isover
SAINT-GOBAIN

Isover Protect Service Transit

Fire stopping & sealing

Installation Instructions

SAINT-GOBAIN

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General Guide

Isover Protect Service Transit has been designed to maintain the fire resistance of walls and floors when these are breached by continuous cables, pipes and ducts. Isover Protect Service Transit consists of a circular or rectangular high temperature shell containing a graphite based intumescent lining material, which expands upon heating to seal spaces or voids around service penetrations, thus preventing the passage of flames, smoke and gases. After installation of Isover Protect Service Transit, services can be retrofitted without having to install a new fire seal. Isover Protect Service Transit is available in three different lengths, 150mm, 250mm and 400mm. The selection of which to use depends on the thickness of the supporting construction and the required use.

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

Friction fitted: Minimum separation between Service Transits should be at least 30mm, except for steel pipes which does not require a minimum separation (linear arrangements).

Fitted with Isover Protect 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 100mm distance to the next group.

Fitted within Isover Protect Coated Board or Isover Protect 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 30mm. The minimum permitted separation between adjacent apertures is 100mm.

Supporting constructions: Flexible walls must have a minimum thickness of 75mm and comprise steel studs or timber studs*) lined on both faces with minimum 1 layer of 12.5mm thick boards. Timber walls must have a minimum thickness of 100mm and comprise solid wood or cross-laminated timber. Rigid walls must have a minimum thickness of 75mm and comprise concrete, aerated concrete or masonry, with a minimum density of 350 kg/m3 (650 kg/m3 in rigid wall details). Rigid floors must have a minimum thickness of 150mm and comprise aerated concrete or concrete with a minimum density of 650 kg/m3. Timber floors must have a minimum thickness of 150mm 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. Services shall be supported at maximum 250mm away from both faces of the wall constructions and 450mm from the upper face of floor constructions.

*) 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. The type of Service Transit is identified with a code; FR (Wall & Floor), FF (Floor only) or FD (Duct) which is stated in the technical drawings.

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 Isover Protect Acrylic on both sides.

   Installation with Isover Protect Acrylic, Isover Protect Coated Board or Isover Protect Mortar:

   Follow the Technical Data Sheet and Installation Instructions supplied with the product selected together with installation instructions and detailed drawings in this document.

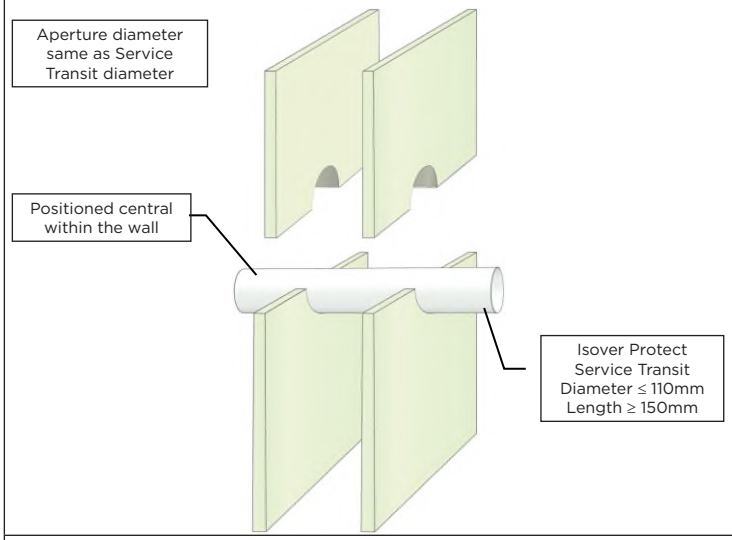
3. Before service penetrations are inserted through the Service Transit, remove the fiber plug from the middle of the Service Transit. After the insertion of services is completed, ensure that the fiber plug is refitted and positioned correctly around the services in the middle of the Service Transit, leaving no openings so a cold smoke barrier is achieved. This is not applicable for the FD transits which does not require a fiber plug.

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 (except the FD transits).

TECHNICAL DRAWINGS ISOVER PROTECT SERVICE TRANSIT

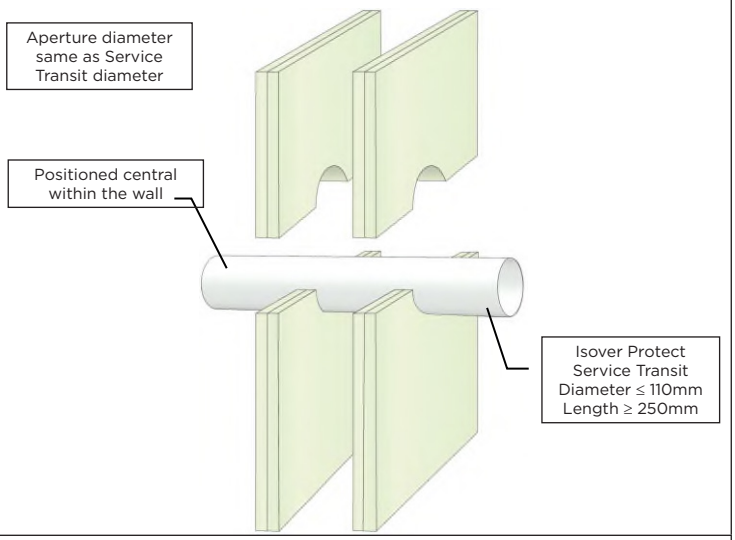
EMPTY - FIRE RESISTANCE EI 30 (E 60)

≥ 75MM DRYWALLS, MASONRY OR CONCRETE WALLS



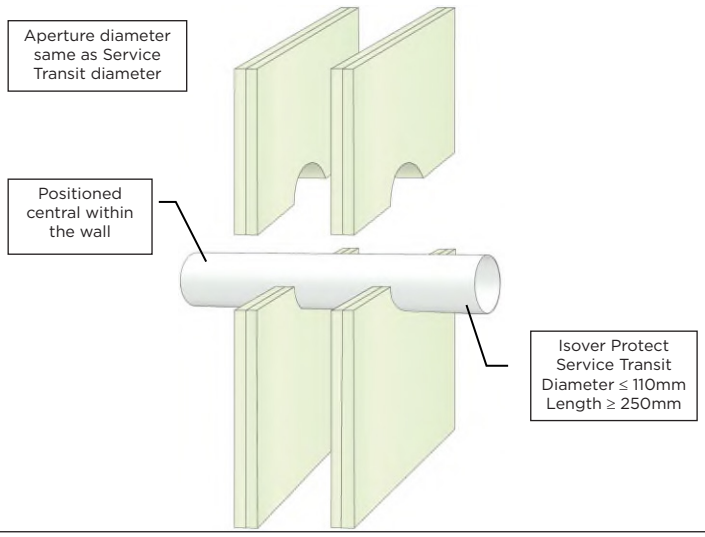
EMPTY - FIRE RESISTANCE EI 60 (E 90)

