





SERVICE PENETRATIONS





Technical Description of Product



PFC Corofil Intumescent Pillows are a mixture of reactive and non-reactive components encased in a thin woven glass fibre casing.

PFC Corofil Intumescent Pillows is a dry system and does not require the use of any sealant or sealing products.

Available in three different sizes:

 Large
 330mm x 200mm x 45mm

 Medium
 330mm x 200mm x 25mm

 Small
 330mm x 50mm x 20mm

Intended Use

The intended use of PFC Corofil Intumescent Pillows, is to reinstate the fire resistance performance of rigid walls where they have been penetrated by various cables and single metallic pipes.

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).

Key Points

- Conditioned to Type Z_1 : Intended for use in internal conditions with humidity equal to or higher than 85% RH excluding temperatures below 0°C, without exposure to rain or UV. Tested in accordance with EOTA TRO24.
- Suitable for both permanent and temporary applications.
- Suitable for installation into openings up to 1100mm x 1100mm depending upon the configuration.
- PFC Corofil Intumescent Pillows have an assumed working life of 10 years.
- The indications of a working life can not be assumed as a guarantee given by PFC Corofil, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works. The durability assessment does not take account of the possible effect of substances permeating through the pipe onto the penetration seal.

Technical Data



Specification

Description	Result	Weight	Approx. Qty per m²	Test Standard
	Large: 330mm x 200mm x 45mm	385 gms	112	
Dimensions	Medium: 330mm x 200mm x 25mm	185 gms	200	
	Small: 330mm x 50mm x 20mm	50 gms	1000	
Fire Resistance Performance	Up to El120			EN1366-3:2009
Airborne Sound	RW (C; Ctr) = 33(0;-2)	EN 10140		
Air Permeability	See ETA 20/1154 section 3.2.1	EN 1314-1		
Classification Reaction To Fire	F	EN 13501-1		
Classification Resistance To Fire		EN13501-2		
Colour/Appearance	Silver/rectangular Pillow			

Installation Instructions



- PFC Corofil Intumescent Pillows may only be penetrated by the cables and pipes as listed
 in the performance data tables from page 6 of this data sheet. Other parts or support constructions
 must not penetrate the seal.
- The service support construction must be fixed to the supporting element containing the
 penetration seal or a suitable adjacent building element, in such a manner that in case of fire,
 no additional load is imposed on the seal. Furthermore, it is assumed that the unexposed face
 support is maintained for the required period of fire resistance.
- Certain pipe and cable configurations should be insulated with a minimum 300mm long,
 6mm thick foil faced ceramic blanket, or PFC Corofil Intumescent Pillows to provide additional insulation to the pipes (see performance data tables from page 6).
- Penetrations must be perpendicular to the seal surface.
- It is assumed compressed air systems are switched off by other means in the case of fire. The function of the pipe seal is only suitable for pneumatic dispatch systems, pressurised air systems etc. only when the systems are shut off in case of fire.
- The total amount of cross sections of services (including insulation) should not exceed 60% of the penetration area.
- PFC Corofil Intumescent Pillows may be used to seal apertures in 150mm rigid walls up to 1100mm x 1100mm dependant upon the configuration.
- Pipes must be installed singular, there must be a minimum 200mm separation between adjacent pipe seals and a further 200mm from the edge of aperture.
- Cables do not require a minimum separation, but must have a minimum 200mm from the edge of the aperture.
- Services in walls must be supported at maximum 250mm from each face of the supporting element.
- Install PFC Corofil Intumescent Pillows so that all joints are staggered in each layer until all gaps within the wall are filled with pillows.
- Pillows should be packed tightly around the services to a minimum depth of 150mm.
- The voids should be completely filled so that the pillows are under a tight compression fit.

Installation Instructions



Substrates

• Rigid Walls: Minimum 150mm thick and comprise of concrete, aerated concrete or masonry, with a minimum density of 650kg/m³.

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.

Test condition: U/U = Uncapped in the furnace/Uncapped outside the furnace

U/C = Uncapped in the furnace/Capped outside the furnace

C/U = Capped inside the furnace/Uncapped outside the furnace

Performance Data



Walls minimum thickness 150mm Rigid Wall

Electric cables penetration seal with PFC Corofil Intumescent Pillows installed with 75mm projection from each face of the wall. Further pillows sewn to provide additional protection to the cables to minimum distance 300mm either face of the seal.

PFC Corofil Intumescent Pillows. Penetration seals 300mm deep, rigid walls, minimum 150mm thick.		
Services	Classification	
Telecom cables up to 21mm ø (single or bundles up to 100mm ø)	El120	
Electric cables up to 21mm ø	El120	
Electric cables up to 50mm ø	E120 E190	
Electric cables up to 80mm ø	E120 E190	
Unsheathed wires up to 24mm ø	El120	
Steel or copper conduits and tubes up to 16mm ø	El120	
Plastic (any) conduits and tubes up to 16mm ø	El120	
Cable trays or ladders up to 300mm	E120 E160	
Cable trays up to 500mm	E120 E190	

Uninsulated steel pipes penetration seal with PFC Corofil Intumescent Pillows installed 75mm projection from each face of the wall.

PFC Corofil Intumescent Pillows. Penetration seals 300mm deep, rigid walls, minimum 150mm thick.		
Services	Classification	
165mm ø x 5.6mm – 14.2mm thick mild steel pipe	E120 C/U	

Performance Data



Walls minimum thickness 150mm Rigid Wall

Insulated steel pipes penetration seal with PFC Corofil Intumescent Pillows installed 75mm projection from each face of the wall. Foil faced ceramic blanket wrapped around pipe to provide additional protection to the pipes to minimum distance 300mm from each face of the seal.

PFC Corofil Intumescent Pillows. Penetration seals 300mm deep, rigid walls, minimum 150mm thick.		
Services	Classification	
48mm ø x 3.5mm – 14.2mm thick steel pipe with Local Interrupted (LI) foil faced ceramic blanket 7mm thick	El120 C/U	
113mm ø \times 4.5mm – 14.2mm thick steel pipe with Local Interrupted (LI) foil faced ceramic blanket 10mm thick	El120 C/U	

Insulated copper pipes penetration seal with PFC Corofil Intumescent Pillows installed 75mm projection from each face of the wall. Additional pillows sewn around pipe to provide additional protection to the pipes to minimum distance 300mm from each face of the seal.

PFC Corofil Intumescent Pillows. Penetration seals 300mm deep, rigid walls, minimum 150mm thick.		
Services	Classification	
108mm ø x 1.5mm - 14.2mm thick copper pipe	E120 C/U E190 C/U	

Insulated copper pipes penetration seal with PFC Corofil Intumescent Pillows installed 75mm projection from each face of the wall. 2 layers of insulation;

1st layer 15mm thick/400mm Local Sustained (LS) Armaflex AF 2nd layer 250mm Local Interrupted (LI) foil faced ceramic blanket 10mm thick

PFC Corofil Intumescent Pillows. Penetration seals 300mm deep, rigid walls, minimum 150mm thick.		
Services	Classification	
54mm ø x 1.0mm - 14.2mm thick copper pipe with 2 layers of insulation	El120 C/U	





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