

FIRE SAFETY AND NOISE CONTROL FOR FAÇADES

In partnership with



INSULATION SPECIALISTS

With over 45 years' experience, Siderise passive fire and acoustic insulation systems provide high performance solutions to create beautiful, protected buildings without compromise.

Siderise's role throughout its contribution to building projects worldwide places technical, accredited and third party-certified product performance at the very heart of its passive fire products and solutions.

Our responsibility for optimum safety in façade and curtain wall structures begins in the collaboration of building concept and design. We have the technical expertise and insight to understand what's required to build a safer building, and we will work with you to ensure that your projects are designed and built with integrity.



Tektum are one of the UK's most dynamic distributors to the Roofing Facade & Cladding Sector.

Working in partnership with Siderise, Tektum offers contractors unrivalled levels of service and support in ensuring the correct product is used for all fire, acoustic and noise applications and although Siderise products are bespoke, Tektum stocks all of the Siderise approved ancillary items for immediate despatch throughout the UK.

Recognising the growth in newbuild and refurbishment facade projects throughout the UK and Ireland, Tektum have expanded our range of products to offer contractors and designers a complete "through wall" solution which includes:

- Siderise Cavity Fire Barriers and Fire Stops
- Acoustic Accessories & Intumescent Sealants & Accessories
Stainless Steel Facade Fasteners and Rivets
- Stainless Steel Mechanical Anchors & Insulation Fasteners
- EPDM Membrane & Bubble Gaskets
- Sealants & Tapes



FIRE SAFETY FOR FAÇADES

For over 25 years Siderise has been the UK's No.1 firestop solution for the curtain walling industry.

Effective compartmentation measures within building design, combined with professional installation can limit the spread of fire and importantly, noxious gases enabling evacuation of a building. Controlling fire spread through compartmentation saves lives, minimises property damage, as well as giving the fire services a safer environment in which to fight a fire.

The range of Siderise Perimeter Barrier systems provide an easy-to-install method of sealing the void formed between curtain walling and the structural frame.

They are suitable for use as both horizontal and vertical firestop systems.

Their inclusion effectively prevents the rapid spread of flames, gases, and smoke. Additionally, they offer a qualified acoustic performance significantly enhancing room-to-room sound reduction.

Due to the unique method of manufacture these resilient products are able to accommodate normal façade deflection and site tolerances.

The Siderise product offer:

- Market-leading fire performance
- Qualified acoustics performance
- Unique construction provides unrivalled movement performance
- Third-party approved
- Simple and quick to install



PERIMETER BARRIERS AND FIRE STOPS FOR CURTAIN WALLING

Market leading solutions which meet fire and smoke stop, and sound barrier requirements in architectural cladding panel applications.

Siderise CW perimeter barrier and fire stop systems offer an extensive range of solutions for fire stop, smoke stop and sound barrier requirements in all architectural cladding panel applications.

Based on the experience gained through being the premier supplier to the UK curtain walling market, the products represent an unrivalled combination of fully qualified performance, practical installation and service benefits.

The primary function of the CW system is to maintain continuity of fire resistance by sealing the void between the compartment floors or walls and the external curtain wall both horizontally and vertically.

Benefits

- Market leading fire resistance and smoke seal
- Suitable for horizontal and vertical application
- Unique product construction provides ability to accommodate façade movement
- Fully qualified acoustic performance
- Simple and quick to install

Third-Party Certification

- Third-party approved: 'Certifire CF563'
- Fully compliant to UK, EU & UAE regulations
- Tested to BS 476 and EN 1364-4 in accordance with EAD, CWCT and ASFP Guidelines

CAVITY BARRIERS FOR VENTILATED CLADDING

Siderise RH 'Open State' horizontal and RV vertical cavity barrier range represent the default choice for market-leading, high-performance Rainscreen Cavity Barrier applications

Siderise RH and RV 'Open State' cavity barriers have been specifically developed to meet the requirements for cavity barriers used in drained and ventilated façades. Their use ensures that the system will drain any moisture within the façade construction, whilst maintaining airflow and in the event of fire, provide an effective hot smoke and fire seal.

Siderise has developed two 'Open State' (open void) horizontal solutions: **RH25(G/S)** for air gaps up to 25mm and **RH50(G/S)** for air gaps up to 50mm. The product range is compliant to current market requirements and has been tested to ASFP Guidance: 'Open State' Cavity Barrier used in External Envelope or Fabric of Buildings, utilising principles of EN 1363-1. ASFP Technical Guidance Document – TGD 19 (July 2014 revised Nov 2017) refers.

