



The countdown to net zero carbon buildings

SPOT ON | BUILDING MATERIALS | JULY 2019

Zero carbon building in Hong Kong

“Following the recent commitment by the UK government to reach net zero carbon emissions by 2050, we foresee the need for revolutionary changes in the construction sector to meet the envisaged criteria and reduce environmental impacts.”

BRIAN LIVINGSTON
MANAGING DIRECTOR
LONDON, UNITED KINGDOM



MARKET TRENDS (pg.2)

We look at trends related to three of the steps identified in the Net Zero Carbon Buildings Commitment. How can the construction and building materials sector utilize available technologies and techniques to meet the carbon neutral targets being set by the UK and Nordic governments?

SPOTLIGHT (pg.4)

Avonside, the UK's largest roofing service provider, shares its forward-thinking vision, growth strategy and predictions for an eco-friendly future.

PUBLIC COMPANY VALUATIONS (pg.6)

A selection of the main players and valuation trends in the building materials sector.

M&A ACTIVITY (pg.9)

A summary of notable transactions in the industry over the past five years.

WHAT'S BEEN HAPPENING AND WHAT COMES NEXT?

In June 2019, the UK became the first G7 country to commit to net zero carbon emissions by 2050. The goal to become carbon neutral is a worldwide challenge.

Although this represents a strong commitment, the Nordics are working towards even more challenging targets. Norway and Sweden have already passed laws to become carbon neutral by 2030 and 2045, respectively.

The construction and building materials sector has an important role to play in achieving these targets, and we are seeing an increasing push towards carbon-neutral buildings.

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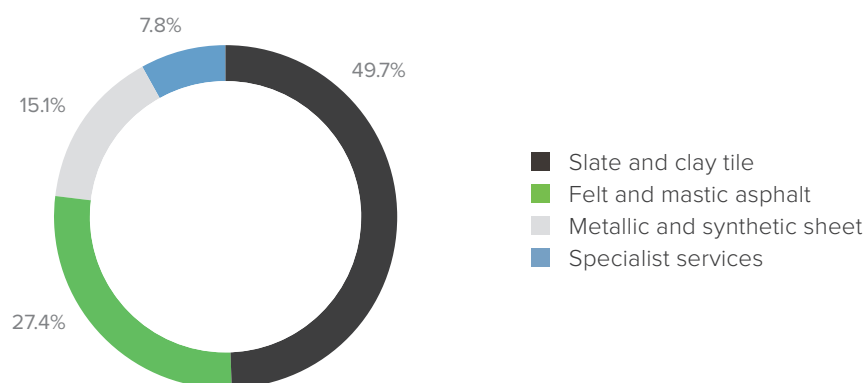
Market trends

In September 2018, the World Green Building Council officially launched The Net Zero Carbon Buildings Commitment, which seeks to challenge companies, cities, states and regions to reach net zero operating emissions in their portfolios by 2030 and to advocate for all buildings to operate at net zero by 2050.

Three of the steps within the council's framework for carbon neutrality are to:

- reduce construction impacts
- reduce operational energy use
- increase renewable energy supply

Products and services segmentation (2018–2019)



