supplement or waiver under this Section 8.02 becomes effective, the Issuer shall send to the Holders of the Notes a notice briefly describing the amendment, supplement or waiver. Any failure of the Issuer to send such notice, or any defect therein, shall not, however, in any way impair or affect the validity of any such amendment, supplement or waiver.

SECTION 8.03. [Reserved].

SECTION 8.04. Revocation and Effect of Consents.

(a) After an amendment, supplement, waiver or other action becomes effective, a consent to it by a Holder of a Note is a continuing consent conclusive and binding upon such Holder and every subsequent Holder of the same Note or portion thereof, and of any Note issued upon the transfer thereof or in exchange therefor or in place thereof, even if notation of the consent is not made on any such Note.

(b) The Issuer may, but shall not be obligated to, fix a record date for the purpose of determining the Holders entitled to consent to any amendment, supplement or waiver. If a record date is fixed, then, notwithstanding the preceding paragraph, those Persons who were Noteholders at such record date (or their duly designated proxies), and only such Persons, shall be entitled to consent to such amendment, supplement, or waiver or to revoke any consent previously given, whether or not such Persons continue to be Noteholders after such record date. No such consent shall be valid or effective for more than 90 days after such record date unless the consent of the requisite number of Noteholders has been obtained.

(c) After an amendment, supplement, waiver or other action under Section 8.01 or Section 8.02 becomes effective, it shall bind every Noteholder, unless it makes a change described in any of clauses (1) through (9) of Section 8.02(b). In that case the amendment, supplement, waiver or other action shall bind each Noteholder who has consented to it and every

subsequent Noteholder or portion of a Note that evidences the same debt as the consenting Holder's Note.

SECTION 8.05. Notation on or Exchange of Notes.

If an amendment, supplement, or waiver changes the terms of a Note, the Trustee (in accordance with the specific written direction of the Issuer) shall, in the case of a Physical Note, request the Holder of the Note (in accordance with the specific written direction of the Issuer) to deliver it to the Trustee. In such case, the Trustee shall place an appropriate notation on the Note about the changed terms and return it to the Noteholder. Alternatively, if the Issuer or the Trustee so determines, the Issuer in exchange for the Note shall issue, the Guarantors shall endorse and, upon receipt of a written order of the Issuer in the form of an Officer's Certificate in accordance with Section 2.01, the Trustee shall authenticate a new Note that reflects the changed terms. Failure to make the appropriate notation or issue a new Note shall not affect the validity and effect of such amendment, supplement or waiver.

SECTION 8.06. Trustee To Sign Amendments, etc.

The Trustee shall sign any amendment, supplement or waiver authorized pursuant to this Article Eight if the amendment, supplement or waiver does not affect the rights, duties, liabilities or immunities of the Trustee. If it does affect the rights, duties, liabilities or immunities of the Trustee, the Trustee may, but need not, sign such amendment, supplement or waiver. Notwithstanding anything herein to the contrary, in signing or refusing to sign an amendment, supplement or waiver the Trustee shall be entitled to receive and, subject to Section 7.01, shall be fully protected in relying upon an Officer's Certificate and an Opinion of Counsel stating, in addition to the matters required by Sections 11.04 and 11.05, that the execution of such amendment, supplement or waiver is authorized or permitted by this Indenture and an Opinion of Counsel stating that such amendment, supplement or waiver is a legal, valid and binding obligation of the Issuer and the Guarantors, enforceable against the Issuer and the Guarantors in accordance with its terms (subject to customary exceptions).

ARTICLE NINE

DISCHARGE OF INDENTURE; DEFEASANCE; GUARANTEE

SECTION 9.01. Discharge of Indenture.

This Indenture will be discharged and will cease to be of further effect as to all Notes and Note Guarantees, and the Trustee, at the expense and upon the written request of the Issuer, will execute proper instruments acknowledging satisfaction and discharge of this Indenture, the Notes and the Note Guarantees, when all amounts due to the Trustee shall have been paid and either:

- (1) the Issuer delivers to the Trustee all outstanding Notes issued under this Indenture (other than (i) Notes which have been destroyed, lost or stolen and which have been replaced or paid as provided in Section 2.08 hereof and (ii) Notes for whose payment money has theretofore

been deposited in trust or segregated and held in trust by the Issuer and thereafter repaid to the Issuer or discharged from such trust) for cancellation; or

(2) (a) all Notes outstanding under this Indenture (I) have become due and payable, whether at maturity or as a result of the sending of a notice of redemption, or (II) will become due and payable within one year, or are to be called for redemption within one year, under arrangements reasonably satisfactory to the Trustee for the giving of notice of redemption by the Trustee in the name, and at the expense, of the Issuer, and the Issuer or any Guarantor irrevocably deposits with the Trustee as trust funds in trust solely for the benefit of the Holders of Notes, cash in euros, European Government Obligations or a combination thereof in such amounts as will be sufficient, in the opinion of a nationally recognized firm of independent public accountants expressed in a written certification thereof delivered to the Trustee, to pay the principal of, premium, if any, and interest on the Notes outstanding under this Indenture on the maturity date or on the applicable Redemption Date, as the case may be; (b) no Default or Event of Default (other than resulting from the granting of any Security Interests securing any borrowing of funds to be applied to make such deposit) shall have occurred and be continuing on the date of such deposit or shall occur as a result of such deposit and such deposit shall not result in a breach or violation of, or constitute a default (other than resulting from the granting of any Security Interests securing any borrowing of funds to be applied to make such deposit) under, any Credit Facilities or other material agreement or instrument (other than this Indenture) to which the Issuer or any Guarantor is a party or by which the Issuer or any Guarantor is bound; (c) the Issuer or any Guarantor has paid or caused to be paid all sums payable by the Issuer or any Guarantor under this Indenture; and (d) the Issuer have delivered (I) irrevocable instructions to the Trustee under this Indenture to apply the deposited money toward the payment of the Notes at maturity or the applicable Redemption Date, as the case may be, and (II) an Officer's Certificate and an Opinion of Counsel, each stating that all conditions precedent herein provided for relating to the satisfaction and discharge of this Indenture with respect of the Notes have been complied with and that such satisfaction and discharge does not result in a default under any agreement or instrument then known to such counsel which binds or affects the Issuer.

Notwithstanding the satisfaction and discharge of this Indenture, the obligations of the Issuer in Article Two and in Sections 4.01, 4.02, 7.07, 9.05 and 9.06 shall survive such satisfaction and discharge (in the case of obligations under Article Two, Sections 4.01 and 4.02, until the Notes are no longer outstanding).

SECTION 9.02. Legal Defeasance.

The Issuer may, at its option and at any time, elect to have all of its obligations and the obligations of the Guarantors with respect to the Notes discharged with respect to this Indenture, the outstanding Notes and the Note Guarantees on a date the conditions set forth in Section 9.04 are satisfied (hereinafter, "Legal Defeasance"). For this purpose, such Legal Defeasance means that the Issuer will be deemed to have paid and discharged the entire indebtedness represented by the outstanding Notes and to have satisfied all their other obligations under such Notes and this Indenture insofar as such Notes are concerned (and the Trustee, at the expense of the Issuer, shall, subject to Section 9.06, execute instruments in form

and substance reasonably satisfactory to the Trustee and the Issuer acknowledging the same), except for the following which shall survive until otherwise terminated or discharged hereunder:

- (1) the rights of the Holders of the outstanding Notes to receive solely from the trust described in Section 9.04 and as more fully set forth in Section 9.04, payments in respect of the principal amount of, premium, if any, and interest on such Notes when such payments are due;
- (2) the Issuer's obligations with respect to issuing temporary Notes, registration of Notes or mutilated, destroyed, lost or stolen Notes, in each case under Article Two and Section 4.02;
- (3) the rights, powers, trusts, duties, and immunities of the Trustee hereunder (including claims of, or payments to, the Trustee under or pursuant to Section 7.07) and the Issuer's obligations in connection therewith; and
- (4) this Article Nine.

Concurrently with any Legal Defeasance, the Issuer may, at its further option, cause to be terminated, as of the date on which such Legal Defeasance occurs, all of the obligations under any or all of the Note Guarantees, if any, then existing and obtain the release of the Note Guarantees of any or all Guarantors. In order to exercise such option regarding a Note Guarantee, the Issuer shall provide the Trustee with written notice of their desire to terminate such Note Guarantee prior to the delivery of the Opinions of Counsel referred to in Section 9.04.

Subject to compliance with this Article Nine, the Issuer may exercise its option under this Section 9.02 with respect to the Notes notwithstanding the prior exercise of its option under Section 9.03 below with respect to the Notes.

**SECTION 9.03. Covenant Defeasance.**

The Issuer may, at its option and at any time, elect to have its obligations and the obligations of the Guarantors under Sections 4.01(c), 4.03, 4.06, 4.07, 4.08, 4.09, 4.10, 4.11, 4.12, 4.13 and 4.14 and Section 5.01(a) released with respect to the outstanding Notes on a date the conditions set forth in Section 9.04 are satisfied (hereinafter, "Covenant Defeasance"). For this purpose, Covenant Defeasance means that, with respect to the outstanding Notes, the Issuer may fail to comply with and shall have no liability in respect of any term, condition or limitation set forth in any such covenant, whether directly or indirectly, by reason of any reference elsewhere herein to any such covenant or by reason of any reference in any such covenant to any other provision herein or in any other document and such omission to comply shall not constitute a Default or an Event of Default under Section 6.01, but, except as specified above, the remainder of this Indenture, the Notes and the Note Guarantees shall be unaffected thereby. In addition, upon the Issuer's exercise of the option in this Section 9.03, subject to the satisfaction of the conditions set forth in Section 9.04, Sections 6.01(3), (4), (5), (6) and (8) shall not constitute Events of Default.

Notwithstanding any discharge or release of any obligations under this Indenture pursuant to Section 9.02 or this Section 9.03, the Issuer's obligations in Article Two and Sections 7.07, 9.05, 9.06, 9.07 and 9.08 shall survive until such time as the Notes have been paid in full. Thereafter, the Issuer's obligations in Sections 7.07, 9.05, 9.07 and 9.08 shall survive.

SECTION 9.04. Conditions to Legal Defeasance or Covenant Defeasance.

The following shall be the conditions to application of Section 9.02 or Section 9.03 to the outstanding Notes:

(1) the Issuer must irrevocably deposit with the Trustee, in trust, for the benefit of the Holders of the Notes issued under this Indenture, cash in euros, European Government Obligations or a combination thereof, in such amounts as will be sufficient, in the opinion of a nationally recognized firm of independent public accountants (such opinion shall be delivered to the Trustee, and upon which the Trustee shall have no liability in relying), to pay the principal, premium, if any, and interest on the Notes outstanding under this Indenture on the stated maturity or on the applicable Redemption Date, as the case may be, and the Issuer must specify whether such Notes are being defeased to maturity or to a particular Redemption Date;

(2) in the case of Legal Defeasance, the Issuer shall have delivered to the Trustee an Opinion of Counsel in the United States (upon which the Trustee shall have no liability in relying) confirming that subject to customary assumptions and exclusions, (a) the Issuer has received from, or there has been published by, the U.S. Internal Revenue Service a ruling or (b) since the Issue Date, there has been a change in the applicable U.S. federal income tax law, in either case to the effect that, and based thereon such Opinion of Counsel shall confirm that, the Holders of the Notes outstanding under this Indenture will not recognize income, gain or loss for U.S. federal income tax purposes as a result of such Legal Defeasance and will be subject to U.S. federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such Legal Defeasance had not occurred;

(3) in the case of Covenant Defeasance, the Issuer shall have delivered to the Trustee an Opinion of Counsel in the United States (upon which the Trustee shall have no liability in relying) confirming that subject to customary assumptions and exclusions, the Holders of the Notes outstanding under this Indenture will not recognize income, gain or loss for U.S. federal income tax purposes as a result of such Covenant Defeasance and will be subject to U.S. federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such Covenant Defeasance had not occurred;

(4) no Default or Event of Default with respect to the Notes shall have occurred and be continuing on the date of such deposit (other than a Default or Event of Default resulting from the borrowing of funds to be applied to such deposit and the granting of Liens in connection therewith) or insofar as Events of Default from bankruptcy or insolvency events are concerned, at any time in the period ending on the 91st day after the date of deposit;

(5) such Legal Defeasance or Covenant Defeasance will not result in a breach or violation of, or constitute a default under any material agreement or instrument (other than this

Indenture) to which the Issuer or any of its Subsidiaries is a party or by which the Issuer or any of its Subsidiaries is bound;

(6) the Issuer must deliver to the Trustee an Officer's Certificate stating that the deposit was not made by the Issuer with the intent of preferring the Holders of Notes issued under this Indenture over the other creditors of the Issuer with the intent of defeating, hindering, delaying or defrauding creditors of the Issuer or others; and

(7) the Issuer must deliver to the Trustee an Officer's Certificate and an Opinion of Counsel, subject to customary assumptions and exclusions, each stating that all conditions precedent provided for relating to the Legal Defeasance or the Covenant Defeasance have been complied with.

**SECTION 9.05. Deposited Money and European Government Obligations To Be Held in Trust.**

All money and European Government Obligations (including the proceeds thereof) deposited with the Trustee pursuant to Section 9.04 in respect of the outstanding Notes shall be held and applied by the Trustee, in accordance with the provisions of such Notes and this Indenture, to the payment, either directly or through any Paying Agents, to the Holders of such Notes, of all sums due and to become due thereon in respect of principal, premium, if any, and accrued interest, but such money need not be segregated from other funds except to the extent required by law.

The Issuer and the Guarantors shall (on a joint and several basis) pay and indemnify the Trustee against any tax, fee or other charge imposed on or assessed against the European Government Obligations deposited pursuant to Section 9.04 or the principal, premium, if any, and interest received in respect thereof other than any such tax, fee or other charge which by law is for the account of the Holders of the outstanding Notes.

Anything in this Article Nine to the contrary notwithstanding, the Trustee shall deliver or pay to the Issuer from time to time upon a written request of the Issuer any money or European Government Obligations held by it as provided in Section 9.04 which, in the opinion of a nationally recognized firm of independent public accountants expressed in a written certification thereof delivered to the Trustee, are in excess of the amount thereof which would then be required to be deposited to effect an equivalent Legal Defeasance or Covenant Defeasance.

