

Product Technical Data Sheet: TDSCCPS PFC Corofil Coated Panel System CCPS

ETA Number: 20/1147



SERVICE PENETRATIONS



**Technical Description of Product** 



PFC Corofil Coated Panel System is a coated mineral wool board used to reinstate the fire resistance performance of wall and floor constructions where they have been provided with apertures for the penetration of single or multiple services.

The panel is supplied coated on both faces. It is cut to size and friction fit into the aperture around the services. PFC Corofil Coated Panel System is available in 1200mm x 600mm panels, 50mm thick with a density of  $140 \text{kg/m}^3$  and 60mm thick with a density of  $160 \text{kg/m}^3$ .

PFC Corofil Acoustic Intumescent Sealant is required to seal all joints and junctions during the sealing process. PFC Corofil Acoustic Intumescent Sealant is subject to a separate Technical data sheet TDSCAIS.

#### **Intended Use**

PFC Corofil Coated Panel System is used to reinstate the fire resistance performance of flexible and rigid walls and rigid floors where they have been penetrated by various cables, plastic pipes and 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**

- Can be installed in apertures up to 730mm wide and 1200mm high or 600mm x 600mm depending upon the application.
- For use with plastic pipes, metallic pipes, cables, cable trays and cable ladders.
- Conditioned to type Z<sub>1</sub>: Intended for 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 TR024. EAD 350454-00-1104 Firestopping and fire sealing products, penetration seals.
- PFC Corofil Coated Panel System has an assumed working life of 10 years, provided that the conditions laid down in this data sheet for packaging, transport, storage, installation, use and repair are met. 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.

# **Technical Data**



# **Specification**

Description	Result		Test Standard			
Fire Resistance performance	Up to El120 depending	on application	EN1366-3:2009			
Airborne Sound	RW (C:Ctr)= 24 (-2:-3)		TR024	TR024		
Classification Reaction To Fire	'F'		EN13501-1			
Classification Resistance To Fire			EN13501-2			
Colour/Appearance	Coated mineral fibre sla	Coated mineral fibre slab 1200 x 600/white				
			BS EN 1314-1			
Air Permeability	Results under positive chamber pressure		Results under negative chamber pressure			
Pressure (Pa)	Leakage (m³/h)	Leakage (m <sup>3</sup> /h) Leakage (m <sup>3</sup> /m <sup>2</sup> /h)		Leakage (m³/m²/h)		
50	0.6	0.8	1.1	1.5		
100	1.0	1.0 1.4		1.8		
150	2.8	3.9	1.5	2.1		
200	3.8 5.3		1.9	2.6		
250	4.5 6.3		2.0	2.8		
300	5.0 6.9		2.4	3.3		
450	5.1	7.1	1.9	2.6		
600	6.7	9.3	2.2	3.1		

#### **Installation Instructions**



- The total amount of cross sections of services (including insulation) should not exceed 60% of the penetration area.
- The minimum permitted separation between adjacent seals/apertures is 200mm.
- Pipes must be installed singular, cables require no minimum separation.
- The seals may only be penetrated by the services described in the tables from page 6 below. Please ensure the services have been tested for use with PFC Corofil Coated Panel System.
- Services in the walls and floors shall be supported as specified in the tables from page 6.
- The service support construction must be fixed to the building element containing the service penetration, or an adjacent suitable building element, in such a manner that in the case of fire, no additional load is imposed on the seal. Furthermore it is assumed the unexposed face support is maintained for the required period of fire resistance.
- It is assumed that compressed air systems are switched off by other means in the case of fire.
- The function of the pipe seal in case of pneumatic dispatch systems, pressurised air systems etc. is guaranteed only when the systems are shut off in the case of fire.
- This data sheet does not cover the avoidance of destruction of the seal or of the abutting building element(s) by forces caused by temperature changes in case of fire. Nor does it address any risks associated with leakage of dangerous liquids or gases caused by failure of the pipe(s) in case of fire. This has to be considered when designing the pipe system.
- Ensure the surfaces to be sealed are clean, dry and free from loose particles which may affect the adhesion of the sealant to the substrate.
- The ambient temperature should be above 5°C at time of application.
- Once the product to fire stop the service penetration has been determined, refer to the relevant product data sheet for the installation instructions.
- For a friction fit installation. Once the penetrations are ready for the PFC Corofil Coated Panel System to be installed, cut the coated panel to fit around the penetrations and ensure a tight fit against the edges of the aperture, all joints and junctions should be fully coated with PFC Corofil Acoustic Intumescent Sealant and friction fitted into the aperture around the penetration.
- For a pattress installation. Once the penetrations are ready for the PFC Corofil Coated Panel System to be installed, the panel should be cut to ensure a 100mm overlap on each edge. Fix the panel to the substrate using minimum 80mm long woodscrews with penny washers at maximum 300mm centres. Screw heads should be coated with PFC Corofil Acoustic Intumescent sealant. All joints, junctions and visible edges should be coated with PFC Corofil Acoustic Intumescent Sealant or PFC Corofil Ablative Coating.