≥ 100MM DRYWALLS, MASONRY OR CONCRETE WALLS



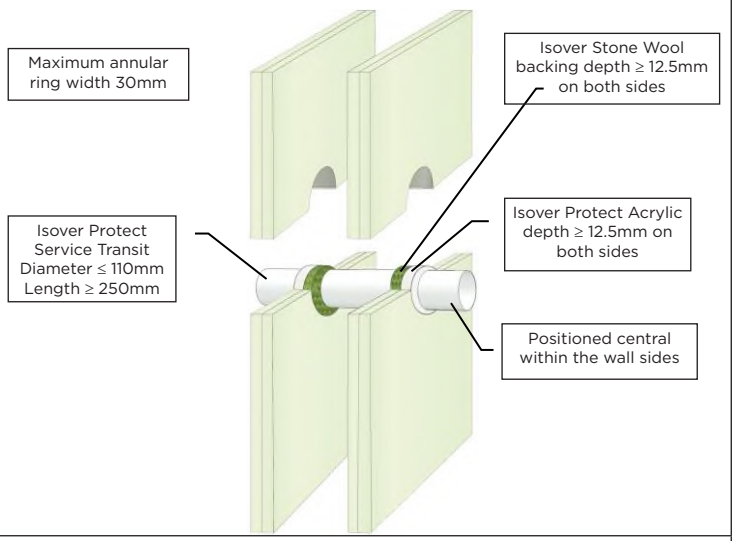
EMPTY - FIRE RESISTANCE EI 90 (E 120)

≥ 120MM DRYWALLS, MASONRY OR CONCRETE WALLS



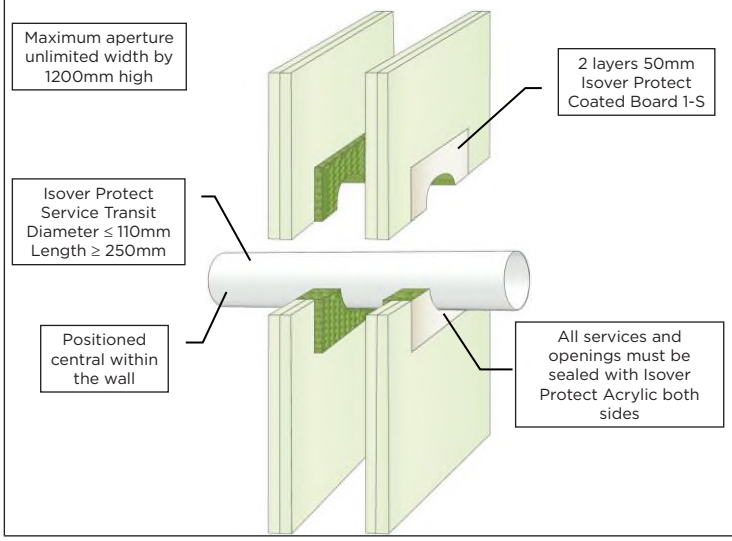
CABLES FIRE RESISTANCE EI 60 (E 60)

≥ 100MM DRYWALLS, MASONRY OR CONCRETE WALLS



EMPTY - FIRE RESISTANCE EI 60 (E 90)

≥ 100MM DRYWALLS, MASONRY OR CONCRETE WALLS



CABLES FIRE RESISTANCE EI 60 (E 60)

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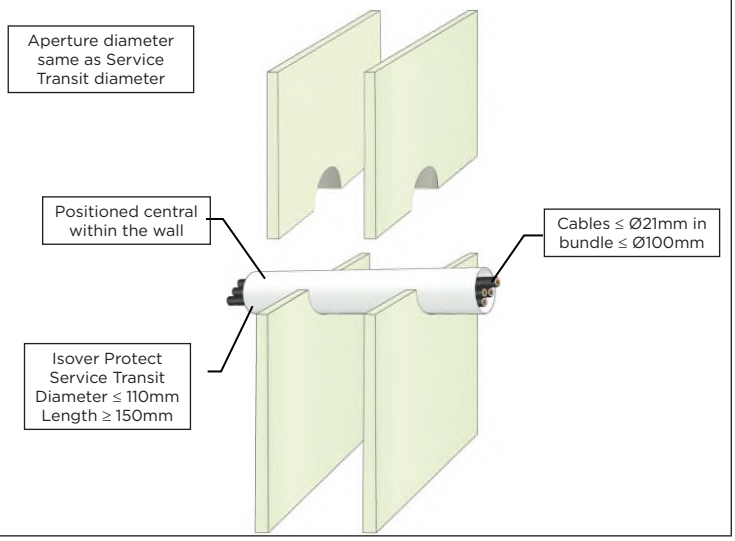

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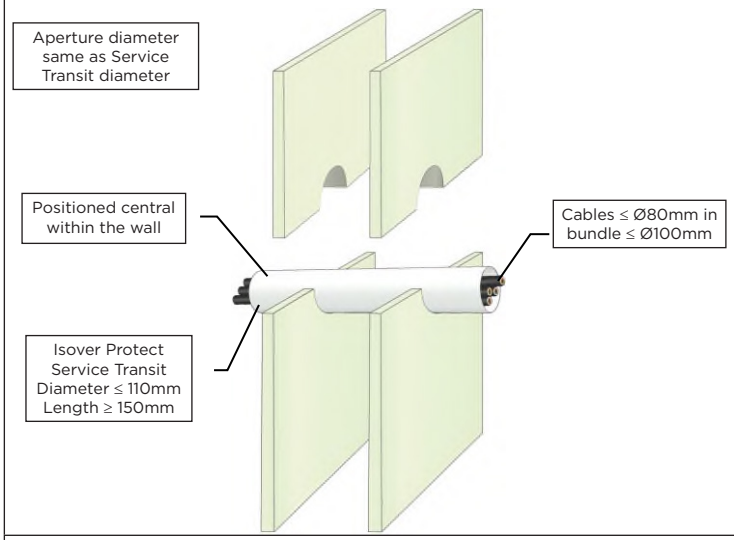
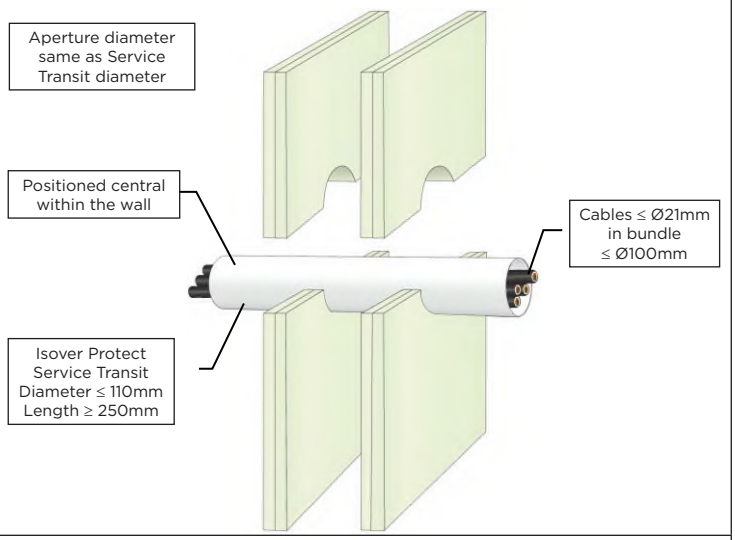