Source: IBISWorld

The UK roofing industry

Revenue

US\$6.6bn

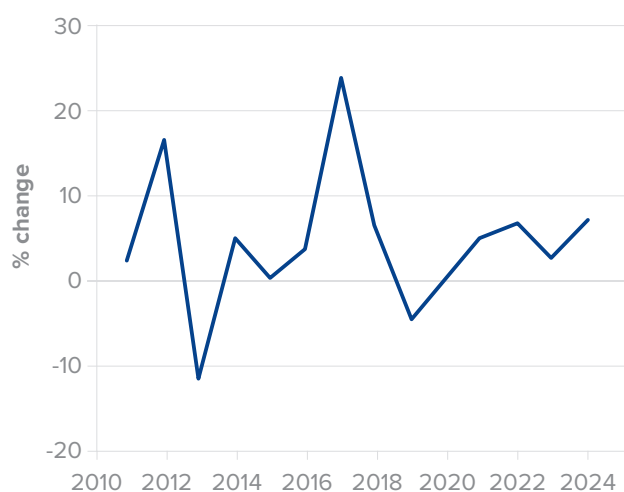
Annual growth 2014–2019

8.2%

Annual growth 2019E–2024E

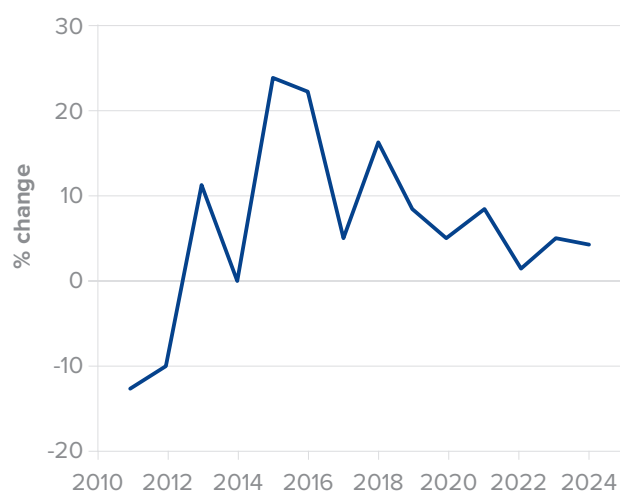
2.4%

Demand from commercial building construction



Source: IBISWorld

Demand from residential building construction



Source: IBISWorld

How does the Net Zero Carbon Buildings Commitment impact the roofing and cladding industry?

REDUCE CONSTRUCTION IMPACTS

The best way to reduce construction impacts is to build less, use less and build smarter.

Using recyclable materials is potentially one of the easiest ways for a construction company or homeowner to reduce construction impacts. Building materials companies should keep this in mind when positioning their products in the market.

Metal roofing is highly recyclable, and the use of already-recycled materials as opposed to raw materials reduces the energy required for its production. For example:

- recycled steel (Galvalume®) uses 26% of the original energy
- recycled aluminum uses 5% of the original energy

Other highly recyclable roofing materials include:

- asphalt shingle
- Ethylene Propylene Diene Monomer (EPDM) rubber
- concrete
- clay

Not only does using recyclable materials help reduce carbon footprint, it also helps satisfy Leadership in Energy and Environmental Design (LEED) certification criteria, which we discussed in detail in our previous newsletter.

REDUCE OPERATIONAL ENERGY USE

One of the simplest ways to reduce operational energy use of a building is to reduce the need for air conditioning systems.

Covering roofing and cladding systems in white serves to reflect sunlight and thereby reduces the heat absorbed. The cooling effect from the use of light colors helps reduce the need for air conditioning during the summer months. Research has indicated that using white surfaces over dark surfaces can help lower heat-wave temperatures by two degrees Celsius or more, which could have a significant impact on local climates.

There is an ever-increasing trend towards the selection of lighter-colored roofing and cladding systems. For example, in the nine-year period up to 2018, New York used over nine million square feet of white paint in free roof upgrades for nonprofits, hospitals and affordable housing buildings to help lower building temperatures.

INCREASE RENEWABLE ENERGY SUPPLY

Renewable energy is an increasingly hot topic. Solar energy, though costly to implement, offers a clean, renewable source of power.

Most people are familiar with solar panels, typically found on rooftops and made with semiconductor materials like those used in computer chips. When sunlight hits the solar panel cells, they turn the collected heat into electricity.

However, many consider the future of solar technology to lie in photovoltaic (PV) glass. Not only is it transparent, but it also works at lower light levels, which means positioning is less important and, vitally, it can work on a vertical basis.

Although PV glass has been in use for a number of years now, its use is expected to grow significantly. Manufacturers are working to improve a number of features, such as efficiency, aesthetics and ease of installation, and to make it as cheap to produce as normal glass.

With the recent government commitments to net zero carbon emissions, the speed of developing these improvements is expected to accelerate.

FUN FACT

Green roofing materials can be longer lasting than asphalt roofing tiles. This is because the plants and soil protect the roof from sun damage and extreme temperature changes.

(Source: Piktochart — Fun facts about roofs)

FUN FACT

Some of the oldest roofing materials in the world are thatch, clay and stone. Thatch is estimated to have been first used between 5,000 and 1,800 BC. Clay tiles can be traced all the way back to around 10,000 BC.

