PFC COROFIL
PASSIVE FIRE PROTECTION SOLUTIONS


Product Technical Data Sheet:

# TDSCAIS

# PFC Corofil Acoustic Intumescent Sealant CAIS

ETA Number: 20/1146
20/1148

SERVICE PENETRATIONS

LINEAR GAP SEALS

NBS

ASFP

Revision 11 – 26/09/2025

## Technical Description of Product

PFC COROFIL
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PFC Corofil Acoustic Intumescent Sealant is an acrylic based sealant used to form linear gap seals where gaps are present in wall and floor constructions and linear joint seals where wall and floor constructions abut.

PFC Corofil Acoustic Intumescent Sealant can also be used to reinstate the fire resistance performance of wall constructions where they have been provided with apertures for the penetrations of multiple services.

PFC Corofil Acoustic Intumescent Sealant has slight intumescent properties that cause it to swell on heating.

Certain seals require the use of 6mm foil lined ceramic to insulate the service. 6mm foil lined ceramic is a foil faced ceramic based insulation material and is utilised externally to the PFC Corofil Acoustic Intumescent Sealant. The relevant tables from page 8 show which services require 6mm foil lined ceramic.

Certain seals require backfilling with stone wool. The tables from page 8 show which seals require backfilling, with which thickness and density.

PFC Corofil Acoustic Intumescent Sealant is supplied in liquid form contained within 310ml cartridges and 600ml foils. The sealant is gunned into the aperture in or between the separating element(s) to a specified depth utilising various backing materials.

## Intended Use

The intended use of PFC Corofil Acoustic Intumescent Sealant is to reinstate the fire performance of gaps in and joints between flexible and rigid wall constructions and gaps in and joints between rigid floor constructions, or to reinstate the fire performance in rigid and flexible wall constructions where they have been penetrated by various cables or metallic pipes.

The specific elements of construction that PFC Corofil Acoustic Intumescent Sealant may be used with is listed under **substrates** on page 6 of this data sheet.

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).

# Technical Description of Product

## Key Points

- 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 and EAD 350454-00-1106 Firestopping and fire sealing products.
- PFC Corofil Acoustic Intumescent Sealant has an assumed working life of 25 years provided that the conditions laid down in ETA 20/1146 and ETA 20/1148 (sections 4.2/5.1/5.2) regarding packaging, transport, storage, installation, use and repair are met.
- The indications of a working life cannot be interpreted 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 on to the penetration seal.

## Technical Data

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## Specification

| | | |
|---|---|---|
| Packaging | 310ml cartridge<br>600ml foil | |
| Colour | White & Grey | |
| Application | Linear Gap Seal<br>Penetration Seal | EN1366-4+A1:2010<br>EN1366-3 |
| Movement capability | ≤ 25% | EN1366-4+A1:2010 |
| Maximum permitted gap size | 60mm | EN1366-4+A1:2010 |
| Acoustic | $R^{w}(C;C^{tr})$= 38(-2;-7) | EN ISO 10142-2 |
| Expected shelf life | 18 months | When stored in accordance with packaging instructions |

PFC Corofil Acoustic Intumescent Sealant has been tested to both EN1366-3 and EN1366-4

Based upon the test results and the direct field of application within both test standards, PFC Corofil Acoustic Intumescent Sealant has been classified in accordance with EN13501-2 as given in Annex A of ETA 20/1146 and ETA 20/1148.

# Installation Instructions

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### General

- 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.
- Ensure that the linear gap size and substrates, or the aperture and any service penetrations have been tested for use with PFC Corofil Acoustic Intumescent Sealant.
- Install any backing rod as required.
- Apply the sealant to the linear gap/joint, or around the service penetration to the required width and depth for the application as described in the tables from page 8 below.
- Once applied, smooth off the sealant.

### Linear Gap Seal

- PFC Corofil Acoustic Intumescent Sealant may be used for sealing linear gaps and joints in specific supporting constructions and substrates as listed under Substrates below.
- The maximum permitted gap/joint width is 60mm.
- Provisions shall be taken to ensure that floor seals cannot be stepped on e.g. by covering with wire mesh or floor finishes.

