

PROTECTA® FR SERVICE TRANSIT

INSTALLATION INSTRUCTIONS



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GENERAL PRODUCT DESCRIPTION

The Protecta® 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.

GENERAL GUIDE

Minimum separations and limitations: Service Transits can be fitted as specified in the detailed drawings from page 2.

Friction fitted: Minimum separation between Service Transits should be at least 30 mm.

Fitted with Protecta® FR Acrylic: Minimum separation between a Service Transit and the edge of the seal should be 10mm and minimum separation between apertures should be 30mm. In timber walls, apertures within a group should be placed horizontally, with minimum 200mm distance to the next group.

Fitted within Protecta® FR Board or EX Mortar: An aperture can include several services, and they may also be different. Minimum separation between Service Transits and also between Service Transits and the edge of the aperture should be 30 mm. The minimum permitted separation between adjacent apertures is 200 mm.

Supporting constructions: Flexible walls must have a minimum thickness of 75 mm and comprise steel studs or timber studs*) lined on both faces with minimum 1 layer of 12.5 mm thick boards. Timber walls must have a minimum thickness of 100 mm and comprise solid wood or cross-laminated timber. Rigid walls must have a minimum thickness of 75 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 650 kg/m³. Rigid floors must have a minimum thickness of 150 mm and comprise aerated concrete or concrete with a minimum density of 650 kg/m³. Timber floors must have a minimum thickness of 150 mm and comprise solid wood or cross-laminated timber. The supporting construction must be classified in accordance with EN 13501-2 for the required fire resistance period.

*) Timber studs: no part of the penetration seal may be closer than 100 mm to a stud, and minimum 100 mm of insulation of class A1 or A2 according to EN 13501-1 must be provided within the cavity between the penetration seal and the stud.