(Source: Piktochart — Fun facts about roofs)

FUN FACT

The sun has produced energy for billions of years. Every hour, the sun beams more energy onto Earth than it needs to satisfy global energy needs for an entire year.

(Source: National Geographic)



Spotlight

OVERVIEW

Founded in 1987 **Avonside** is Britain's largest roofing service provider, with UK-wide coverage. The group has the resources and capabilities of a national operation, whilst still being able to offer the hands-on, face-to-face approach of a local company.

The group consists of a family of specialist divisions with a forward-thinking vision to deliver best-in-class roofing at the point of delivery.

These are:

- Avonside Roofing
- Avonside Flat Roofing
- Avonside Renewables
- Avonside Energy

The combined skills and expertise of its individual divisions means the group is well-equipped to tackle projects of any scale or nature and deliver first-class results with ease.

Every year, Avonside completes over 15,000 projects and has the largest labor resource in the industry, with over 1,200 fully qualified operatives.



Q&A

What is your current strategy?

Our goal is to be the provider of choice for the UK housebuilding sector, developing relations with our blue-chip client base.

Our flexible operating base means that we are able to respond quickly and effectively in line with client requirements.

It's our belief that consolidation of the sector can result in economies of scale that can give the sector the financial stability required to plan projects effectively. Our growth has been based upon an aggressive acquisition strategy, underpinned by ongoing organic growth. It's a model that has served us well over a sustained period.

In our most active year we made six acquisitions to extend our national coverage, and we have continued to make strategic acquisitions to expand the brand. Our goal is to operate effectively—primarily in public or privately funded housebuilding.

Innovation has always been a central part of our philosophy. We have played an active part in the regulatory environment for our sector whilst innovating in key commercial and service offerings, keeping the organization at the forefront of our sector.

The Group's strategy has led it to win lucrative work in recent years. For instance, in November 2016, we were appointed to a US\$1bn public-sector framework contract for the provision of flat roofing services. In July 2016 we secured a US\$378,000 contract to install general roofing and PV systems for housebuilder Taylor Wimpey.

As part of your growth strategy, what technologies are you currently investigating?

Innovation at Avonside goes beyond materials, extending to the business

vision and procedures. We have initiated our own environmental policy; that is, a commitment to minimising the impact of building and construction activities on the environment whilst exploring new technologies and systems.

We are heavily involved in the renewable energy market and frequently consult with developers and manufacturers to develop new ways of achieving renewable targets in a pragmatic and economically viable manner.

For example, the drive to offer a one-stop solution in energy-efficient solutions has seen the group expand its expertise into solar panel installations. We work with architects, planners and developers to offer the most cost-effective solutions, which often include multi-trade solutions.

Internally, we are embracing technological developments to improve our business processes and the flexibility and connectivity of our people, which in turn is driving productivity levels.

What differentiates Avonside from its competitors?

We are a large player in what is, essentially, a fragmented sector. Therefore, we can bring the advantages of a larger company—financial stability, strong health and safety performance, and the largest pool of skilled labor in the sector—whilst marrying these effectively with our national coverage of local operating business units, which can offer local knowledge, expertise and commitment.

We see our national coverage of 40 branches as a key differentiator. We also have experienced, sector-relevant expertise at all levels throughout our business.

We invest heavily in our people, partner with our supply chain and remain committed to safety and the environment, all with the intention of continuously improving customer satisfaction.

FUN FACT

Lake Maracaibo, Venezuela, has the most recorded lightning strikes in the world, with 232.52 lightning flashes per square kilometer per year. People assume a metal roof is more susceptible to being hit, but lightning tends to strike the highest object in the area—metal or not. A metal roof would, in fact, disperse the energy in a safe manner through the structure.

(Source: Metro)

What future trends do you see arising within the global roofing and cladding market?














Roofing installation methods have only marginally changed over the past decade, although scope for growth exists in the market, but recent developments suggest that may be about to change: the UK's sustainability drive could support demand for more eco-friendly roofing over the next five-year period, such as:

- Green roofs: roofs covered in vegetation that helps to reduce stormwater run-off and cooling costs.
- PV systems: solar panel systems that supply renewable and usable energy through the conversion of light into electricity, using semiconducting materials.