### Penetration Seals

- PFC Corofil Acoustic Intumescent Sealant may be used to provide a penetration seal with pipes and cables as shown in the relevant tables from page 8 below.
- The total amount of cross sections of services (including insulation) should not exceed 60% of the penetration area.
- Services in walls and floors shall be supported a maximum of 400mm from the face of the separating element.
- The seals may only be penetrated by the services mentioned in this data sheet; other parts or support constructions must not penetrate the seal.
- The service support construction must be fixed to the building element containing the penetration seal, or a suitable adjacent building element, in such a manner that in case of fire, no additional load is placed on the seal. Furthermore, it is assumed that the unexposed face support is maintained for the required period of fire resistance.
- Certain pipe configurations should be insulated with a minimum 300mm long, 6mm foil lined ceramic. See tables from page 8.
- Pipes must be perpendicular to the seal surface.
- 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 case of fire.
- The assessment 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. This has to be considered when designing the piping system.
- The approval does not address any risks associated with the leakage of dangerous liquids or gases caused by failure of the pipe(s) in case of fire.

## Installation Instructions

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# Substrates

**Linear Gap Seals**

- Flexible walls: Minimum 120mm 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/$m^3$.

**Penetration Seals**

- Flexible walls: Minimum 75mm thick, comprising of metal or timber studs lined on both sides with 1 layer 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, cavities 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 75mm thick and comprised of concrete, aerated concrete or masonry, with a minimum density of 650kg/$m^3$.

## Installation Instructions

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## 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.

Classification of Linear Joint Seals:

| Classification of Linear Joint Seals | |
|---|---|
| Test Conditions | Designation |
| Specimen Orientation<br>• Horizontal supporting construction<br>• Vertical supporting construction – vertical joint<br>• Vertical supporting construction – horizontal joint | <br>H<br>V<br>T |
| Movement capability<br>• No movement<br>• Movement induced (%) | <br>X<br>M000 |
| Type of splices<br>• Manufactured<br>• Field<br>• Both manufactured and field | <br>M<br>F<br>B |
| Joint widths range (in mm) | W w1 to w2* |
| * w1 is the lower width limit w2 is the higher width limit | |

## Performance Data

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### Linear Joints to flexible and rigid walls minimum 100mm thick

| PFC Corofil Acoustic intumescent Sealant installed vertically in flexible walls minimum 100mm thick | | | | | |
|---|---|---|---|---|---|
| Substrate | Joint Width mm | Joint Depth mm | Joint Orientation | Backing Rod | Fire resistance performance |
| Flexible/Flexible | 5 - 60 | 10 both sides | Vertical | Stonewool 75mm deep 60kg/m3 | EI120 |

### Linear Joints to flexible and rigid walls, minimum 120mm thick.

| PFC Corofil Acoustic Intumescent Sealant sealing head of drywall track. Sealant flush to both faces of wall. | | | | | |
|---|---|---|---|---|---|
| Substrate | Joint Width mm | Joint Depth mm | Joint Orientation | Backing Rod | Classification |
| Gypsum board/ Steel head track | 00 to 20 | 25 both sides | Horizontal | Not Required | EI120-T-X-F-W 00 to 20 |
| Gypsum board/ Steel head track | 00 to 20 | 25 both sides | Vertical | Not Required | EI120-V-X-F-W 00 to 20 |

| PFC Corofil Acoustic Intumescent Sealant Linear Gap Seals. Flexible or Rigid wall. Sealant flush to both faces. | | | | | |
|---|---|---|---|---|---|
| Substrate | Joint Width mm | Joint Depth mm | Joint Orientation | Backing Rod | Classification |
| Flexible wall to rigid wall | 00 to 20 | 12.5 both sides | Vertical | PE | EI120-V-X-F-W 00 to 20 |

### Linear Joints to rigid walls, minimum 150mm thick with induced movement to ≤ 25%.

| PFC Corofil Acoustic Intumescent Sealant Linear Gap Seals. Rigid Wall. | | | | | |
|---|---|---|---|---|---|
| Substrate | Joint Width mm | Joint Depth mm | Joint Orientation | Backing Rod | Classification |
| Concrete to Concrete | 00 to 60 | 20 both sides | Vertical | PE | E240 EI120-V-25-F-W 00 to 60 |
| Concrete to Concrete | 00 to 60 | 5 Non fireside | Vertical | Stonewool 75mm deep 60kg/m$^3$ | E240 EI120-V-25-F-W 00 to 20 |

