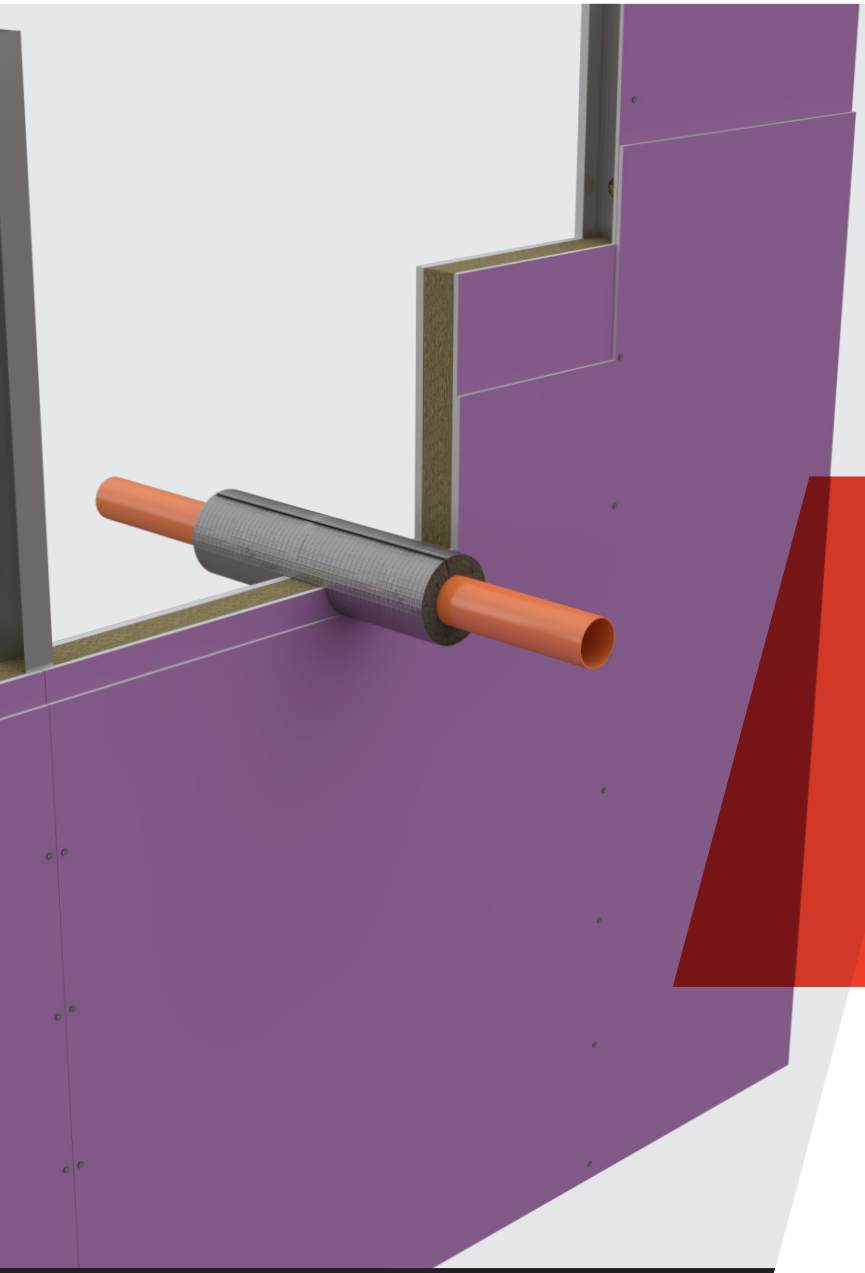
PFC COROFIL
PASSIVE FIRE PROTECTION SOLUTIONS



Product Technical Data Sheet:

TDSCIFS

PFC Corofil Insulated Fire Sleeves CIFS

ETA Number: 20/1164

SERVICE PENETRATIONS

NBS

ASFP

Revision 1 - 04/11/2020

Technical Description of Product

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PFC Corofil Insulated Fire Sleeve is a flexible intumescent material, consisting primarily of mineral fibres, intercalated graphite and organic binders formed into a pipe sleeve.

Grey in colour it has a glass fibre reinforced aluminium foil cladding around the perimeter along its full length. Supplied in various diameters to suit specific pipe sizes it has a nominal 25mm thick wall. It can be cut down along its length to aid fitment and a strip of aluminium foil tape is used to seal the joint.

PFC Corofil Insulated Fire Sleeve have been tested in accordance with EN1366-3:2009 and offer fire resistance periods of up to EI240 for differing services and wall / floor constructions.