Siderise RV vertical cavity barriers for rainscreen cladding are used to full fill the void between the external envelope and internal structure. By fully sealing the void they assist ventilated façades to function by maintaining air-pressurisation compartmentation. Significantly, their unique stonewool lamella core construction enables the vertical barriers to accommodate the serviceability movement normally associated with rainscreen façades.

Intersections between horizontal and vertical cavity barriers are simply abutted.

CAVITY BARRIERS & FIRE STOPS FOR MASONRY WALLS

Siderise have developed a range of passive fire products specifically for masonry façades, covering all kinds of brick and stonework, including brick slips and render systems. This makes them suitable for a whole range of low to high rise projects.

Masonry is a popular façade choice all over the world. We not only rely on its inherent fire resistance, noise-reducing capabilities, and its ability to withstand harsh weather conditions, but also enjoy the rich palette of tones and textures it offers. From the outside, masonry appears to be a straightforward construction. However, when we look behind the outer layer of bricks, they are more complex than they seem.

Potential Risks

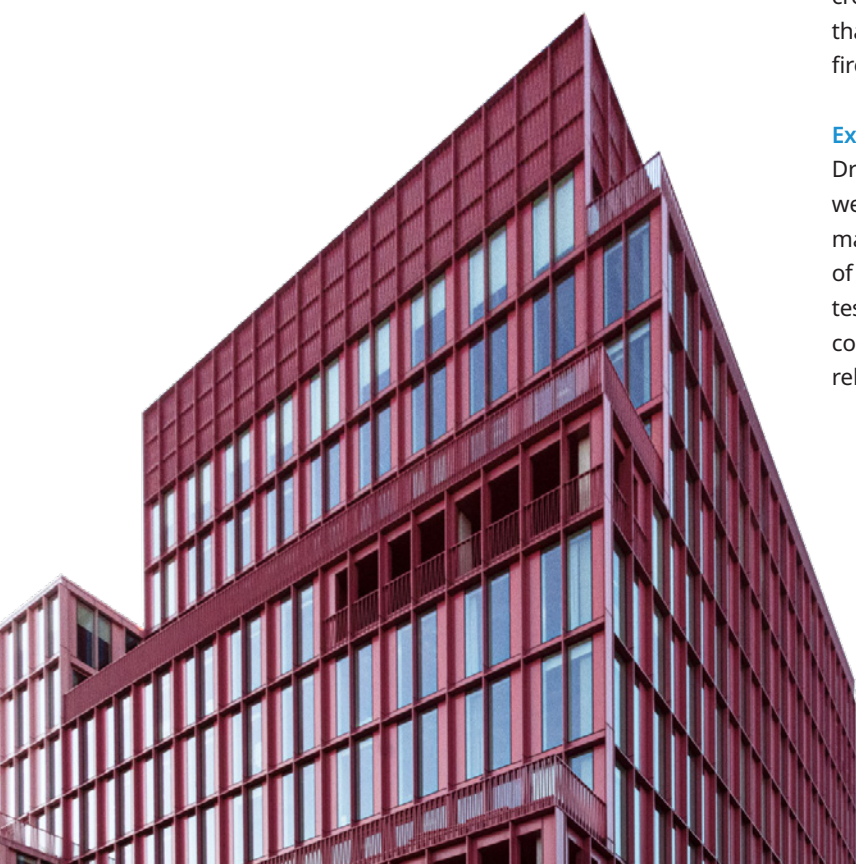
To prevent moisture penetrating through to internal spaces, it is necessary to build masonry façades with an inner and outer leaf, creating a cavity in between. Whilst beneficial for preventing damp and creating space for insulation, these voids can cause serious issues in a fire. They can act as a chimney, allowing flames, heat, and smoke to spread into different building compartments.



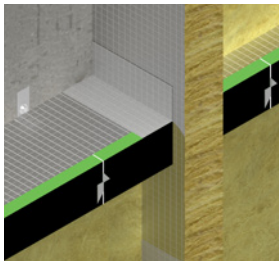
Within this cavity, there are several different materials whose interactions need to also be considered. This has become increasingly complex over time with the growing use of quick-to-construct steel framing systems (SFS), rather than traditional non-combustible blockwork for the inner leaf. There are also several design elements specific to masonry façades which, if not considered properly, could cause serious fire risk issues. This includes decorative offset bricks creating an inconsistent cavity depth, or projecting balconies that have historically lacked a standard tested approach for firestopping.

