

Product Technical Data Sheet:

TDSCFST

**PFC Corofil Firebreak
Service Transit CFST**

ETA Number: 21/0207



**SERVICE
PENETRATIONS**



Technical Description of Product



Firebreak Service Transits consist of round, square or rectangular steel sleeves which contain a heat reactive material. When exposed to heat the intumescent material begins to react, rapidly forming an insulating char plug which effectively closes and seals the service transit, to restrict the passage of fire and smoke through the fire rated wall or floor.

Each PFC Corofil Firebreak Service Transit is supplied with two end foam plugs which are inserted after services have been installed to reduce hot and cold smoke leakage.

Firebreak Service Transits have been tested in accordance with EN1366-3: 2009 and offer fire resistance periods of up to 240 minutes for differing services and wall / floor constructions.

Intended Use

Firebreak Service Transits are designed to allow cables, combustible and steel pipes to penetrate fire resistant walls and floors. They can be opened to provide a retro fit solution to pre installed services and are suitable for removal or addition of services without damage to the surrounding structure.

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 Y₂; intended for use at temperatures below 0°C, but with no exposure to rain nor UV. Includes lower use categories.
- Available in a range of sizes and shapes (square, round and rectangular) to suit whole cable baskets up to 300mm wide.
- Fire tested for a wide range of cables and other services. Tested empty and up to 60% service fill.
- Able to be fitted around already installed services.

Technical Data



Specification

| | | |
|------------------------|--|---------------------------|
| Product Dimensions | 125mm (w) x 125mm (h) x 254mm (d) 1100mm (w) x 125mm (h) x 254mm (d) 50mm diameter x 254mm (d) 100mm diameter x 254mm (d) 65mm (w) x 65mm (h) x 254mm (d) 102mm (w) x 102mm (h) x 254mm (d) | |
| Service Type | Electrical cables, Telecom cables (single or in a bundle), Copper pipes, PVC pipes | |
| Flexible & Rigid Walls | Up to EI120 | EN1366-3:2009 & EN13501-2 |
| Rigid Floors | Up to E240, EI120 | EN1366-3:2009 & EN13501-2 |
| Colour/Appearance | Red metal steel shell with intumescent liner | |

Installation Instructions



- Select the correct size of PFC Corofil Firebreak Service Transit to suit the existing opening. If necessary enlarge the opening to the exact size of the Firebreak Service Transit to allow for installation.
 - If retrofitting around existing cables or cable baskets, open the Transit, remove the supplied end plugs and fit around the existing services.
 - Slide the Transit into the previously formed opening, making sure that it is positioned centrally within the thickness of the floor or wall ensuring that an equal length protrudes either side.
 - Fully fill any large opening in floors, around the Transit using Firebreak Compound.
 - Small openings (up to 10mm) should be sealed with PFC Corofil Acoustic Intumescent Sealant.
 - The Transit is held in place using mounting flanges which are friction fitted. Open flanges and fit over each end of the Transit (i.e. one flange on each side of wall). Slide each flange until it is pressed against the surface of the wall or floor. Fit the supplied nut and bolt through the pre-formed holes in the open corner of each flange and tighten securely in position. Ensure the mounting flanges are correctly fitted on both sides of walls and floors. Once secured in position by the bolts supplied, the mounting flanges do not need to be separately fixed to the wall or floor.
 - Fit the foam end plugs into both ends of Transit, cutting the plugs as necessary to make a snug fit around the penetrating services.
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Installation Instructions



Substrates

- Flexible walls: The wall must have a minimum thickness of 100mm and be comprised of steel studs lined on both faces with minimum 2 layers of 12.5mm thick boards.
 - Rigid walls: The wall must have a minimum thickness of 100mm and be comprised of concrete, aerated concrete or masonry, with a minimum density of 650 kg/m³.
 - Rigid floors: The floor must have a minimum thickness of 150mm and be comprised of aerated concrete or concrete with a minimum density of 650 kg/m³.
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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