We are also closely monitoring the modular and off-site construction space with interest, as it provides a potential opportunity within housebuilding to reduce the overall housing shortfall. We are keen to establish a meaningful part in that particular supply chain at some point.

Additionally, the emergence of single-ply roofing techniques using thermoplastics and other compounds has the capacity to harness industry growth.

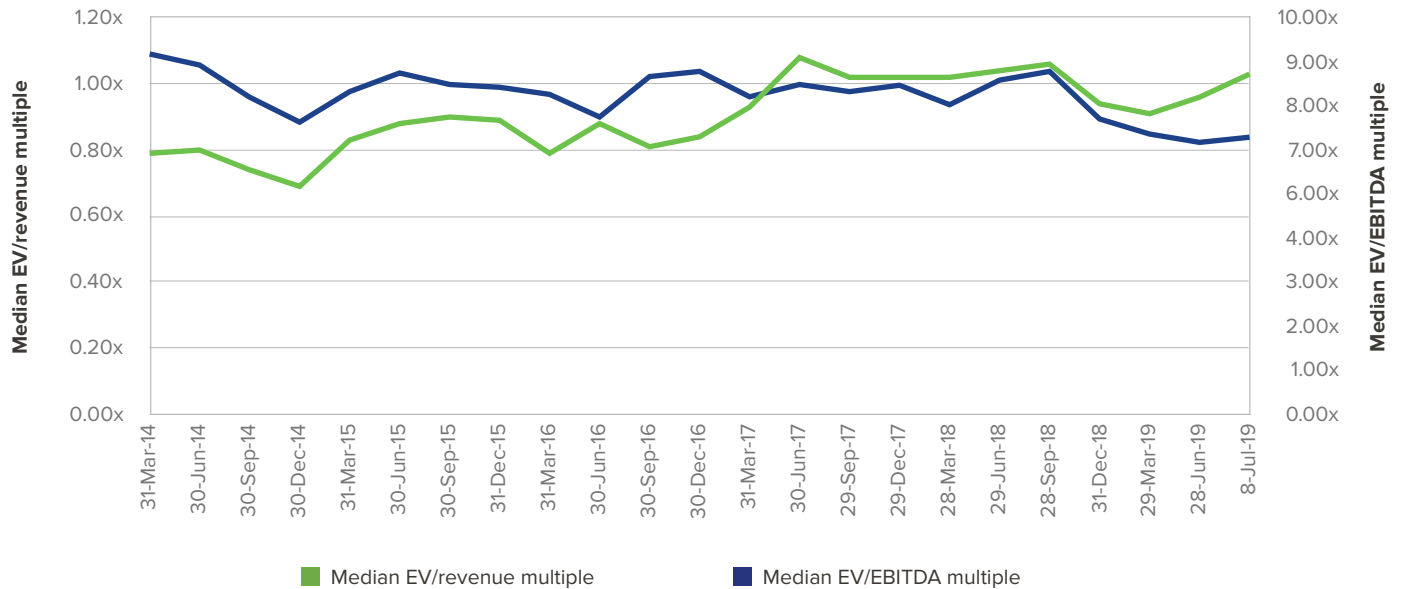
Selected public company valuations

Manufacturers	Head office location	Enterprise value (US\$m)	Enterprise value			
			LTM sales	NTM sales	LTM EBITDA	NTM EBITDA
Etex N.V.		1,866	0.6x	N/A	4.2x	N/A
SIG plc		1,159	0.3x	0.4x	12.8x	7.6x
Kingspan Group plc		10,388	2.1x	1.9x	17.7x	15.6x
Carlisle Companies Incorporated		8,982	2.0x	1.8x	12.0x	10.2x
Compagnie de Saint-Gobain S.A.		30,258	0.6x	0.6x	5.5x	5.5x
China National Building Material Company Limited		32,045	0.9x	1.0x	4.4x	5.3x
LIXIL Group Corporation		10,502	0.6x	0.6x	13.7x	8.3x
Sika AG		25,593	3.6x	3.0x	22.3x	17.3x
Fletcher Building Limited		3,865	0.6x	0.7x	6.2x	7.3x
Boral Limited		6,066	1.5x	1.5x	8.7x	8.1x
Wienerberger AG		3,910	1.0x	1.0x	7.0x	5.9x
IS DongSeo Co., Ltd.		1,391	1.0x	1.5x	3.7x	9.3x
Siam City Cement Public Company Limited		3,253	2.2x	2.1x	11.5x	11.0x