CABLES FIRE RESISTANCE EI 90 (E 90)

≥ 100MM DRYWALLS, MASONRY OR CONCRETE WALLS



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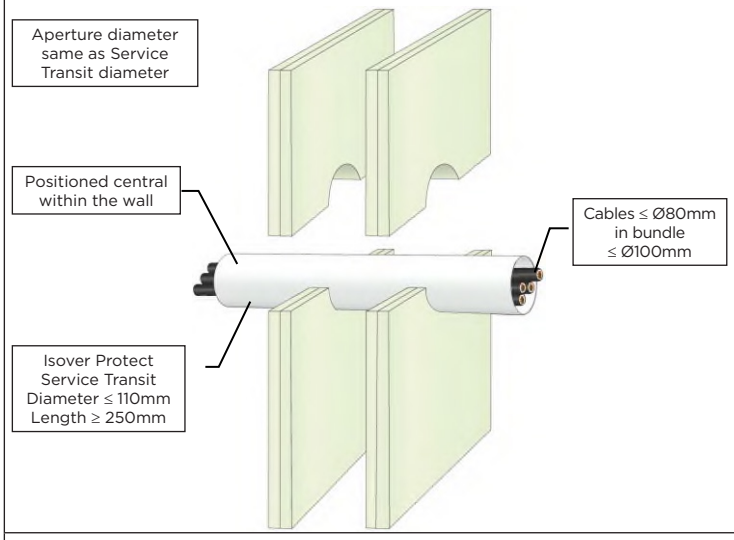
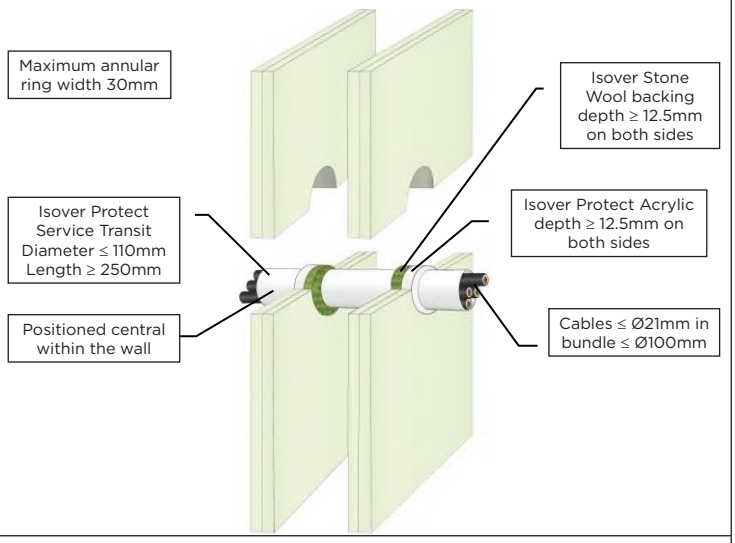


CABLES FIRE RESISTANCE EI 90 (E 90)

≥ 100MM DRYWALLS, MASONRY OR CONCRETE WALLS



CABLES FIRE RESISTANCE EI 60 (E 90)

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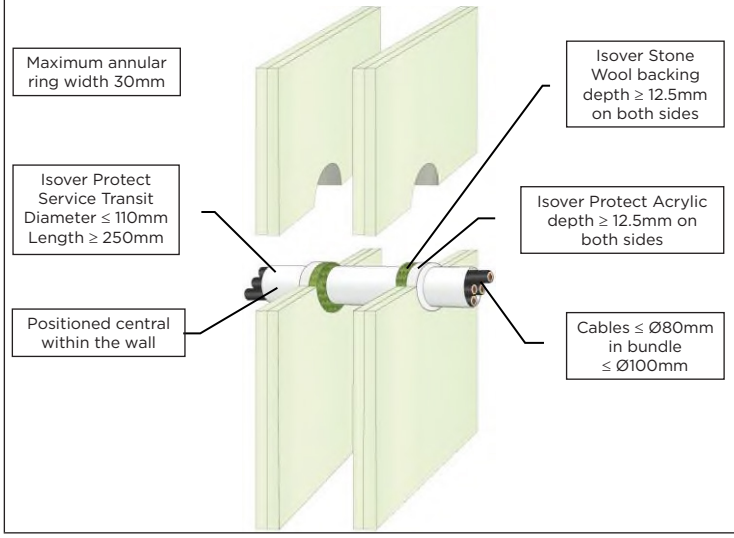

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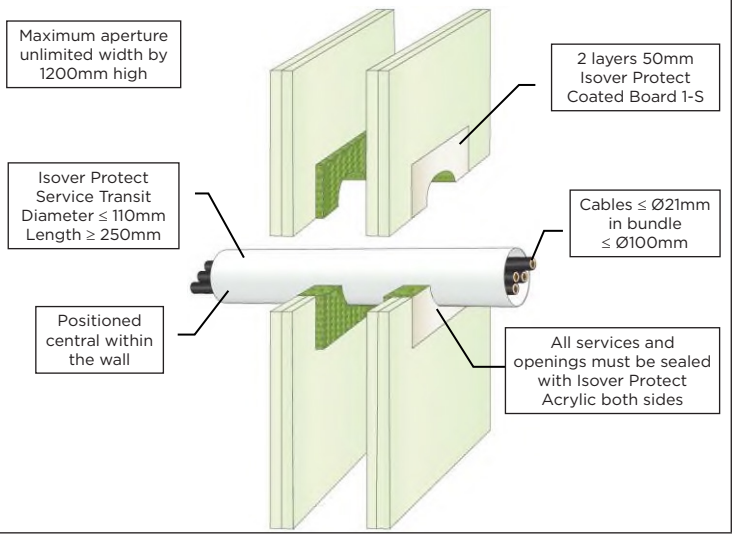

