













# **Technical Description of Product**



PFC Corofil Cavity Fire Stop full fill cavity barrier is a stone wool product installed between the façade and the inner structure of a building to reinstate the fire resistance performance of the cavity.

PFC Corofil Cavity Fire Stop has been tested to EN1366-4 and EN1363-1 TRO31 and will provide up to 120 minutes fire integrity and insulation performance.

PFC Corofil Cavity Fire Stop is cut to size to suit the cavity width and can be supplied as plain stone wool, foil encapsulated, or with an integral DPC.

### **Intended Use**

PFC Corofil Cavity Fire Stop has been designed and tested to be installed within building cavities between the façade and the inner structure. It can be installed against SFS with a calcium silicate fibre cement board and masonry substrates in both horizontal and vertical orientations. PFC Corofil Cavity Fire Stop can be installed in a masonry support system\* in cavities up to 450mm wide. PFC Corofil Cavity Fire Stop is suitable for cavity widths up to 600mm.

This data sheet shows the only applications the product has been tested in. Please ensure the product has been tested in and is suitable for your application (see PFC Corofil terms and conditions 13.1.1).

\* Please see substrates on page 5 for the masonry support system specification

# **Key Points**

- Suitable for cavities up to 600mm (please see tables from page 5).
- Can be installed against SFS with a calcium silicate fibre cement board.
- Can be installed against aerated concrete, concrete & masonry substrates.
- Can be installed in a masonry support system (please see substrates on page 5 for specification).
- Provides up to 120 minutes fire integrity and insulation performance (please see tables from page 5).

#### **Installation Instructions**



#### Cavity widths up to 200mm wide (minimum thickness of CCFS 100mm)

- Ensure surfaces are clean, dry and free from dirt, dust, mortar and other contaminants.
- Ensure the opening to be filled has been tested with and is suitable for the product being installed.
- Cut back any insulation fixed to the inner substrate prior to installation of the PFC Corofil Cavity Fire Stop.
- The PFC Corofil Cavity Fire Stop should be installed with a minimum 5mm compression.
- Any cutting of the PFC Corofil Cavity Fire Stop on site to suit tolerances, shall be done accurately and kept to a minimum. Ensure that the minimum 5mm extra for the compression is maintained.
- Compress the PFC Corofil Cavity Fire Stop and push into the cavity.
- When extending the length of the Cavity Fire Stop, ensure the adjacent lengths have their joints tightly abutted together and are aligned flush with each other to give the appearance of a continuous strip with no gaps.
- Fill any gaps up to 5mm wide with PFC Corofil Acoustic Intumescent Sealant to a minimum depth of 10mm.

#### Cavity widths 201mm to 600mm wide (minimum thickness of CCFS 82mm)

- Ensure surfaces are clean, dry and free from dirt, dust, mortar and other contaminants.
- · Ensure the opening to be filled has been tested with and is suitable for the product being installed.
- Cut back any insulation fixed to the inner substrate prior to installation of the PFC Corofil Cavity Fire Stop.
- The PFC Corofil Cavity Fire Stop should be installed with a minimum 5mm compression.
- Any cutting of the PFC Corofil Cavity Fire Stop on site to suit tolerances, shall be done accurately and kept to a minimum. Ensure that the minimum 5mm extra for the compression is maintained.
- For masonry applications, fix PFC Corofil Multipurpose Brackets to the substrate using 1 no. non combustible steel screw minimum 4mm ø x 40mm long (supplied by others) and position the leg of the brackets to the midpoint of the Cavity Fire Stop. The brackets should be fixed 250mm from each end of each individual section of barrier at maximum 500mm centres.
- For calcium silicate fibre cement board applications, fix PFC Corofil Multipurpose Brackets to the substrate using 1 no. 6mm ø x 32mm coarse threaded steel screw suitable for the board (supplied by others) and position the leg of the brackets to the midpoint of the Cavity Fire Stop.
   The brackets should be fixed 250mm from each end of each individual section of barrier at maximum 500mm centres.
- When fixing the brackets to any other substrate, please contact a fixing supplier for advice on the correct fixings.
- When cutting lengths to fit at the end of a run, install one bracket centrally in lengths up to 300mm, for lengths 301mm to 500mm 2 brackets should still be used distanced equally from each end.
- Push the Cavity Fire Stop onto the leg of the bracket so it is spiked into the centre along the length and compress into the cavity. There should be at least 25mm between the end of the bracket and the outer face of the barrier.
- Fill any gaps up to 5mm with PFC Corofil Acoustic Intumescent Sealant to a minimum depth of 10mm.

