

General Product Description

The Protecta® FR Service Transit has been designed to maintain the fire resistance of walls and floors when these are breached by continuous cables and plastic pipes.

The Service Transit consists of a circular high temperature plastic tube containing a graphite based intumescent lining material which expands upon heating to seal spaces or voids around cables and pipes, thus preventing the passage of flames, smoke and gases.

After installation of the Service Transit, cables and pipes can be retrofitted without having to install a new fire seal.

The Service Transit is available in three different lengths, 150mm, 250mm and 400mm and the selection of which to use depends on the thickness of the supporting construction and the required fire classification.

Properties

- Safe, easy and quick to fire stop service penetrations.
- Ideal for installations where it is likely that services will be inserted or replaced later on
- Ideal for installations in tight spaces where it will be difficult to install a normal fire seal at a later stage in the building construction
- A plug in the middle prevents penetration of cold smoke (see air permeability tests on the next page)
- New patented fast expanding graphite material
- For cables, plastic pipes and cables inside plastic pipes (conduits)
- Classified for fire sealing all types of constructions; drywalls, masonry or concrete walls, timber walls, concrete floors and timber floors
- Can be fitted several ways; cast in concrete, friction fitted in concrete, masonry or gypsum, or inserted in larger apertures with Protecta FR Acrylic, FR Board or EX Mortar
- Very high fire classifications up to 240 minutes for both integrity and insulation
- Certified for PVC-U, PVC-C, PE, LDPE, MDPE, HDPE, ABS, SAN+PVC and PP pipes plus all kinds of cables
- No emissions - environmentally and user friendly
- Unlimited storage time (under correct conditions)
- 30 years working life guarantee

Sound Insulation

Description	Sound reduction
Service Transit's in all sizes	Rw 42 dB

The sound insulation value is only valid for the Service Transit and not for other elements in the building construction.

The sound insulation has been tested by the accredited laboratory Exova BM Trada in Great Britain according to EN ISO 10140-2. Test report is available upon request.



Sizes and Intended Use

Pno.	Size	Qty/Box	Intended Use
P249	OD Ø40 ID Ø33.8 x 150mm	30	Flexible and rigid walls from 75mm to 150mm thick
P250	OD Ø63 ID 53.4 x 150mm	25	
P251	OD Ø90 ID 75.8 x 150mm	12	
P252	OD Ø110 ID 95.0 x 150mm	9	Flexible, rigid and timber walls from 100mm to 210mm thick, or rigid and timber floors from 150mm to 210mm thick
P253	OD Ø40 ID Ø33.8 x 250mm	30	
P254	OD Ø63 ID 53.4 x 250mm	25	
P255	OD Ø90 ID 75.8 x 250mm	12	
P256	OD Ø110 ID 95.0 x 250mm	9	Flexible, rigid and timber walls, or rigid and timber floors from 210mm to 400mm thick
P257	OD Ø40 ID Ø33.8 x 400mm	30	
P258	OD Ø63 ID 53.4 x 400mm	25	
P259	OD Ø90 ID 75.8 x 400mm	12	
P260	OD Ø110 ID 95.0 x 400mm	9	

Technical Data

Technical Approval	EAD 350454-00-1104
Durability according to ETAG 026-2	Z ₂ intended for use in internal conditions with humidity classes other than Z ₁ , excluding temperatures below 0 °C.
Tube	High temperature resistant plastic
Conditioning procedure	EN 13238:2010
Expansion ratio	17:1
Expansion pressure	65.4 N
Colour	White tube with anthracite inlay
Graphite weight	1.4 kg/m ² per mm thickness
Graphite density	1409 kg/m ³
Normal expansion time	Approx. 1 minute
Minimum expansion temperature	105 °C
Storage	Store in temperatures between 5 °C and 30 °C
Life	Under normal conditions; 30 years +

Air Permeability

FR Service Transit, without services

Positive Pressure (Pa)	Leakage (m³/h)	Negative Pressure (Pa)	Leakage (m³/h)
25	0.08	25	0.18
50	0.14	50	0.29
100	0.35	100	0.46
200	0.62	200	0.88
300	1.44	300	1.33
450	2.18	450	1.82
600	3.24	600	2.66

FR Service Transit, with one single service penetration

Positive Pressure (Pa)	Leakage (m³/h)	Negative Pressure (Pa)	Leakage (m³/h)
25	0.05	25	0.14
50	0.13	50	0.24
100	0.36	100	0.40
200	0.75	200	0.63
300	1.50	300	1.40
450	2.64	450	1.97
600	3.60	600	2.72

FR Service Transit, with services in a bundle, approx. half filled

Positive Pressure (Pa)	Leakage (m³/h)	Negative Pressure (Pa)	Leakage (m³/h)
25	0.14	25	0.35
50	0.26	50	0.47
100	0.66	100	0.72
200	1.30	200	1.38
300	2.46	300	2.52
450	3.89	450	3.53
600	4.80	600	4.27

FR Service Transit, with services in a bundle, fully filled

Positive Pressure (Pa)	Leakage (m³/h)	Negative Pressure (Pa)	Leakage (m³/h)
25	1.43	25	1.43
50	1.87	50	2.29
100	3.59	100	3.84
200	6.19	200	6.51
300	8.63	300	9.00
450	11.70	450	11.60
600	14.43	600	14.15

Protecta® FR Service Transit - tested at Warringtonfire Testing and Certification Ltd (UKAS accredited); according to EN 1026: 2016.