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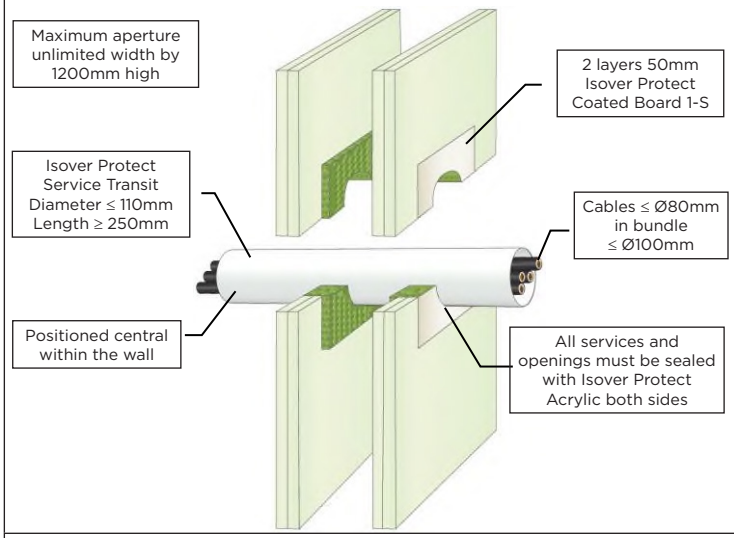
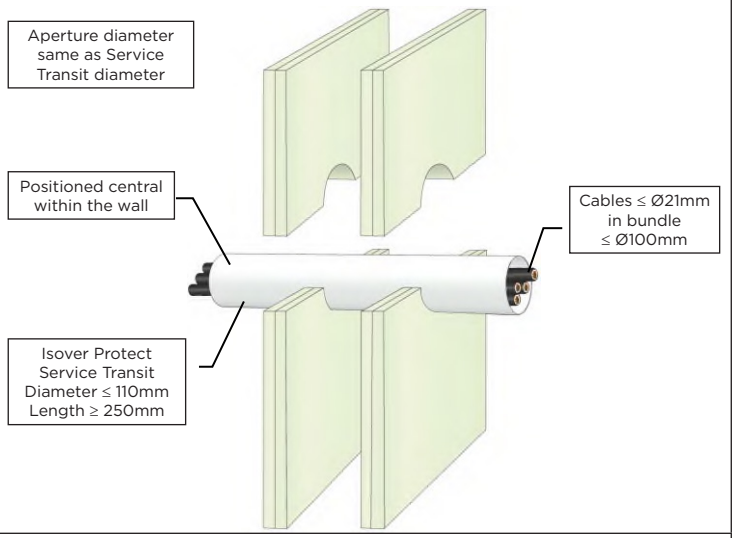


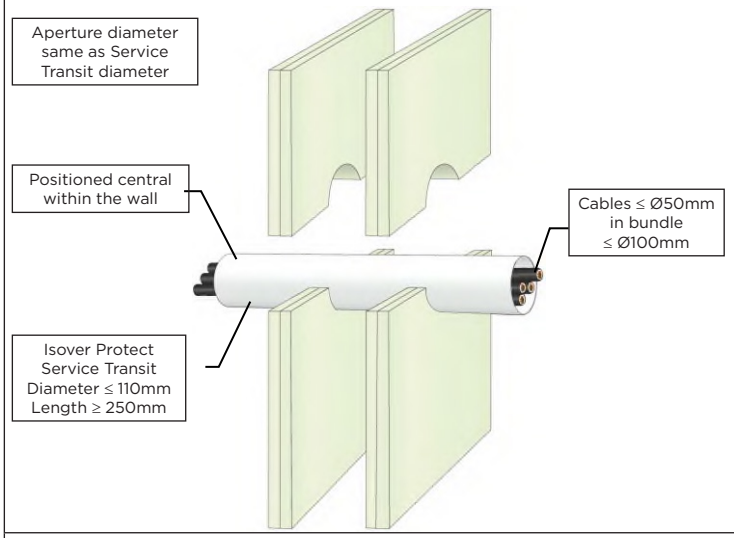
CABLES FIRE RESISTANCE EI 120 (E 120)

≥ 120MM DRYWALLS, MASONRY OR CONCRETE WALLS



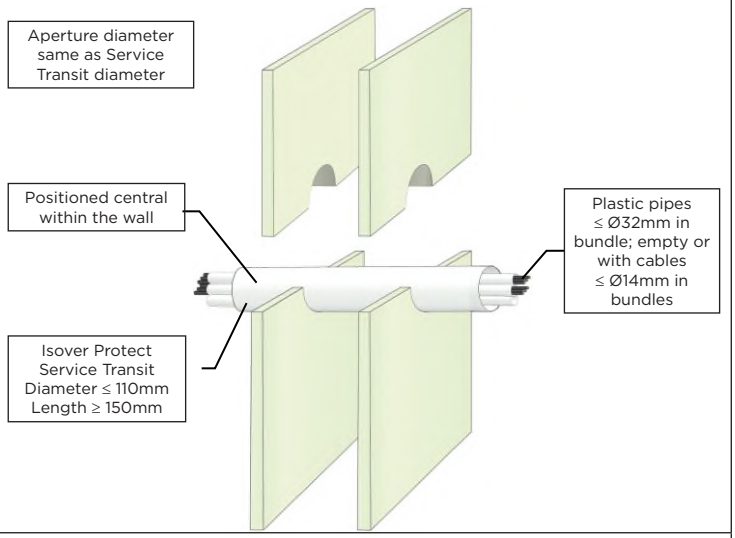
CABLES FIRE RESISTANCE EI 90 (E 120)

