

May 2017

Investment Banking

**Conversion and Macro Trends
Drive M&A Activity in Building
Technologies**

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Ongoing conversion to specialty building products

Trends driving the growth in the sector

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Building Technologies



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Conversion and Other Macro Trends Drive M&A Activity in Building Technologies

Acquirers see attractive growth opportunities for manufacturers of specialty materials and other highly differentiated, value-added building products.

Over the past decade, building technologies has emerged as a distinct sub-sector and an impressive growth story in the broader construction industry. As homeowners and tenants of commercial properties increasingly demand enhanced design options, superior performance attributes, and reduced environmental impact from their buildings, manufacturers of differentiated, highly engineered products have exhibited above-market growth rates and superior value-added margins, gaining market share from companies that produce more commoditized products.

The impressive financial performance and strong, defensible market positions of building technologies companies, as well as the opportunity to continue gaining market share amid the ongoing construction recovery, have attracted significant interest from strategic acquirers and financial sponsors. In this article, we look at some of the characteristics that define building technologies as a sector, as well as several of the trends that are driving the growth of the sector and the premium valuations that these companies are able to command.

Emergence of Building Technologies

Within the broader building products industry, building technologies is a sector that comprises manufacturers of differentiated products that are developed through highly engineered, and often proprietary, production processes. These companies often use composite materials or technologically advanced processes to create products with characteristics that justify a higher purchase price by delivering an improved value proposition over the product's lifecycle. These differentiators include qualities such as enhanced customization and design capabilities, easier installation, reduced maintenance, improved durability and weather resistance, reduced environmental impact, or superior aesthetics.

While the trend of using composites and other technologically advanced products is occurring globally across the construction industry, it is particularly prominent in several key segments. At William Blair, we have defined the following subcategories within building technologies: access systems, doors and windows, flooring, interior solutions, and roofing, façade and exterior products.

Because of their compelling value proposition and significant technological barriers to entry, building technologies companies have been able to deliver impressive financial performance. These companies typically have revenue growth in excess of 10% and EBITDA

margins higher than 15%. They have also proved to be more resilient to swings in construction cycles. During the last recession, building technologies companies experienced a more moderate decline and a quicker recovery than traditional building products companies.

With the construction industry in the midst of a growth period, the demand for building technologies should continue on its impressive trajectory. There is ample room for additional growth—particularly in North America, which, relative to Europe, is in the earlier innings of the large-scale conversion to these types of products. Continued growth in North America will be driven by rising customer awareness and a focus on superior products with longer lifecycles that justify the premium pricing.

Macro Trends in Building Technologies

A variety of trends, ranging from changes in consumer preferences to heightened regulation, improved product performance, and reduced production costs, are creating increased demand for specialty building products and driving M&A activity across the building technologies sector.

Conversion to Specialty Products: The biggest driver of the growth of the building technologies sector is consumers' and builders' increasing preference for specialty materials (often composites) that provide enhanced design options, improved

performance, and/or reduced lifecycle costs relative to traditional materials. Whether it's homeowners looking to upgrade their kitchens by installing a quartz composite sink in a unique color or a commercial tenant looking to enhance the durability and design of a retail space by installing decorative composite wall panels, end users are looking to "trade up" to these types of specialty products.

Consumers and builders are increasingly opting for specialty products that provide superior performance and enhanced design.

This conversion trend has been a major factor in most of the recent transactions that William Blair has completed in the building products industry. Our sell-side clients whose growth has been driven largely by this conversion trend include:

- *Pearlman Group* – solutions for quartz/granite countertops
- *AERT* - composite decking
- *SCHOCK* - quartz composite granite kitchen and bathroom sinks
- *Marmite* - sanitary ware made from cast marble
- *Nudo Products* - composite panel solutions
- *Plaskolite* - rigid plastic sheet

Focus on Kitchen and Bath: Demand for specialty products is particularly strong with kitchen and bath projects. Homeowners are looking to add premium, differentiated finishes to these high-traffic, showpiece areas of the home. Our recent sales of Marmite and SCHOCK are great examples of this as both processes generated broad interest from both strategic buyers and financial sponsors and premium valuations.

Efficiency in the Building Envelope: The trend toward "greener," more sustainable construction has taken hold in markets across the globe as governments, private enterprise, and consumers increasingly recognize the role that buildings play in resource usage and greenhouse gas emissions. In addition to using more environmentally friendly materials, construction will increasingly focus on buildings that offer healthier environments for workers and residents and "smart" buildings where efficiencies are maximized through information collection and system-to-system communication. As a result, there will be growing demand for specialty products that decrease the building's carbon footprint and increase energy efficiency.

Advances in Flooring: Across the home, improved flooring options are driving conversion to specialty products. Luxury vinyl has been the fastest-growing portion of the flooring industry over the past several years, with new technologies improving the

look, feel, and selection of available products. In addition, carpeting is becoming softer and more environmentally friendly through improvements in the production process, and parquet wood laminates have benefited from improved design and performance over traditional options.

Attractive Dynamics in A&D Channels: Architecture and design (A&D) firms play an important role in the growth of the building technologies sector. "Specifiers" at these firms generally focus on aesthetic appeal, customer service, and total lifecycle value over a strictly price-based approach when deciding what products will go into final designs. Wolf-Gordon, a leading specialty distributor of wallcoverings, textiles, and paint, has benefited from strong relationships with product specifiers in A&D channels. These relationships played an important role in driving financial sponsor and strategic buyer interest for Wolf-Gordon on its 2016 sale to Saw Mill Capital, a transaction where William Blair served as sell-side advisor.

Over the coming year, we will publish additional articles that explore many of these building technologies trends in greater depth. We will also further examine the key subsectors in building technologies. In the meantime, if you have questions about the trends driving the deal-making landscape in the sector, please do not hesitate to contact us.