**SECTION 9.06. Reinstatement.**

If the Trustee or any Paying Agent is unable to apply any money or European Government Obligations in accordance with Section 9.01, 9.02 or 9.03 by reason of any legal proceeding or by reason of any order or judgment of any court or governmental authority enjoining, restraining or otherwise prohibiting such application, each Issuer's and each Guarantor's obligations under this Indenture, the Notes and the Note Guarantees shall be revived and reinstated as though no deposit had occurred pursuant to this Article Nine until such time as the Trustee or such Paying Agent is permitted to apply all such money or European Government



Obligations in accordance with Section 9.01; *provided* that if the Issuer or the Guarantors have made any payment of principal of, premium, if any, or accrued interest on any Notes because of the reinstatement of their obligations, the Issuer or the Guarantors, as the case may be, shall be subrogated to the rights of the Holders of such Notes to receive such payment from the money or European Government Obligations held by the Trustee or any Paying Agent.

SECTION 9.07. Moneys Held by Paying Agent.

In connection with the satisfaction and discharge of this Indenture, all moneys and European Government Obligations then held by any Paying Agent under the provisions of this Indenture shall, upon written demand of the Issuer, be paid or delivered to the Trustee, or if sufficient moneys and European Government Obligations have been deposited pursuant to Section 9.04, to the Issuer upon a request of the Issuer (or, if such moneys and European Government Obligations had been deposited by the Guarantors, to such Guarantors), and thereupon such Paying Agent shall be released from all further liability with respect to such moneys.

SECTION 9.08. Moneys Held by Trustee.

Any moneys and European Government Obligations deposited with the Trustee or any Paying Agent or then held by the Issuer or the Guarantors in trust for the payment of the principal of, or premium, if any, or interest on any Note that are not applied but remain unclaimed by the Holder of such Note for two years after the date upon which the principal of, or premium, if any, or interest on such Note shall have respectively become due and payable shall be repaid or returned to the Issuer (or, if appropriate, the Guarantors) upon a written request of the Issuer, or if such moneys and European Government Obligations are then held by the Issuer or the Guarantors in trust, such moneys and European Government Obligations shall be released from such trust; and the Holder of such Note entitled to receive such payment shall thereafter, as an unsecured general creditor, look only to the Issuer and the Guarantors for the payment thereof, and all liability of the Trustee or such Paying Agent with respect to such trust moneys and European Government Obligations shall thereupon cease.

## ARTICLE TEN

### GUARANTEE OF SECURITIES

SECTION 10.01. Guarantee.

The Guarantors, by execution of this Indenture, jointly and severally, guarantee to each Holder and to the Trustee (i) the due and punctual payment of the principal of, premium, if any, and interest on each Note, when and as the same shall become due and payable, whether at maturity, by acceleration or otherwise, the due and punctual payment of interest on the overdue principal of and interest on the Notes, to the extent lawful, and the due and punctual payment of all other obligations and due and punctual performance of all obligations of the Issuer to the Holders or the Trustee all in accordance with the terms of such Note and this Indenture and (ii) in



the case of any extension of time of payment or renewal of any Notes or any of such other obligations, that the same will be promptly paid in full when due or performed in accordance with the terms of the extension or renewal, at stated maturity, by acceleration or otherwise. Each Guarantor, by execution of this Indenture, agrees that, subject only to the applicable provisions, if any, of Section 10.06, its obligations hereunder shall be absolute and unconditional, irrespective of, and shall be unaffected by, any invalidity, irregularity or unenforceability of any such Note or this Indenture, any failure to enforce the provisions of any such Note or this Indenture, any waiver, modification or indulgence granted to the Issuer with respect thereto by the Holder of such Note, or any other circumstances which may otherwise constitute a legal or equitable discharge of a surety or such Guarantor. Each Guarantor further agrees that its Note Guarantee herein constitutes a Guarantee of payment when due (and not a Guarantee of collection).

Each Guarantor hereby waives diligence, presentment, demand for payment, filing of claims with a court in the event of merger or bankruptcy of the Issuer, any right to require a proceeding first against the Issuer, protest or notice with respect to any such Note or the Indebtedness evidenced thereby and all demands whatsoever, and covenants that this Guarantee will not be discharged as to any such Note except by payment in full of the principal thereof and interest thereon. Each Guarantor hereby agrees that, as between such Guarantor, on the one hand, and the Holders and the Trustee, on the other hand, (i) the maturity of the obligations guaranteed hereby may be accelerated as provided in Article Six for the purposes of this Guarantee, notwithstanding any stay, injunction or other prohibition preventing such acceleration in respect of the obligations guaranteed hereby, and (ii) in the event of any declaration of acceleration of such obligations as provided in Article Six, such obligations (whether or not due and payable) shall forthwith become due and payable by each Guarantor for the purpose of this Guarantee.

The Guarantors shall have the right to seek contribution from any non-paying Guarantor so long as the exercise of such right does not impair the rights of the Trustee or any Holder under the Note Guarantees.

**SECTION 10.02. Execution and Delivery of Note Guarantee.**

To further evidence the Note Guarantee set forth in Section 10.01, each Guarantor hereby agrees that a notation of such Note Guarantee, substantially in the form attached hereto as Exhibit H, shall be endorsed on each Note authenticated and delivered by the Trustee and such Note Guarantee shall be executed by either manual or facsimile signature of an Officer of each Guarantor. The validity and enforceability of any Note Guarantee shall not be affected by the fact that it is not affixed to any particular Note.

Each of the Guarantors hereby agrees that its Note Guarantee set forth in Section 10.01 shall be in full force and effect notwithstanding any failure to endorse on each Note a notation of such Note Guarantee.

If an Officer of a Guarantor whose signature is on this Indenture or a Note Guarantee no longer holds that office at the time the Trustee authenticates the Note on which

such Note Guarantee is endorsed or at any time thereafter, such Guarantor's Guarantee of such Note shall be valid nevertheless.

The delivery of any Note by the Trustee, after the authentication thereof hereunder, shall constitute due delivery of any Note Guarantee set forth in this Indenture on behalf of the Guarantor.

SECTION 10.03. Release of Guarantors.

(a) A Note Guarantee of a Guarantor will be unconditionally and automatically released and discharged upon any of the following:

(1) any Transfer directly or indirectly (including, without limitation, by way of consolidation or merger) to any Person that is not a Guarantor of all or substantially all of the assets of, such Guarantor; *provided* that such Guarantor is also released from all of its obligations in respect of Indebtedness under each Credit Facility; or

(2) any Transfer directly or indirectly (including, without limitation, by way of consolidation or merger) to any Person that is not a Guarantor, of Equity Interests of a Guarantor or any issuance by a Guarantor of its Equity Interests, such that such Guarantor ceases to be a Restricted Subsidiary; *provided* that such Guarantor is also released from all of its obligations in respect of Indebtedness under each Credit Facility; or

(3) the release of such Guarantor from all guarantee obligations of such Guarantor in respect of other Indebtedness that gave rise (or would give rise) to the obligation to provide such Note Guarantee; or

(4) upon Legal Defeasance, Covenant Defeasance or satisfaction and discharge of this Indenture in accordance with Article Nine; or

(5) such Guarantor is designated an Unrestricted Subsidiary in accordance with the terms of this Indenture; or

(6) such Guarantor is disposed of or ceases to exist, including, without limitation, by dissolution, liquidation or winding up, in each case in connection with a Permitted Reorganization.

(b) No such release or discharge of a Note Guarantee of a Guarantor shall be effective against the Trustee or the Holders of Notes to which such Note Guarantee relates if a Default or Event of Default shall have occurred and be continuing under this Indenture as of the time of such proposed release until such time as such Default or Event of Default is cured and waived (unless such release or discharge is (x) in connection with the sale of the Equity Interests in such Guarantor constituting collateral for a Credit Facility in connection with the exercise of remedies against such Equity Interests or (y) in connection with a Transfer permitted by this Indenture, including a Permitted Reorganization, if, but for the existence of such Default or Event of Default, such Guarantor would otherwise be entitled to be released from its Guarantee following the Transfer, including the consummation of a Permitted Reorganization).

(c) If the Note Guarantee of any Guarantor is deemed to be released or is automatically released, the Issuer shall deliver to the Trustee an Officer's Certificate stating the identity of the released Guarantor, the basis for release in reasonable detail, and that such release complies with this Indenture. At the written request and expense of the Issuer, and upon delivery to the Trustee of an Officer's Certificate and an Opinion of Counsel, each stating that all conditions precedent provided for in this Indenture relating to such release or discharge have been complied with, the Trustee shall execute and deliver such releases, documents and instruments to the Issuer as requested by either the Issuer or a Guarantor in order to evidence the release or discharge of such Guarantor from its obligations under its Guarantee endorsed on the Notes and under this Article Nine (it being understood that the failure to obtain any such instrument shall not impair any automatic release pursuant to this Section 10.03).

SECTION 10.04. Waiver of Subrogation.

Each Guarantor hereby irrevocably waives any claim or other rights which it may now or hereafter acquire against the Issuer that arise from the existence, payment, performance or enforcement of such Guarantor's obligations under its Note Guarantee and this Indenture, including, without limitation, any right of subrogation, reimbursement, exoneration, indemnification, and any right to participate in any claim or remedy of any Holder of Notes against the Issuer, whether or not such claim, remedy or right arises in equity, or under contract, statute or common law, including, without limitation, the right to take or receive from the Issuer, directly or indirectly, in cash or other property or by set-off or in any other manner, payment or Note on account of such claim or other rights. If any amount shall be paid to any Guarantor in violation of the preceding sentence and the Notes shall not have been paid in full, such amount shall have been deemed to have been paid to such Guarantor for the benefit of, and held in trust for the benefit of, the Holders of the Notes, and shall forthwith be paid to the Trustee for the benefit of such Holders to be credited and applied upon the Notes, whether matured or unmatured, in accordance with the terms of this Indenture. Each Guarantor acknowledges that it will receive direct and indirect benefits from the financing arrangements contemplated by this Indenture and that the waiver set forth in this Section 10.04 is knowingly made in contemplation of such benefits.

SECTION 10.05. Notice to Trustee.

The Issuer or any Guarantor shall give prompt written notice to the Trustee of any fact known to such Issuer or any such Guarantor which could reasonably be expected to prohibit the making of any payment to or by the Trustee in respect of the Note Guarantees. Notwithstanding the provisions of this Article Nine or any other provision of this Indenture, the Trustee shall not be charged with knowledge of the existence of any facts which would prohibit the making of any payment to or by the Trustee in respect of the Note Guarantees, unless and until a Responsible Officer of the Trustee shall have received written notice thereof from the Issuer no later than three Business Days prior to such payment; and, prior to the receipt of any such written notice, the Trustee, subject to the provisions of this Section 10.05, and subject to the provisions of Sections 7.01 and 7.02, shall be entitled in all respects to assume that no such facts exist; *provided, however*, that if the Trustee shall not have received the notice referred to in this Section 10.05 at least three Business Days prior to the date upon which by the terms hereof any

such payment may become payable for any purpose under this Indenture (including, without limitation, the payment of the principal of, premium, if any, or interest on any Note), then, anything herein contained to the contrary notwithstanding, the Trustee shall have full power and authority to receive such money and to apply the same to the purpose for which such money was received and shall not be affected by any notice to the contrary which may be received by it less than three Business Days prior to such date.

SECTION 10.06. Limitation on Guarantor's Liability.

Each Guarantor, and by its acceptance hereof, each Holder and the Trustee, hereby confirm that it is the intention of all such parties that the Guarantee of a Guarantor does not constitute a fraudulent transfer or conveyance for purposes of Title 11 of the United States Code, as amended, the Uniform Fraudulent Conveyance Act, the Uniform Fraudulent Transfer Act or any similar U.S. Federal or state or other applicable law. To effectuate the foregoing intention, each Holder and each Guarantor hereby irrevocably agree that the obligations of a Guarantor under its Note Guarantee shall be limited to the maximum amount as will, after giving effect to all other contingent and fixed liabilities of such Guarantor result in the obligations of such Guarantor not constituting such a fraudulent transfer or conveyance.

ARTICLE ELEVEN

MISCELLANEOUS

SECTION 11.01. [Reserved].

SECTION 11.02. Notices.

Except for notice or communications to Holders, any notice or communication shall be given in writing in English and delivered in person or mailed by first class mail (registered or certified, return receipt requested), telex, electronic transmission with a portable document format (.pdf) attachment, telecopier or overnight air courier guaranteeing next day delivery, addressed as follows:

If to the Issuer or any Guarantor:

James Hardie International Finance Designated Activity Company  
Europa House 2nd Floor  
Harcourt Centre, Harcourt Street  
Dublin DO2 WR20, Ireland  
Facsimile: +353-1-479-1128  
E-mail: treasury@jameshardie.com  
Attention: The Treasurer

With copies to:

DLA Piper LLP (US)

1251 Avenue of the Americas, 27th Floor  
New York, New York 10020  
Facsimile: +1 (212) 884-8692  
Attention: Jamie Knox, Esq.

If to the Trustee:

Deutsche Bank Trust Company Americas  
Trust Agency Services  
60 Wall Street, 16th Floor  
MS: NYC60-1630  
New York, New York 10005  
Facsimile: 732-578-4635  
Attention: Corporates Team Deal Manager – James Hardie International  
Finance Designated Activity Company

With copies to:

Deutsche Bank Trust Company Americas  
c/o Deutsche Bank National Trust Company  
Trust Agency Services  
100 Plaza One, 8<sup>th</sup> Floor  
MS: JCY03-0801  
Jersey City, New Jersey 07311  
Facsimile: 732-578-4635  
Attention: Corporates Team Deal Manager – James Hardie International  
Finance Designated Activity Company

The Issuer, the Guarantors or the Trustee by written notice to the others may designate additional or different addresses for subsequent notices or communications.

All notices and communications (other than those sent to Holders) shall be deemed to have been duly given at the time delivered by hand, if personally delivered; five (5) calendar days after mailing if sent by registered or certified mail, postage prepaid (except that a notice of change of address shall not be deemed to have been given until actually received by the addressee); when answered back, if telexed; when receipt acknowledged, if telecopied; and the next Business Day after timely delivery to the courier, if sent by overnight air courier guaranteeing next day delivery. Notices given by publication will be deemed given on the first date on which publication is made. Notices delivered to Euroclear and Clearstream will be deemed given on the date when delivered. Notices given by first class mail, postage paid, will be deemed given five calendar days after mailing whether or not the addressee receives it.