Expert solutions

Drawing on our vast experience and knowledge of facades, we have developed a suite of passive fire solutions for masonry constructions which address all these issues. Each of these products have been developed and thoroughly tested to match the ethos that surrounds modern masonry construction – from speed of build to providing a proven reliable and robust solution for buildings made to last.



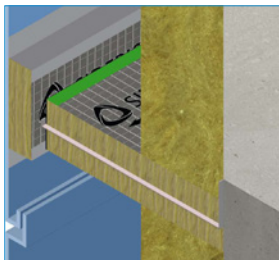
FIRE SAFETY SOLUTIONS



**RV/RH Cavity Barriers
for Ventilated Cladding
Rainscreen
– Vertical and Horizontal**



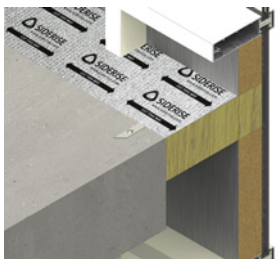
**EWI Cavity Barriers and
Firestops for External
Masonry Walls**



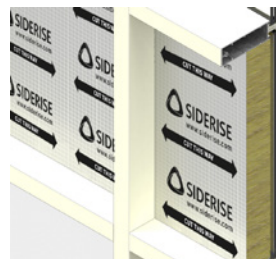
**OSCI Open State Cassette
Insert**



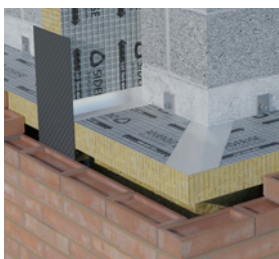
**BB-CB Balcony Bracket –
Cavity Barrier**



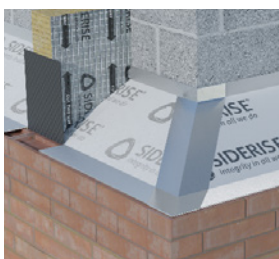
**CW-FS Perimeter Barriers
and Firestops for Curtain
Walling**



**Siderise Nexus Fusion
for spandrel panels**



**EW Cavity Barriers and
Firestops for External
Masonry Walls**



**NC-CT Non-Combustible
Cavity Tray**



NOISE CONTROL FOR FAÇADES

Acoustics in the built environment is a concern to society and a challenge to designers. We are experiencing increasing noise levels, occupant complaints and dissatisfied clients.

Siderise are leading manufacturers of acoustic materials for construction and other industries. Our range includes a choice of effective and proven sound reduction solutions which deal with all common sound path problems.

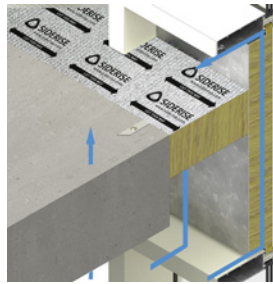
Additionally, we offer a vast range of sound absorption, isolation, anti-vibration and damping materials.

Our specialist design service, for standard and bespoke perimeter barrier slab-edge floor closures which combine fire resistance with the required sound insulation performance, is complemented by a range of acoustic barrier and insert systems to improve the sound performance within the curtain wall environment.

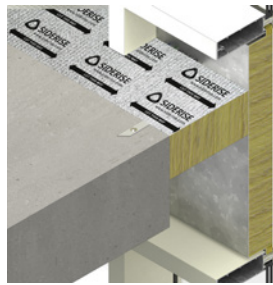
PERIMETER CLOSURES AND ACOUSTIC BARRIERS

"Our qualified in-house noise consultants can assist you to achieve the optimum acoustics performance."

Mike Carrick AMIOA,
Technical Officer – Acoustics,
Siderise Special Products Ltd.



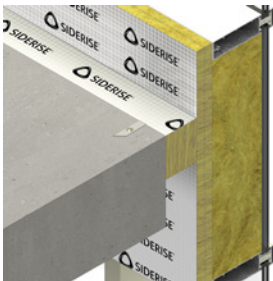
For main sound transmission modes at floor/façade abutment our Façades team can undertake acoustic performance assessments and calculate the required SRI values for the firestop in order to meet the overall performance for a specific project. When required, additional acoustic treatments are available to ensure compliance.