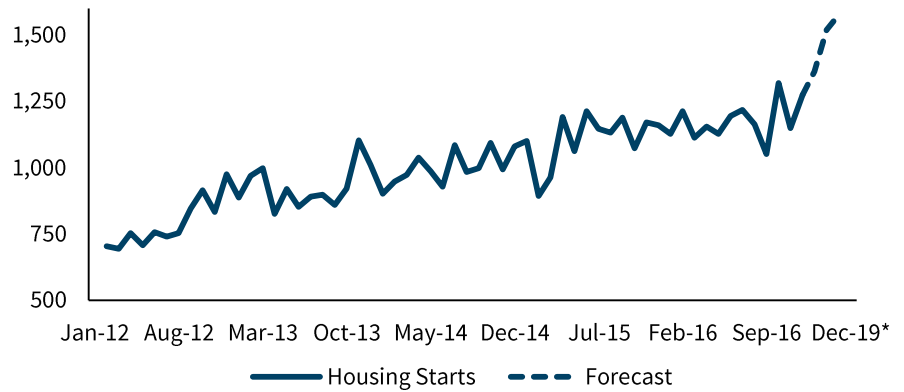
Building Technologies Market Analysis

We look behind the numbers to examine the market dynamics that are driving trends in the dealmaking landscape in the building technologies sector.

General Housing Outlook

Most industry experts expect an elongated recovery in the United States housing market to return housing starts to about 1.5 million, which is the long-term market average.

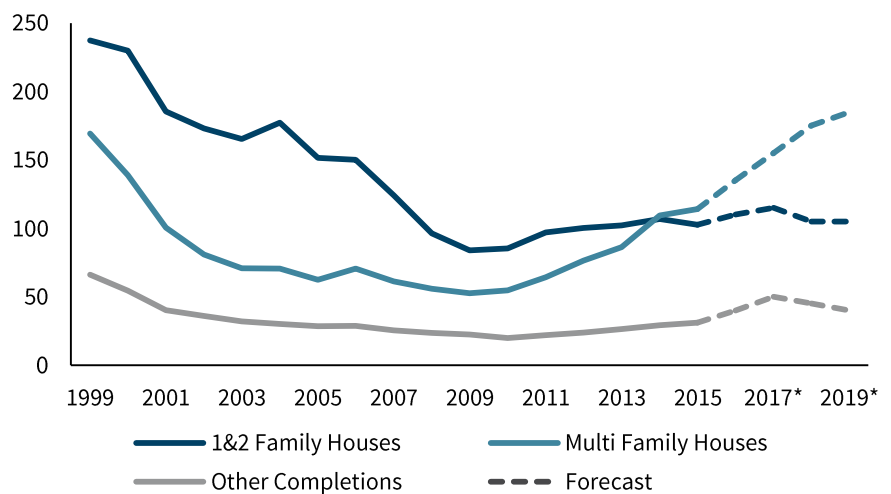
US Housing Starts chart 2012-2019
(in thousands)



Sources: U.S. Census/Haver and Metrostudy January 2017
* Denotes forecast

In Germany, housing completions are lagging behind the increase in the number of households. Vacancy rates are at historical lows fueling rent and property price increases. At the same time, the economy is growing with a low unemployment rate, employees subject to social security contributions are at record levels and purchasing power is increasing thanks to expanding sectors of the economy.

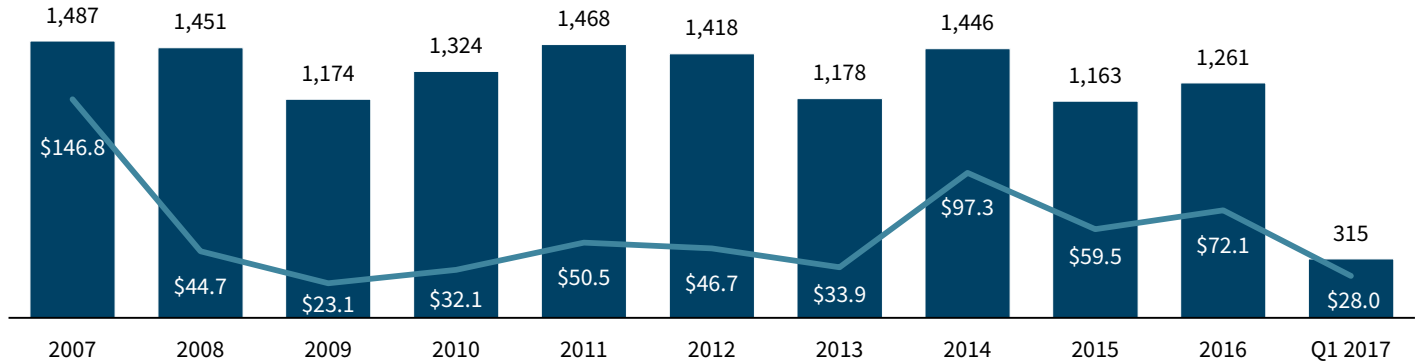
Housing Completions in Germany 1999 to 2019
(in thousands)



Sources: Federal Statistical Office, ifo Institute
* Denotes forecast

Building Technologies and Traditional Products – M&A Volume and Values

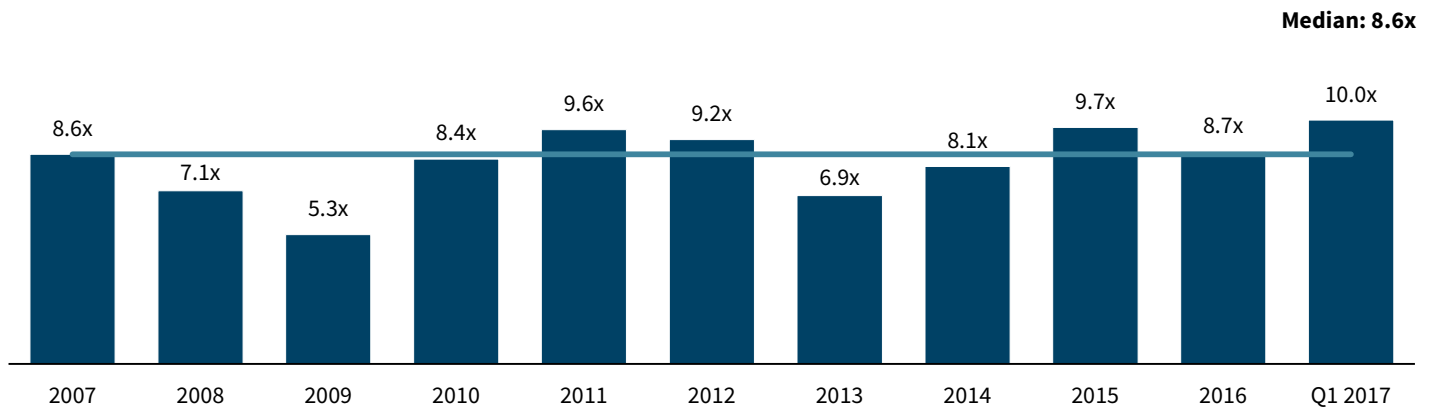
M&A activity across the broader industry continues to recover from pre-recession levels. Interest specifically in building technologies companies has surged as strategic buyers and financial sponsors have aggressively pursued acquisition opportunities in the subsector given the attractive characteristics.