### **Installation Instructions**



#### **Substrates**

- Flexible walls: PFC Corofil Coated Panel System can be installed against flexible walls at minimum 100mm thick, comprising of metal or timber studs lined on both sides with 2 layers of 12.5mm 'type F' gypsum plasterboards according to EN520. In timber stud walls, no part of the penetration shall be closer than 100mm to the timber stud, the cavity must be closed between the penetration seal and the stud and minimum 100mm of either class A1 or A2 insulation according to EN13501-1 shall be provided within the cavity between the penetration seal and the stud.
- Rigid walls: Minimum 100mm thick and comprised of concrete, aerated concrete or masonry, with a minimum density of 650kg/m<sup>3</sup>.
- Rigid floors: Minimum 150mm thick and comprised of concrete, aerated concrete or masonry, with a minimum density of 650kg/m<sup>3</sup>.

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

#### Terminology

Fire resistance classes:	<ul> <li>E = Integrity. The length of time it takes for the fire to pass to the non fire side.</li> <li>I = Insulation. The length of time it takes for the heat of the fire to pass to the non fire side.</li> </ul>
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 70mm Flexible or Rigid Wall pattress installation

PFC Corofil Coated Panel. 1 no. 50mm pattress installed to both faces of the wall.					
Service	Service supports maximum distance from both faces of the substrate	Maximum aperture (mm)	Classification		
500mm wide x 60mm deep steel cable basket containing 3 'type B' cable and 20 x bundle of telecom cables					
500mm wide x 60mmm deep steel cable tray containing 1 'type B' cable, 3 x 'type A1' cable, 3 'type A2' cable and 3 'type A3' cable					
20mm ø Adaptaflex SPL20 flexible conduit	1025mm	570mm wide x 200mm high	E190		
20mm ø Kopex KSU 316 stainless steel flexible conduit					
150mm wide x 60mm deep steel cable tray containing 4 x FP200 gold (fire alarm cable 7mm ø red) cables					

# Walls minimum thickness 100mm Flexible or Rigid Wall

PFC Corofil Coated Panel. 1 no. 50mm pattress installed to both faces of the wall.					
Service	Insulation	Service supports maximum distance from both faces of the substrate	Maximum aperture (mm)	Classification	
Electric cables up to 80mm ø	Single layer		750mm wide x 1200mm high	EI120	
Cable trays and ladders					
100mm ø bundle telecoms cables type 'F'	40mm thick,	100			
Unsheathed electric cables up to 24mm ø	40kg/m³ Stone wool (L/I 300mm)	400mm			
Steel or copper conduits up to 16mm ø					
Plastic conduits up to 16mm ø					

## **Performance Data**



PFC Corofil Coated Panel. 1 no. 50mm pattress installed to both faces of the wall.					
Service	Insulation	Service supports maximum distance from both faces of the substrate	Maximum aperture (mm)	Classification	
Copper/steel pipe 42mm - 159mm ø, 1.2 - 14.2mm wall thickness	25mm thick foil faced glass fibre Continuous/	faced glass fibre	600mm wide	E120 C/U E190 C/U	
Copper/steel pipe 42mm ø, 1.0mm - 14.2mm wall thickness	sustained (C/S) insulation minimum 30kg/m³	400mm	x 600mm high	EI120 C/U	