## Performance Data

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### Linear Joints to rigid walls, minimum 100mm thick.

| PFC Corofil Acoustic Intumescent Sealant Linear Gap Seals. Rigid Wall. Sealant Flush to one face of the wall. | | | | | |
|---|---|---|---|---|---|
| Substrate | Joint Width mm | Joint Depth mm | Joint Orientation | Backing Rod | Classification |
| Concrete to Concrete | 00 to 20 | 10 single side | Vertical | PE | E120 EI45 V-X-F-W-00 to 20 |
| Concrete to Concrete | 00 to 50 | 25 single side | | | E120 EI60 V-X-F-W-00 to 50 |
| Concrete to Steel | 00 to 20 | 10 single side | | | E120 EI20 V-X-F-W-00 to 20 |
| Concrete to Steel | 00 to 50 | 50 single side | | | E45 EI30 V-X-F-W-00 to 50 |
| Concrete to Softwood | 00 to 20 | 10 single side | | | E30 EI20 V-X-F-W-00 to 20 |
| Concrete to Softwood | 00 to 50 | 50 single side | | | EI45 V-X F-W-00 to 50 |

### Linear Joints to rigid floor, minimum 150mm thick.

| PFC Corofil Acoustic Intumescent Sealant Linear Gap Seals. Rigid floor. Sealant Flush to one face of the floor. | | | | | |
|---|---|---|---|---|---|
| Substrate | Joint Width mm | Joint Depth mm | Joint Orientation | Backing Rod | Classification |
| Concrete to Concrete | 00 to 20 | 10 single side | Horizontal | PE | E240 EI45 H-X-F-W 00 to 20 |
| Concrete to Concrete | 00 to 50 | 25 single side | | | E240 EI90 H-X-F-W 00 to 50 |
| Concrete to Steel | 00 to 20 | 10 single side | | | E120 EI20 H-X-F-W 00 to 20 |
| Concrete to Steel | 00 to 50 | 50 single side | | | E240 EI90 H-X-F-W 00 to 50 |
| Concrete to Softwood | 00 to 20 | 10 single side | | | EI30 H-X-F-W 00 to 20 |
| Concrete to Softwood | 00 to 50 | 50 single side | | | EI45 H-X F-W 00 to 50 |

### Linear Joints to rigid floors, minimum 150mm thick with induced movement to ≤ 25%.

| PFC Corofil Acoustic Intumescent Sealant Linear Gap Seals. Rigid floor. | | | | | |
|---|---|---|---|---|---|
| Substrate | Joint Width mm | Joint Depth mm | Joint Orientation | Backing Rod | Classification |
| Concrete to Concrete | 00 to 60 | 20 both sides | Horizontal | Stonewool 75mm deep 60kg/m$^3$ | E240 EI120-H-25-F-W 00 to 60 |
| Concrete to Concrete | 00 to 60 | 5 Non fireside | Horizontal | PE | E240 EI120-H-25-F-W 00 to 60 |

## Performance Data

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### Penetration Seals

Walls: Flexible or rigid walls, minimum thickness 120mm.

| PFC Corofil Acoustic Intumescent Sealant - penetration seals; Flexible or Rigid walls, minimum 120mm thick – Pipes. | | | |
|---|---|---|---|
| Penetration Specification | Annular gap and depth of sealant (installed on both faces) | Backing material | Classification |
| Copper/Steel pipe 15mm ø, 0.8mm – 7.4mm wall thickness | 10mm annulus x 25mm deep | Not required | E120 C/U<br>EI20 C/U |
| Copper/Steel pipe 40mm ø, 0.8mm – 14.2mm wall thickness | | | E120 C/U<br>EI15 C/U |
| Copper/Steel pipe 40mm – 159mm ø, 1.8mm – 14.2mm wall thickness | | | E120 C/U |
| Copper/Steel pipe 40mm ø, 0.8mm – 14.2mm wall thickness* | | | E120 C/U<br>EI90 C/U |
| Copper/Steel pipe 40mm – 159mm ø, 1.8mm – 14.2mm wall thickness* | | | E120 C/U<br>EI20 C/U |
| *6mm foil lined ceramic to the unexposed face 300mm long | | | |