Source: Dealogic

Building Technologies and Traditional Products – M&A EV/EBITDA Multiples

Overall multiples are above long-term historical averages compared with the broader industry. Building technologies companies are able to achieve premium valuations due to a number of factors including a leading market position, compelling value proposition, significant technological barriers to entry, robust margins, and/or relative resilience during cyclical downturns.



Source: Dealogic

Drawing on our deep sector expertise and the strength of our relationships with buyers around the world, William Blair has built a leading building technologies banking franchise. Business owners turn to us for outstanding execution for their M&A and capital raising objectives.

Recent transactions include:



GranQuartz PEARL

has been acquired by



THE STEPHENS GROUP
May 2017



has been acquired by



Oldcastle Architectural[™]
May 2017

SCHOCK
HANDMADE IN GERMANY

has been acquired by



Investment Partners
December 2016

MARMITE

has been acquired by



THE CRANEMERE GROUP LIMITED
May 2016

WolfGordon

has been acquired by



SAW MILL CAPITAL
January 2016

NUDO

has been acquired by



VERZATEC
December 2015

AXA COMPANY

has been acquired by



ALLEGION[™]
September 2015

VETRICERAMICI
special products for the ceramic industry

has been acquired by



FERRO
December 2014

JET Group

has been acquired by

EGERIA
April 2014

**William Blair
By the Numbers**

300+

bankers globally with local cultural knowledge

2,000+

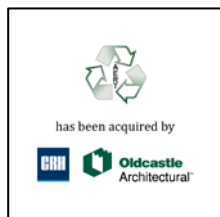
completed advisory and financing transactions

\$230 billion+

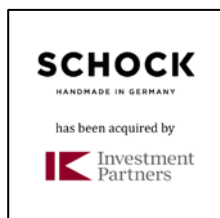
in transaction value for our clients

*In the past five years as of January 1, 2017

William Blair Spotlight on Recent Transactions



- AERT is a vertically integrated manufacturer of innovative, high performance composite decking solutions
- Potential acquirers were attracted to buying into the ongoing conversion from traditional wood to composite decking
- Acquisition provides Oldcastle Architectural, a subsidiary of CRH plc, access into this attractive category with leading brands (ChoiceDek® and MoistureShield®) that are complementary to its existing portfolio of outdoor living brands



- SCHOCK is the global market leader in the design and production of premium quality quartz composite kitchen sinks “Made in Germany” with a global market share of more than 20%
- Potential acquirers were attracted to buying into the ongoing shift from stainless steel kitchen sinks towards the growing niche market for quartz composite kitchen sinks
- SCHOCK’s mid-term focus lies on its international expansion, especially in the United States



- One of the largest M&A transactions in Poland in 2016, Marmite is the European leader in the design and production of premium-quality, private-label cast marble sanitary ware
- Potential acquirers were attracted to buying into the early stages of an ongoing shift towards building products manufactured using specialty materials and/or advanced, patented production processes
- In the mid-term, Marmite will enter new markets and increase the penetration in its existing channels

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Building Technologies

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Sector and Transaction Data

Recent Select Building Technologies M&A Transactions

(\$ in millions)

Announced Date	Buyer Name / Target Name	Enterprise Value	Enterprise Value /	
			Revenue	EBITDA
May-17	The Stephens Group, LLC/Pearlman Group		<i>Confidential</i>	
Mar-17	Aluplast GmbH/Chelsea Building Products	N/A	N/A	N/A
Mar-17	CRH/AERT		<i>Confidential</i>	
Mar-17	Standard Industries Inc./Braas Monier Building Group S.A	€ 1,590.4	1.2x	8.3x
Mar-17	Madison Dearborn Partners, LLC/U.S. Lumber Group, LLC		<i>Pending</i>	
Feb-17	High Road Capital Partners; High Road Capital Partners Fund II, L.P./ Mid-West Wholesale Hardware Co.	N/A	N/A	N/A
Feb-17	Headwaters Incorporated/Magnolia Window and Door	N/A	N/A	N/A
Jan-17	Mohawk/Emilceramica	N/A	N/A	N/A
Jan-17	JET Group/Xtralite	N/A	N/A	N/A
Jan-17	Allegion plc/Republic Doors and Frames, Inc.	N/A	N/A	N/A
Dec-16	Quad C Management/Stanton Carpet Corporation	N/A	N/A	N/A
Dec-16	IK Investment Partners/SCHOCK		<i>Confidential</i>	
Dec-16	Dunes Point Capital LLC (Harvey Building Products)/Soft-Lite Windows	N/A	N/A	N/A
Dec-16	The Cook & Boardman Group, LLC/Delta Door and Hardware LLC	N/A	N/A	N/A
Dec-16	dormakaba Holdings AG/St Stanley Black & Decker, Inc., Certain Mechanical Security	\$725.0	0.5x	13.9x
Nov-16	dormakaba Group/Mesker Opening Group	\$142.5	2.1x	10.6x
Nov-16	VBG Group AB/Mobile Climate Control AB - MCC Europe AB	\$197.5	1.4x	11.8x
Nov-16	Quikrete Holdings, Inc./CEMEX, S.A.B de C.V., U.S. Reinforced Concrete Pipe Mfg.	\$540.0	N/A	N/A
Nov-16	Boral Industries, Inc./Headwaters Incorporated	\$2,629.7	2.6x	14.8x
Oct-16	Lone Star Funds/American Bath Group	N/A	N/A	N/A
Oct-16	Shaw Industries/US Floors	N/A	N/A	N/A
Oct-16	Rhone Group LLC/Zodiac Pool Solutions SAS	N/A	N/A	N/A
Oct-16	Quikrete Holdings, Inc./Contech Holdings, Inc.	\$950.0	1.4x	N/A
Sep-16	Jeld-Wen Inc./Breezway Australia Pty Ltd	N/A	N/A	N/A
Sep-16	American Securities/Henry Company LLC	\$600.0	N/A	N/A
Aug-16	Fortune Brands Home & Security, Inc./Riobel Inc.	\$88.4	2.2x	N/A
Aug-16	ABC Supply Co., Inc./L&W Supply Corporation	\$670.0	0.5x	N/A
Aug-16	Blue Wolf Capital Partners LLC/NACS USA Inc. (nka: Novo Building Products, LLC)	\$110.0	N/A	N/A
Jul-16	Kingspan Group plc/Essmann Gruppe	N/A	N/A	N/A
Jul-16	Stanton Carpet/Crescent Carpet Importers	N/A	N/A	N/A
Jul-16	Melrose Industries PLC/Nortek Inc.	\$2,673.0	1.1x	9.9x
Jun-16	Triton Advisers Ltd/Flakt Wood Group Ltd	N/A	N/A	N/A
Jun-16	Brakel BV/Argina Technics n.v.	N/A	N/A	N/A
Jun-16	Allegion plc/TRELOCK GmbH		<i>Confidential</i>	