≥ 120MM DRYWALLS, MASONRY OR CONCRETE WALLS



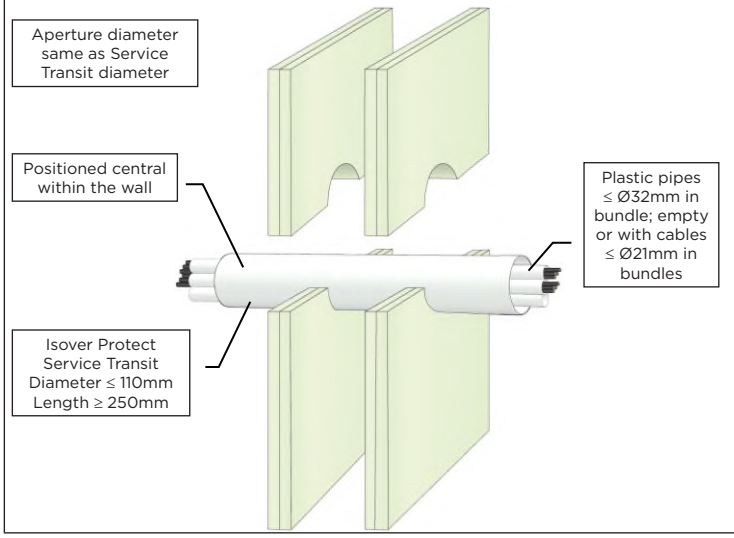
PLASTIC PIPES & CONDUITS FIRE RESISTANCE EI 60 U/C (E 60)

≥ 75MM DRYWALLS, MASONRY OR CONCRETE WALLS



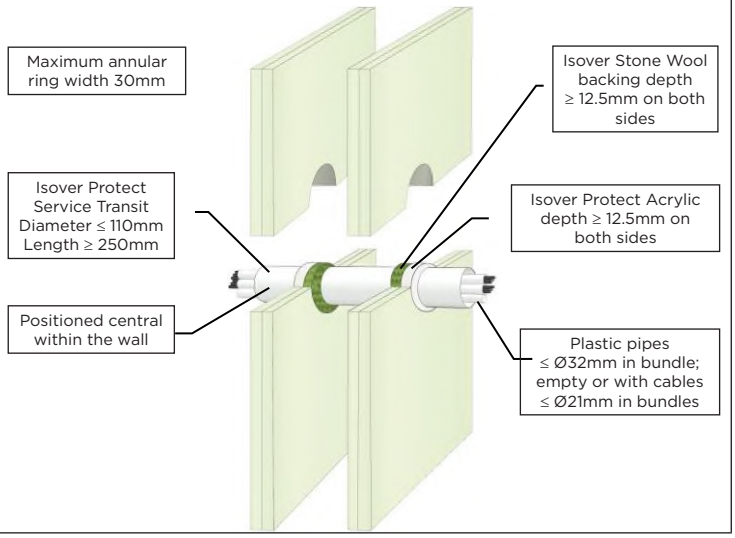
PLASTIC PIPES & CONDUITS FIRE RESISTANCE EI 90 U/C (E 90)

≥ 100MM DRYWALLS, MASONRY OR CONCRETE WALLS



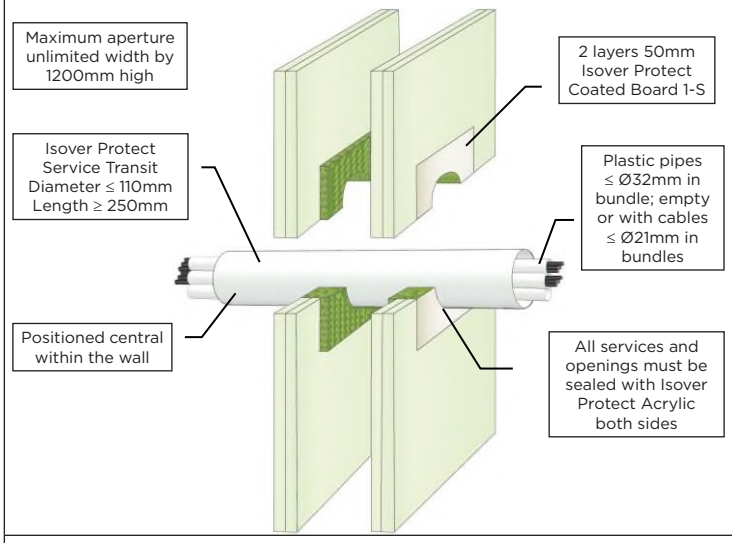
PLASTIC PIPES & CONDUITS FIRE RESISTANCE EI 90 U/C (E 90)

≥ 100MM DRYWALLS, MASONRY OR CONCRETE WALLS



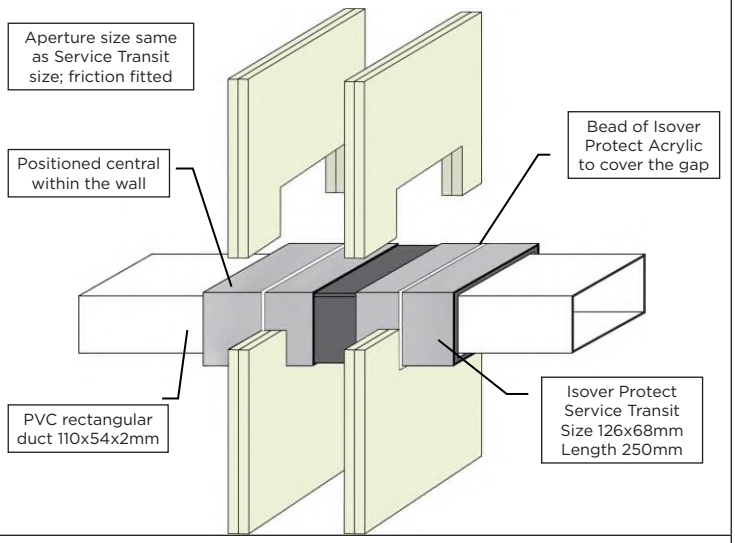
PLASTIC PIPES & CONDUITS FIRE RESISTANCE EI 90 U/C (E 90)

≥ 100MM DRYWALLS, MASONRY OR CONCRETE WALLS



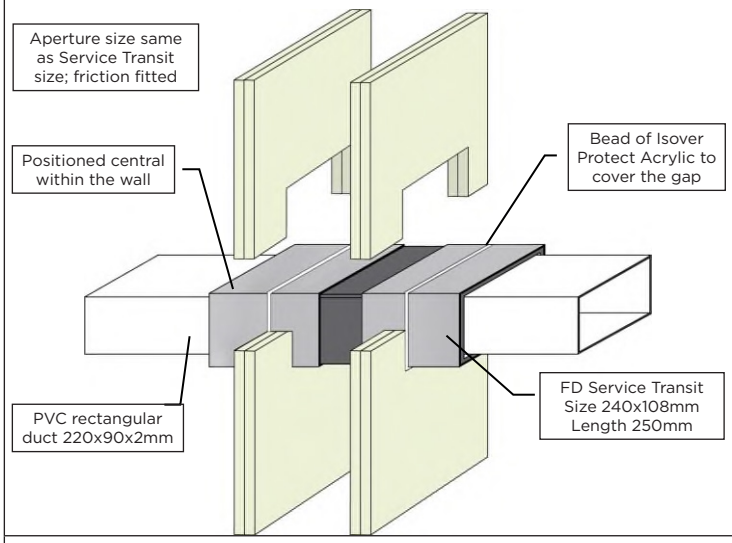
PLASTIC DUCT - FIRE RESISTANCE EI 120 U/U