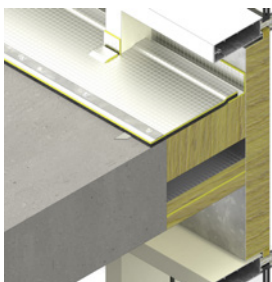
Siderise CW-FS perimeter barriers are market leading fire, smoke and acoustic seals for use within curtain walling. For guidance, tested performance for firestop only:

CW-FS60 = 23dB(Rw)

CW-FS120 = 25dB(Rw)



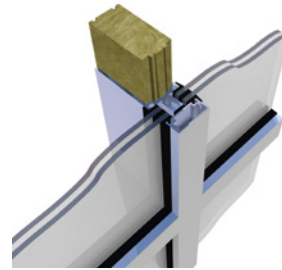
Siderise CW-FB curtain wall fireboard forms part of a perimeter barrier firestop and spandrel zone protection system for use with non-fire rated aluminium curtain wall façades. It protects mullions and transoms and maximises the stability and integrity of framing elements and spandrel construction.



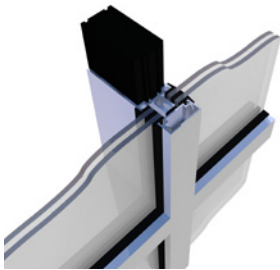
Siderise CVB is a high mass closure normally incorporated beneath the perimeter barrier firestop and located to maximise the air gap and create a "twin mass" system. For guidance, tested performance for composite assembly:
CW-FS120 + AB10 + 100mm airgap + CVB10 = 51dB (Rw)

ACOUSTIC INSULATION INSERTS FOR FAÇADES

Siderise MI Mullion Inserts comprise of a range of specialist acoustic insulation materials designed to reduce vertical and horizontal sound transmission in curtain wall buildings, improving the performance of hollow-framed façades and glazed areas.



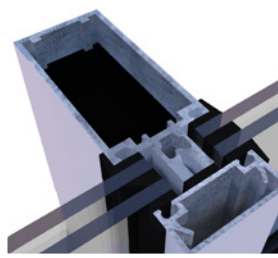
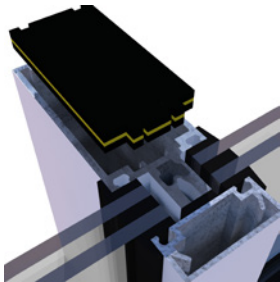
Siderise MI2 insert: Through frame – sound transmission treatment using shaped absorptive mineral wool inserts.



Siderise MI3 insert: Through frame – sound transmission treatment using shaped impregnated acoustic foam inserts.