SECTOR AND TRANSACTION DATA

(\$ in millions)

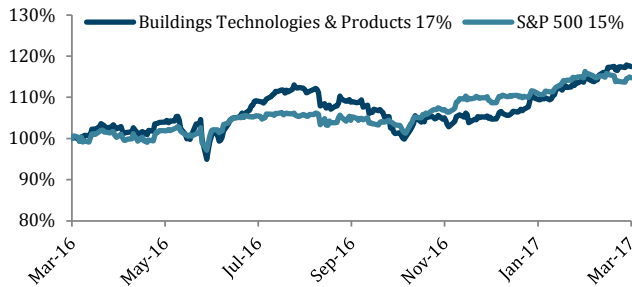
Announced Date	Buyer Name / Target Name	Enterprise Value	Enterprise Value /	
			Revenue	EBITDA
Jun-16	ASSA ABLOY AB/Nassau Door A/S	N/A	N/A	N/A
Jun-16	Clearview Capital LLC (Novik Inc.)/Exteria Building Products LLC	N/A	N/A	N/A
Jun-16	Platinum Equity. LLC/Fabcon Incorporated	N/A	N/A	N/A
May-16	ICG/Nora Systems (Majority)	N/A	N/A	N/A
May-16	Cranemere/Marmite	Confidential		
May-16	Beacon Roofing Supply Inc./Fox Brothers Co.	N/A	N/A	N/A
Apr-16	Interior Specialists Inc./HD Supply Inc. (Interior Solutions business unit)	N/A	N/A	N/A
Apr-16	OpenGate Capital/Royal Group, Inc. (Window & Door)	N/A	N/A	N/A
Apr-16	The Riverside Company/Momentum Textiles, LLC	N/A	N/A	12.0x
Apr-16	Franke Holding AG/Duravit AG (25%)	N/A	N/A	N/A
Apr-16	Jordan Company/Top Knobs USA	\$467.5	N/A	N/A
Apr-16	Owens Corning/Interwrap, Inc.	\$450.0	1.8x	N/A
Apr-16	ICP Adhesives and Sealants, Inc./Fomo Products, Inc.	N/A	N/A	N/A
Mar-16	Schlegel Acquisition Holdings/Giesse Gruppo Industriale	N/A	1.0x	7.3x
Mar-16	Prophet Equity/Total Plastic Inc.	Confidential		
Mar-16	WL Ross & Co./Nexeo Solutions, LLC	\$1,610.0	0.4x	10.2x
Feb-16	H. Dawson Sons & Co./Aminster Carpets Ltd.	N/A	N/A	N/A
Feb-16	Court Square Capital Partners/National Distribution Contacting	N/A	N/A	N/A
Feb-16	JET Group/Bramo Glass	N/A	N/A	N/A
Feb-16	CeterOak Partners/Cascade Windows, Inc.	N/A	N/A	N/A
Jan-16	Sawmill Capital/Wolf Gordon	Confidential		
Jan-16	The Tapco Group/Deceuninck North America, LLC, Deck and Rail Business	N/A	N/A	N/A
Jan-16	Standard Industries Inc./Icopal A/S	N/A	1.0x	N/A
Jan-16	Compagnie de Saint-Gobain SA/Industrial Potengy Ltd	N/A	N/A	N/A

Sources: Dealogic

Public Comparable Performance & Trends

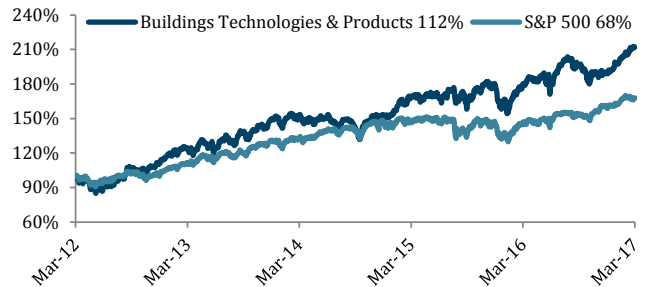
The following charts index all building technologies and building products firms profiled on pages 10-14.