Intended Use

PFC Corofil Insulated Fire Sleeves are a pipe closure device, installed around metal and plastic pipes to form a penetration seal, to reinstate the fire resistance performance of non load bearing wall and floor constructions where they have been provided with apertures for the penetration of services.

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 X: Products intended for use in conditions exposed to weathering.
- Comprehensive range of sizes.
- Reduces cold bridging on insulated pipe systems.

Technical Data

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Specification

Pipe Diameter	15mm - 162mm	
Pipe Material	PVC, PVC-U, HDPE, ABS, Steel, Copper, Metal	
Fire Resistance Rigid Floors	Up to EI120	
Fire Resistance Flexible & Rigid Walls	Up to EI240	EN1366-3:2009 & EN13501-2
Colour/Appearance	Grey/dark grey in colour with a glass fibre reinforced aluminium foil cladding around perimeter.	

Technical Data

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Available Insulated Fire Sleeve Sizes

Sleeve Inside Diameter	For Pipes with Nominal Outside Diameters	Nominal thickness of sleeve	Recommended aperture diameter
17mm	15 - 19mm	25mm	67mm
21mm	19 - 23mm		71mm
27mm	25 - 29mm		77mm
34mm	32 - 36mm		84mm
42mm	40 - 44mm		92mm
48mm	46 - 50mm		98mm
54mm	52 - 56mm		104mm
60mm	58 - 62mm		110mm
67mm	65 - 69mm		117mm
76mm	74 - 78mm		126mm
80mm	78 - 82mm		130mm
89mm	87 - 91mm		139mm
102mm	100 - 104mm		152mm
108mm	106 - 110mm		158mm
114mm	112 - 116mm		164mm
127mm	125 - 129mm		177mm
134mm	132 - 136mm		184mm
140mm	138 - 142mm		190mm
159mm	157 - 161mm		209mm
160mm	158 - 162mm		210mm

Installation Instructions

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- Apertures for the penetration of pipes require separation of a minimum of 200mm.
- Pipes protected by PFC Corofil Insulated Fire Sleeve should be supported a maximum 150mm from each wall face and maximum 450mm from the upper face of floor constructions.
- Pipes must be perpendicular to the seal surface.
- PFC Corofil Insulated Fire Sleeve is 300mm long as standard. It may be cut down to suit the thickness of the wall or floor and any required protrusion.
- If the wall or floor is thicker than the minimum, the length of the Insulated Fire Sleeve should be extended to accommodate the extra thickness and allow for any required protrusion.
- The aperture to be sealed should be nominally 50mm larger than the pipe to be sealed.
- Metal pipes should be fitted with a minimum thickness of 40mm continuous stone wool pipe insulation, product reference Rockwool Rocklap H&V pipe section of 120kg/m^3 density butted up to the fire sleeve.
- Pipe configurations U/C and C/C are approved for use.
- When installing within a compound aperture there must be a minimum 60mm between the seal and the edge of the aperture.
- Cut the Insulated Fire Sleeve to the required length.
- Make a single cut along the entire length of the Insulated Fire Sleeve.
- Wrap the Insulated Fire Sleeve around the pipe.
- Using aluminium foil tape (supplied by others) seal the joint in the sleeve.
- Push the Insulated Fire Sleeve along the pipe into the aperture. Ensure there is sufficient sleeve protruding through each face of the wall or underside of the floor.

Installation Instructions

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Substrates

- Flexible walls: The wall must have a minimum thickness of 132mm and comprise timber or steel studs lined on both faces with minimum 2 layers of minimum 15mm thick lining boards. For 132mm thick timber stud walls there must be a minimum distance of 100mm of the seal to any stud and the cavity between stud and seal must be closed and minimum 100mm insulation of Class A1 or A2 (in accordance with EN 13501-1) in the cavity between stud and seal.
- Rigid walls: The wall must have a minimum thickness of 132mm and be comprised of concrete, aerated concrete or masonry, with a minimum density of 650kg/m^3.
- Rigid floors: The floor must have a minimum thickness of 150mm and be comprised of concrete, aerated concrete or masonry, with a minimum density of 550kg/m^3.

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

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Flexible and Rigid Walls minimum thickness 132mm.