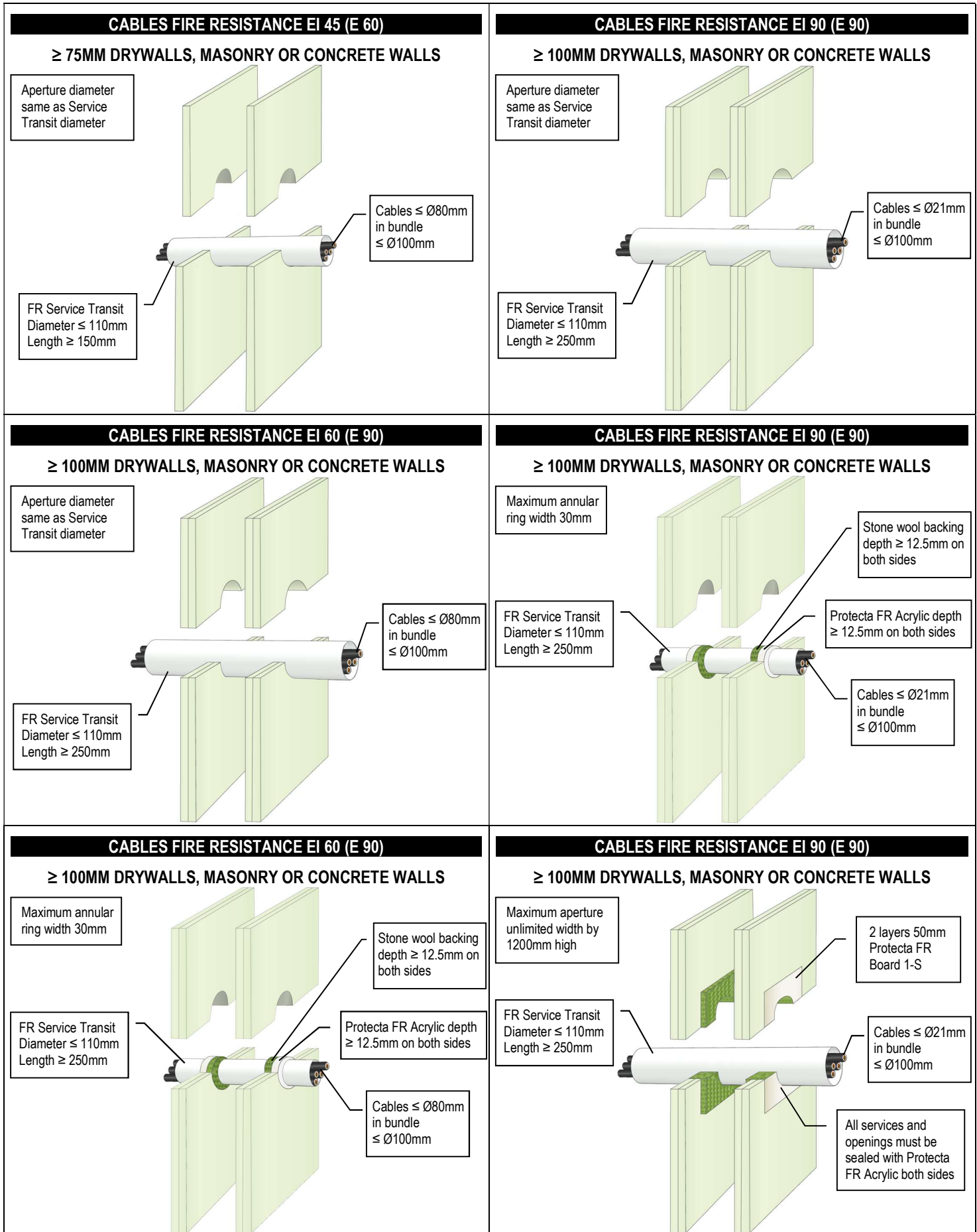
INSTALLATION

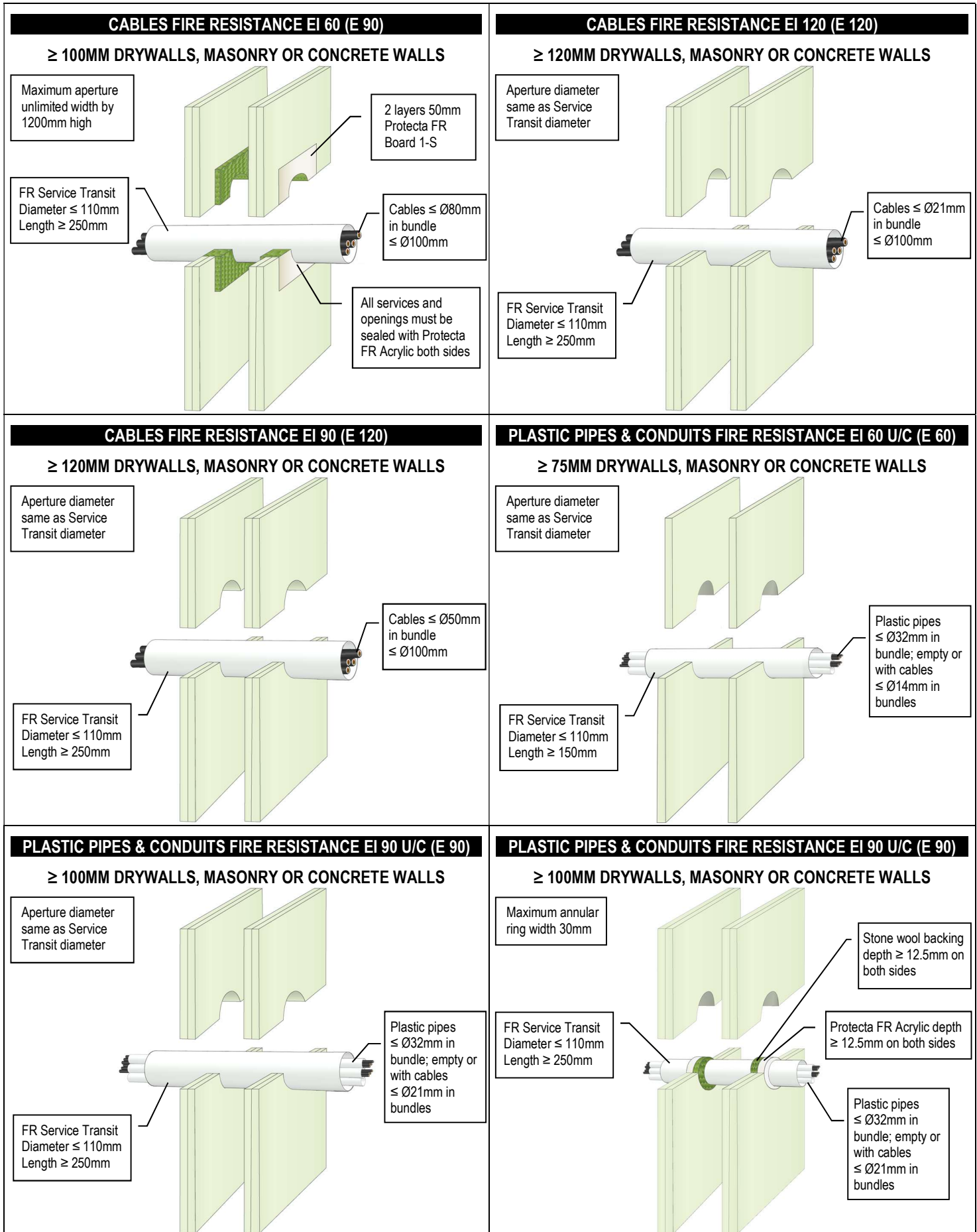
1. Install the Service Transit centrally in the wall, floor or fire seal ensuring that the center point of the transit is located mid-depth in the wall, floor or fire seal.
2. **Friction fitted or cast installation:**
Make sure there is a tight seal with no gaps around the Service Transit and that it is securely locked in position. If this is not the case, simply apply a bead of Protecta® FR Acrylic on both sides.
Installation with Protecta® FR Acrylic, FR Board or EX Mortar:
Follow the Technical Data Sheet and Installation Instructions supplied with the product selected together with installation instructions and detailed drawings in this document.
3. Before cables and/or plastic pipes are inserted through the Service Transit, remove the fiber plug from the middle of the Service Transit. After the insertion of services is completed, ensure that the fiber plug is refitted and positioned correctly around the services in the middle of the Service Transit, leaving no openings so a cold smoke barrier is achieved.
4. Make sure labels with retrofit instructions are placed near the Service Transit on both sides after installation, so future service installations are completed correctly by reinstating the fiber plug.