Source: Capital IQ

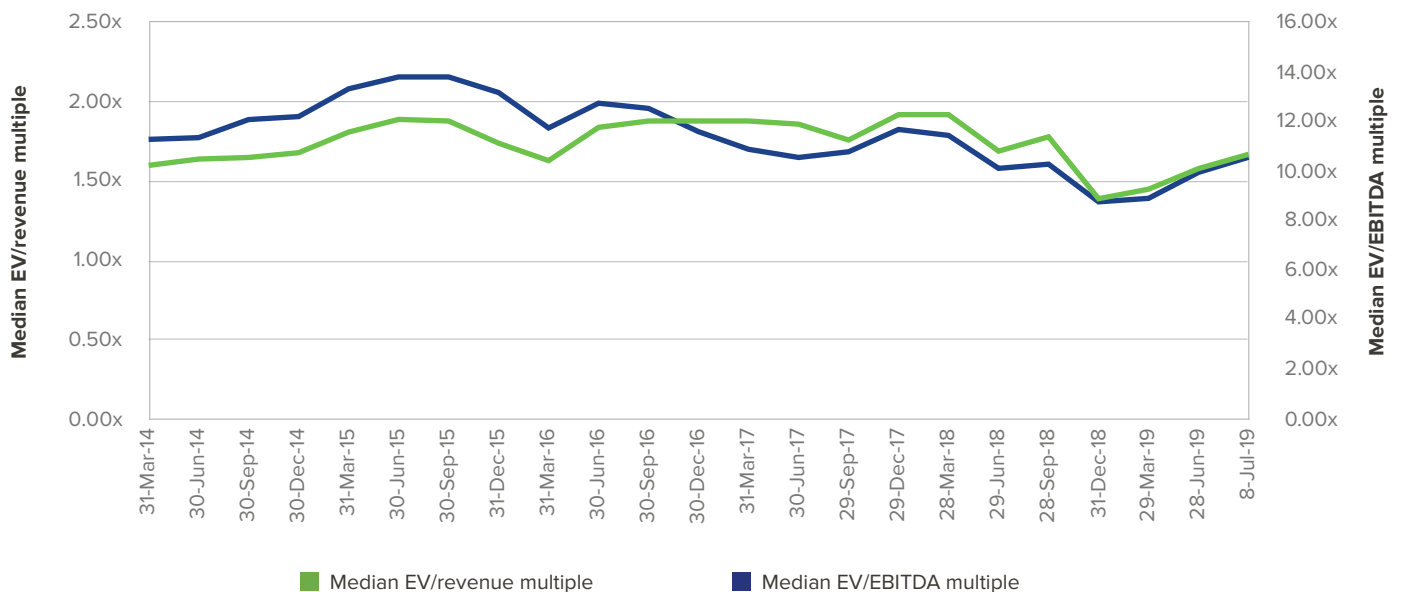
Selected public company valuation trends