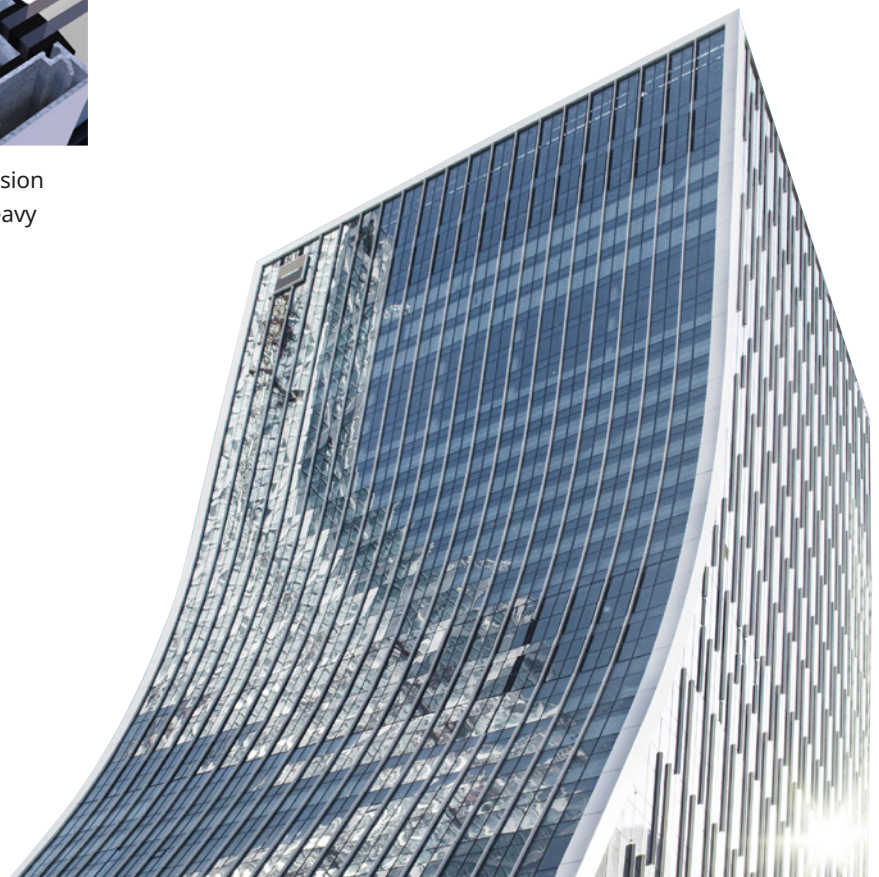


Siderise MI6 Insert: Through frame – sound transmission treatment using shaped composite high mass layer and acoustic foam inserts.



Siderise MI1 Closure: Along frame – sound transmission treatment using dense resilient foam with central heavy membrane.

See separate data sheet for system choice guidance and acoustic performance which can be found at www.siderise.com.



VALUE PROPOSITION

We work with architects, contractors and specialist installers to develop effective, engineered solutions for fire, thermal and acoustic challenges.



The fundamental ethos at Siderise is to provide cost-effective, high quality insulation products and to support customers and specifiers with the highest level of technical expertise.

Siderise offers free technical advice to professionals and specialist fire contractors on the most appropriate method of fire stopping for a wide variety of construction applications.

Our specialist Façades team offer solutions for any fire or acoustic seal requirement within the external façade.

At the design stage we can complement standard details with consideration of wider performance demands including acoustics, thermal requirements and serviceability movement.

Upon receipt of project specific information we can provide practical design solutions without compromising on cost or performance.

We support specifiers from initial enquiry and technical consultation to formal pre-qualification and project realisation.

Specifications are provided for standard products and applications and can be tailored to suit specific project performance requirements.



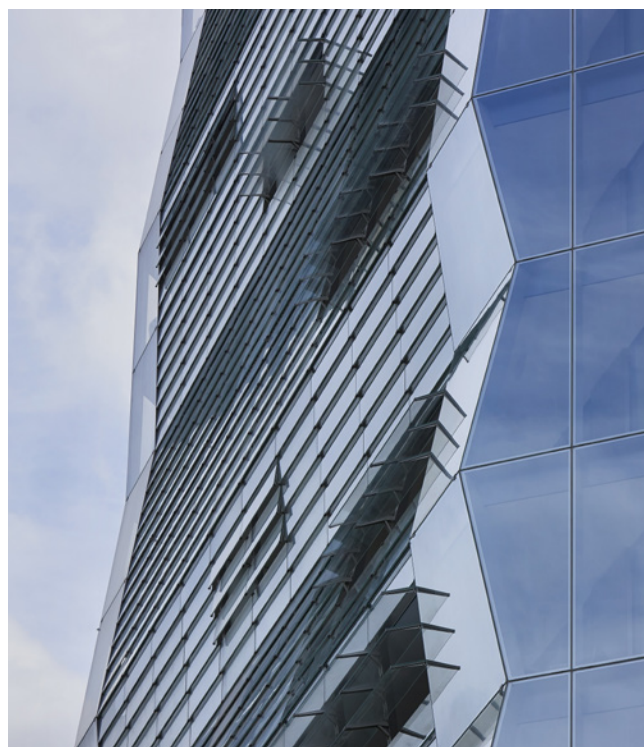
MARKET LEADING SUPPORT

Customer service is at the heart of everything we do, that's why we do all we can to make specifying and using Siderise products easy for you. For the architect, designer and specifier, selecting the right solutions for your project is one of the keys to its success. You can trust us to keep our promises and we can offer excellent lead-times thanks to our technologically advanced manufacturing plant and skilled workforce.

Technical support

Siderise provides the following technical support services:

- Offer project specific or application specific technical support at initial tender or full detailed design stage.
- Attend site meetings in a consultative capacity for either fire-stopping, acoustic design and/or thermal performance support.
- Consult with Building Control Officers, Architects, Main Contractors or Noise Consultants to provide support at any stage of the project.
- Project-specific design review, advice and details.
- Technical project proposals, project details and method statements.
- Assist with mark-up of project drawings to highlight typical locations of fire stops at visible lines of compartmentation and/or standard cavity barrier locations – with reference to standard details, building regulations and/or other code requirements.
- Provide 'Composite SRI' calculations and practical design advice to ensure optimum 'floor to floor' / 'room to room' sound attenuation performance.
- Train your staff or sub-contractors as competent installers.