Flexible or rigid wall constructions with wall thickness of minimum 100mm
 PFC Corofil Firebreak Service Transit penetration seal in flexible or rigid walls
 minimum 100mm thick

| Penetration Seal: Cables fitted through single cable Transit of dimensions, 125 x 125mm to 1100 x 125mm. Maximum 60% cable fill. Transit has no external insulation material. | | |
|---|---|----------------|
| Services | Service Insulation | Classification |
| Electrical cables up to 80mm diameter, single or in a bundle | None | E 120, EI 30 |
| Electrical cables up to 80mm diameter, single or in a bundle | 300mm long insulwrap to services, 5mm thick | E 120, EI 60 |
| Up to 21mm diameter telecoms, single or in bundles up to 100mm diameter | None | E 120, EI 60 |
| Unsheathed wire up to 24mm diameter | None | E 120, EI 30 |
| | 300mm long insulwrap to services, 5mm thick | E 120, EI 60 |

| Specific Cables | Service Insulation | Classification |
|--|--------------------|----------------|
| Type C2, C3, D1, D2 electrical cables, single or in a bundle | None | E 120, EI 45 |
| Type A1, A2, C1, A3 electrical cables, single or in a bundle | | E 120, EI 60 |

Performance Data



PFC Corofil Firebreak Service Transit penetration seal in flexible or rigid walls minimum 100mm thick

| Penetration Seal: Cables fitted through single cable Transit of dimensions, 65 x 65mm to 102 x 102mm and 50 to 100mm diameter. Maximum 60% cable fill. Transit has no external insulation material. | | |
|---|---|--|
| Services | Service Insulation | Classification |
| Electrical cables up to 80mm diameter, single or in a bundle, unsheathed wire up to 24mm diameter | None | E 120, EI 30 |
| Up to 21mm diameter telecoms, single or in bundles up to 100mm diameter | | E 120, EI 60 |
| Electrical cables up to 80mm diameter, single or in a bundle, unsheathed wire up to 24mm diameter | 300mm long insulwrap to services, 5mm thick | E 120, EI 60 |
| 82mm dia. x 3.2mm wall PVC Pipe to EN1329-1, EN1453-1 or EN1452-1 | None | E 120 U/U, C/U, U/C, CC EI 60 U/U, C/U, U/C, CC |
| 54mm dia. Copper Pipe | 19mm Armaflex CS | E 120 U/U EI 60 U/U |

| Specific Cables | Service Insulation | Classification |
|---|---|----------------|
| Type C2, D1, D2 electrical cables, single or in a bundle | None | E 120, EI 45 |
| Type A1, C1, D3, A3 electrical cables, single or in a bundle | | E 120, EI 60 |
| Type C2, C3, E, D1, D2 electrical cables, single or in a bundle | 300mm long insulwrap to services, 5mm thick | E 120, EI 60 |

Performance Data



PFC Corofil Firebreak Service Transit penetration seal in flexible or rigid walls minimum 100mm thick

| Penetration Seal: Cables fitted through single cable Transit of dimensions, 125 x 125mm to 1100 x 125mm. Maximum 60% cable fill. Exposed surfaces of Transit insulated with 5mm thick insulwrap. | | |
|--|---|----------------|
| Services | Service Insulation | Classification |
| Electrical cables up to 80mm diameter, single or in a bundle | None | E 120, EI 30 |
| Electrical cables 22 to 80mm diameter, single or in a bundle | 300mm long insulwrap to services, 5mm thick | E 120, EI 90 |
| Electrical cables up to 21mm diameter, single or in a bundle | | EI 120 |
| Up to 21mm diameter telecom cables, single or in bundles up to 100mm diameter | None | E 120, EI 90 |
| Unsheathed wire up to 24mm diameter | None | E 120, EI 30 |
| | 300mm long insulwrap to services, 5mm thick | E 120, EI 60 |

| Specific Cables | Service Insulation | Classification |
|--|---|----------------|
| Type C2, C3, D1 or D2 electrical cables, single or in a bundle | None | E 120, EI 45 |
| Type A1, A2, D3 or C1 electrical cables, single or in a bundle | | E 120, EI 60 |
| Type A3 electrical cables, single or in a bundle | | E 120, EI 60 |
| Type E or D2 electrical cables, single or in a bundle | 290mm long insulwrap to services, 5mm thick | EI 120 |