The Trustee agrees to accept and act upon instructions, directions, reports, notices and other communications or information pursuant to this Indenture sent by unsecured electronic transmissions (including email and .pdf attachments); *provided* that (i) the Trustee shall not have any duty or obligation to verify or confirm that the Person sending instructions, directions,

reports, notices or other communications or information by electronic transmission is, in fact, a Person authorized to give such instructions, directions, reports, notices or other communications or information on behalf of the party purporting to send such electronic transmission; and the Trustee shall not have any liability for any losses, liabilities, costs or expenses incurred or sustained directly or indirectly by any party as a result of such reliance upon or compliance with such instructions, directions, reports, notices or other communications or information and (ii) each other party agrees to assume all risks arising out of the use of electronic methods to submit instructions, directions, reports, notices or other communications or information to the Trustee, including the risk of the Trustee acting on unauthorized instructions, notices, reports or other communications or information, and the risk of interception and misuse by third parties. If the party elects to give the Trustee email or facsimile instructions (or instructions by a similar electronic method) and the Trustee in its discretion elects to act upon such instructions, the Trustee's understanding of such instructions shall be deemed controlling.

Any notice or communication to a Holder shall be mailed by first class mail, certified or registered, return receipt requested, sent in accordance with the Common Depositary's applicable procedures in the case of a Global Note, or by overnight air courier guaranteeing next day delivery to its address shown on the register kept by the Registrar (or to the extent permitted or required by applicable Common Depositary procedures or regulations with respect to Global Notes, sent electronically in .pdf format). Failure to mail a notice or communication to a Holder or any defect in it shall not affect its sufficiency with respect to other Holders. Where this Indenture or any Note provides for notice of any event (including any notice of redemption or repurchase) to a Holder of a Global Note (whether by mail or otherwise), such notice shall be sufficiently given if given to the Common Depositary (or its designee) pursuant to the standing instructions from the Common Depositary or its designee, including by electronic mail in accordance with such Common Depositary's applicable procedures.

If a notice or communication to a Holder is mailed in the manner provided above, it shall be deemed duly given, whether or not the addressee receives it.

Notwithstanding anything herein to the contrary, any notice to the Trustee shall be deemed given when actually received.

SECTION 11.03. [Reserved].

SECTION 11.04. Certificate and Opinion as to Conditions Precedent.

Upon any request or application by the Issuer or any Guarantor to the Trustee to take any action under this Indenture, such Issuer or such Guarantor shall furnish to the Trustee:

(1) an Officer's Certificate (which shall include the statements set forth in Section 11.05 below) stating that, in the opinion of the signatory, all conditions precedent and covenants, if any, provided for in this Indenture relating to the proposed action have been complied with; and

(2) an Opinion of Counsel (which shall include the statements set forth in Section 11.05 below) stating that, in the opinion of such counsel, all such conditions precedent and covenants have been complied with.

SECTION 11.05. Statements Required in Certificate and Opinion.

Each certificate and opinion with respect to compliance by or on behalf of the Issuer or any Guarantor with a condition or covenant provided for in this Indenture shall include:

- (1) a statement that the Person making such certificate or opinion has read such covenant or condition;
- (2) a brief statement as to the nature and scope of the examination or investigation upon which the statements or opinions contained in such certificate or opinion are based;
- (3) a statement that, in the opinion of such Person, it or he has made such examination or investigation as is necessary to enable it or him to express an informed opinion as to whether or not such covenant or condition has been complied with; and
- (4) a statement as to whether or not, in the opinion of such Person, such covenant or condition has been complied with.

SECTION 11.06. Rules by Trustee and Agents.

The Trustee and Agent may make reasonable rules for action by or meetings of Noteholders. The Registrar, Paying Agent and Agent may make reasonable rules and set reasonable requirements for their functions.

SECTION 11.07. Business Days; Legal Holidays.

A “Business Day” is a day that is not a Legal Holiday. A “Legal Holiday” is a Saturday, a Sunday or other day on which commercial banks in The City of New York, the State of New York or the City of London, United Kingdom are authorized or required by law to close. If a payment date is a Legal Holiday at a place of payment, payment may be made at that place on the next succeeding day that is not a Legal Holiday, and no interest shall accrue for the intervening period.

SECTION 11.08. Governing Law.

This Indenture, the Notes and the Note Guarantees shall be governed by, and construed in accordance with, the laws of the State of New York.

SECTION 11.09. No Adverse Interpretation of Other Agreements.

This Indenture may not be used to interpret another indenture, loan, security or debt agreement of the Issuer or any Subsidiary thereof. No such indenture, loan, security or debt agreement may be used to interpret this Indenture.

SECTION 11.10. Successors.

All agreements of the Issuer and the Guarantors in this Indenture and the Notes shall bind their respective successors. All agreements of the Trustee, any additional trustee and any Agents in this Indenture shall bind its successor.

SECTION 11.11. Multiple Counterparts.

The parties may sign multiple counterparts of this Indenture. Each signed counterpart shall be deemed an original, but all of them together represent one and the same agreement. The exchange of copies of this Indenture and of signature pages by facsimile or PDF transmission shall constitute effective execution and delivery of this Indenture as to the parties hereto and may be used in lieu of the original Indenture for all purposes. Signatures of the parties hereto transmitted by facsimile or PDF shall be deemed to be their original signatures for all purposes.

SECTION 11.12. Table of Contents, Headings, etc.

The table of contents, cross-reference sheet and headings of the Articles and Sections of this Indenture have been inserted for convenience of reference only, are not to be considered a part hereof, and shall in no way modify or restrict any of the terms or provisions hereof.

SECTION 11.13. Separability.

Each provision of this Indenture shall be considered separable and if for any reason any provision which is not essential to the effectuation of the basic purpose of this Indenture or the Notes shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

SECTION 11.14. Waiver of Jury Trial.

THE ISSUER, THE GUARANTORS AND THE TRUSTEE, AND EACH HOLDER OF A NOTE BY ITS ACCEPTANCE THEREOF, IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHTS TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS INDENTURE, THE NOTES, THE NOTE GUARANTEES OR ANY TRANSACTION CONTEMPLATED HEREBY.

SECTION 11.15. Consent to Jurisdiction and Service.

Each of the Issuer and any Guarantor not organized in the United States hereby appoint C T Corporation System, 111 Eighth Avenue, New York, New York 10011, as its agent for service of process in any suit, action or proceeding with respect to this Indenture, the Notes and the Note Guarantees and for actions brought under the U.S. federal or state securities laws brought in any U.S. federal or state court located in the Borough of Manhattan in the City of New York. In relation to any legal action or proceeding arising out of or in connection with this



Indenture, the Notes and the Note Guarantees, the Issuer and each Guarantor hereby irrevocably submit to the non-exclusive jurisdiction of the U.S. federal and state courts in the Borough of Manhattan in the City of New York, County and State of New York, United States.

SECTION 11.16. Force Majeure.

The Trustee and Agents shall not incur any liability for not performing any act or fulfilling any duty, obligation or responsibility hereunder by reason of any occurrence beyond the control of the Trustee or the Agents (including but not limited to any act or provision of any present or future law or regulation or governmental authority, any act of God or war, civil unrest, local or national disturbance or disaster, any act of terrorism, or the unavailability of the Federal Reserve Bank wire or facsimile or other wire or communication facility).

SECTION 11.17. U.S.A. Patriot Act.

In order to comply with the laws, rules, regulations and executive orders in effect from time to time applicable to banking institutions, including, without limitation, those relating to the funding of terrorist activities and money laundering, including Section 326 of the USA PATRIOT Act of the United States ("Applicable Law"), the Trustee is required to obtain, verify, record and update certain information relating to individuals and entities which maintain a business relationship with the Trustee. Accordingly, each of the parties agree to provide to the Trustee, upon their request from time to time such identifying information and documentation as may be available for such party in order to enable the Trustee to comply with Applicable Law.

SECTION 11.18. No Personal Liability of Directors, Officers, Employees and Stockholders.

No past, present or future director, officer, employee, incorporator, member, partner or stockholder of the Parent, any Guarantor, the Issuer or of any other Subsidiary of the Parent, or any affiliate of the foregoing, as such, shall have any liability for any obligations of the Issuer or the Guarantors under the Notes, this Indenture or the Note Guarantees or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder of Notes by accepting a Note waives and releases all such liability. The waiver and release are part of the consideration for the issuance of the Notes. This waiver may not be effective to waive liabilities under the federal securities laws.

[Signature Pages Follow]

IN WITNESS WHEREOF, the parties have caused this Indenture to be duly executed all as of the date and year first written above.

JAMES HARDIE INTERNATIONAL FINANCE  
DESIGNATED ACTIVITY COMPANY,  
as Issuer

By: /s/ Lorcan Murtagh  
Name: Lorcan Murtagh  
Title: Authorized Signatory

GUARANTORS:

JAMES HARDIE INTERNATIONAL GROUP  
LIMITED,  
as a Guarantor

By: /s/ Lorcan Murtagh  
Name: Lorcan Murtagh  
Title: Authorized Signatory

JAMES HARDIE TECHNOLOGY LIMITED,  
as a Guarantor

By: /s/ Lorcan Murtagh  
Name: Lorcan Murtagh  
Title: Authorized Signatory

JAMES HARDIE BUILDING PRODUCTS INC.,  
as a Guarantor

By: /s/ Joseph C. Blasko  
Name: Joseph C. Blasko  
Title: Authorized Signatory

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DEUTSCHE BANK TRUST COMPANY  
AMERICAS,  
as Trustee

By: Deutsche Bank National Trust Company

By: /s/Robert S. Peschler  
Name: Robert S. Peschler  
Title: Vice President

By: /s/ Jacqueline Bartnick  
Name: Jacqueline Bartnick  
Title: Director

DEUTSCHE BANK AG, LONDON BRANCH,  
as Paying Agent and Transfer Agent

By: /s/ Shireen Mahmoud  
Name: Shireen Mahmoud  
Title: Assistant Vice President

By: /s/ Paul Yetton  
Name: Paul Yetton  
Title: Vice President

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[FORM OF RESTRICTED NOTE]

**JAMES HARDIE INTERNATIONAL FINANCE DESIGNATED ACTIVITY COMPANY**

3.625% SENIOR NOTE DUE 2026

*[Insert Global Note Legend, if applicable]*

*[Insert Private Placement Legend]*

*[Insert Regulation S Legend, if applicable]*

*[Insert ERISA Legend]*

No. [ ]

Common Code No. [ ]

ISIN No. [ ]

€[ ]

JAMES HARDIE INTERNATIONAL FINANCE DESIGNATED ACTIVITY COMPANY, a private designated activity company duly incorporated under the laws of Ireland (the "Issuer"), for value received promises to pay to BT Globenet Nominees Limited or registered assigns the principal sum of [ ] (or such other principal amount as shall be set forth in the Schedule of Exchanges of Interests in Global Note attached hereto), on October 1, 2026.

Interest Payment Dates: April 1 and October 1, commencing April 1, 2019.

Record Dates: March 15 and September 15 (whether or not a Business Day).

Reference is made to the further provisions of this Note contained herein, which will for all purposes have the same effect as if set forth at this place.

IN WITNESS WHEREOF, the Issuer has caused this Note to be signed manually or by facsimile by its duly authorized officer.

JAMES HARDIE INTERNATIONAL FINANCE  
DESIGNATED ACTIVITY COMPANY

By: \_\_\_\_\_  
Name:  
Title:

Certificate of Authentication

This is one of the 3.625% Senior Notes due 2026 referred to in the within-mentioned Indenture.

DEUTSCHE BANK AG, LONDON BRANCH,  
as Authentication Agent

By: \_\_\_\_\_  
Authorized Signatory

DEUTSCHE BANK AG, LONDON BRANCH,  
as Authentication Agent

By: \_\_\_\_\_  
Authorized Signatory

Dated:

[FORM OF REVERSE OF RESTRICTED NOTE]

**JAMES HARDIE INTERNATIONAL FINANCE DESIGNATED ACTIVITY COMPANY**

3.625% SENIOR NOTE DUE 2026

1. Interest. JAMES HARDIE INTERNATIONAL FINANCE DESIGNATED ACTIVITY COMPANY, a private designated activity company duly incorporated under the laws of Ireland (the “Issuer”), promises to pay interest on the principal amount set forth on the face hereof at a rate of 3.625% per annum. Interest hereon will accrue from and including the most recent date to which interest has been paid or, if no interest has been paid, from and including October 4, 2018 to but excluding the date on which interest is paid. Interest shall be payable in arrears on each April 1 and October 1, commencing April 1, 2019. Interest will be computed on the basis of a 360-day year of twelve 30-day months and, in the case of an incomplete month, the actual days elapsed. The Issuer shall pay interest on overdue principal and on overdue interest (to the full extent permitted by law) at the rate borne by the Notes.

2. Method of Payment. The Issuer will pay interest hereon (except defaulted interest) to the Persons who are registered Holders at the close of business on March 15 or September 15 preceding the Interest Payment Date (whether or not a Business Day). Holders of Physical Notes must surrender such Physical Notes to a Paying Agent to collect principal payments. Prior to 10:00 A.M., London time, on each Interest Payment Date and Maturity Date, the Issuer shall have deposited with the Paying Agent in immediately available funds euros sufficient to make cash payments, if any, due on such Interest Payment Date or Maturity Date, as the case may be, in a timely manner which permits such Paying Agents to remit payment to the Holders on such Interest Payment Date or Maturity Date, as the case may be. The principal and interest on Global Notes shall be payable to Euroclear and Clearstream or its nominee, as the case may be, as the sole registered owner and the sole Holder of the Global Notes represented thereby. All payments of principal, premium, if any, and interest with respect to Global Notes shall be made in accordance with the applicable procedures of Euroclear or Clearstream, as the case may be. The principal and interest on Physical Notes shall be payable, either in person, by wire transfer or by mail, at the office of the Paying Agent, such payment information to be received by the Paying Agent at least 15 days prior to the applicable payment date. Final payment of principal at maturity with respect to a Physical Note will only be made by the Trustee upon surrender of the related Note at the office or agency of the Issuer maintained for such purpose in London, United Kingdom.

3. Paying Agent and Registrar. Initially, Deutsche Bank Trust Company Americas (the “Trustee”) will act as Registrar and Deutsche Bank AG, London Branch will act as a Paying Agent. The Issuer may change any Paying Agent or Registrar without prior notice to the Holders. The Issuer or any Affiliate thereof may act as Paying Agent or Registrar.