Walls: Flexible or rigid walls, minimum thickness 100mm.

| PFC Corofil Acoustic Intumescent Sealant - penetration seals; Flexible or Rigid walls, minimum 100mm thick – Pipes. | | | |
|---|---|---|---|
| Penetration Specification | Annular gap and depth of sealant (installed on both faces) | Backing material | Classification |
| Steel pipe 42mm ø, 2.8mm – 14.2mm wall thickness | 10mm annulus x 25mm deep | Not required | E120 C/U<br>EI45 C/U |
| Steel pipe 114mm ø, 3.0mm – 14.2mm wall thickness | | | E120 C/U<br>EI20 C/U |
| Steel pipe 42mm – 115mm ø, 3.0mm – 14.2mm wall thickness | | | E120 C/U<br>EI20 C/U |
| PVC-u pipes 40mm ø, 3.0mm wall thickness* | | | EI120 C/U |
| *6mm foil lined ceramic to the unexposed face 300mm long | | | |

## Performance Data

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### Penetration Seals

### Walls: Flexible or rigid walls, minimum thickness 75mm.

| PFC Corofil Acoustic Intumescent Sealant - penetration seals; Flexible or Rigid walls, minimum 75mm thick – Pipes. | | | |
|---|---|---|---|
| Penetration Specification | Annular gap and depth of sealant (installed on both faces) | Backing material | Classification |
| Copper/Steel pipe 15mm ø, 0.7mm – 7.5mm wall thickness | 10mm annulus x 12mm deep | Stone wool 10mm deep, 45kg/m³ density | E90 C/U<br>EI60 C/U |
| Copper/Steel pipe 15mm – 54mm ø, 1.2mm – 7.5mm wall thickness | | | E90 C/U |
| Steel pipe 15mm ø, 1.0mm – 14.2mm wall thickness | | | EI90 C/U |
| Steel pipe 15mm – 76mm ø, 2.0mm – 14.2mm wall thickness | | | E90 C/U<br>EI20 C/U |

### Walls: Flexible or rigid walls, minimum thickness 120mm.

| PFC Corofil Acoustic Intumescent Sealant - penetration seals; Flexible or Rigid walls, minimum 120mm thick – Cables. | | | |
|---|---|---|---|
| Penetration Specification | Annular gap and depth of sealant (installed on both faces) | Backing material | Classification |
| Cables up to 21mm | 490mm long x 100mm high x 25mm deep | Stone wool 70mm thick, 80kg/m³ density | E120<br>EI90 |
| Perforated cable tray 450mm x 50mm | | | |
| Cables 21mm – 50mm | 200mm long x 100mm high x 25mm deep | Not required | E90<br>EI60 |

### Walls: Flexible or rigid walls, minimum thickness 100mm.

| PFC Corofil Acoustic Intumescent Sealant - penetration seals; Flexible or Rigid walls, minimum 100mm thick – Cables. | | | |
|---|---|---|---|
| Penetration Specification | Annular gap and depth of sealant (installed on both faces) | Backing material | Classification |
| Cables up to 80mm | 180mm x 180mm maximum<br>50mm x 50mm minimum | Stone wool 20mm thick, 45kg/m³ density | E90<br>EI60 |

## Performance Data

Penetration Seals

Walls: Flexible or rigid walls, minimum thickness 75mm.

| PFC Corofil Acoustic Intumescent Sealant - penetration seals; Flexible or Rigid walls, minimum 75mm thick – Cables. | | | |
|---|---|---|---|
| Penetration Specification | Annular gap and depth of sealant (installed on both faces) | Backing material | Classification |
| 1 x 'B' cable | 25mm ø aperture | Stone wool 50mm thick, 45kg/m$^3$ density | E90<br>EI60 |


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| Doc Reference | TDSCAIS | |
|---|---|---|
| Revision 1.2 | | |
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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