PFC Corofil Insulated Fire Sleeves installed within a flexible or rigid wall, minimum thickness 132mm - Metal, steel, plastic pipes.			
Penetration Specification	**Minimum length of sleeve**	**Minimum protrusion of sleeve each side of wall**	**Classification**
Metal pipe 15mm ø 1 - 14.2mm wall thickness 40mm minimum thickness stone wool insulation Rockwool Rocklap, butted up to the insulated fire sleeve	150mm	9mm	EI 120
Metal pipe 15 - 159mm ø 1 - 14.2mm / 2 - 14.2mm wall thickness 40mm minimum thickness stone wool insulation Rockwool Rocklap, butted up to the insulated fire sleeve	150mm	9mm	E 120 / EI 30
PVC-U 15 - 160mm ø 1.8 - 3.2mm wall thickness	180mm	24mm	EI 120
HDPE 15 - 110mm ø 3.0 - 4.3mm wall thickness	180mm	24mm	EI 120
HDPE 15 - 160mm ø 3.0 - 6.2mm wall thickness	180mm	24mm	EI 90

Rigid Walls minimum thickness 150mm

PFC Corofil Insulated Fire Sleeves installed within a rigid wall, minimum thickness 150mm - Plastic pipes			
Penetration Specification	**Minimum length of sleeve**	**Minimum protrusion of sleeve each side of wall**	**Classification**
PVC-U pipe 15 - 110mm ø 3.2mm wall thickness	150mm	0mm	EI 240

Performance Data

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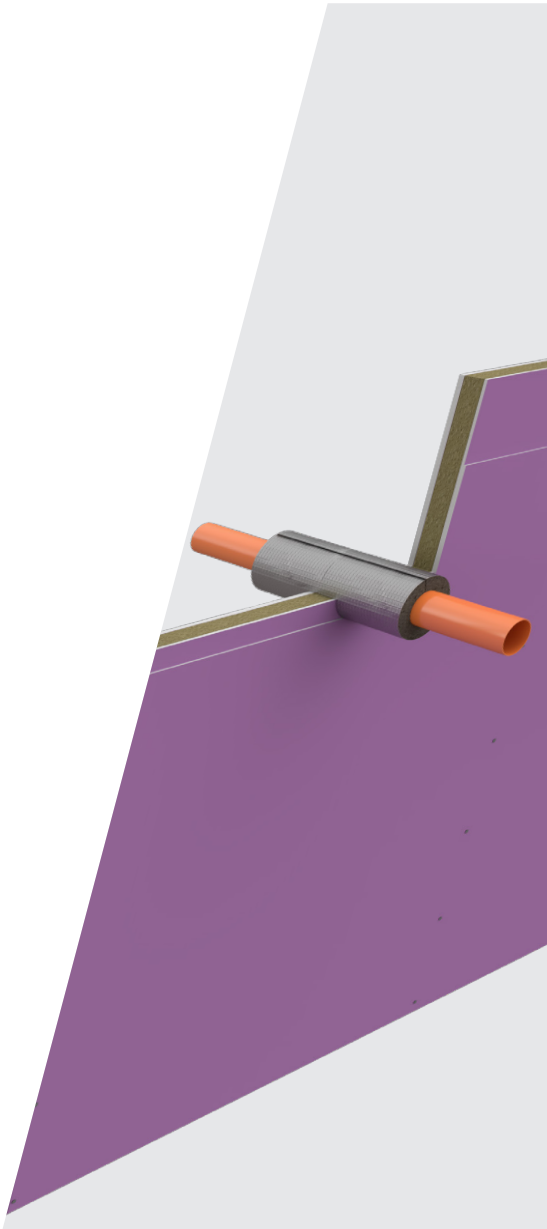
Rigid Floors minimum thickness 150mm

PFC Corofil Insulated Fire Sleeves installed within a rigid floor, minimum thickness 150mm - Plastic pipes			
Penetration Specification	**Minimum length of sleeve**	**Minimum protrusion of sleeve each side of wall**	**Classification**
PVC-U pipe 15 - 160mm ø 3.2mm wall thickness	175mm	25mm	EI 120
PVC-U pipe 15 - 40mm ø 3.0mm wall thickness	150mm	0mm	EI 120
HDPE pipe 15 - 160mm ø 3.0 - 6.2mm wall thickness	150mm	0mm	EI 120

Rigid Floors in conjunction with PFC Corofil Firestop Compound maximum aperture of 330mm x 330mm

PFC Corofil Insulated Fire Sleeves installed within a rigid floor with PFC Corofil Firestop Compound, maximum aperture 330mm x 330mm - Plastic pipes			
Penetration Specification	**Minimum length of sleeve**	**Minimum protrusion of sleeve each side of wall**	**Classification**
PVC-U pipe 15 - 160mm ø 3.2mm wall thickness	150mm	0mm	EI 90
PVC-U pipe 15 - 110mm ø 3.2mm wall thickness	150mm	0mm	EI 120
HDPE pipe 15 - 160mm ø 4.3 - 6.2mm wall thickness	150mm	0mm	EI 120



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