≥ 100MM DRYWALLS, MASONRY OR CONCRETE WALLS



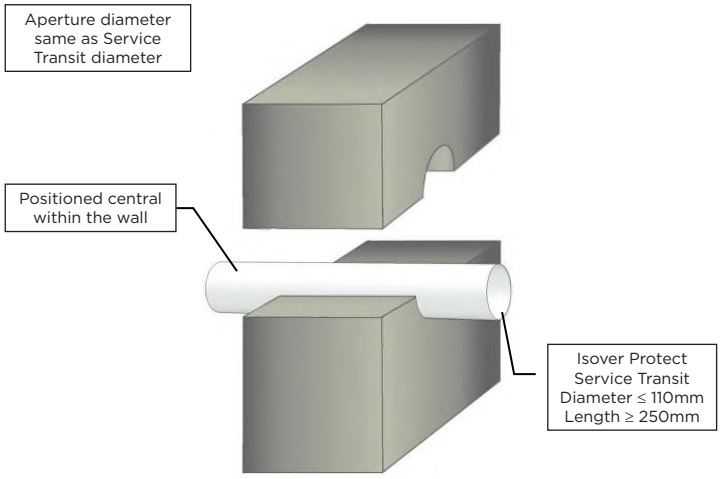
PLASTIC DUCT - FIRE RESISTANCE EI 120 U/U

≥ 100MM DRYWALLS, MASONRY OR CONCRETE WALLS



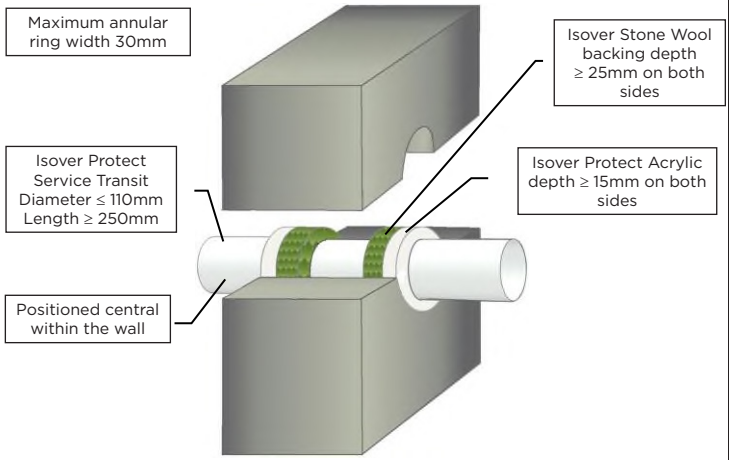
EMPTY - FIRE RESISTANCE EI 180 (E 240)

≥ 150MM MASONRY OR CONCRETE WALLS



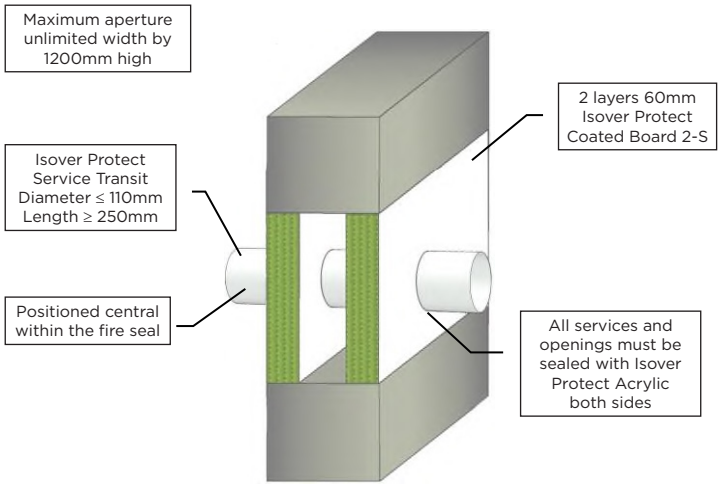
EMPTY - FIRE RESISTANCE EI 240

≥ 150MM MASONRY OR CONCRETE WALLS



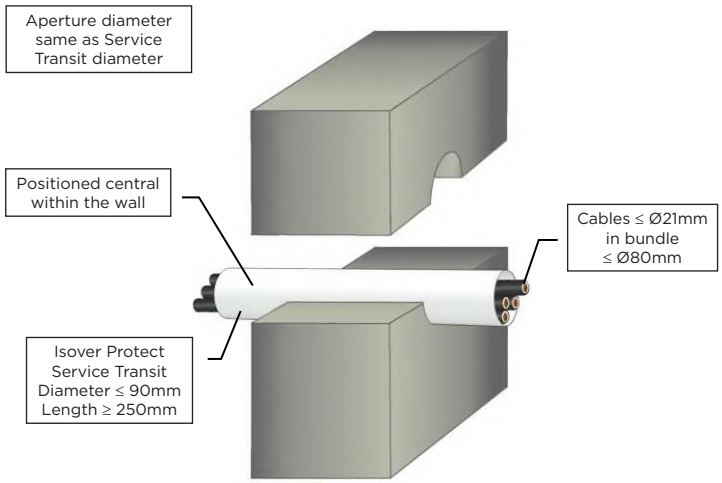
EMPTY - FIRE RESISTANCE EI 180 (E 240)

≥ 150MM MASONRY OR CONCRETE WALLS



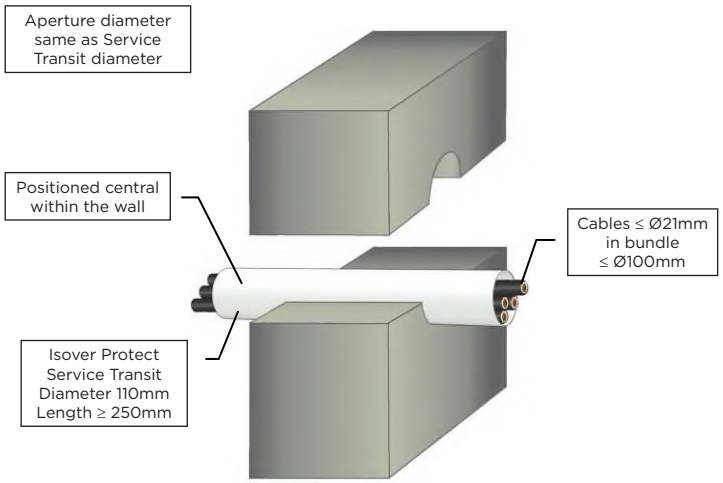
CABLES FIRE RESISTANCE EI 240 (E 240)