4. Indenture. The Issuer issued the Notes under an Indenture dated as of October 4, 2018 (the “Indenture”) among the Issuer, the Guarantors and the Trustee. This is one

of an issue of Notes of the Issuer issued, or to be issued, under the Indenture. The terms of the Notes include those stated in the Indenture. The Notes are subject to all such terms, and Holders are referred to the Indenture and such Act for a statement of them. Capitalized and certain other terms used herein and not otherwise defined have the meanings set forth in the Indenture.

5. Optional Redemption.

At any time prior to October 1, 2021, the Issuer may on any one or more occasions redeem up to 40% of the original aggregate principal amount of outstanding Notes (calculated after giving effect to any issuance of Additional Notes) issued under the Indenture, upon not less than 15 nor more than 60 days' prior notice to Holders of the Notes, at a redemption price (as calculated by Holdings) equal to (i) 103.625% of the aggregate principal amount of the Notes redeemed, with an amount equal or less than the net cash proceeds from one or more Equity Offerings to the extent that such net proceeds are received by or contributed to Holdings, plus (ii) accrued and unpaid interest, if any, to but excluding the Redemption Date; *provided that*:

- (1) at least 50% of the original aggregate principal amount of the Notes issued under the Indenture on the Issue Date (but excluding any Additional Notes issued under the Indenture after the Issue Date) remains outstanding immediately after the occurrence of each such redemption; and
- (2) the redemption occurs within 180 days of the date of the closing of such Equity Offering.

In addition, prior to October 1, 2021, the Issuer may redeem on any one or more occasions the Notes, in whole or in part, upon not less than 15 nor more than 60 days' prior notice to Holders of the Notes at a redemption price equal to 100% of the principal amount thereof, plus accrued and unpaid interest, if any, to but excluding the applicable Make-Whole Redemption Date, plus the applicable Make-Whole Premium (a "Make-Whole Redemption"). The Issuer shall notify the Trustee of the Make-Whole Premium by delivering to the Trustee promptly after the calculation of such Make-Whole Premium, on or before the applicable Redemption Date, an Officer's Certificate showing the calculation thereof in reasonable detail, and the Trustee shall have no responsibility for verifying or otherwise for such calculation or the calculation of any redemption price or the Make-Whole Premium.

On or after October 1, 2021, the Issuer may on any one or more occasions redeem all or a part of the Notes, upon not less than 15 nor more than 60 days' prior notice to Holders of the Notes, at the redemption prices (expressed as percentages of principal amount) set forth below, plus accrued and unpaid interest, if any, on the Notes redeemed, to but excluding the applicable Redemption Date, if redeemed during the twelve-month period beginning on October 1 of the years indicated below:



<u>Year</u>	<u>Percentage</u>
2021.....	101.8125%
2022.....	100.9063%
2023 and thereafter.....	100.0000%

The Issuer may, at its option, at any time upon not less than 15 nor more than 60 days' notice to Holders of the Notes, redeem all (but not less than all) of the Notes then outstanding, at a redemption price equal to 100% of the principal amount of the Notes, plus accrued and unpaid interest thereon, if any, to but excluding the applicable Redemption Date (subject to the rights of Holders of the Notes to be redeemed on or after a record date for the payment of interest to receive interest on the relevant Interest Payment Date), and all Additional Amounts, if any, then due and which shall become due on the applicable Redemption Date as a result of the redemption or otherwise, if the Issuer reasonably determines in good faith that, as a result of a Change in Tax Law, the Issuer or any Guarantor is, or on the next Interest Payment Date in respect of the Notes would be, required to pay any Additional Amounts, and such obligation to pay Additional Amounts cannot be avoided by taking reasonable measures available to the Issuer or such Guarantor (including, without limitation, making payment through a paying agent located in another jurisdiction or, in the case of a Guarantor, by having the Issuer or another Guarantor make the payment).

For the avoidance of doubt, the Notes shall not be redeemable due to a Change in Tax Law because the Notes have not been listed or fail to remain listed on Euronext Dublin, unless such failure is caused by a Change in Tax Law that otherwise could serve as a basis for redemption of the Notes due to a Change in Tax Law.

The foregoing provisions related to redemption due to a Change in Tax Law shall apply *mutatis mutandis* to any successor to the Issuer.

Notwithstanding the foregoing provisions of this paragraph 5, the payment of accrued but unpaid interest in connection with the redemption of the Notes is subject to the rights of a Holder of the Notes on a record date for the payment of interest whose Notes are to be redeemed on or after such record date but on or prior to the related Interest Payment Date to receive interest on such Interest Payment Date.

6. Notice of Redemption. Notices of redemption shall be mailed by first class mail at least 15 but not more than 60 days before the Redemption Date to each Holder of the Notes to be redeemed at its registered address (or to the extent permitted or required by applicable procedures of Euroclear or Clearstream or regulations with respect to Global Notes, sent electronically in .pdf format), except that notices of redemption may be delivered or mailed more than 60 days prior to the Redemption Date if the notice is issued in connection with a defeasance of the Notes, a satisfaction and discharge of this Indenture with respect to the Notes or as specified in the last sentence of this paragraph. The Issuer may instruct the Trustee in writing to send the notice of redemption in the name or and at the expense of the Issuer provided the Trustee receives such written instruction at least 15 days (or such shorter time as the Trustee may agree) prior to the date such notice of redemption is to be sent. If any Note is to be redeemed in part only, the notice of redemption that relates to such Note shall state the portion of the principal

amount thereof to be redeemed. Any redemption and notice thereof may, in the Issuer's discretion, be subject to the satisfaction of one or more conditions precedent described in the notice relating to such redemption, including completion of an Equity Offering or other corporate transaction. In addition, if such redemption or purchase is subject to satisfaction of one or more conditions precedent, such notice shall describe each such condition, and if applicable, shall state that, in the Issuer's discretion, the Redemption Date or purchase date may be delayed until such time (including more than 60 days after the date the notice of redemption was mailed or delivered, including by electronic transmission) as any or all such conditions shall be satisfied or waived, or such redemption may not occur and such notice may be rescinded in the event that any or all such conditions shall not have been satisfied or waived by the Redemption Date or by the Redemption Date as so delayed, or such notice or offer may be rescinded at any time in the Issuer's discretion if the Issuer reasonably believes that any or all of such conditions will not be satisfied or waived.

7. Offers To Purchase. The Indenture provides that upon the occurrence of a Change of Control or an Asset Disposition and subject to further limitations contained therein, the Issuer shall make an offer to purchase outstanding Notes in accordance with the procedures set forth in the Indenture.

8. Denominations, Transfer, Exchange. The Notes are in registered form without coupons in denominations of €100,000 and any integral multiple of €1,000 in excess thereof. A Holder may transfer or exchange Notes in accordance with the Indenture. The Registrar and the Trustee may require a Holder, among other things, to furnish appropriate endorsements and transfer documents and to pay to it any taxes and fees required by law or permitted by the Indenture. The Issuer shall not be required to (i) transfer or exchange any Note selected for redemption or (ii) transfer or exchange any note for a period of 15 days before a mailing of notice of redemption. The Registrar need not register the transfer of or exchange any Notes or portion of a Note selected for redemption, or register the transfer of or exchange any Notes for a period of 15 days before a mailing of notice of redemption.

9. Persons Deemed Owners. The registered Holder of this Note may be treated as the owner of this Note for all purposes.

10. Unclaimed Money. If money for the payment of principal or interest remains unclaimed for two years, the Trustee will pay the money back to the Issuer at its written request. After that, Holders entitled to the money must look to the Issuer and the Guarantors for payment as general creditors unless an "abandoned property" law designates another Person.

11. Amendment, Supplement, Waiver, Etc. The Issuer and the Trustee may, without the consent of the Holders of any outstanding Notes, amend, waive or supplement the Indenture or the Notes for certain specified purposes, including, among other things, curing ambiguities, omissions, defects or inconsistencies, conforming the text of the Indenture, this Note, or the Note Guarantees to any provision of the "Description of the Notes" set forth in the Offering Memorandum to the extent that such provision in the "Description of the Notes" set forth in the Offering Memorandum was intended to be a verbatim recitation of a provision of the Indenture, this Note, or the Note Guarantees, providing for the assumption by a successor to the

Issuer of its obligations to the Holders and making any change that does not adversely affect the rights of any Holder in any material respect. Other amendments and modifications of the Indenture or the Notes may be made by the Issuer and the Trustee with the consent of the Holders of not less than a majority of the aggregate principal amount of the outstanding Notes, subject to certain exceptions requiring the consent of the Holders of the particular Notes to be affected.

12. Restrictive Covenants. The Indenture imposes certain limitations on the ability of the Issuer and its Subsidiaries to, among other things, create liens, make Restricted Payments, enter into Sale and Leaseback Transactions or consolidate, merge or sell all or substantially all of the assets of the Issuer and its Subsidiaries and requires the Issuer to provide reports to Holders of the Notes. Such limitations are subject to a number of important qualifications and exceptions. Pursuant to Section 4.06 of the Indenture, the Issuer must annually report to the Trustee on compliance with such limitations.

13. Successor Corporation. When a successor corporation assumes all the obligations of its predecessor under the Notes and the Indenture and the transaction complies with the terms of Article Five of the Indenture, the predecessor corporation will, except as provided in Article Five, be released from those obligations.

14. Defaults and Remedies. Events of Default are set forth in the Indenture. If an Event of Default occurs and is continuing under the Indenture, either the Trustee, by notice in writing to the Issuer, or the Holders of at least 25% in aggregate principal amount of the Notes then outstanding, by notice in writing to the Issuer and the Trustee specifying the respective Event of Default and that it is a "notice of acceleration", may declare the principal of and premium, if any, and accrued interest, if any, on the Notes to be due and payable, and upon such declaration of acceleration, such principal of and premium, if any, and accrued interest, if any, shall be immediately due and payable; *provided, however,* that, notwithstanding the foregoing, if an Event of Default specified in Section 6.01(7) occurs with respect to the Issuer, the principal of and premium, if any, and accrued interest, if any, on the Notes then outstanding shall become and be immediately due and payable without any declaration or other act on the part of the Trustee or any Holder.

Notwithstanding the foregoing, if after such acceleration but before a judgment or decree based on such acceleration is obtained by the Trustee, the Holders of a majority in aggregate principal amount of outstanding Notes may rescind and annul such acceleration if:

- (1) all Events of Default, other than nonpayment of principal, premium, if any, or interest that has become due solely because of the acceleration, have been cured or waived;
- (2) to the extent the payment of such interest is lawful, interest on overdue installments of interest and overdue principal, which has become due otherwise than by such declaration of acceleration, has been paid;

(3) the Issuer has paid the Trustee its reasonable compensation and reimbursed the Trustee for its expenses, disbursements and advances; and

(4) in the event of the cure or waiver of an Event of Default of the type described in Section 6.01(7), the Trustee shall have received an Officer's Certificate and an Opinion of Counsel that such Event of Default has been cured or waived.

No such rescission shall affect any subsequent Default or impair any right consequent thereto.

Holders may not enforce the Indenture or the Notes except as provided in the Indenture. The Trustee may require indemnity satisfactory to it before it enforces the Indenture or the Notes. Subject to certain limitations, Holders of a majority in principal amount of the then outstanding Notes may direct the Trustee in its exercise of any trust or power. The Trustee may withhold from Holders of the Notes notice of any continuing Default or Event of Default with respect to the Notes (except a Default or Event of Default relating to the payment of principal of or interest on the Notes) if it determines that withholding notice is in their best interests.

15. Trustee Dealings with the Issuer. The Trustee, in its individual or any other capacity, may make loans to, accept deposits from and perform services for the Issuer or its Affiliates, and may otherwise deal with the Issuer or its Affiliates, as if it were not Trustee.

16. No Recourse Against Others. No past, present or future director, officer, employee, incorporator, member, partner or stockholder of the Parent, any Guarantor, the Issuer or of any other Subsidiary of the Parent, or any affiliate of the foregoing, as such, shall have any liability for any obligations of the Issuer or the Guarantors under the Notes, the Indenture or the Note Guarantees or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder of the Notes by accepting a Note waives and releases all such liability. This waiver may not be effective to waive liabilities under the federal securities laws.

17. Discharge. The Issuer's obligations pursuant to the Indenture will be discharged, except for obligations pursuant to certain sections thereof, subject to the terms of the Indenture, upon the payment of all the Notes or upon the irrevocable deposit with the Trustee of cash in euros, European Government Obligations or a combination thereof, in such amounts as will be sufficient to pay when due principal of and interest on the Notes to maturity or redemption, as the case may be.

18. Guarantees. From and after the Issue Date, the Notes will be entitled to the benefits of certain Note Guarantees made for the benefit of the Holders. Reference is hereby made to the Indenture for a statement of the respective rights, limitations of rights, duties and obligations thereunder of the Guarantors, the Trustee and the Holders.

19. Authentication. This Note shall not be valid until the Trustee manually signs the certificate of authentication on the other side of this Note.

20. Governing Law. THIS NOTE SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.

21. Abbreviations. Customary abbreviations may be used in the name of a Holder or an assignee, such as: TEN COM (= tenants in common), TENANT (= tenants by the entireties), JT TEN (= joint tenants with right of survivorship and not as tenants in common), CUST (= Custodian), and U/G/M/A (= Uniform Gifts to Minors Act).

The Issuer will furnish to any Holder upon written request and without charge a copy of the Indenture. Requests may be made to:

James Hardie International Finance Designated Activity Company  
Europa House 2nd Floor  
Harcourt Centre, Harcourt Street  
Dublin DO2 WR20, Ireland  
Facsimile: +353-1-479-1128  
E-mail: [treasury@jameshardie.com](mailto:treasury@jameshardie.com)  
Attention: The Treasurer

ASSIGNMENT

I or we assign and transfer this Note to:

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(Insert assignee's social security or tax I.D. number)

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(Print or type name, address and zip code of assignee)

and irrevocably appoint \_\_\_\_\_

Agent to transfer this Note on the books of the Issuer. The Agent may substitute another to act for him.

Date: \_\_\_\_\_ Your Signature: \_\_\_\_\_  
(Sign exactly as your name appears on the other side of this Note)

Signature Guarantee: \_\_\_\_\_

SIGNATURE GUARANTEE

Signatures must be guaranteed by a participant in a recognized signature guaranty medallion program or other signature guarantor acceptable to the Trustee.