- Introduce formally accredited, third party approved installers/contractors.
- Available for co-ordinated site visits with BCO or other stakeholders to inspect installations, putting the Client or Main Contractor at ease.
- Produce formal letters, confirming the details of site inspections and findings.

Continuous Professional Development

Our experts run a programme of CPD sessions and training in the areas of noise control and passive fire protection to keep you ahead of the game. The seminars, which can be online are presented by our technical experts and focus on current industry standards and legislation. Assessing the problems whilst considering real-life examples and exploring the solutions available for effective noise control and passive fire and smoke containment.

Why choose a Siderise CPD?

Our industry experience spans over 45 years and as designers and manufacturers of fire and acoustic solutions to the construction industry, we have assisted many architectural practices with their designs. This expertise means that we can provide companies with all the knowledge they need on passive fire protection and noise control.



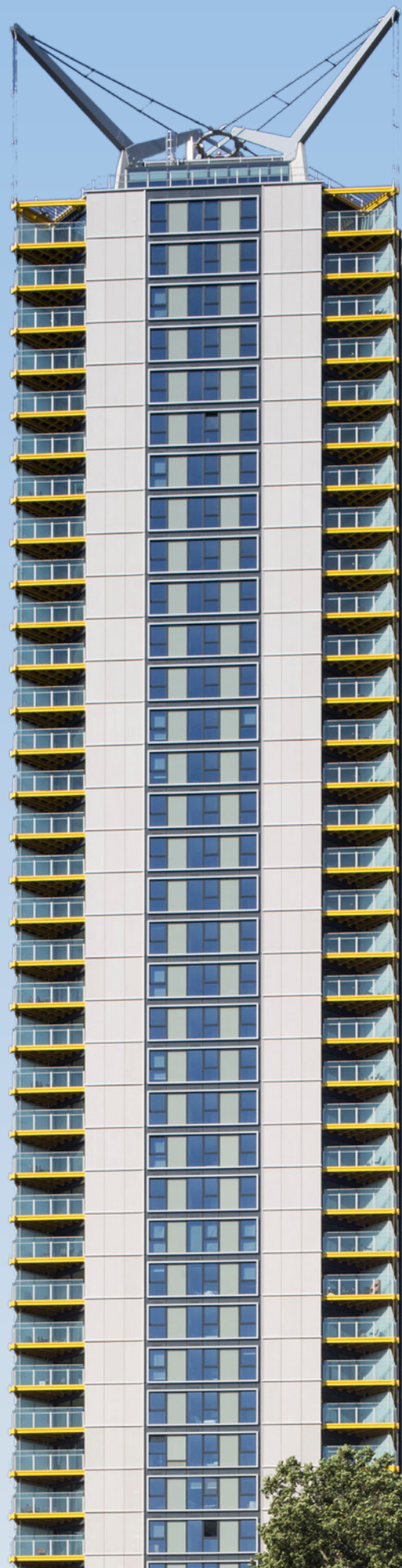
Tektum distributes materials to the metal roofing facade and cladding industry, specialising in providing fasteners for the complete building envelope.

Our mission is to provide quality branded products with unrivalled levels of service and our experienced team has the product and industry knowledge to meet our customers needs accurately and quickly.

We have a proven track record of successfully servicing our clients on projects throughout the UK and beyond and our range has expanded to include:

- Stainless and Carbon Steel Fasteners for Roofing and Cladding Fasteners for Single Ply and Flat Roof applications
- Butyl Strip Sealants
- Gun Applied Mastics and Sealants
- Coloured and Large Flange Rivets for metal cladding and façades Sealing Tapes, Foam Tapes and Foam Fillers
- EPDM Membranes and Bubble Gasket
- Pipe Flashings
- Power Tools
- Site Accessories and Consumables
- Support Bar Systems