EMEA HISTORIC MULTIPLES



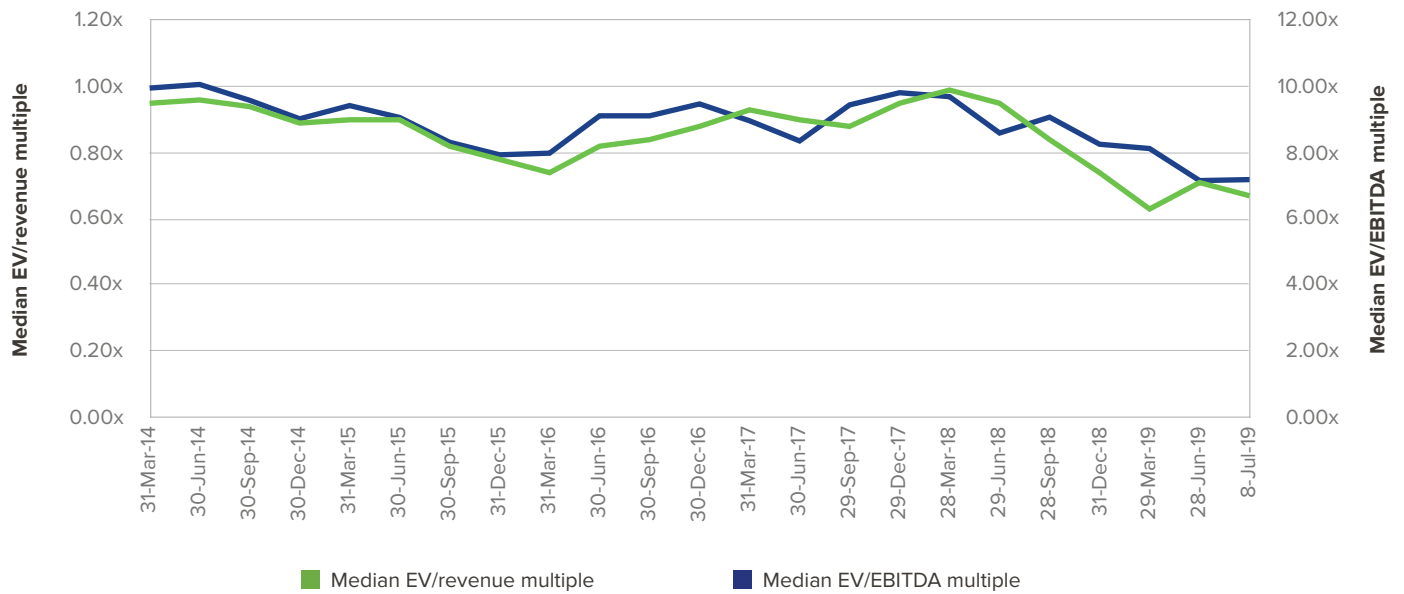
Source: Capital IQ

AMERICAS HISTORIC MULTIPLES



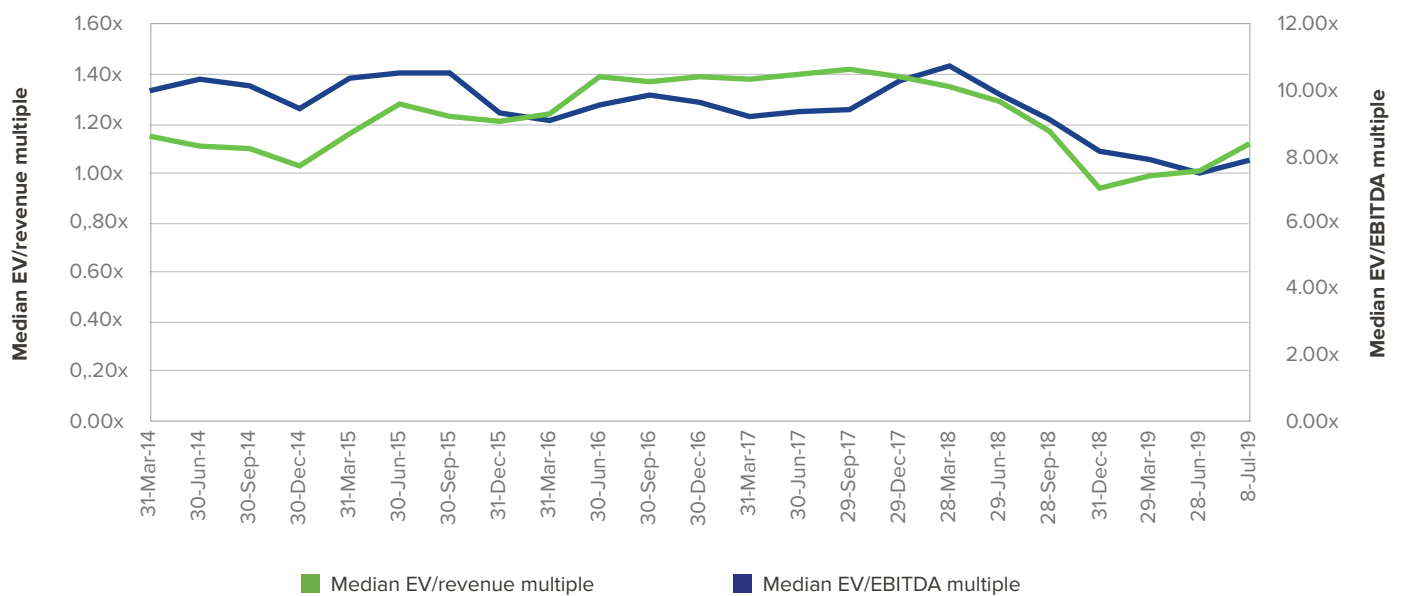
Source: Capital IQ

ASIA-PACIFIC HISTORIC MULTIPLES



Source: Capital IQ

GLOBAL HISTORIC MULTIPLES



Source: Capital IQ

Recent M&A activity

A selection of private transactions in the building materials sector

Date	Target	Country	Target description	Bidder	Country	Valuation		
						EV (US\$m)	EV/Rev	EV/EBITDA
28-Jul-19	 BRACKNELL ROOFING The National Roofing Contractor		Provides roofing contracting services for commercial projects	 AVONSIDE Group Services		N/A	N/A	N/A
20-May-19	 SAINT-GOBAIN BUILDING DISTRIBUTION		Offers building products for construction and civil engineering	 STARK GROUP		374	0.2x	7.0x
14-Dec-18	 Roospace Solutions		Manufactures and installs panelized roofing systems	 SAINT-GOBAIN		N/A	N/A	N/A
10-Dec-18	 PAC-CLAD ENTERPRISE		Manufactures metal roofing, wall panels and other metal products	 CARLISLE		197	1.2x	N/A
17-Oct-18	 st steel&tube STRUCTURES IN EVERYWHERE		Provides architectural stainless steel and other metals	 NEW ZEALAND STEEL		30	0.6x	21.6x
17-Apr-18	 Lagan CONSTRUCTION GROUP		Manufactures building products	 BREEDON		650	1.8x	9.9x
31-Jan-18	 PlyGem® BUILDING PRODUCTS		Manufactures residential and commercial building products	 CLAYTON DUBILIER & RICE		1,501	1.1x	9.9x
22-Dec-17	 PLADUR®		Manufactures plaster-related products for the building sector	 etex building performance		209	N/A	N/A
11-Nov-14	 vicwest BUILDING PRODUCTS		Manufactures and distributes building construction products, including metal roofing	 Kingspan®		198	0.7x	21.2x



Case study

THE SOLE SHAREHOLDER OF FORT WAYNE ROOFING, INC. (FWR) HAS SOLD THE COMPANY TO TECTA AMERICA. FINANCIAL DETAILS HAVE NOT BEEN DISCLOSED.