OPTION OF HOLDER TO ELECT PURCHASE

If you want to elect to have all or any part of this Note purchased by the Issuer pursuant to Section 4.08 or Section 4.09 of the Indenture, check the appropriate box:

Section 4.08                       Section 4.09

If you want to have only part of the Note purchased by the Issuer pursuant to Section 4.08 or Section 4.09 of the Indenture, state the amount you elect to have purchased:

€ \_\_\_\_\_  
(€100,000 or any integral multiple of €1,000  
in excess thereof; provided that the part not  
purchased must be at least €100,000)

Date: \_\_\_\_\_

Your Signature: \_\_\_\_\_  
(Sign exactly as your name appears on the face  
of this Note)

\_\_\_\_\_  
Signature Guaranteed

SIGNATURE GUARANTEE

Signatures must be guaranteed by a participant in a recognized signature guaranty medallion program or other signature guarantor acceptable to the Trustee.

SCHEDULE OF EXCHANGES OF INTERESTS IN GLOBAL NOTE\*

The following exchanges of a part of this Global Note for an interest in another Global Note or for a Physical Note, or exchanges of a part of another Global Note or Physical Note for an interest in this Global Note, have been made:

<u>Date of Exchange</u>	<u>Amount of decrease in Principal Amount of this Global Note</u>	<u>Amount of increase in Principal Amount of this Global Note</u>	<u>Principal Amount of this Global Note following such decrease (or increase)</u>	<u>Signature of authorized signatory of Trustee</u>
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\* Insert in Global Securities only.



[FORM OF UNRESTRICTED NOTE]

**JAMES HARDIE INTERNATIONAL FINANCE DESIGNATED ACTIVITY COMPANY**

3.625% SENIOR NOTE DUE 2026

*[Insert Global Note Legend, if applicable]*

*[Insert ERISA Legend]*

No. [ ]

Common Code No. [ ]

ISIN No. [ ]

€[ ]

JAMES HARDIE INTERNATIONAL FINANCE DESIGNATED ACTIVITY COMPANY, a private designated activity company duly incorporated under the laws of Ireland (the “Issuer”), for value received promises to pay to BT Globenet Nominees Limited or registered assigns the principal sum of [ ] (or such other principal amount as shall be set forth in the Schedule of Exchanges of Interests in Global Note attached hereto), on October 1, 2026.

Interest Payment Dates: April 1 and October 1, commencing April 1, 2019.

Record Dates: March 15 and September 15 (whether or not a Business Day).

Reference is made to the further provisions of this Note contained herein, which will for all purposes have the same effect as if set forth at this place.

IN WITNESS WHEREOF, the Issuer has caused this Note to be signed manually or by facsimile by its duly authorized officer.

JAMES HARDIE INTERNATIONAL FINANCE  
DESIGNATED ACTIVITY COMPANY

By: \_\_\_\_\_  
Name:  
Title:

Certificate of Authentication

This is one of the 3.625% Senior Notes due 2026 referred to in the within-mentioned Indenture.

DEUTSCHE BANK AG, LONDON BRANCH,  
as Authentication Agent

By: \_\_\_\_\_  
Authorized Signatory

DEUTSCHE BANK AG, LONDON BRANCH,  
as Authentication Agent

By: \_\_\_\_\_  
Authorized Signatory

Dated:

[FORM OF REVERSE OF UNRESTRICTED NOTE]

**JAMES HARDIE INTERNATIONAL FINANCE DESIGNATED ACTIVITY COMPANY**

3.625% SENIOR NOTE DUE 2026

1. Interest. JAMES HARDIE INTERNATIONAL FINANCE DESIGNATED ACTIVITY COMPANY, a private designated activity company duly incorporated under the laws of Ireland (the “Issuer”), promises to pay interest on the principal amount set forth on the face hereof at a rate of 3.625% per annum. Interest hereon will accrue from and including the most recent date to which interest has been paid or, if no interest has been paid, from and including October 4, 2018 to but excluding the date on which interest is paid. Interest shall be payable in arrears on each April 1 and October 1, commencing April 1, 2019. Interest will be computed on the basis of a 360-day year of twelve 30-day months and, in the case of an incomplete month, the actual days elapsed. The Issuer shall pay interest on overdue principal and on overdue interest (to the full extent permitted by law) at the rate borne by the Notes.

2. Method of Payment. The Issuer will pay interest hereon (except defaulted interest) to the Persons who are registered Holders at the close of business on March 15 or September 15 preceding the Interest Payment Date (whether or not a Business Day). Holders of Physical Notes must surrender such Physical Notes to a Paying Agent to collect principal payments. Prior to 10:00 A.M., London time, on each Interest Payment Date and Maturity Date, the Issuer shall have deposited with the Paying Agent in immediately available funds euros sufficient to make cash payments, if any, due on such Interest Payment Date or Maturity Date, as the case may be, in a timely manner which permits such Paying Agents to remit payment to the Holders on such Interest Payment Date or Maturity Date, as the case may be. The principal and interest on Global Notes shall be payable to Euroclear and Clearstream or its nominee, as the case may be, as the sole registered owner and the sole Holder of the Global Notes represented thereby. All payments of principal, premium, if any, and interest with respect to Global Notes shall be made in accordance with the applicable procedures of Euroclear or Clearstream, as the case may be. The principal and interest on Physical Notes shall be payable, either in person, by wire transfer or by mail, at the office of the Paying Agent, such payment information to be received by the Paying Agent at least 15 days prior to the applicable payment date. Final payment of principal at maturity with respect to a Physical Note will only be made by the Trustee upon surrender of the related Note at the office or agency of the Issuer maintained for such purpose in London, United Kingdom.

3. Paying Agent and Registrar. Initially, Deutsche Bank Trust Company Americas (the “Trustee”) will act as Registrar and Deutsche Bank AG, London Branch will act as a Paying Agent. The Issuer may change any Paying Agent or Registrar without prior notice to the Holders. The Issuer or any Affiliate thereof may act as Paying Agent or Registrar.

4. Indenture. The Issuer issued the Notes under an Indenture dated as of October 4, 2018 (the “Indenture”) among the Issuer, the Guarantors and the Trustee. This is one

of an issue of Notes of the Issuer issued, or to be issued, under the Indenture. The terms of the Notes include those stated in the Indenture. The Notes are subject to all such terms, and Holders are referred to the Indenture and such Act for a statement of them. Capitalized and certain other terms used herein and not otherwise defined have the meanings set forth in the Indenture.

5. Optional Redemption.

At any time prior to October 1, 2021, the Issuer may on any one or more occasions redeem up to 40% of the original aggregate principal amount of outstanding Notes (calculated after giving effect to any issuance of Additional Notes) issued under the Indenture, upon not less than 15 nor more than 60 days' prior notice to Holders of the Notes, at a redemption price (as calculated by Holdings) equal to (i) 103.625% of the aggregate principal amount of the Notes redeemed, with an amount equal or less than the net cash proceeds from one or more Equity Offerings to the extent that such net proceeds are received by or contributed to Holdings, plus (ii) accrued and unpaid interest, if any, to but excluding the Redemption Date; *provided that*:

- (1) at least 50% of the original aggregate principal amount of the Notes issued under the Indenture on the Issue Date (but excluding any Additional Notes issued under the Indenture after the Issue Date) remains outstanding immediately after the occurrence of each such redemption; and
- (2) the redemption occurs within 180 days of the date of the closing of such Equity Offering.

In addition, prior to October 1, 2021, the Issuer may redeem on any one or more occasions the Notes, in whole or in part, upon not less than 15 nor more than 60 days' prior notice to Holders of the Notes at a redemption price equal to 100% of the principal amount thereof, plus accrued and unpaid interest, if any, to but excluding the applicable Make-Whole Redemption Date, plus the applicable Make-Whole Premium (a "Make-Whole Redemption"). The Issuer shall notify the Trustee of the Make-Whole Premium by delivering to the Trustee promptly after the calculation of such Make-Whole Premium, on or before the applicable Redemption Date, an Officer's Certificate showing the calculation thereof in reasonable detail, and the Trustee shall have no responsibility for verifying or otherwise for such calculation or the calculation of any redemption price or the Make-Whole Premium.

On or after October 1, 2021, the Issuer may on any one or more occasions redeem all or a part of the Notes, upon not less than 15 nor more than 60 days' prior notice to Holders of the Notes, at the redemption prices (expressed as percentages of principal amount) set forth below, plus accrued and unpaid interest, if any, on the Notes redeemed, to but excluding the applicable Redemption Date, if redeemed during the twelve-month period beginning on October 1 of the years indicated below:

<u>Year</u>	<u>Percentage</u>
2021.....	101.8125%
2022.....	100.9063%
2023 and thereafter.....	100.0000%

The Issuer may, at its option, at any time upon not less than 15 nor more than 60 days' notice to Holders of the Notes, redeem all (but not less than all) of the Notes then outstanding, at a redemption price equal to 100% of the principal amount of the Notes, plus accrued and unpaid interest thereon, if any, to but excluding the applicable Redemption Date (subject to the rights of Holders of the Notes to be redeemed on or after a record date for the payment of interest to receive interest on the relevant Interest Payment Date), and all Additional Amounts, if any, then due and which shall become due on the applicable Redemption Date as a result of the redemption or otherwise, if the Issuer reasonably determines in good faith that, as a result of a Change in Tax Law, the Issuer or any Guarantor is, or on the next Interest Payment Date in respect of the Notes would be, required to pay any Additional Amounts, and such obligation to pay Additional Amounts cannot be avoided by taking reasonable measures available to the Issuer or such Guarantor (including, without limitation, making payment through a paying agent located in another jurisdiction or, in the case of a Guarantor, by having the Issuer or another Guarantor make the payment).

For the avoidance of doubt, the Notes shall not be redeemable due to a Change in Tax Law because the Notes have not been listed or fail to remain listed on Euronext Dublin, unless such failure is caused by a Change in Tax Law that otherwise could serve as a basis for redemption of the Notes due to a Change in Tax Law.

The foregoing provisions related to redemption due to a Change in Tax Law shall apply *mutatis mutandis* to any successor to the Issuer.

Notwithstanding the foregoing provisions of this paragraph 5, the payment of accrued but unpaid interest in connection with the redemption of the Notes is subject to the rights of a Holder of the Notes on a record date for the payment of interest whose Notes are to be redeemed on or after such record date but on or prior to the related Interest Payment Date to receive interest on such Interest Payment Date.

6. Notice of Redemption. Notices of redemption shall be mailed by first class mail at least 15 but not more than 60 days before the Redemption Date to each Holder of the Notes to be redeemed at its registered address (or to the extent permitted or required by applicable procedures of Euroclear of Clearstream or regulations with respect to Global Notes, sent electronically in .pdf format), except that notices of redemption may be delivered or mailed more than 60 days prior to the Redemption Date if the notice is issued in connection with a defeasance of the Notes, a satisfaction and discharge of this Indenture with respect to the Notes or as specified in the last sentence of this paragraph. The Issuer may instruct the Trustee in writing to send the notice of redemption in the name or and at the expense of the Issuer provided the Trustee receives such written instruction at least 15 days (or such shorter time as the Trustee may agree) prior to the date such notice of redemption is to be sent. If any Note is to be redeemed in part only, the notice of redemption that relates to such Note shall state the portion of the principal

amount thereof to be redeemed. Any redemption and notice thereof may, in the Issuer's discretion, be subject to the satisfaction of one or more conditions precedent described in the notice relating to such redemption, including completion of an Equity Offering or other corporate transaction. In addition, if such redemption or purchase is subject to satisfaction of one or more conditions precedent, such notice shall describe each such condition, and if applicable, shall state that, in the Issuer's discretion, the Redemption Date or purchase date may be delayed until such time (including more than 60 days after the date the notice of redemption was mailed or delivered, including by electronic transmission) as any or all such conditions shall be satisfied or waived, or such redemption may not occur and such notice may be rescinded in the event that any or all such conditions shall not have been satisfied or waived by the Redemption Date or by the Redemption Date as so delayed, or such notice or offer may be rescinded at any time in the Issuer's discretion if the Issuer reasonably believes that any or all of such conditions will not be satisfied or waived.

7. Offers To Purchase. The Indenture provides that upon the occurrence of a Change of Control or an Asset Disposition and subject to further limitations contained therein, the Issuer shall make an offer to purchase outstanding Notes in accordance with the procedures set forth in the Indenture.

8. Denominations, Transfer, Exchange. The Notes are in registered form without coupons in denominations of €100,000 and any integral multiple of €1,000 in excess thereof. A Holder may transfer or exchange Notes in accordance with the Indenture. The Registrar and the Trustee may require a Holder, among other things, to furnish appropriate endorsements and transfer documents and to pay to it any taxes and fees required by law or permitted by the Indenture. The Issuer shall not be required to (i) transfer or exchange any Note selected for redemption or (ii) transfer or exchange any note for a period of 15 days before a mailing of notice of redemption. The Registrar need not register the transfer of or exchange any Notes or portion of a Note selected for redemption, or register the transfer of or exchange any Notes for a period of 15 days before a mailing of notice of redemption.

9. Persons Deemed Owners. The registered Holder of this Note may be treated as the owner of this Note for all purposes.

10. Unclaimed Money. If money for the payment of principal or interest remains unclaimed for two years, the Trustee will pay the money back to the Issuer at its written request. After that, Holders entitled to the money must look to the Issuer and the Guarantors for payment as general creditors unless an "abandoned property" law designates another Person.

11. Amendment, Supplement, Waiver, Etc. The Issuer and the Trustee may, without the consent of the Holders of any outstanding Notes, amend, waive or supplement the Indenture or the Notes for certain specified purposes, including, among other things, curing ambiguities, omissions, defects or inconsistencies, conforming the text of the Indenture, this Note, or the Note Guarantees to any provision of the "Description of the Notes" set forth in the Offering Memorandum to the extent that such provision in the "Description of the Notes" set forth in the Offering Memorandum was intended to be a verbatim recitation of a provision of the Indenture, this Note, or the Note Guarantees, providing for the assumption by a successor to the

Issuer of its obligations to the Holders and making any change that does not adversely affect the rights of any Holder in any material respect. Other amendments and modifications of the Indenture or the Notes may be made by the Issuer and the Trustee with the consent of the Holders of not less than a majority of the aggregate principal amount of the outstanding Notes, subject to certain exceptions requiring the consent of the Holders of the particular Notes to be affected.