TEST STANDARDS

This Installation Instructions and the Technical Data Sheet are based on the product's European Technical Assessment issued in accordance with regulation (EU) No 305/2011 on the basis of EAD 350454-00-1104, September 2017, tested to EN 1366-3 in conjunction with EN 1363-1. The product hold the following approval marks; CE-mark for Europe, UL-EU Certificate Internationally & UAE Certificate of Compliance.

<p>EMPTY - FIRE RESISTANCE EI 30 (E 60)</p> <p>≥ 75MM DRYWALLS, MASONRY OR CONCRETE WALLS</p> <p>Aperture diameter same as Service Transit diameter</p> <p>FR Service Transit Diameter ≤ 110mm Length ≥ 150mm</p>	<p>EMPTY - FIRE RESISTANCE EI 60 (E 90)</p> <p>≥ 100MM DRYWALLS, MASONRY OR CONCRETE WALLS</p> <p>Aperture diameter same as Service Transit diameter</p> <p>FR Service Transit Diameter ≤ 110mm Length ≥ 250mm</p>
<p>EMPTY - FIRE RESISTANCE EI 90 (E 120)</p> <p>≥ 120MM DRYWALLS, MASONRY OR CONCRETE WALLS</p> <p>Aperture diameter same as Service Transit diameter</p> <p>FR Service Transit Diameter ≤ 110mm Length ≥ 250mm</p>	<p>EMPTY - FIRE RESISTANCE EI 90 (E 90)</p> <p>≥ 100MM DRYWALLS, MASONRY OR CONCRETE WALLS</p> <p>Maximum annular ring width 30mm</p> <p>Stone wool backing depth ≥ 12.5mm on both sides</p> <p>Protecta FR Acrylic depth ≥ 12.5mm on both sides</p> <p>FR Service Transit Diameter ≤ 110mm Length ≥ 250mm</p>
<p>EMPTY - FIRE RESISTANCE EI 60 (E 90)</p> <p>≥ 100MM DRYWALLS, MASONRY OR CONCRETE WALLS</p> <p>Maximum aperture unlimited width by 1200mm high</p> <p>2 layers 50mm Protecta FR Board 1-S</p> <p>FR Service Transit Diameter ≤ 110mm Length ≥ 250mm</p> <p>All services and openings must be sealed with Protecta FR Acrylic both sides</p>	<p>CABLES FIRE RESISTANCE EI 60 (E 60)</p> <p>≥ 75MM DRYWALLS, MASONRY OR CONCRETE WALLS</p> <p>Aperture diameter same as Service Transit diameter</p> <p>Cables ≤ Ø21mm in bundle ≤ Ø100mm</p> <p>FR Service Transit Diameter ≤ 110mm Length ≥ 150mm</p>





PLASTIC PIPES & CONDUITS FIRE RESISTANCE EI 90 U/C (E 90)
≥ 100MM DRYWALLS, MASONRY OR CONCRETE WALLS

Maximum aperture unlimited width by 1200mm high

FR Service Transit Diameter ≤ 110mm Length ≥ 250mm

2 layers 50mm Protecta FR Board 1-S

Plastic pipes ≤ Ø32mm in bundle; empty or with cables ≤ Ø21mm in bundles

All services and openings must be sealed with Protecta FR Acrylic both sides

EMPTY - FIRE RESISTANCE EI 90 (E 240)
≥ 150MM MASONRY OR CONCRETE WALLS

Aperture diameter same as Service Transit diameter

FR Service Transit Diameter ≤ 110mm Length ≥ 250mm

EMPTY - FIRE RESISTANCE EI 90 (E 240)
≥ 150MM MASONRY OR CONCRETE WALLS

Maximum annular ring width 30mm

FR Service Transit Diameter ≤ 110mm Length ≥ 250mm

Stone wool backing depth ≥ 25mm on both sides

Protecta FR Acrylic depth ≥ 15mm on both sides

EMPTY - FIRE RESISTANCE EI 90 (E 240)
≥ 150MM MASONRY OR CONCRETE WALLS

Maximum aperture unlimited width by 1200mm high

FR Service Transit Diameter ≤ 110mm Length ≥ 250mm

2 layers 60mm Protecta FR Board 2-S

All services and openings must be sealed with Protecta FR Acrylic both sides

CABLES FIRE RESISTANCE EI 240 (E 240)
≥ 150MM MASONRY OR CONCRETE WALLS

Aperture diameter same as Service Transit diameter

FR Service Transit Diameter ≤ 90mm Length ≥ 250mm

Cables ≤ Ø21mm in bundle ≤ Ø80mm

CABLES FIRE RESISTANCE EI 180 (E 240)
≥ 150MM MASONRY OR CONCRETE WALLS

Aperture diameter same as Service Transit diameter

FR Service Transit Diameter 110mm Length ≥ 250mm

Cables ≤ Ø21mm in bundle ≤ Ø100mm