FWR, founded in 1990 and based in Fort Wayne, Indiana, is a professional roofing and sheet metal organization servicing clients in Fort Wayne, Indianapolis and South Bend.

The firm is a full-service, commercial low and steep roofing and sheet metal contractor, offering roofing design, fabrication and installation for commercial constructions.

Headquartered in Chicagoland, Tecta America leads the commercial roofing industry in the United States, providing installation, replacement, new construction, repairs, disaster response and portfolio management to more than 5,000 customers nationwide. The company, with annual revenues close to US\$1 billion, has a successful track record of acquiring and integrating privately owned roofing contractors.

Oaklins' team in Dallas advised the seller in this transaction. The team ran a targeted and formal process that produced multiple written indications of interest. Three large industry acquirors emerged with offers, and the team negotiated improvements and recommended the best-fit buyer.



has been acquired by



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OAKLINS OFFERS A COMPREHENSIVE RANGE OF SERVICES

- M&A advisory (buy-side and sell-side)
- Growth equity and equity capital markets advisory
- Debt advisory
- Corporate finance services

Building materials is one of our focus areas. Combining comprehensive sector knowledge with global execution has led Oaklins to become one of the most experienced M&A advisors in the building materials sector, with a large network of relevant market players worldwide. This results in the best possible merger, acquisition and divestment opportunities for building materials companies.

If mergers, acquisitions, or divestitures of businesses or business units are part of your strategy, we would welcome the opportunity to exchange ideas with you.

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