12. Restrictive Covenants. The Indenture imposes certain limitations on the ability of the Issuer and its Subsidiaries to, among other things, create liens, make Restricted Payments, enter into Sale and Leaseback Transactions or consolidate, merge or sell all or substantially all of the assets of the Issuer and its Subsidiaries and requires the Issuer to provide reports to Holders of the Notes. Such limitations are subject to a number of important qualifications and exceptions. Pursuant to Section 4.06 of the Indenture, the Issuer must annually report to the Trustee on compliance with such limitations.

13. Successor Corporation. When a successor corporation assumes all the obligations of its predecessor under the Notes and the Indenture and the transaction complies with the terms of Article Five of the Indenture, the predecessor corporation will, except as provided in Article Five, be released from those obligations.

14. Defaults and Remedies. Events of Default are set forth in the Indenture. If an Event of Default occurs and is continuing under the Indenture, either the Trustee, by notice in writing to the Issuer, or the Holders of at least 25% in aggregate principal amount of the Notes then outstanding, by notice in writing to the Issuer and the Trustee specifying the respective Event of Default and that it is a "notice of acceleration", may declare the principal of and premium, if any, and accrued interest, if any, on the Notes to be due and payable, and upon such declaration of acceleration, such principal of and premium, if any, and accrued interest, if any, shall be immediately due and payable; *provided, however,* that, notwithstanding the foregoing, if an Event of Default specified in Section 6.01(7) occurs with respect to the Issuer, the principal of and premium, if any, and accrued interest, if any, on the Notes then outstanding shall become and be immediately due and payable without any declaration or other act on the part of the Trustee or any Holder.

Notwithstanding the foregoing, if after such acceleration but before a judgment or decree based on such acceleration is obtained by the Trustee, the Holders of a majority in aggregate principal amount of outstanding Notes may rescind and annul such acceleration if:

- (1) all Events of Default, other than nonpayment of principal, premium, if any, or interest that has become due solely because of the acceleration, have been cured or waived;
- (2) to the extent the payment of such interest is lawful, interest on overdue installments of interest and overdue principal, which has become due otherwise than by such declaration of acceleration, has been paid;



(3) the Issuer has paid the Trustee its reasonable compensation and reimbursed the Trustee for its expenses, disbursements and advances; and

(4) in the event of the cure or waiver of an Event of Default of the type described in Section 6.01(7), the Trustee shall have received an Officer's Certificate and an Opinion of Counsel that such Event of Default has been cured or waived.

No such rescission shall affect any subsequent Default or impair any right consequent thereto.

Holders may not enforce the Indenture or the Notes except as provided in the Indenture. The Trustee may require indemnity satisfactory to it before it enforces the Indenture or the Notes. Subject to certain limitations, Holders of a majority in principal amount of the then outstanding Notes may direct the Trustee in its exercise of any trust or power. The Trustee may withhold from Holders of the Notes notice of any continuing Default or Event of Default with respect to the Notes (except a Default or Event of Default relating to the payment of principal of or interest on the Notes) if it determines that withholding notice is in their best interests.

15. Trustee Dealings with the Issuer. The Trustee, in its individual or any other capacity, may make loans to, accept deposits from and perform services for the Issuer or its Affiliates, and may otherwise deal with the Issuer or its Affiliates, as if it were not Trustee.

16. No Recourse Against Others. No past, present or future director, officer, employee, incorporator, member, partner or stockholder of the Parent, any Guarantor, the Issuer or of any other Subsidiary of the Parent, or any affiliate of the foregoing, as such, shall have any liability for any obligations of the Issuer or the Guarantors under the Notes, the Indenture or the Note Guarantees or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder of the Notes by accepting a Note waives and releases all such liability. This waiver may not be effective to waive liabilities under the federal securities laws.

17. Discharge. The Issuer's obligations pursuant to the Indenture will be discharged, except for obligations pursuant to certain sections thereof, subject to the terms of the Indenture, upon the payment of all the Notes or upon the irrevocable deposit with the Trustee of cash in euros, European Government Obligations or a combination thereof, in such amounts as will be sufficient to pay when due principal of and interest on the Notes to maturity or redemption, as the case may be.

18. Guarantees. From and after the Issue Date, the Notes will be entitled to the benefits of certain Note Guarantees made for the benefit of the Holders. Reference is hereby made to the Indenture for a statement of the respective rights, limitations of rights, duties and obligations thereunder of the Guarantors, the Trustee and the Holders.

19. Authentication. This Note shall not be valid until the Trustee manually signs the certificate of authentication on the other side of this Note.

20. Governing Law. THIS NOTE SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.

21. Abbreviations. Customary abbreviations may be used in the name of a Holder or an assignee, such as: TEN COM (= tenants in common), TENANT (= tenants by the entireties), JT TEN (= joint tenants with right of survivorship and not as tenants in common), CUST (= Custodian), and U/G/M/A (= Uniform Gifts to Minors Act).

The Issuer will furnish to any Holder upon written request and without charge a copy of the Indenture. Requests may be made to:

James Hardie International Finance Designated Activity Company  
Europa House 2nd Floor  
Harcourt Centre, Harcourt Street  
Dublin DO2 WR20, Ireland  
Facsimile: +353-1-479-1128  
E-mail: [treasury@jameshardie.com](mailto:treasury@jameshardie.com)  
Attention: The Treasurer

ASSIGNMENT

I or we assign and transfer this Note to:

---

(Insert assignee's social security or tax I.D. number)

---

(Print or type name, address and zip code of assignee)

and irrevocably appoint \_\_\_\_\_

Agent to transfer this Note on the books of the Issuer. The Agent may substitute another to act for him.

Date: \_\_\_\_\_ Your Signature: \_\_\_\_\_  
(Sign exactly as your name appears on the other side of this Note)

Signature Guarantee: \_\_\_\_\_

SIGNATURE GUARANTEE

Signatures must be guaranteed by a participant in a recognized signature guaranty medallion program or other signature guarantor acceptable to the Trustee.

OPTION OF HOLDER TO ELECT PURCHASE

If you want to elect to have all or any part of this Note purchased by the Issuer pursuant to Section 4.08 or Section 4.09 of the Indenture, check the appropriate box:

Section 4.08                       Section 4.09

If you want to have only part of the Note purchased by the Issuer pursuant to Section 4.08 or Section 4.09 of the Indenture, state the amount you elect to have purchased:

€ \_\_\_\_\_  
(€100,000 or any integral multiple of €1,000  
in excess thereof; provided that the part not  
purchased must be at least €100,000)

Date: \_\_\_\_\_

Your Signature: \_\_\_\_\_  
(Sign exactly as your name appears on the face  
of this Note)

\_\_\_\_\_  
Signature Guaranteed

SIGNATURE GUARANTEE

Signatures must be guaranteed by a participant in a recognized signature guaranty medallion program or other signature guarantor acceptable to the Trustee.

EXHIBIT B

[FORM OF LEGEND FOR RESTRICTED SECURITIES]

Any Restricted Note authenticated and delivered hereunder shall bear a legend (which would be in addition to any other legends required in the case of a Global Note) in substantially the following form:

THE SECURITY (OR ITS PREDECESSOR) EVIDENCED HEREBY WAS ORIGINALLY ISSUED IN A TRANSACTION EXEMPT FROM REGISTRATION UNDER SECTION 5 OF THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND HAS NOT BEEN REGISTERED UNDER THE SECURITIES LAWS OF ANY STATE IN THE UNITED STATES OR OTHER JURISDICTION. NONE OF THE SECURITY EVIDENCED HEREBY OR ANY INTEREST OF PARTICIPATION THEREIN MAY BE OFFERED, SOLD, ASSIGNED, PLEDGED, ENCUMBERED OR OTHERWISE TRANSFERRED OR DISPOSED OF IN THE ABSENCE OF SUCH REGISTRATION OR AN APPLICABLE EXEMPTION THEREFROM. EACH PURCHASER OF THE SECURITY EVIDENCED HEREBY IS HEREBY NOTIFIED THAT THE SELLER MAY BE RELYING ON THE EXEMPTION FROM THE PROVISIONS OF SECTION 5 OF THE SECURITIES ACT PROVIDED BY RULE 144A THEREUNDER. THE HOLDER OF THE SECURITY EVIDENCED HEREBY AGREES, ON ITS OWN BEHALF AND ON BEHALF OF ANY INVESTOR ACCOUNT FOR WHICH IT HAS PURCHASED SECURITIES, FOR THE BENEFIT OF THE ISSUER THAT (A) IT IS A "QUALIFIED INSTITUTIONAL BUYER" (AS DEFINED IN RULE 144A UNDER THE U.S. SECURITIES ACT) OR IT IS NOT A U.S. PERSON AND IS ACQUIRING THIS NOTE IN AN "OFFSHORE TRANSACTION" PURSUANT TO RULE 904 OF REGULATION S UNDER THE U.S. SECURITIES ACT, (B) SUCH SECURITY MAY BE RESOLD, PLEDGED OR OTHERWISE TRANSFERRED, PRIOR TO THE DATE (THE "RESALE RESTRICTION TERMINATION DATE") THAT IS [IN THE CASE OF RULE 144A NOTES: ONE YEAR AFTER THE LATER OF THE ORIGINAL ISSUE DATE HEREOF, THE ORIGINAL ISSUE DATE OF THE ISSUANCE OF ANY ADDITIONAL NOTES AND THE LAST DATE ON WHICH THE ISSUER OR ANY AFFILIATE OF THE ISSUER WAS THE OWNER OF THIS SECURITY (OR ANY PREDECESSOR OF SUCH SECURITY),] [IN THE CASE OF REGULATION S NOTES: 40 DAYS AFTER THE LATER OF THE ORIGINAL ISSUE DATE HEREOF, THE ORIGINAL ISSUE DATE OF THE ISSUANCE OF ANY ADDITIONAL NOTES AND THE DATE ON WHICH THIS SECURITY (OR ANY PREDECESSOR OF SUCH SECURITY) WAS FIRST OFFERED TO PERSONS OTHER THAN DISTRIBUTORS (AS DEFINED IN RULE 902 OF REGULATION S) IN RELIANCE ON REGULATION S] ONLY (1)(a) FOR SO LONG AS THE NOTES ARE ELIGIBLE FOR RESALE PURSUANT TO RULE 144A UNDER THE SECURITIES ACT INSIDE THE UNITED STATES TO A PERSON WHO THE SELLER REASONABLY BELIEVES IS A QUALIFIED INSTITUTIONAL BUYER (AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT) PURCHASING FOR ITS OWN ACCOUNT

OR FOR THE ACCOUNT OF A QUALIFIED INSTITUTIONAL BUYER IN A TRANSACTION MEETING THE REQUIREMENTS OF RULE 144A UNDER THE SECURITIES ACT AND TO WHOM NOTICE IS GIVEN THAT THE TRANSFER IS BEING MADE IN RELIANCE ON RULE 144A, (b) OUTSIDE THE UNITED STATES TO A NON-U.S. PERSON IN A TRANSACTION MEETING THE REQUIREMENTS OF REGULATION S UNDER THE SECURITIES ACT, OR (c) IN ACCORDANCE WITH ANOTHER EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT (AND IN THE CASE OF CLAUSES (1)(b) AND (c), BASED UPON AN OPINION OF COUNSEL, CERTIFICATION AND/ OR OTHER INFORMATION ACCEPTABLE TO THE ISSUER IF THE ISSUER SO REQUESTS), (2) TO THE ISSUER, A GUARANTOR OR A SUBSIDIARY THEREOF OR (3) PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT AND, IN EACH CASE, IN ACCORDANCE WITH ANY APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES OR ANY OTHER APPLICABLE JURISDICTION AND (C) THE HOLDER WILL, AND EACH SUBSEQUENT HOLDER IS REQUIRED TO, NOTIFY ANY PURCHASER OF THE SECURITY EVIDENCED HEREBY OF THE RESALE RESTRICTIONS SET FORTH IN CLAUSE (B) ABOVE. THIS LEGEND WILL BE REMOVED UPON THE REQUEST OF THE HOLDER AFTER THE RESALE RESTRICTION TERMINATION DATE.

EXHIBIT C

[FORM OF ERISA LEGEND]

Any Note authenticated and delivered hereunder shall bear a legend (which would be in addition to any other legends required in the case of a Restricted Note or Global Note) in substantially the following form:

BY ITS ACQUISITION OF THIS SECURITY OR ANY INTEREST THEREIN, THE PURCHASER OR HOLDER THEREOF WILL BE DEEMED TO HAVE REPRESENTED AND WARRANTED TO THE ISSUER, THE INITIAL PURCHASERS AND EACH OF THEIR RESPECTIVE AFFILIATES THAT EITHER (A) NO PORTION OF THE ASSETS USED BY SUCH PURCHASER OR HOLDER TO ACQUIRE OR HOLD THIS SECURITY CONSTITUTES THE ASSETS OF AN EMPLOYEE BENEFIT PLAN THAT IS SUBJECT TO TITLE I OF THE EMPLOYEE RETIREMENT INCOME SECURITY ACT OF 1974, AS AMENDED ("ERISA"), OF A PLAN, INDIVIDUAL RETIREMENT ACCOUNT OR OTHER ARRANGEMENT THAT IS SUBJECT TO SECTION 4975 OF THE U.S. INTERNAL REVENUE CODE OF 1986, AS AMENDED (THE "INTERNAL REVENUE CODE") OR PROVISIONS UNDER ANY OTHER FEDERAL, STATE, LOCAL, NON-U.S. OR OTHER LAWS, RULES OR REGULATIONS THAT ARE SIMILAR TO SUCH PROVISIONS OF ERISA OR THE INTERNAL REVENUE CODE ("SIMILAR LAWS"), AND OF AN ENTITY WHOSE UNDERLYING ASSETS ARE CONSIDERED TO INCLUDE "PLAN ASSETS" OF ANY SUCH PLAN, ACCOUNT OR ARRANGEMENT (EACH, A "PLAN"), OR (B) THE ACQUISITION AND HOLDING OF THIS SECURITY WILL NOT CONSTITUTE A NON-EXEMPT PROHIBITED TRANSACTION UNDER SECTION 406 OF ERISA OR SECTION 4975 OF THE INTERNAL REVENUE CODE OR A SIMILAR VIOLATION UNDER ANY APPLICABLE SIMILAR LAWS.