Indexed Stock Performance - Last 12 Month



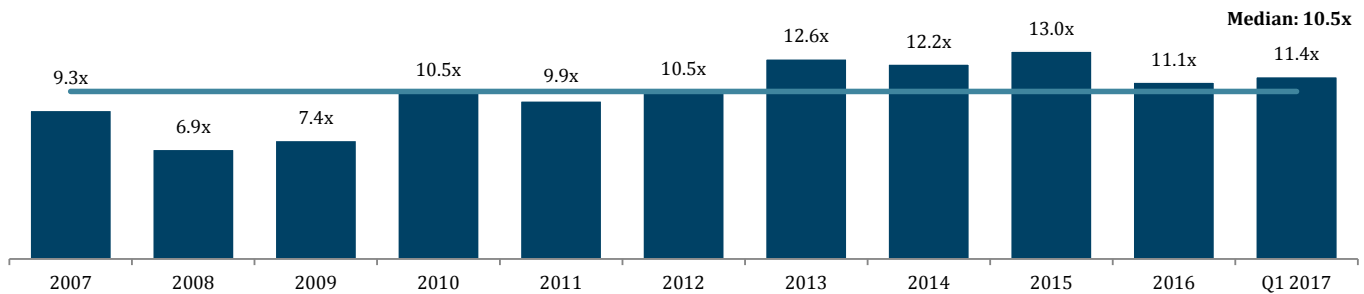
Source: Capital IQ as of March 31, 2017

Indexed Stock Performance - Last 5 Years



Source: Capital IQ as of March 31, 2017

Overall Public Comparable - EV/LTM EBITDA



Sources: Capital IQ as of March 31, 2017 and William Blair market analysis

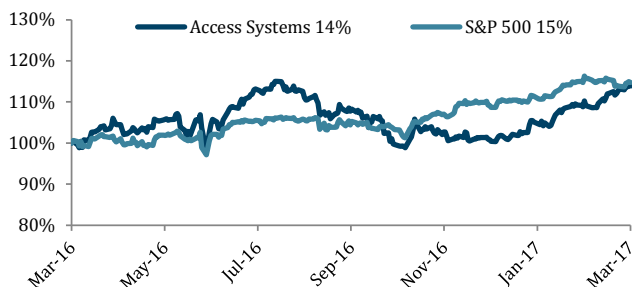
Access Systems

(\$ in millions)

Company	Stock Price Change Since 3/31/2016	LTM Financials		LTM Margins			Historical Revenue 3-Yr CAGR	Valuation			
		Revenue	EBITDA	Gross Profit	EBITDA	OCF ⁽¹⁾ Margin		Enterprise Value	EV/LTM Revenue	EV/LTM EBITDA	Net Debt/EBITDA
Allegion plc	18.8%	\$2,238	\$512	44.1%	22.9%	22.9%	1.6%	\$8,445	3.77x	16.5x	2.2x
ASSA ABLOY AB	4.4%	\$8,689	\$1,609	39.5%	18.5%	18.5%	12.0%	\$25,217	3.06x	16.5x	1.5x
Fortune Brands Home & Security, Inc.	8.6%	\$4,985	\$811	36.4%	16.3%	16.3%	2.7%	\$10,566	2.12x	13.0x	1.5x
dormakaba Holding AG	24.3%	\$2,377	\$347	42.2%	14.6%	14.6%	1.6%	\$4,267	1.83x	12.5x	2.2x
Stanley Black & Decker, Inc.	26.3%	\$12,214	\$2,099	37.8%	17.2%	17.2%	(2.8%)	\$25,493	2.09x	12.1x	2.2x
Mean	16.5%	\$6,101	\$1,076	40.0%	17.9%	17.9%	3.0%	\$14,798	2.57x	14.1x	1.9x
Median	18.8%	\$4,985	\$811	39.5%	17.2%	17.2%	1.6%	\$10,566	2.12x	13.0x	2.2x

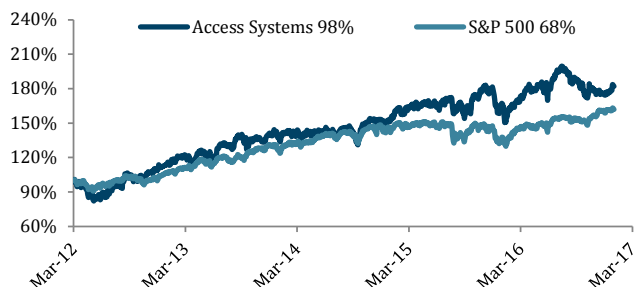
(1) Operating cash flow (OCF) calculated as EBITDA less capital expenditures
Source: Capital IQ as of March 31, 2017

Indexed Stock Performance - Last 12 Month



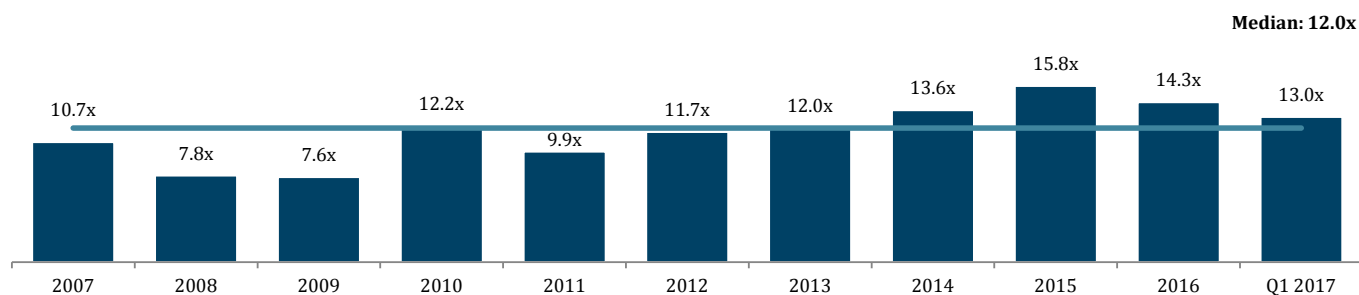
Source: Capital IQ as of March 31, 2017

Indexed Stock Performance - Last 5 Years



Source: Capital IQ as of March 31, 2017

Access Systems - EV/LTM EBITDA



Sources: Capital IQ as of March 31, 2017 and William Blair market analysis

Doors & Windows

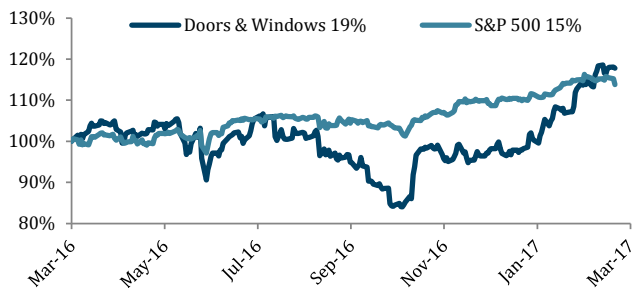
(\$ in millions)

