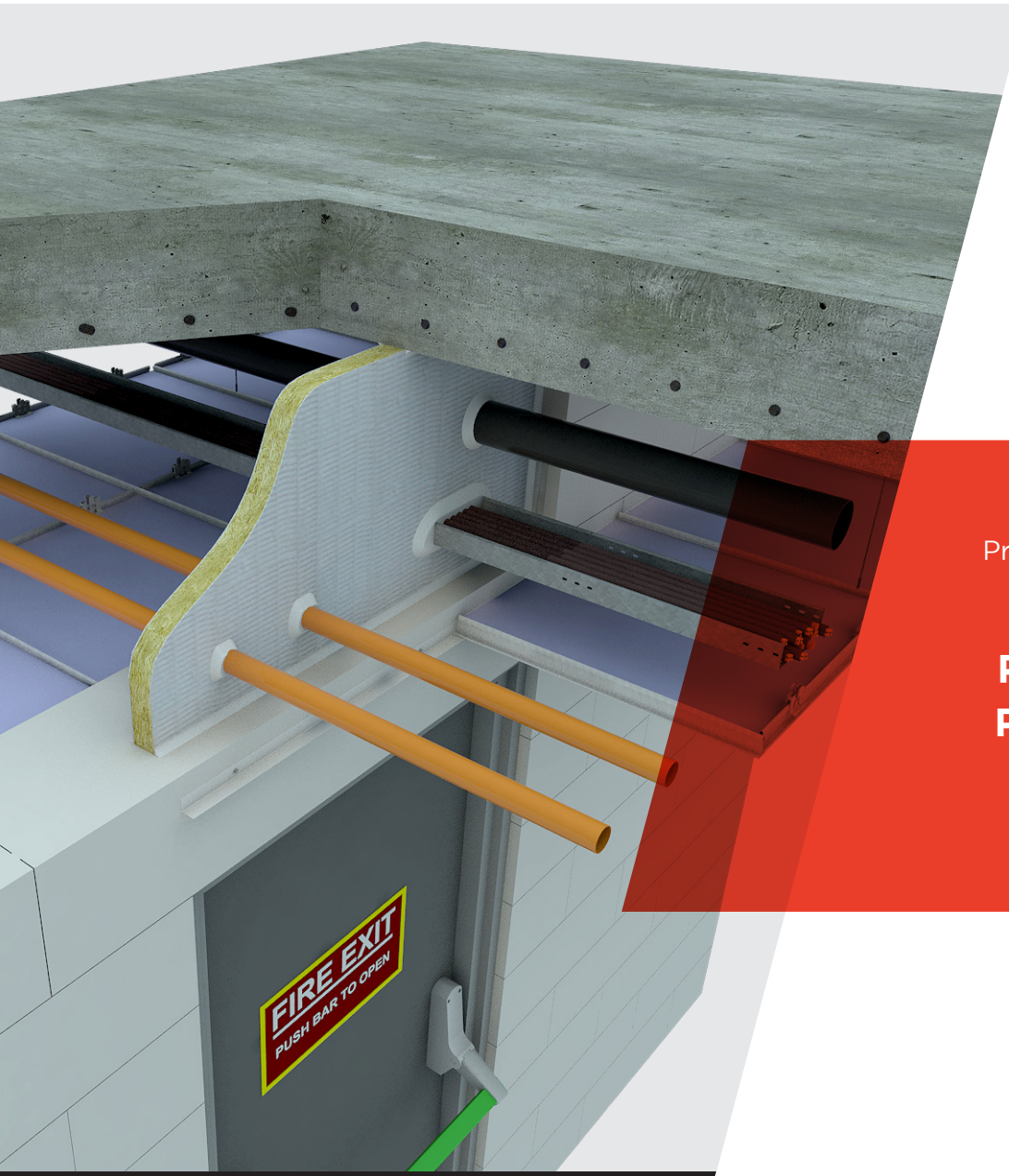
PFC COROFIL
PASSIVE FIRE PROTECTION SOLUTIONS



Product Technical Data Sheet:

TDSCCPS

PFC Corofil Coated Panel System CCPS

ETA Number: 20/1147

SERVICE PENETRATIONS

NBS

ASFP

Revision 1.1 – 19/10/2023

Technical Description of Product

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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 140kg/m^3 and 60mm thick with a density of 160kg/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_1: 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

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Specification

Description	Result		Test Standard	
Fire Resistance performance	Up to EI120 depending on application		EN1366-3	
Airborne Sound	RW (C:Ctr)= 24 (-2:-3)		TR024	
Classification Reaction To Fire	'F'		EN13501-1	
Classification Resistance To Fire			EN13501-2	
Colour/Appearance	Coated mineral fibre slab 1200 x 600/white			
Air Permeability			BS EN 1314-1	
	Results under positive chamber pressure		Results under negative chamber pressure	
Pressure (Pa)	Leakage (m^3/h)	Leakage ($m^3/m^2/h$)	Leakage (m^3/h)	Leakage ($m^3/m^2/h$)
50	0.6	0.8	1.1	1.5
100	1.0	1.4	1.3	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

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Substrates

- Flexible walls: 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^3.
- Rigid floors: Minimum 150mm thick and comprised of concrete, aerated concrete or masonry, with a minimum density of 650kg/m^3.