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EXHIBIT D

[FORM OF LEGEND FOR GLOBAL NOTE]

Any Global Note authenticated and delivered hereunder shall bear a legend (which would be in addition to any other legends required in the case of a Restricted Note) in substantially the following form:

THIS NOTE IS A GLOBAL NOTE WITHIN THE MEANING OF THE INDENTURE HEREINAFTER REFERRED TO AND IS REGISTERED IN THE NAME OF A DEPOSITORY OR A NOMINEE OF A DEPOSITORY. THIS NOTE IS NOT EXCHANGEABLE FOR NOTES REGISTERED IN THE NAME OF A PERSON OTHER THAN THE DEPOSITORY OR ITS NOMINEE EXCEPT IN THE LIMITED CIRCUMSTANCES DESCRIBED IN THE INDENTURE, AND NO TRANSFER OF THIS NOTE (OTHER THAN A TRANSFER OF THIS NOTE AS A WHOLE BY THE DEPOSITORY TO A NOMINEE OF THE DEPOSITORY OR BY A NOMINEE OF THE DEPOSITORY TO THE DEPOSITORY OR ANOTHER NOMINEE OF THE DEPOSITORY) MAY BE REGISTERED EXCEPT IN THE LIMITED CIRCUMSTANCES DESCRIBED IN THE INDENTURE.

UNLESS THIS CERTIFICATE IS PRESENTED BY AN AUTHORIZED REPRESENTATIVE OF EITHER EUROCLEAR BANK SA/NV ("EUROCLEAR") OR CLEARSTREAM BANKING, SOCIÉTÉ ANONYME ("CLEARSTREAM"), TO THE ISSUER OR ITS AGENT FOR REGISTRATION OF TRANSFER, EXCHANGE, OR PAYMENT, AND ANY CERTIFICATE ISSUED IS REGISTERED IN THE NAME OF THE COMMON DEPOSITORY OR IN SUCH OTHER NAME AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF EUROCLEAR OR CLEARSTREAM (AND ANY PAYMENT IS MADE TO THE COMMON DEPOSITORY OR SUCH OTHER ENTITY AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF EUROCLEAR OR CLEARSTREAM), ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL INASMUCH AS THE REGISTERED OWNER HEREOF, THE COMMON DEPOSITORY, HAS AN INTEREST HEREIN.



EXHIBIT E

[FORM OF LEGEND FOR REGULATION S NOTE]

Any Regulation S Note authenticated and delivered hereunder shall bear a legend (which would be in addition to any other legends required in the case of a Restricted Note) in substantially the following form:

“BY ITS ACQUISITION HEREOF, THE HOLDER HEREOF REPRESENTS THAT IT IS NOT A U.S. PERSON, NOR IS IT PURCHASING FOR THE ACCOUNT OF A U.S. PERSON, AND IS ACQUIRING THIS NOTE IN AN OFFSHORE TRANSACTION IN ACCORDANCE WITH REGULATION S UNDER THE SECURITIES ACT.”

**FORM OF CERTIFICATE OF TRANSFER**

James Hardie International Finance Designated Activity Company  
Europa House 2nd Floor  
Harcourt Centre, Harcourt Street  
Dublin DO2 WR20, Ireland  
Facsimile: +353-1-479-1128  
E-mail: treasury@jameshardie.com  
Attention: The Treasurer

Deutsche Bank Trust Company Americas  
c/o DB Services Americas, Inc.  
5022 Gate Parkway, Suite 200  
Jacksonville, FL 32256  
Attention: Transfer Department

re: James Hardie International Finance Designated Activity Company

Re: 3.625% Senior Notes due 2026

(Common Code \_\_\_\_\_)  
(ISIN \_\_\_\_\_)

Reference is hereby made to the Indenture, dated as of October 4, 2018 (the "Indenture"), by and among James Hardie International Finance Designated Activity Company (the "Issuer"), the Guarantors and Deutsche Bank Trust Company Americas, as trustee. Capitalized terms used but not defined herein shall have the meanings given to them in the Indenture.

\_\_\_\_\_ (the "Transferor") owns and proposes to transfer the Note[s] or interest in such Note[s] specified in Annex A hereto, in the principal amount of \_\_\_\_\_ in such Note[s] or interests (the "Transfer"), to \_\_\_\_\_ (the "Transferee"), as further specified in Annex A hereto. In connection with the Transfer, the Transferor hereby certifies that:

[CHECK ALL THAT APPLY]

1.  **Check if Transferee will take delivery of a beneficial interest in a Rule 144A Global Note or a Physical Note pursuant to Rule 144A.** The Transfer is being effected pursuant to and in accordance with Rule 144A under the United States Securities Act of 1933, as amended (the "Securities Act"), and, accordingly, the Transferor hereby further certifies that the

beneficial interest or Physical Note is being transferred to a Person that the Transferor reasonably believed and believes is purchasing the beneficial interest or Physical Note for its own account, or for one or more accounts with respect to which such Person exercises sole investment discretion, and such Person and each such account is a “qualified institutional buyer” within the meaning of Rule 144A in a transaction meeting the requirements of Rule 144A and such Transfer is in compliance with any applicable blue sky securities laws of any state of the United States. Upon consummation of the proposed Transfer in accordance with the terms of the Indenture, the transferred beneficial interest or Physical Note will be subject to the restrictions on transfer enumerated in the Private Placement Legend printed on the Rule 144A Global Note and/or the Physical Note and in the Indenture and the Securities Act.

2.  **Check if Transferee will take delivery of a beneficial interest in a Regulation S Global Note or a Physical Note pursuant to Regulation S.** The Transfer is being effected pursuant to and in accordance with Rule 903 or Rule 904 under the Securities Act and, accordingly, the Transferor hereby further certifies that (i) the Transfer is not being made to a person in the United States and (x) at the time the buy order was originated, the Transferee was outside the United States or such Transferor and any Person acting on its behalf reasonably believed and believes that the Transferee was outside the United States or (y) the transaction was executed in, on or through the facilities of a designated offshore securities market and neither such Transferor nor any Person acting on its behalf knows that the transaction was prearranged with a buyer in the United States, (ii) no directed selling efforts have been made in contravention of the requirements of Rule 903(b) or Rule 904(b) of Regulation S under the Securities Act, (iii) the transaction is not part of a plan or scheme to evade the registration requirements of the Securities Act and (iv) if the proposed transfer is being made prior to the expiration of the Restricted Period, the transfer is not being made to a U.S. Person or for the account or benefit of a U.S. Person (other than an Initial Purchaser). Upon consummation of the proposed transfer in accordance with the terms of the Indenture, the transferred beneficial interest or Physical Note will be subject to the restrictions on Transfer enumerated in the Private Placement Legend printed on the Regulation S Global Note and/or the Physical Note and in the Indenture and the Securities Act.

3.  **Check and complete if Transferee will take delivery of a beneficial interest in the Global Note or a Physical Note pursuant to any provision of the Securities Act other than Rule 144A or Regulation S.** The Transfer is being effected in compliance with the transfer restrictions applicable to beneficial interests in Restricted Global Notes and Restricted Physical Notes and pursuant to and in accordance with the Securities Act and any applicable blue sky securities laws of any state of the United States, and accordingly the Transferor hereby further certifies that (check one):

(a)  such Transfer is being effected pursuant to and in accordance with Rule 144 under the Securities Act;

or

(b)  such Transfer is being effected to the Issuer or a Subsidiary thereof;

or

(c)  such Transfer is being effected pursuant to an effective registration statement under the Securities Act and in compliance with the prospectus delivery requirements of the Securities Act;

or

(d)  such Transfer is being effected pursuant to an exemption from the registration requirements of the Securities Act other than Rule 144A, Rule 144 or Rule 904, and the Transferor hereby further certifies that it has not engaged in any general solicitation within the meaning of Regulation D under the Securities Act and the Transfer complies with the transfer restrictions applicable to beneficial interests in a Restricted Global Note or Restricted Physical Notes and the requirements of the exemption claimed, which certification is supported by, if such Transfer is in respect of a principal amount of Notes at the time of transfer of less than the euro-denominated equivalent of \$250,000, an Opinion of Counsel provided by the Transferor or the Transferee (a copy of which the Transferor has attached to this certification), to the effect that such Transfer is in compliance with the Securities Act. Upon consummation of the proposed transfer in accordance with the terms of the Indenture, the transferred beneficial interest or Physical Note will be subject to the restrictions on transfer enumerated in the Private Placement Legend printed on the Global Note and/or the Physical Notes and in the Indenture and the Securities Act.

4.  **Check if Transferee will take delivery of a beneficial interest in an Unrestricted Global Note or an Unrestricted Physical Note.**

(a)  **Check if Transfer is pursuant to Rule 144.** (i) The Transfer is being effected pursuant to and in accordance with Rule 144 under the Securities Act and in compliance with the transfer restrictions contained in the Indenture and any applicable blue sky securities laws of any state of the United States and (ii) the restrictions on transfer contained in the Indenture and the Private Placement Legend are not required in order to maintain compliance with the Securities Act. Upon consummation of the proposed Transfer in accordance with the terms of the Indenture, the transferred beneficial interest or Physical Note will no longer be subject to the restrictions on transfer enumerated in the Private Placement Legend printed on the Restricted Global Notes, on Restricted Physical Notes and in the Indenture.

(b)  **Check if Transfer is pursuant to Regulation S.** (i) The Transfer is being effected pursuant to and in accordance with Rule 903 or Rule 904 under the Securities Act and in compliance with the transfer restrictions contained in the Indenture and any applicable blue sky securities laws of any state of the United States and (ii) the restrictions on transfer contained in the Indenture and the Private Placement Legend are not required in order to maintain compliance with the Securities Act. Upon consummation of the proposed Transfer in accordance with the terms of the Indenture, the transferred beneficial interest or Physical Note will no longer be subject to the restrictions on transfer enumerated in the Private Placement

Legend printed on the Restricted Global Notes, on Restricted Physical Notes and in the Indenture.

(c)  **Check if Transfer is pursuant to Other Exemption.** (i) The Transfer is being effected pursuant to and in compliance with an exemption from the registration requirements of the Securities Act other than Rule 144, Rule 903 or Rule 904 and in compliance with the transfer restrictions contained in the Indenture and any applicable blue sky securities laws of any State of the United States and (ii) the restrictions on transfer contained in the Indenture and the Private Placement Legend are not required in order to maintain compliance with the Securities Act. Upon consummation of the proposed Transfer in accordance with the terms of the Indenture, the transferred beneficial interest or Physical Note will not be subject to the restrictions on transfer enumerated in the Private Placement Legend printed on the Restricted Global Notes or Restricted Physical Notes and in the Indenture.

(d)  **Check if Transfer is pursuant to an Effective Registration Statement.** (i) The Transfer is being effected pursuant to and in compliance with an effective registration statement under the Securities Act and any applicable blue sky securities laws of any State of the United States and in compliance with the prospectus delivery requirements of the Securities Act and (ii) the restrictions on transfer contained in the Indenture and the Private Placement Legend are not required in order to maintain compliance with the Securities Act. Upon consummation of the proposed Transfer in accordance with the terms of the Indenture, the transferred beneficial interest or Physical Note will not be subject to the restrictions on transfer enumerated in the Private Placement Legend printed on the Restricted Global Notes or Restricted Physical Notes and in the Indenture.

This certificate and the statements contained herein are made for your benefit and the benefit of the Issuer.

\_\_\_\_\_  
[Insert Name of Transferor]

By: \_\_\_\_\_  
Name:  
Title:

Dated: \_\_\_\_\_

**ANNEX A TO CERTIFICATE OF TRANSFER**

1. The Transferor owns and proposes to transfer the following:

[CHECK ONE]

- (a)  a beneficial interest in a:
- (i)  Rule 144A Global Note (Common Code \_\_\_\_\_)  
(ISIN \_\_\_\_\_), or
- (ii)  Regulation S Global Note (Common Code \_\_\_\_\_)  
(ISIN \_\_\_\_\_), or
- (b)  a Restricted Physical Note.

2. After the Transfer the Transferee will hold:

[CHECK ONE]

- (a)  a beneficial interest in the:
- (i)  Rule 144A Global Note (Common Code \_\_\_\_\_)  
(ISIN \_\_\_\_\_), or
- (ii)  Regulation S Global Note (Common Code \_\_\_\_\_)  
(ISIN \_\_\_\_\_), or
- (iii)  Unrestricted Global Note (Common Code \_\_\_\_\_)  
(ISIN \_\_\_\_\_), or
- (b)  a Restricted Physical Note; or
- (c)  an Unrestricted Physical Note,

in accordance with the terms of the Indenture.

**FORM OF CERTIFICATE OF EXCHANGE**

James Hardie International Finance Designated Activity Company  
Europa House 2nd Floor  
Harcourt Centre, Harcourt Street  
Dublin DO2 WR20, Ireland  
Facsimile: +353-1-479-1128  
E-mail: treasury@jameshardie.com  
Attention: The Treasurer

Deutsche Bank Trust Company Americas  
c/o DB Services Americas, Inc.  
5022 Gate Parkway, Suite 200  
Jacksonville, FL 32256  
Attention: Transfer Department

re: James Hardie International Finance Designated Activity Company

Re: 3.625% Senior Notes due 2026

(Common Code \_\_\_\_\_)  
(ISIN \_\_\_\_\_)

Reference is hereby made to the Indenture, dated as of October 4, 2018 (the "Indenture"), by and among James Hardie International Finance Designated Activity Company (the "Issuer"), the Guarantors and Deutsche Bank Trust Company Americas, as trustee. Capitalized terms used but not defined herein shall have the meanings given to them in the Indenture.

\_\_\_\_\_ (the "Owner") owns and proposes to exchange the Note[s] or interest in such Note[s] specified herein, in the principal amount of \_\_\_\_\_ in such Note[s] or interests (the "Exchange"). In connection with the Exchange, the Owner hereby certifies that:

**1. Exchange of Restricted Physical Notes or Beneficial Interests in a Restricted Global Note for Unrestricted Physical Notes or Beneficial Interests in an Unrestricted Global Note**

(a)  **Check if Exchange is from beneficial interest in a Restricted Global Note to beneficial interest in an Unrestricted Global Note.** In connection with the Exchange of the Owner's beneficial interest in a Restricted Global Note for a beneficial interest in an Unrestricted Global Note in an equal principal amount, the Owner hereby certifies (i) the

beneficial interest is being acquired for the Owner's own account without transfer, (ii) such Exchange has been effected in compliance with the transfer restrictions applicable to the Global Notes and pursuant to and in accordance with the United States Securities Act of 1933, as amended (the "Securities Act"), (iii) the restrictions on transfer contained in the Indenture and the Private Placement Legend are not required in order to maintain compliance with the Securities Act and (iv) the beneficial interest in an Unrestricted Global Note is being acquired in compliance with any applicable blue sky securities laws of any state of the United States.