≥ 150MM MASONRY OR CONCRETE WALLS



CABLES FIRE RESISTANCE EI 180 (E 240)

≥ 150MM MASONRY OR CONCRETE WALLS



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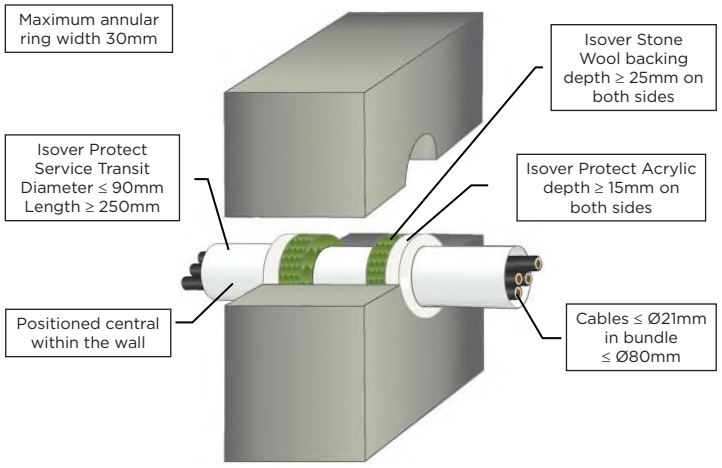

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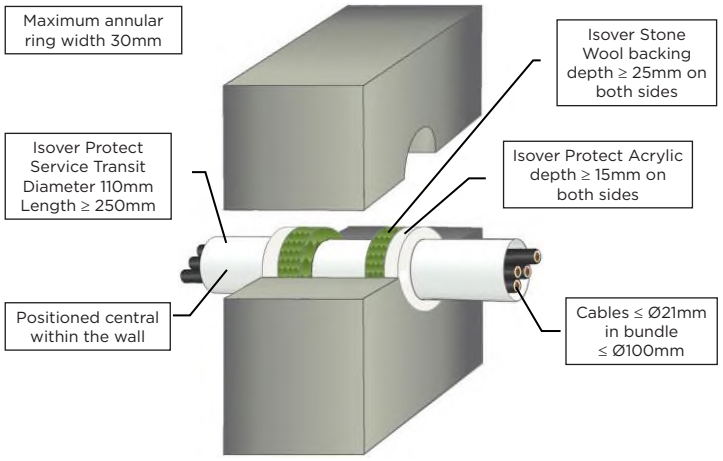
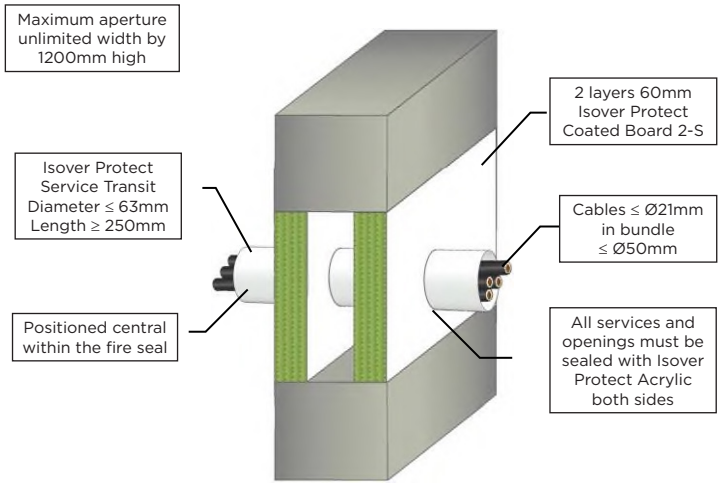


CABLES FIRE RESISTANCE EI 180 (E 240)

≥ 150MM MASONRY OR CONCRETE WALLS



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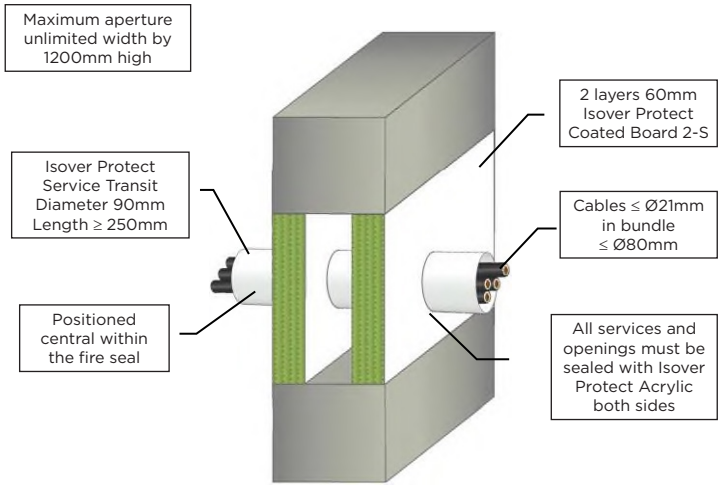
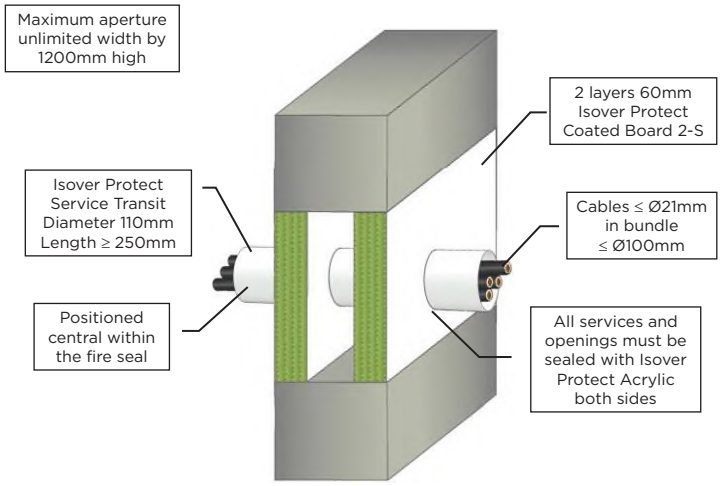
≥ 150MM MASONRY OR CONCRETE WALLS