### **Installation Instructions**



#### Masonry Support System (minimum thickness of CCFS 82mm)

- Ensure surfaces are clean, dry and free from dirt, dust, mortar and other contaminants.
- Ensure the opening to be filled has been tested with and is suitable for the product being installed.
- Cut back any insulation fixed to the inner substrate prior to installation of the PFC Corofil Cavity Fire Stop.
- The PFC Corofil Cavity Fire Stop should be installed with a minimum 5mm compression.
- Any cutting of the PFC Corofil Cavity Fire Stop on site to suit tolerances, shall be done accurately and kept to a minimum. Ensure that the minimum 5mm extra for the compression is maintained.
- Ensure there is a minimum of 28mm from the top of the masonry support bracket to the top of the floor slab.
- Mark where the brackets meet the Cavity Fire Stop and cut a notch into the Cavity Fire Stop.
- Compress the Cavity Fire Stop and push into the cavity, ensuring the top of the Cavity Fire Stop sits flush with the top surface of the floor slab.
- When extending the length of the Cavity Fire Stop, ensure the adjacent lengths have their
  joints tightly abutted together and are aligned flush with each other to give the appearance
  of a continuous strip with no gaps.
- Fill any gaps up to 5mm with PFC Corofil Acoustic Intumescent Sealant to a minimum depth of 10mm.

## **Installation Instructions**



#### **Substrates**

- Rigid walls: Minimum 100mm thick and comprised of concrete, aerated concrete or masonry, with a minimum density of 650kg/m³.
- Rigid Floors: Minimum 150mm thick and comprised of concrete, aerated concrete or masonry, with a minimum density of 650kg/m<sup>3</sup>.
- SFS system: 135mm overall thickness comprising, 90mm Metsec C stud clad internally with 2 x 15mm Knauf Fire Panel, clad externally with 1 x 12mm RCM Y-Wall panel and 75mm Rockwool Duo slab.
- Masonry support system: Ancon Masonry Support System MDC/P to suit a 200mm cavity.

The supporting construction must be classified in accordance with EN13501-2 for the required fire resistance period.

## **Terminology**

Fire resistance classes:

- E = Integrity. The length of time it takes for the fire to pass to the non fire side.
- I = Insulation. The length of time it takes for the heat of the fire to pass to the non fire side.

# **Performance Data**



# Floors minimum thickness 150mm Rigid Floor

PFC Corofil Cavity Fire Stop installed against Rigid Floors minimum 150mm thick.					
Overall Cavity width (mm)	Minimum thickness of Cavity Fire Stop (mm)	Orientation	Brackets required	Fire resistance performance	
10 - 100	100		No	El120	
101 - 200	100		No	E120 EI90	
201 - 450	82	Horizontal	Yes	E120 EI30	
451 - 595	82		Yes	E60 El30	

# Wall minimum thickness 100mm Rigid Wall

PFC Corofil Cavity Fire Stop installed against Rigid walls minimum 100mm thick.					
Overall Cavity width (mm)	Minimum thickness of Cavity Fire Stop (mm)	Orientation	Brackets required	Fire resistance performance	
10 - 200	100		No	El120	
10 - 200 with integral DPC	100	Vertical	No	El120	
201 - 600	82		Yes	E120 EI30	

# SFS system with calcium silicate cement fibre board

PFC Corofil Cavity Fire Stop installed against SFS system (see substrates on page 5 for full specification) to masonry outer substrate.					
Overall Cavity width (mm)	Minimum thickness of Cavity Fire Stop (mm)	Orientation	Brackets required	Fire resistance performance	
10 - 595	82	Horizontal	Yes	E120 E160	
10 - 600	82	Vertical	Yes	E120 EI30	

## **Performance Data**



# Floors minimum thickness 150mm Rigid floor with masonry support system

PFC Corofil Cavity Fire Stop installed horizontally against an Ancon MDC/P Masonry Support System fixed to a rigid floor slab minimum 150mm thick.

Overall Cavity width (mm)	Minimum thickness of Cavity Fire Stop (mm)	Minimum gap from top of Masonry support bracket to top of floor slab (mm)  Brackets required		Fire resistance performance
200	82	20	No	El120
201-450		28	Yes	E120 EI30

## 'CCFS Plain, Tested to EN1366-4'

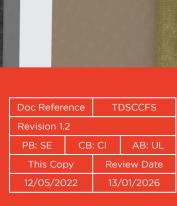
PFC Corofil Cavity Firestop installed (CCFS) Plain installed in a masonry substrate Rigid walls minimum thickness 100mm

Rigid floors minimum thickness 150mm

Overall Cavity	Minimum thickness of	Orientation	Brackets	Fire resistance performance	
Width (mm)	Cavity Fire Stop (mm) required		required	Integrity (minutes)	Insulation (minutes)
201 - 300	100	Horizontal	Yes	120	120
		Vertical			

Please note: The products and fire resistance performances listed in this table are not included in the classification





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