Company	Stock Price Change Since 3/31/2016	LTM Financials		LTM Margins			Historical Revenue 3-Yr CAGR	Valuation			
		Revenue	EBITDA	Gross Profit	EBITDA	OCF ⁽¹⁾ Margin		Enterprise Value	EV/LTM Revenue	EV/LTM EBITDA	Net Debt/EBITDA
Masonite International	21.0%	\$1,974	\$250	20.8%	12.7%	12.7%	0.6%	\$2,878	1.46x	11.5x	1.6x
PGT Innovations, Inc.	9.2%	\$461	\$81	30.9%	17.6%	17.6%	3.2%	\$769	1.67x	9.5x	2.6x
Tyman plc	(5.6%)	\$660	\$119	37.8%	18.1%	18.1%	(3.0%)	\$930	1.52x	8.4x	2.0x
JELD-WEN Holding, inc.	N/A	\$3,667	\$362	21.8%	9.9%	9.9%	2.2%	\$4,657	1.27x	12.9x	2.9x
Mean	8.2%	\$1,690	\$203	27.8%	14.6%	14.6%	0.8%	\$2,308	1.48x	10.6x	2.3x
Median	9.2%	\$1,317	\$185	26.4%	15.2%	15.2%	1.4%	\$1,904	1.49x	10.5x	2.3x

(1) Operating cash flow (OCF) calculated as EBITDA less capital expenditures

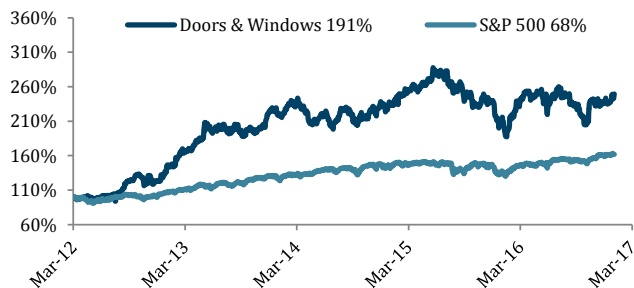
Source: Capital IQ as of March 31, 2017

Indexed Stock Performance - Last 12 Month



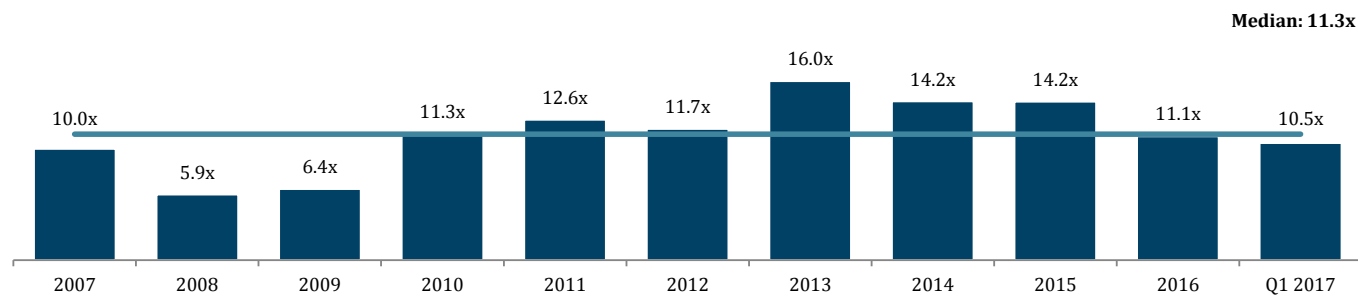
Source: Capital IQ as of March 31, 2017

Indexed Stock Performance - Last 5 Years



Source: Capital IQ as of March 31, 2017]

Doors & Windows - EV/LTM EBITDA



Sources: Capital IQ as of March 31, 2017 and William Blair market analysis

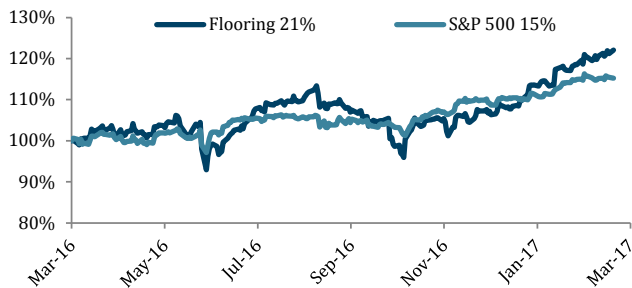
Flooring

(\$ in millions)

Company	Stock Price Change Since 3/31/2016	LTM Financials		LTM Margins		OCF ⁽¹⁾ Margin	Historical Revenue 3-Yr CAGR	Valuation			
		Revenue	EBITDA	Gross Profit	EBITDA			Enterprise Value	EV/LTM Revenue	EV/LTM EBITDA	Net Debt/EBITDA
Armstrong Flooring, Inc.	N/A	\$1,193	\$73	19.3%	6.2%	6.2%	(1.1%)	\$530	0.44x	7.2x	N/A
Forbo Holding AG	26.1%	\$1,203	\$196	39.7%	16.3%	16.3%	(1.7%)	\$2,415	2.03x	12.5x	N/A
Interface, Inc.	2.8%	\$959	\$141	38.5%	14.7%	14.7%	(2.3%)	\$1,332	1.39x	9.4x	0.7x
James Halstead plc	9.4%	\$312	\$65	43.1%	20.8%	20.8%	0.3%	\$1,365	4.71x	22.7x	N/A
Mohawk Industries, Inc.	20.2%	\$8,959	\$1,720	31.8%	19.2%	19.2%	7.1%	\$19,460	2.17x	11.3x	1.4x
Tarkett S.A.	38.0%	\$3,030	\$370	27.3%	12.2%	12.2%	6.5%	\$3,148	1.08x	8.8x	1.1x
Mean	19.3%	\$2,609	\$428	33.3%	14.9%	14.9%	1.5%	\$4,708	1.97x	12.0x	1.1x
Median	20.2%	\$1,198	\$169	35.1%	15.5%	15.5%	(0.4%)	\$1,890	1.71x	10.4x	1.1x