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

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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	1025mm	570mm wide x 200mm high	EI90
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			
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 40mm thick, 40kg/m³ Stone wool (L/l 300mm)	400mm	750mm wide x 1200mm high	EI120
Cable trays and ladders				
100mm ø bundle telecoms cables type 'F'				
Unsheathed electric cables up to 24mm ø				
Steel or copper conduits up to 16mm ø				
Plastic conduits up to 16mm ø				

Performance Data

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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/ sustained (C/S) insulation minimum 30kg/m^3	400mm	600mm wide x 600mm high	E120 C/U EI90 C/U
Copper/steel pipe 42mm ø, 1.0mm – 14.2mm wall thickness				EI120 C/U

Performance Data

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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	6mm thick foil lined ceramic (L/I 300mm)	250mm	600mm wide x 600mm high	EI60
Cable trays and ladders				
100mm ø bundle telecoms cables type 'F'				
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 (L/I 300mm) 40kg/m³	400mm	730mm wide x 1100mm high	EI45 C/U
Copper/steel pipe 42mm – 159mm ø, 2mm – 14.2mm wall thickness				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	45mm Stone wool insulation (L/I 200mm) 40kg/m³	400mm	700mm wide x 1100mm high	EI120
Electric cables 21mm ø - 80mm ø				E120 EI90
Cable trays and ladders				EI120
100mm ø bundle telecoms cables type 'F'				
Unsheathed electric cables up to 24mm ø				
Copper/steel pipe 42mm ø, 1.2mm – 14.2mm wall thickness	40mm Stone wool insulation (L/I 300mm) 40kg/m³	400mm	730mm wide x 1100mm high	E120 C/U EI60 C/U
Copper/steel pipe 42mm – 159mm ø, 2mm – 14.2mm wall thickness				E120 C/U EI30 C/U

Performance Data

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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	40mm Stone wool insulation (L/l 300mm) 40kg/m³	400mm	700mm wide x 1100mm high	EI60
Cable trays and ladders				
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				
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

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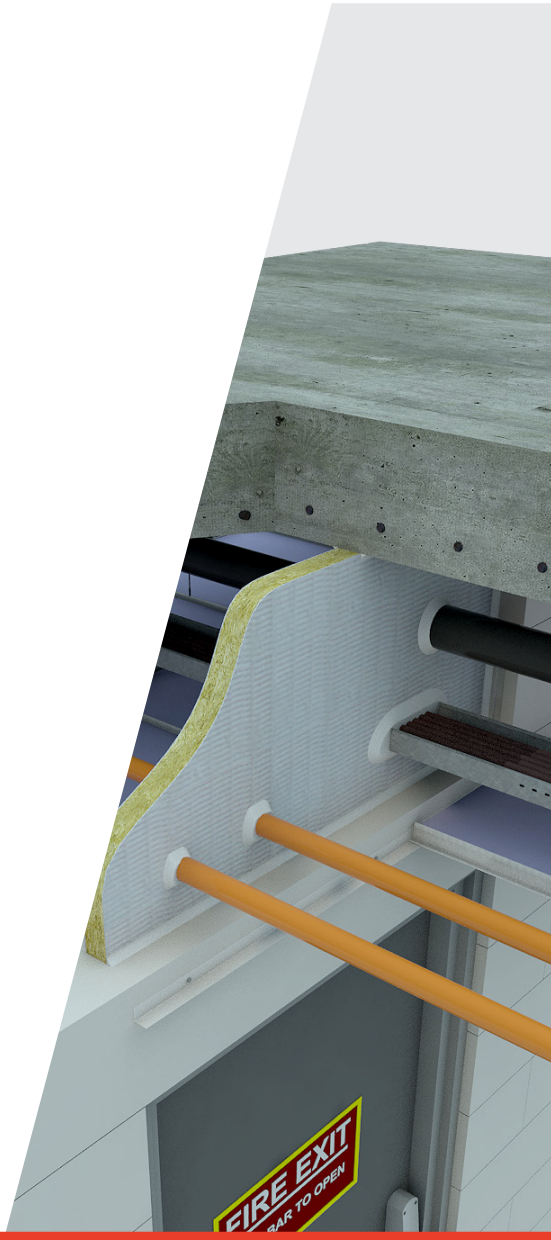
Other penetration seals tested for use with PFC Corofil Coated Panel System

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	PFC Corofil High Expansion Sealant	Flexible/rigid walls	TDSCHES
Cables & cable trays		Rigid wall	
Uponor MLC (Multi Layer Composite) pipes			
PVC pipes			
Cables & cable trays		Rigid floor	
Uponor MLC (Multi Layer Composite) pipes			
PVC pipes			
Copper/steel pipes with continuous/sustained (C/S) insulation	PFC Corofil Universal Pipe wrap	Flexible/rigid walls	TDSCUPW
PVC, PE, PP plastic pipes			
PVC, PE, PP plastic pipes	PFC Corofil Intumescent Pipe Collars	Flexible/rigid walls	TDSCIPC
Before installation, please check the relevant product data sheet to ensure the seal type has been tested with the services and the substrates.			



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King Georges Trading Estate | Davis Road | Chessington | KT9 1TT
T. +44 (0) 208 391 0533
E. sales@pfc-corofil.com | tech@pfc-corofil.com | W. pfc-corofil.com