Performance Data



PFC Corofil Firebreak Service Transit penetration seal in flexible or rigid walls minimum 100mm thick

| Penetration Seal: Cables fitted through single cable Transit of dimensions, 65 x 65mm to 102 x 102mm and 50 to 100mm diameter. Exposed surfaces of Transit insulated with 5mm thick insulwrap. | | |
|--|---|--|
| Services | Service Insulation | Classification |
| Electrical cables up to 80mm diameter, single or in a bundle | None | E 120, EI 30 |
| Electrical cables up to 80mm diameter, single or in a bundle | 300mm long insulwrap to services, 5mm thick | EI 120 |
| Up to 21mm diameter telecom cables, single or in bundles up to 100mm diameter | None | E 120, EI 90 |
| Unsheathed wire up to 24mm diameter | None | E 120, EI 30 |
| | 300mm long insulwrap to services, 5mm thick | E 120, EI 60 |
| 82mm dia. x 3.2mm wall PVC Pipe to EN1329-1, EN1453-1 or EN1452-1 | None | E 120 U/U, C/U, U/C, CC EI 90 U/U, C/U, U/C, CC |
| 54mm dia. Copper Pipe | 19mm Armaflex CS | E 120 U/U EI 90 U/U |

| Specific Cables | Service Insulation | Classification |
|--|--------------------|----------------|
| Type C2, C3, D1 or D2 electrical cables, single or in a bundle | None | E 120, EI 45 |
| Type A1, A2, D3 or C1 electrical cables, single or in a bundle | | E 120, EI 60 |
| Type A3 electrical cables, single or in a bundle | | E 120, EI 90 |

Performance Data



PFC Corofil Firebreak Service Transit penetration seal in flexible or rigid walls minimum 100mm thick

| Penetration Seal: Cables fitted through ganged cable Transit of dimensions, 65 x 65mm to 102 x 102mm. Maximum 60% cable fill. Transit has no external insulation material. | | |
|--|--------------------|--|
| Services | Service Insulation | Classification |
| Type D3 electrical cables, single | None | E 120, EI 20 |
| Up to 21mm diameter telecoms, single or in bundles up to 100mm diameter | | |
| Unsheathed wire up to 24mm diameter | | E 90, EI 20 |
| 82mm dia. x 3.2mm wall PVC Pipe to EN1329-1, EN1453-1 or EN1452-1 | | E 120 U/U, C/U, U/C, CC EI 20 U/U, C/U, U/C, CC |
| 54mm dia. Copper Pipe | 19mm Armaflex CS | E 120 U/U EI 20 U/U |

Performance Data



PFC Corofil Firebreak Service Transit penetration seal in rigid floors
 minimum 150mm thick

Penetration seals, in concrete floors

| Penetration Seal: Cables fitted through single and ganged cable Transit of dimensions, 65 x 65mm to 102 x 102mm. Maximum 60% cable fill. Transit has no external insulation material. | | |
|---|---|--|
| Services | Service Insulation | Classification |
| Electrical cables up to 80mm diameter, single or in a bundle | None | E 180, EI 30 |
| Electrical cables up to 21mm diameter, single or in a bundle | | E 240, EI 60 |
| Telecom cables up to 21mm diameter, single or in a bundle | | |
| Electrical cables up to 80mm diameter, single or in a bundle | 300mm long insulwrap to services, 5mm thick | E 180, EI 45 |
| Electrical cables up to 21mm diameter, single or in a bundle | | E 240, EI 60 |
| Telecom cables up to 21mm diameter, single or in a bundle | | |
| 82mm dia. x 3.2mm wall PVC Pipe to EN1329-1, EN1453-1 or EN1452-1 | None | E 240 U/U, C/U, U/C, C/C EI 60 U/U, C/U, U/C, C/C |

| Specific Cables | Service Insulation | Classification |
|--|--------------------|----------------|
| Type C3 electrical cables, single or in a bundle | None | E 240, EI 30 |
| Type D3 or C2 electrical cables, single or in a bundle | | E 240, EI 45 |
| Type C1 or B electrical cables, single or in a bundle | | E 240, EI 60 |