#### Walls minimum thickness 150mm Rigid wall in line installation

PFC Corofil Coated Panel 1 no. 50mm installed centrally within the wall.					
Service	Insulation	Service supports maximum distance from both faces of the substrate	Maximum aperture (mm)	Classification	
Electric cables up to 80mm ø					
Cable trays and ladders		250mm	600mm wide x 600mm high	E160	
100mm ø bundle telecoms cables type 'F'	6mm thick foil lined ceramic (L/I 300mm)				
Unsheathed electric cables up to 24mm ø					
Copper/steel pipe 108mm ø, 1.5mm – 14.2mm wall thickness C/S 40mm Stone wool insulation (min 140kg/m³)				E60 C/U EI45 C/U	
Copper/steel pipe 42mm ø, 1.2mm - 14.2mm wall thickness	40mm Stone wool insulation	400mm	730mm wide x 1100mm high	EI45 C/U	
Copper/steel pipe 42mm - 159mm ø, 2mm - 14.2mm wall thickness	(L/I 300mm) 40kg/m <sup>3</sup>			EI45 C/U EI15 C/U	

PFC Corofil Coated Panel 2 no. 50mm installed back to back centrally within the wall.					
Service	Insulation	Service supports maximum distance from both faces of the substrate	Maximum aperture (mm)	Classification	
Electric cables up to 21mm ø				EI120	
Electric cables 21mm ø - 80mm ø	45mm Stone wool insulation (L/I 200mm) 40kg/m³	400mm	700mm wide x 1100mm high	E120 E190	
Cable trays and ladders					
100mm ø bundle telecoms cables type 'F'			Ũ	EI120	
Unsheathed electric cables up to 24mm ø					
Copper/steel pipe 42mm ø, 1.2mm - 14.2mm wall thickness	40mm Stone wool insulation	100mm	730mm wide x 1100mm high	E120 C/U E160 C/U	
Copper/steel pipe 42mm - 159mm ø, 2mm - 14.2mm wall thickness	(L/I 300mm) 40kg/m <sup>3</sup>	400mm		E120 C/U EI30 C/U	



## Floors minimum thickness 150mm Rigid floor in line installation

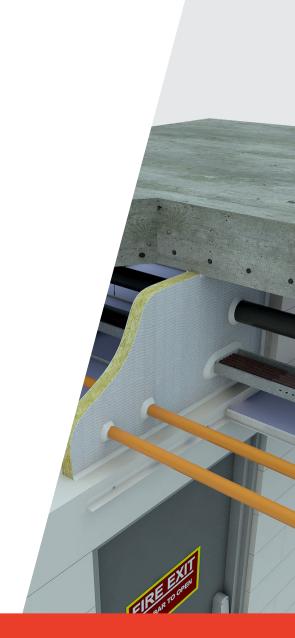
PFC Corofil Coated Panel 2 no. 50mm installed centrally within the floor.					
Service	Insulation	Service supports maximum distance from both faces of the substrate	Maximum aperture (mm)	Classification	
Electric cables up to 80mm ø					
Cable trays and ladders	40mm Stone wool insulation (L/I 300mm) 40kg/m <sup>3</sup>		700mm wide x 1100mm high	EI6O	
100mm ø bundle telecoms cables type 'F'					
Unsheathed electric cables up to 17mm ø					
Unsheathed electric cables 18mm to 24mm ø					
Steel or copper conduits up to 16mm		400mm			
Plastic conduits up to 16mm					
Copper/steel pipe 42mm ø, 1.2mm - 14.2mm wall thickness				EI120 C/U	
Copper/steel pipe 42mm - 159mm ø, 2mm - 14.2mm wall thickness				E120 C/U EI30 C/U	

## **Performance Data**



#### Other penetration seals tested for use with PFC Corofil Coated Panel System

Service	Seal type	Substrates	Technical data sheet
Copper/steel pipes with continuous/sustained (C/S) insulation		Flexible/rigid walls	
Cables & cable trays	]		
Uponor MLC (Multi Layer Composite) pipes		Rigid wall	TDSCHES
PVC pipes	PFC Corofil High Expansion Sealant		
Cables & cable trays		Rigid floor	
Uponor MLC (Multi Layer Composite) pipes			
PVC pipes			
Copper/steel pipes with continuous/sustained (C/S) insulation	PFC Corofil		
PVC, PE, PP plastic pipes	Universal Pipe wrap	Flexible/rigid walls	TDSCUPW
PVC, PE, PP plastic pipes	PFC Corofil Intumescent Pipe Collars	Flexible/rigid walls	TDSCIPC





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