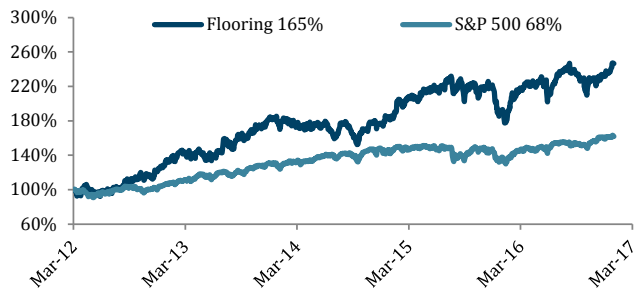
(1) Operating cash flow (OCF) calculated as EBITDA less capital expenditures
Source: Capital IQ as of March 31, 2017

Indexed Stock Performance - Last 12 Month



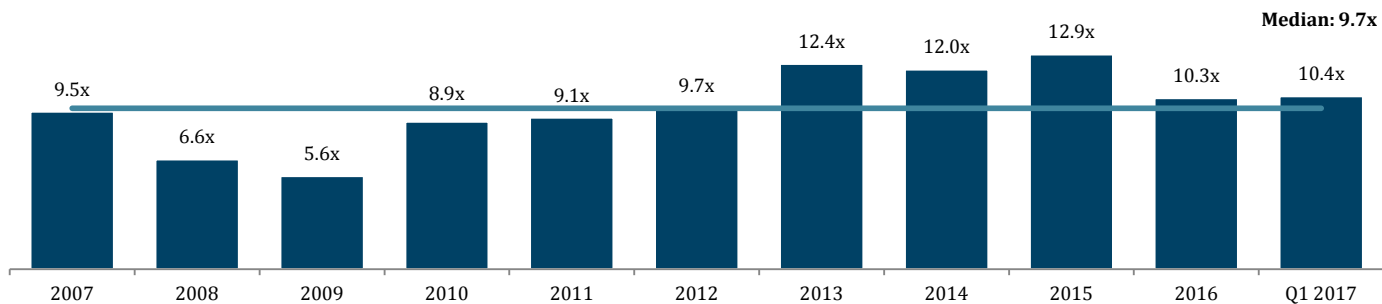
Source: Capital IQ as of March 31, 2017

Indexed Stock Performance - Last 5 Years



Source: Capital IQ as of March 31, 2017

Flooring - EV/LTM EBITDA



Sources: Capital IQ as of March 31, 2017 and William Blair market analysis

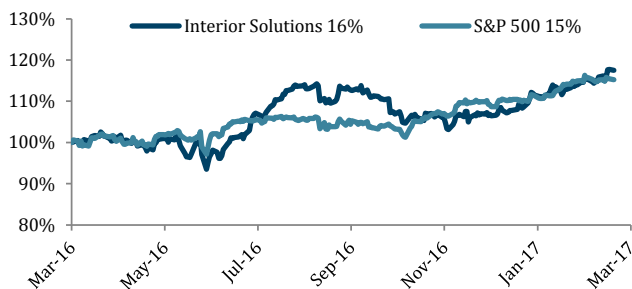
Interior Solutions

(\$ in millions)

Company	Stock Price Change Since 3/31/2016	LTM Financials		LTM Margins		OCF ⁽¹⁾ Margin	Historical Revenue 3-Yr CAGR	Valuation			
		Revenue	EBITDA	Gross Profit	EBITDA			Enterprise Value	EV/LTM Revenue	EV/LTM EBITDA	Net Debt/EBITDA
American Woodmark Corporation	23.1%	\$1,012	\$126	21.4%	12.4%	12.4%	12.0%	\$1,323	1.31x	10.5x	N/A
Geberit AG	15.2%	\$2,852	\$813	72.4%	28.5%	28.5%	16.0%	\$16,389	NMF	20.5x	0.6x
LIXIL Group Corporation	24.0%	\$16,409	\$1,084	30.6%	6.6%	6.6%	5.2%	\$13,180	0.84x	12.7x	5.7x
Masco Corporation	8.1%	\$7,357	\$1,238	33.6%	16.8%	16.8%	2.5%	\$13,009	1.77x	10.5x	1.5x
Zehnder Group AG	(19.5%)	\$598	\$31	65.4%	5.2%	5.2%	1.5%	\$336	0.58x	11.1x	N/A
Volution Group plc	1.6%	\$230	\$51	48.8%	22.2%	22.2%	16.7%	\$519	2.40x	10.8x	1.0x
Uponor Oyj	22.2%	\$1,216	\$125	34.2%	10.3%	10.3%	3.6%	\$1,532	1.31x	12.7x	1.4x
CENTROTEC Sustainable AG	20.7%	\$637	\$65	55.3%	10.3%	10.3%	4.1%	\$337	0.55x	5.3x	N/A
Lennox International Inc.	23.8%	\$3,642	\$545	29.6%	15.0%	15.0%	4.0%	\$8,114	2.23x	14.9x	1.5x
Mean	13.2%	\$3,773	\$453	43.5%	14.1%	14.1%	7.3%	\$6,082	1.37x	12.1x	1.9x
Median	20.7%	\$1,216	\$126	34.2%	12.4%	12.4%	4.1%	\$1,532	1.31x	11.1x	1.4x

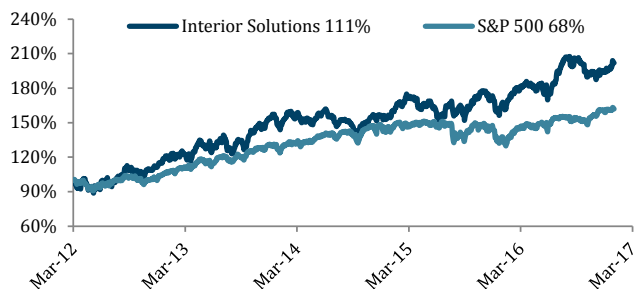
(1) Operating cash flow (OCF) calculated as EBITDA less capital expenditures
Source: Capital IQ as of March 31, 2017

