Siderise Fire and Acoustic Gap Sealant

This product has been discontinued, It has been replaced by:

Siderise FR-A Fire Rated Dry Zone Sealant for internal use where there is low exposure to moisture i.e. curtain walling, precast concrete façade, composite cladding, and building interior applications.

Siderise FR-X Fire Rated Wet Zone Sealant for external use where there is exposure to moisture or weathering i.e. ventilated cladding (rainscreen) and external masonry wall applications.

Application

Siderise Fire & Acoustic Sealant is a one-part, fire-stopping, gun-grade joint sealant. Acrylic-based it gives a firm yet flexible seal to joints in a variety of fire-rated structures. It will not support combustion and when subjected to heat, chars and slightly intumesces preventing the spread of smoke and fire through the joint. Siderise Fire & Acoustic Sealant has been formulated to give improved sealing and application performance coupled with excellent fire-stopping properties.

Benefits:

- Fire-rated in both horizontal & vertical joints
- No priming is required for most construction substrates and remains flexible for joint movement
- For use in small joints with excellent slump resistance
- 18 months shelf life
- Fast cure tack-free within an hour, easy to apply and tool off
- Halogen-free, resists fungi and vermin
- Excellent adhesion to most common building substrates Reduces sound transmission in joints
- No known effects on plastic pipes, cables/bunches, sheathing, or metallic components

Product Description

Siderise Fire & Acoustic Sealant is primarily intended for use with Siderise Firestop & Cavity Barrier Systems to ensure small gaps and imperfections are treated where it is otherwise not possible. This includes applications such as:

- Sealing around façade support brackets or penetrations
- Sealing joints to Firestops/Cavity Barriers where it is not possible to apply foil tape, such as imperfections in the slab edge creating gaps.

Siderise Fire & Acoustic Sealant is designed for sealing joints, voids, irregular holes in fire walls, floors, partitions and other structures and for maintaining their integrity when sealing around pipes and cables which penetrate them. It is also ideally suited for internal perimeter pointing of fire rated door and window frames. Application instructions All surfaces must be clean and sound, free from dirt and grease. The surfaces may be damp but not running wet. Use mechanical abrasion to clean porous surfaces before application to remove loose material. Particular attention should be paid to BS 6093 (2013) - codes of practice for the design of joints and jointing in building construction, when preparing a specification for a particular joint. In order to obtain maximum performance as a sealant, the width of the joint should be twice the depth, and the use of backing material is strongly recommended e.g. stonewool. Prepare joint by cleaning and priming if necessary. Cut nozzle to the desired angle and gun firmly into the joint to give a good solid fill. Strike off the sealant flush with the joint sides within five minutes of application, before surface skinning occurs. A small amount of shrinkage will occur on curing. If a flush finish is required, fill the joint slightly proud of the surface to allow for shrinkage.

Fire Performance

Siderise Fire & Acoustic Sealant has been tested in conjunction with backing materials in accordance with EN 1366-4:2006.

- Resistance to Fire – expressed as the minimum value in minutes of both the Integrity (E) and Insulation (I) performance. Please see Table 1.
- Reaction to Fire – 'F' classification to EN 13501-1, as it is an intumescing product.

Table 1: Resistance to Fire to EN 1366-4 – Single Sided Seal (installed on either side of wall)

Configuration Wall Construction (min 100mm thick)	Max. Joint Width (mm)	Minimum Seal Depth (mm)	Backing Material	Integrity (mins)	Insulation (mins)
concrete to concrete	50	25	Polyethylene backing rod	120	60
concrete to concrete	50	2:1 ratio (width:depth) & Min. 10	Polyethylene backing rod	120	45
concrete to softwood	50	25	Polyethylene backing rod	45	45
concrete to softwood	50	2:1 ratio (width:depth) & Min. 10	Polyethylene backing rod	30	20

Configuration Wall Construction (min 100mm thick)	Max.Joint Width (mm)	Minimum Seal Depth (mm)	Backing Material	Integrity (mins)	Insulation (mins)
concrete to steel	50	2:1 ratio (width:depth) & Min. 10	Polyethylene backing rod	45	20
concrete to steel	50	10	Polyethylene backing rod	120	20

The above results show typical integrity levels of the product in a fire scenario, however, each joint situation will have different characteristics and therefore different fire ratings. In general, it has been found that a greater depth of sealant will provide greater integrity and that the use of a double seal i.e. sealant applied at both external faces of a joint will increase values further, particularly insulation. When used in conjunction with Siderise cavity barriers and fire stops, all fire barriers should be tightly abutted and typically installed with compression (see the relevant product Technical Data for further information). The Sealant may be used on any small localised imperfections.

Acoustic Performance

Siderise Fire & Acoustic Sealant additionally provides an effective seal to small gaps to ensure that the main construction components (wall, floor, Firestop/Cavity Barrier) do not suffer a significant loss in sound transmission performance due to the gap. The acoustic performance is attributable to the density of the sealant coupled with the characteristic that it remains flexible. It is important to note that the sealant is intended to treat gaps and imperfections, not as a standalone acoustic product; backing materials and surrounding elements will have a large impact on the overall performance of the detail. Technical advice should always be sought from the Technical Team.

Technical Specification

Table 2: Product Properties

Properties	Value
Form supplied	Ready to use thixotropic paste in 310ml rigid plastic cartridges
Specific gravity	~1.61g/cm^3
Cure Rate	3mm per day at 23°C, 50% relative humidity
Skin time	40 minutes
Shrinkage	Approximately 12%
Movement accommodation	Low to medium 7.5% butt joints
Shelf life	Up to 18 months when stored in unopened cartridges under cool dry conditions
Operating Temperature	5°C to 35°C
Service & Durability	Type X: For use in applications exposed to free weathering and all lower classes
Compatibility	Can be used in contact with most building and decorating materials

Reaction to Fire	Classification to EN 13501-1: 'F'
Resistance to Fire	Please see Table 1

Health and Safety

- Wash the material from the skin while still wet.
- Material in contact with eyes should be washed out immediately with water.
- Seek medical advice if discomfort persists.

Additional Information Available

The following information is available for download via the website:

- Safety Data Sheet

Technical Support

For technical advice or support please contact: technical.services@siderise.com

For Installation Training or Site Inspections please contact: site.services@siderise.com

Context

The information in this datasheet is believed to be accurate at the date of publication. Siderise has a policy of continuous product improvement and reserves the right to alter or amend the specifications of products without prior notice. Siderise does not accept responsibility for the consequences of using the products described outside of the recommendations within this datasheet. Expert advice should be sought where there is any doubt about the correct specification or installation of Siderise products.

Siderise Fire and Acoustic Gap Sealant_2_01_20240708_1326