Performance Data

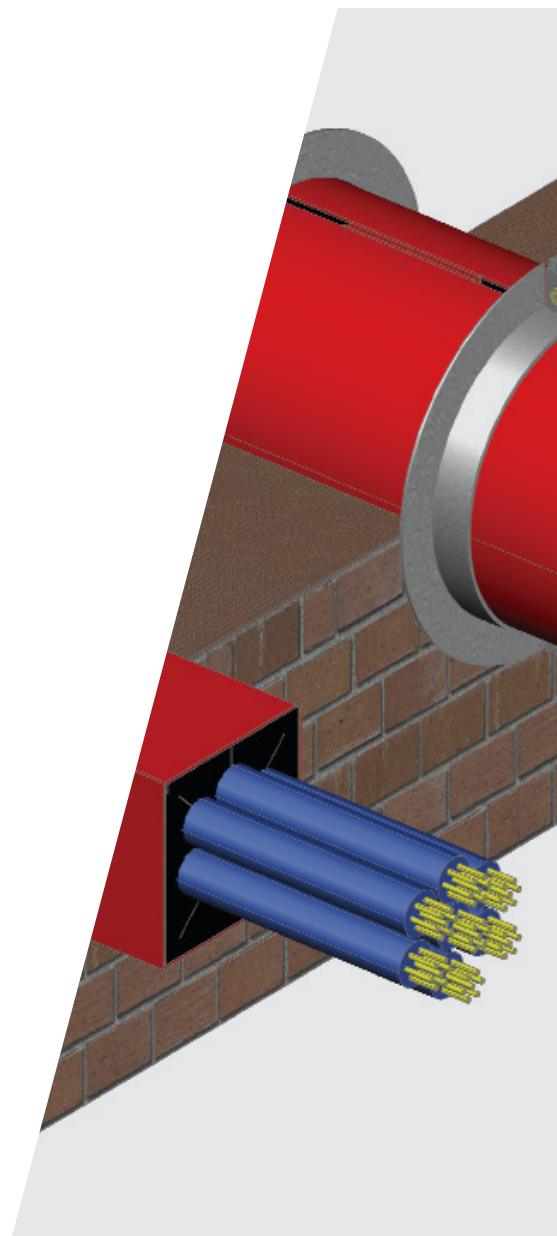


PFC Corofil Firebreak Service Transit penetration seal in rigid floors minimum 150mm thick

Penetration seals, in concrete floors

| Penetration Seal: Cables fitted through single and ganged cable Transit of dimensions, 65 x 65mm to 102 x 102mm. Maximum 60% cable fill. Exposed surfaces of Transit insulated with 5mm thick insulwrap. | | |
|--|---|---|
| Services | Service Insulation | Classification |
| Electrical cables 51 to 80mm diameter, single | None | E 240, EI 30 |
| Electrical cables 22 to 50mm diameter, single | | E 180, EI 30 |
| Electrical cables up to 21mm diameter, single or in a bundle | | E 240, EI 60 |
| Telecom cables up to 21mm diameter, single or in a bundle | | E 240, EI 60 |
| Electrical cables 51 to 80mm diameter, single | 300mm long insulwrap to services, 5mm thick | E 180, EI 90 |
| Electrical cables 22 to 50mm diameter, single | | E 240, EI 90 |
| Electrical cables up to 21mm diameter, single or in a bundle | | E 240, EI 120 |
| Telecom cables up to 21mm diameter, single or in a bundle | | |
| 82mm dia. x 3.2mm wall PVC Pipe to EN1329-1, EN1453-1 or EN1452-1 | None | E 240 U/U, C/U, U/C, C/C EI 120 U/U, C/U, U/C, C/C |

| Specific Cables | Service Insulation | Classification |
|--|---|----------------|
| Type C1, C2, C3, D2, D3 electrical cables, single or in a bundle | 300mm long insulwrap to services, 5mm thick | E 240, EI 120 |



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|---------------|--------|-------------|--|
| Doc Reference | | TDSCFST | |
| Revision 1 | | | |
| PB: DQ | CB: CI | AB: UL | |
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