To learn more about our company, please visit us at www.tektumsupplies.co.uk

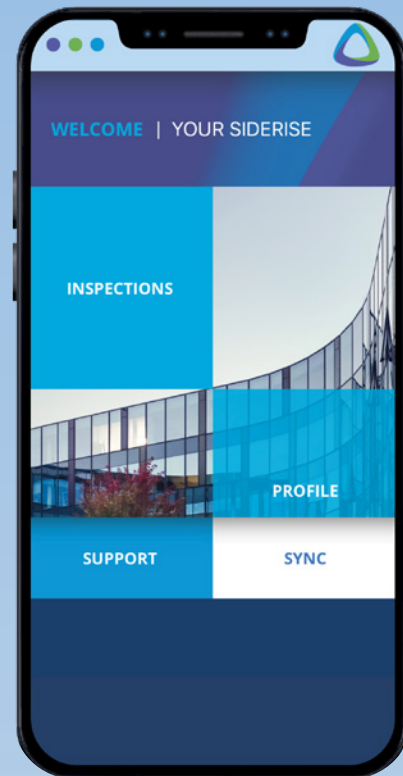


INSPECTION APP

Siderise have developed a simple-to-use inspection application to enable the efficient recording and assessment of the installation of our products – and the issue of the recorded information into a clear and concise report.

The App provides a simple, easy-to-use process for recording the progress and quality of the installation of all of our standard firestop, cavity barrier and acoustic barrier systems. It allows the user to effectively inspect, record and seamlessly audit the quality of the installation work. Importantly, this process highlights any issues in need of a resolution.

Once in the field, the installer can use the App on a standard smartphone or tablet device to capture the relevant information for the installation.



App features

- Streamlined and contextual data entry using an iOS or Android device
- The App allows the user to easily update the data input fields, capture multiple photos for each area and/or element inspected and record as compliant or otherwise
- Photos taken using the device's built-in camera document the installation and are embedded/annotated within the report
- Immediate generation of a comprehensive report on the quality of installation of areas inspected as in accordance with recommendations or, importantly, identifies incorrect installation and areas requiring remedial treatment.

Contractor benefits

- Enhances site productivity and quality of workmanship while eliminating time consuming paper reporting
- Provides clear understanding of on-site conditions requiring remediation and highlights any issues in need of resolution
- Provides a method to simplify documentation
- Supports management
- Contributes towards O&M and contractual compliance
- Enhances quality – bringing peace of mind to you and your client

PROJECT PROFILE

Aloft Palm, Jumeirah

With stunning 360° views of the Persian Gulf, the Aloft Palm Jumeirah boasts a striking, colourful interior that stands out from other sleek and muted designs in Dubai.

When it came to fire safety measures on this landmark hotel, Siderise met the client's requirements by providing the proven CW-FS perimeter barrier as part of the façade system. While the primary function of the CW-FS is to protect against the spread of fire, it also works as an acoustic barrier which stops noise travelling room to room.



70 St Mary Axe, London

The distinctive, semi-elliptical shape of the new 90m-high glass and steel office building at 70 St Mary Axe in London required proven passive fire protection and acoustic solutions that could fit with the unique curved frame. Leading manufacturer of fire, acoustic and thermal insulation products, Siderise, met the challenge.

Built by Mace, 70 St Mary Axe is another example of Architects pushing the envelope when it comes to daring and striking design. The curvaceous form of the 24-storey structure presented a number of challenges for façade contractor, Focchi, including the creation of a cold- curved glass panel. In addition, the building's unusual shape meant each floor was slightly different from the ones above and below, therefore requiring a high level of accuracy and detail to meet the sound barrier and firestop requirements.

The collaboration with Focchi saw Siderise recommend the CW-FS 120 Firestop to seal the gap between the curved walling system and the internal floor slabs of this tapered building and also as a vertical barrier for each internal steel column.

As well as being an effective seal against the passage of fire and smoke, the CW-FS 120 will also function as an effective acoustic barrier and plenum lining. Siderise also provided the BM/P Acoustic Barrier Mat to assist in reducing flanking transmission between adjacent internal areas and further improve the room-to-room acoustic performance.

Whilst specifying the correct product is vital, the quality of installation of a life-safety-critical product is equally as important. Throughout the application, the Siderise Inspector App provided Focchi with an efficient way to effectively inspect, record and seamlessly audit the quality of the installation of the firestops. By capturing the relevant information on a tablet device, the contractor was able to highlight any issues in need of a resolution.

With this stunning city building and its curvaceous irregular form a welcome addition to the London skyline, Siderise played its part in delivering tried and tested solutions which met the client's passive fire protection and noise transfer requirements.





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