Indexed Stock Performance - Last 12 Month



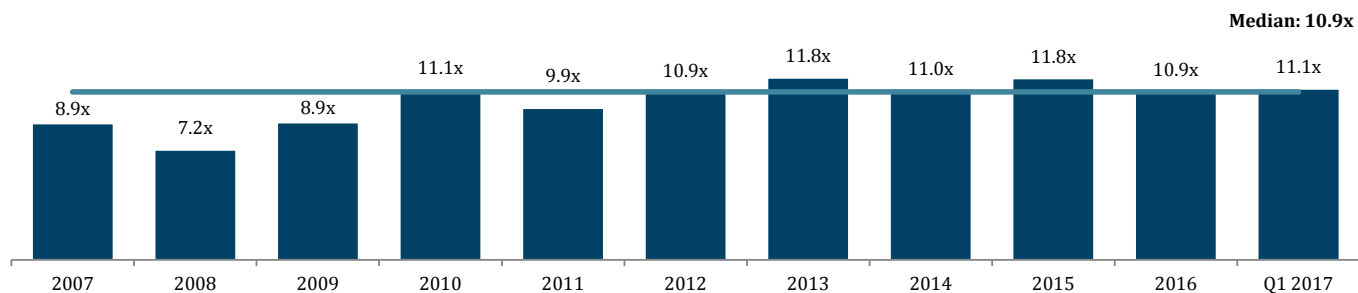
Source: Capital IQ as of March 31, 2017

Indexed Stock Performance - Last 5 Years



Source: Capital IQ as of March 31, 2017

Interior Solutions - EV/LTM EBITDA



Sources: Capital IQ as of March 31, 2017 and William Blair market analysis

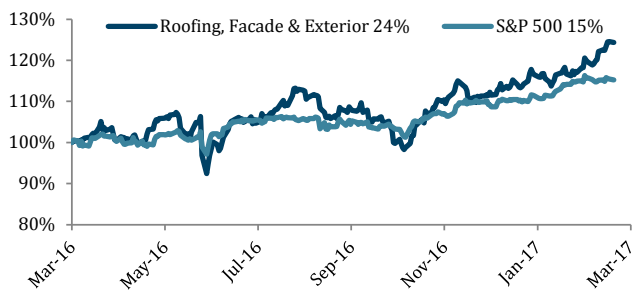
Roofing, Facade & Exterior Products

(\$ in millions)

Company	Stock Price Change Since 3/31/2016	LTM Financials		LTM Margins			Historical Revenue 3-Yr CAGR	Valuation			
		Revenue	EBITDA	Gross Profit	EBITDA	OCF ⁽¹⁾ Margin		Enterprise Value	EV/LTM Revenue	EV/LTM EBITDA	Net Debt/EBITDA
Griffon Corporation	59.5%	\$1,930	\$192	24.5%	9.9%	9.9%	(2.7%)	\$2,175	1.13x	11.3x	4.9x
Trex Company, Inc.	44.8%	\$480	\$123	39.0%	25.7%	25.7%	10.7%	\$2,033	4.24x	16.5x	N/A
Ply Gem Holdings, Inc	40.2%	\$1,912	\$230	24.3%	12.0%	12.0%	1.6%	\$2,150	1.12x	9.3x	3.4x
James Hardie Industries plc	14.5%	\$1,863	\$460	36.4%	24.7%	24.7%	7.2%	\$7,427	3.99x	16.1x	0.9x
Kingspan Group plc	20.2%	\$3,650	\$493	30.2%	13.5%	13.5%	3.5%	\$6,336	1.80x	13.3x	1.1x
Owens Corning	29.8%	\$5,677	\$1,111	24.9%	19.6%	19.6%	3.9%	\$9,105	1.60x	8.2x	1.8x
Wienerberger AG	10.6%	\$3,290	\$399	32.4%	12.1%	12.1%	2.4%	\$3,212	1.01x	8.4x	1.9x
Mean	31.4%	\$2,686	\$430	30.2%	16.8%	16.8%	3.8%	\$4,634	2.13x	11.9x	2.3x
Median	29.8%	\$1,930	\$399	30.2%	13.5%	13.5%	3.5%	\$3,212	1.60x	11.3x	1.8x

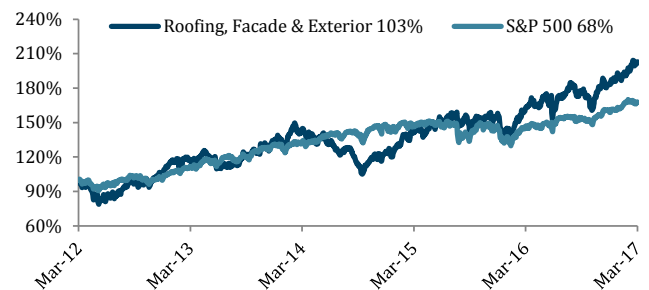
(1) Operating cash flow (OCF) calculated as EBITDA less capital expenditures
Source: Capital IQ as of March 31, 2017

Indexed Stock Performance - Last 12 Month



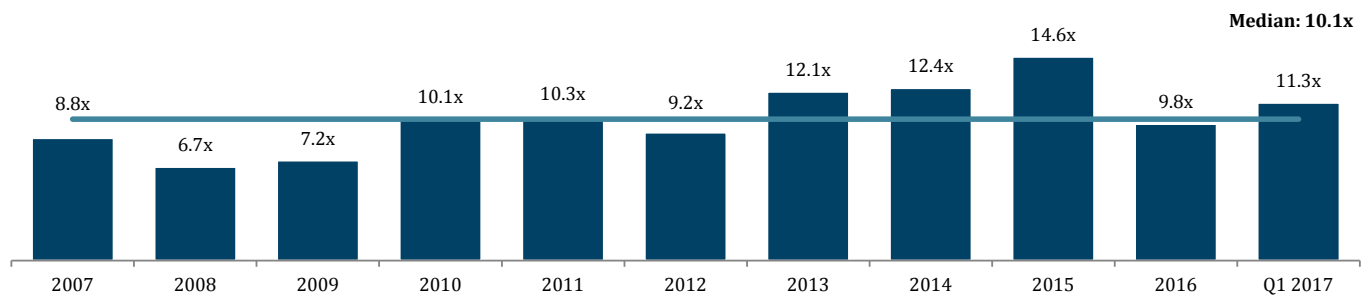
Source: Capital IQ as of March 31, 2017

Indexed Stock Performance - Last 5 Years



Source: Capital IQ as of March 31, 2017

Roofing, Facade & Exterior Products - EV/LTM EBITDA



Sources: Capital IQ as of March 31, 2017 and William Blair market analysis

Disclosure

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