(b)  **Check if Exchange is from Restricted Physical Note to beneficial interest in an Unrestricted Global Note.** In connection with the Owner's Exchange of a Restricted Physical Note for a beneficial interest in an Unrestricted Global Note, the Owner hereby certifies (i) the beneficial interest is being acquired for the Owner's own account without transfer, (ii) such Exchange has been effected in compliance with the transfer restrictions applicable to Restricted Physical Notes and pursuant to and in accordance with the Securities Act, (iii) the restrictions on transfer contained in the Indenture and the Private Placement Legend are not required in order to maintain compliance with the Securities Act and (iv) the beneficial interest is being acquired in compliance with any applicable blue sky securities laws of any state of the United States.

(c)  **Check if Exchange is from Restricted Physical Note to Unrestricted Physical Note.** In connection with the Owner's Exchange of a Restricted Physical Note for an Unrestricted Physical Note, the Owner hereby certifies (i) the Unrestricted Physical Note is being acquired for the Owner's own account without transfer, (ii) such Exchange has been effected in compliance with the transfer restrictions applicable to Restricted Physical Notes and pursuant to and in accordance with the Securities Act, (iii) the restrictions on transfer contained in the Indenture and the Private Placement Legend are not required in order to maintain compliance with the Securities Act and (iv) the Unrestricted Physical Note is being acquired in compliance with any applicable blue sky securities laws of any state of the United States.

## 2. **Exchange of Restricted Physical Notes for Beneficial Interests in Restricted Global Notes.**

(a)  **Check if Exchange is from Restricted Physical Note to beneficial interest in a Restricted Global Note.** In connection with the Exchange of the Owner's Restricted Physical Note for a beneficial interest in the [CHECK ONE] \_\_ Rule 144A Global Note, \_\_Regulation S Global Note with an equal principal amount, the Owner hereby certifies (i) the beneficial interest is being acquired for the Owner's own account without transfer and (ii) such Exchange has been effected in compliance with the transfer restrictions applicable to the Restricted Global Notes and pursuant to and in accordance with the Securities Act, and in compliance with any applicable blue sky securities laws of any state of the United States. Upon consummation of the proposed Exchange in accordance with the terms of the Indenture, the beneficial interest issued will be subject to the restrictions on transfer enumerated in the Private Placement Legend printed on the relevant Restricted Global Note and in the Indenture and the Securities Act.



This certificate and the statements contained herein are made for your benefit and the benefit of the Issuer.

\_\_\_\_\_  
[Insert Name of Owner]

By: \_\_\_\_\_  
Name:  
Title:

Dated: \_\_\_\_\_

GUARANTEES

Each of the undersigned (the "Guarantors") hereby jointly and severally unconditionally guarantees, to the extent set forth in the Indenture, dated as of October 4, 2018, by and among James Hardie International Finance Designated Activity Company (the "Issuer"), the Guarantors and Deutsche Bank Trust Company Americas, as trustee (as amended, restated or supplemented from time to time, the "Indenture"), and subject to the Indenture, (a) the due and punctual payment of the principal of, and premium, if any, and interest on the Notes, when and as the same shall become due and payable, whether at maturity, by acceleration or otherwise, the due and punctual payment of interest on overdue principal of, and premium and, to the extent permitted by law, interest, and the due and punctual performance of all other obligations of the Issuer to the Noteholders or the Trustee, all in accordance with the terms set forth in Sections 10.01 through 10.06 of the Indenture, (b) in case of any extension of time of payment or renewal of any Notes or any of such other obligations, that the same will be promptly paid in full when due or performed in accordance with the terms of the extension or renewal, whether at stated maturity, by acceleration or otherwise and (c) all amounts due to the Trustee pursuant to the Indenture.

The obligations of the Guarantors to the Noteholders and to the Trustee pursuant to this Guarantee and the Indenture are expressly set forth in Sections 10.01 through 10.06 of the Indenture, and reference is hereby made to the Indenture for the precise terms and limitations of this Guarantee. Each Holder of the Note to which this Guarantee is endorsed, by accepting such Note, agrees to and shall be bound by such provisions.

[Signatures on Following Pages]

IN WITNESS WHEREOF, each of the Guarantors has caused this Guarantee to be signed by a duly authorized officer.

JAMES HARDIE INTERNATIONAL GROUP LIMITED,  
as a Guarantor

By: \_\_\_\_\_  
Name:  
Title:

JAMES HARDIE TECHNOLOGY LIMITED,  
as a Guarantor

By: \_\_\_\_\_  
Name:  
Title:

JAMES HARDIE BUILDING PRODUCTS INC.,  
as a Guarantor

By: \_\_\_\_\_  
Name:  
Title:

FORM OF SUPPLEMENTAL INDENTURE  
TO BE DELIVERED BY SUBSEQUENT GUARANTORS

SUPPLEMENTAL INDENTURE (this "Supplemental Indenture"), dated as of \_\_\_\_\_, among \_\_\_\_\_ (the "Guaranteeing Subsidiary"), a subsidiary of James Hardie International Group Limited (or its permitted successor), a private limited company duly incorporated under the laws of Ireland, James Hardie International Finance Designated Activity Company (or its permitted successor), a private designated activity company duly incorporated under the laws of Ireland (the "Issuer"), the other Guarantors (as defined in the Indenture referred to herein) and Deutsche Bank Trust Company Americas, a New York banking corporation, as trustee under the Indenture referred to below (the "Trustee").

WITNESSETH

WHEREAS, the Issuer has heretofore executed and delivered to the Trustee an indenture, dated as of October 4, 2018 (the "Indenture"), providing for the issuance of the Issuer's 3.625% Senior Notes due 2026 (the "Notes");

WHEREAS, the Indenture provides that under certain circumstances the Guaranteeing Subsidiary shall execute and deliver to the Trustee a supplemental indenture pursuant to which the Guaranteeing Subsidiary shall unconditionally guarantee all of the Issuer's Obligations under the Notes and the Indenture on the terms and conditions set forth herein (the "Note Guarantee"); and

WHEREAS, pursuant to Section 8.01 of the Indenture, the Trustee is authorized to execute and deliver this Supplemental Indenture.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Guaranteeing Subsidiary and the Trustee mutually covenant and agree for the equal and ratable benefit of the Holders of the Notes as follows:

1. **CAPITALIZED TERMS.** Capitalized terms used herein without definition shall have the meanings assigned to them in the Indenture.
  2. **AGREEMENT TO GUARANTEE.** The Guaranteeing Subsidiary hereby agrees to provide an unconditional Guarantee on the terms and subject to the conditions set forth in the Note Guarantee and in the Indenture including but not limited to Sections 10.01 through 10.06 thereof.
  4. **NO RECOURSE AGAINST OTHERS.** No director, officer, employee, incorporator or stockholder of the Parent, any Guarantor, the Issuer or of any other Subsidiary of the Parent, or any affiliate of the foregoing, as such, shall have any liability for any obligations of the Issuer or the Guarantors under the Notes, the Indenture, this Supplemental Indenture or the Note Guarantees or for any claim based on, in respect of, or by reason of, such obligations or
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their creation. Each Holder of Notes by accepting a Note waives and releases all such liability. This waiver may not be effective to waive liabilities under the federal securities laws.

5. THIS SUPPLEMENTAL INDENTURE SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.

6. COUNTERPARTS. The parties may sign any number of copies of this Supplemental Indenture. Each signed copy shall be an original, but all of them together represent the same agreement.

7. EFFECT OF HEADINGS. The Section headings herein are for convenience only and shall not affect the construction hereof.

8. THE TRUSTEE. The Trustee shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made solely by the Guaranteeing Subsidiary and the Issuer, or for or with respect to (i) the validity or sufficiency of this Supplemental Indenture or any of the terms or provisions hereof, (ii) the proper authorization hereof by the Company, the Guarantors or the Guaranteeing Subsidiary by action or otherwise, (iii) the due execution hereof by the Company, the Guarantors or the Guaranteeing Subsidiary or (iv) the consequences of any amendment herein provided for, and the Trustee makes no representation with respect to any such matters..

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Indenture to be duly executed and attested, all as of the date first above written.

Dated: \_\_\_\_\_

[GUARANTEEING SUBSIDIARY]

By: \_\_\_\_\_  
Name:  
Title:

JAMES HARDIE INTERNATIONAL FINANCE  
DESIGNATED ACTIVITY COMPANY

By: \_\_\_\_\_  
Name:  
Title:

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[EXISTING GUARANTORS]

By: \_\_\_\_\_  
Name:  
Title:

DEUTSCHE BANK TRUST COMPANY  
AMERICAS,  
as Trustee

By: \_\_\_\_\_  
Name:  
Title:

By: \_\_\_\_\_  
Name:  
Title:

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# Appendix 3X

## Initial Director's Interest Notice

*Information or documents not available now must be given to ASX as soon as available. Information and documents given to ASX become ASX's property and may be made public.*

Introduced 30/9/2001.

<b>Name of entity</b> James Hardie Industries plc
<b>ARBN</b> 097 829 895

We (the entity) give ASX the following information under listing rule 3.19A.1 and as agent for the director for the purposes of section 205G of the Corporations Act.

<b>Name of Director</b>	Anne LLOYD
<b>Date of appointment</b>	4 November 2018

### Part 1 - Director's relevant interests in securities of which the director is the registered holder

*In the case of a trust, this includes interests in the trust made available by the responsible entity of the trust*

Note: In the case of a company, interests which come within paragraph (i) of the definition of "notifiable interest of a director" should be disclosed in this part.

<b>Number &amp; class of securities</b>
Nil

+ See chapter 19 for defined terms.



**Appendix 3X**  
**Initial Director's Interest Notice**

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**Part 2 – Director's relevant interests in securities of which the director is not the registered holder**

*In the case of a trust, this includes interests in the trust made available by the responsible entity of the trust*

<b>Name of holder &amp; nature of interest</b>	<b>Number &amp; class of Securities</b>
<small>Note: Provide details of the circumstances giving rise to the relevant interest.</small>	Nil

**Part 3 – Director's interests in contracts**

Note: In the case of a company, interests which come within paragraph (ii) of the definition of "notifiable interest of a director" should be disclosed in this part.

<b>Detail of contract</b>	Not applicable
<b>Nature of interest</b>	Not applicable
<b>Name of registered holder (if issued securities)</b>	Not applicable
<b>No. and class of securities to which interest relates</b>	Not applicable

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+ See chapter 19 for defined terms.



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**Notification of dividend / distribution**

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**Announcement Summary**

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**Entity name**

JAMES HARDIE INDUSTRIES PLC

**Security on which the Distribution will be paid**

JHX - CHESS DEPOSITARY INTERESTS 1:1

**Announcement Type**

New announcement

**Date of this announcement**

Thursday November 8, 2018

**Distribution Amount**

USD 0.10000000

**Ex Date**

Tuesday December 11, 2018

**Record Date**

Wednesday December 12, 2018

**Payment Date**

Friday February 22, 2019

Refer to below for full details of the announcement

**Announcement Details**

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**Part 1 - Entity and announcement details**

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**1.1 Name of +Entity****JAMES HARDIE INDUSTRIES PLC****1.2 Registered Number Type**

ARBN

**Registration Number**

097829895

**1.3 ASX issuer code**

JHX

**1.4 The announcement is**

New announcement

**1.5 Date of this announcement**

Thursday November 8, 2018

**1.6 ASX +Security Code**

JHX



ASX +Security Description  
CHESS DEPOSITARY INTERESTS 1:1

Part 2A - All dividends/distributions basic details

2A.1 Type of dividend/distribution

Ordinary

2A.2 The Dividend/distribution:

relates to a period of six months

2A.3 The dividend/distribution relates to the financial reporting or payment period ending ended/ending (date)

Sunday September 30, 2018

2A.4 +Record Date

Wednesday December 12, 2018

2A.5 Ex Date

Tuesday December 11, 2018

2A.6 Payment Date

Friday February 22, 2019

2A.7 Are any of the below approvals required for the dividend/distribution before business day 0 of the timetable?

- Security holder approval
- Court approval
- Lodgement of court order with +ASIC
- ACCC approval
- FIRB approval
- Another approval/condition external to the entity required before business day 0 of the timetable for the dividend/distribution.

No

2A.8 Currency in which the dividend/distribution is made ("primary currency")

USD - US Dollar

2A.9 Total dividend/distribution payment amount

per +security (in primary currency) for all dividends/distributions notified in this form

USD 0.10000000

2A.9a AUD equivalent to total dividend/distribution amount per +security

2A.9b If AUD equivalent not known, date for information to be released

Thursday December 13, 2018

Estimated or Actual?

Actual



## Notification of dividend / distribution

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2A.10 Does the entity have arrangements relating to the currency in which the dividend/distribution is paid to securityholders that it wishes to disclose to the market?

Yes

2A.11 Does the entity have a securities plan for dividends/distributions on this +security?

We do not have a securities plan for dividends/distributions on this security

2A.12 Does the +entity have tax component information apart from franking?

No

2A.13 Withholding tax rate applicable to the dividend/distribution

20.000000

### Part 2B - Currency Information

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2B.1 Does the entity default to payment in certain currencies dependent upon certain attributes such as the banking instruction or registered address of the +securityholder? (For example NZD to residents of New Zealand and/or USD to residents of the U.S.A.).

No

2B.2 Please provide a description of your currency arrangements

The dividend is payable in Australian currency unless the securityholder elects otherwise.

### Part 3A - Ordinary dividend/distribution

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3A.1 Is the ordinary dividend/distribution estimated at this time?

No

3A.1a Ordinary dividend/distribution estimated amount per +security

USD

3A.1b Ordinary Dividend/distribution amount per security

USD 0.10000000

3A.2 Is the ordinary dividend/distribution franked?

No

3A.3 Percentage of ordinary dividend/distribution that is franked

0.0000 %

3A.4 Ordinary dividend/distribution franked amount per +security

USD 0.00000000

3A.5 Percentage amount of dividend which is unfranked

100.0000 %



Notification of dividend / distribution

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3A.6 Ordinary dividend/distribution unfranked  
amount per +security excluding conduit foreign  
income amount  
USD 0.10000000

Part 5 - Further information

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5.1 Please provide any further information applicable to this dividend/distribution

5.2 Additional information for inclusion in the Announcement Summary