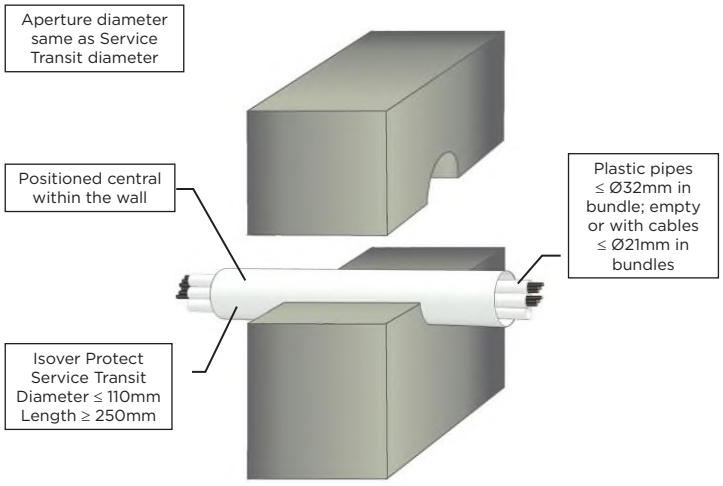
CABLES FIRE RESISTANCE EI 120 (E 240)

≥ 150MM MASONRY OR CONCRETE WALLS



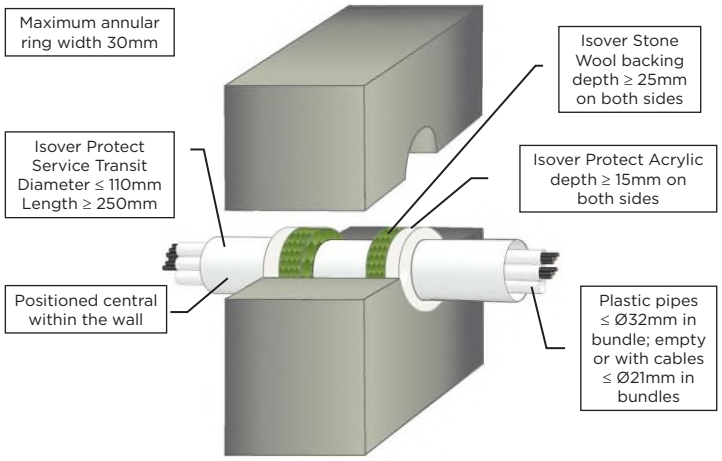
PLASTIC PIPES & CONDUITS FIRE RESISTANCE EI 240 U/C (E 240)

≥ 150MM MASONRY OR CONCRETE WALLS



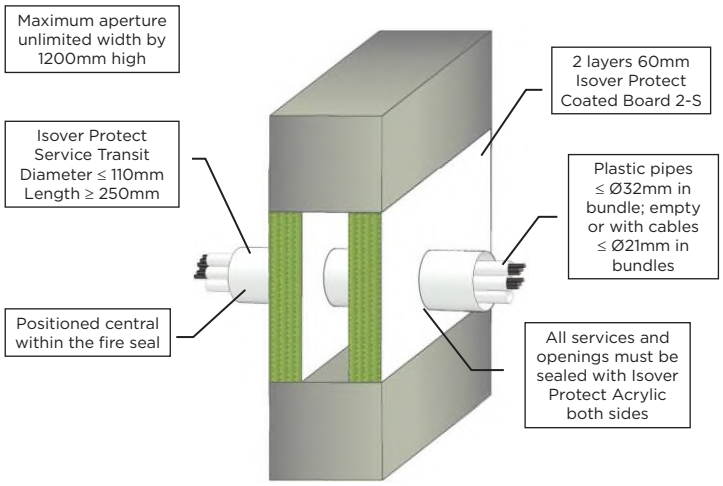
PLASTIC PIPES & CONDUITS FIRE RESISTANCE EI 240 U/C (E 240)

≥ 150MM MASONRY OR CONCRETE WALLS



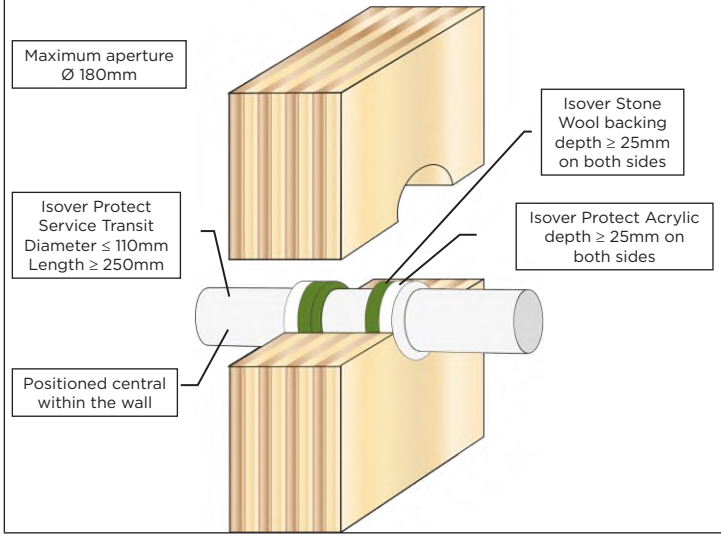
PLASTIC PIPES & CONDUITS FIRE RESISTANCE EI 90 U/C (E 90

≥ 150MM MASONRY OR CONCRETE WALLS



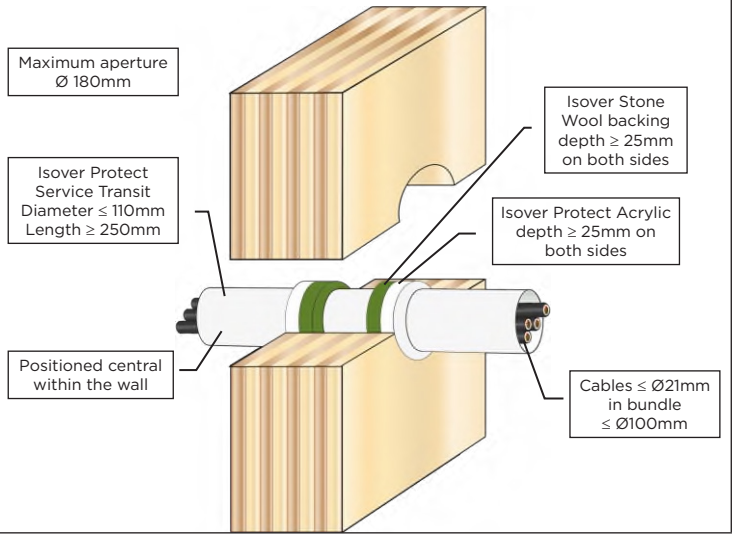
EMPTY - FIRE RESISTANCE EI 90 (E 90)

≥ 100MM TIMBER WALLS



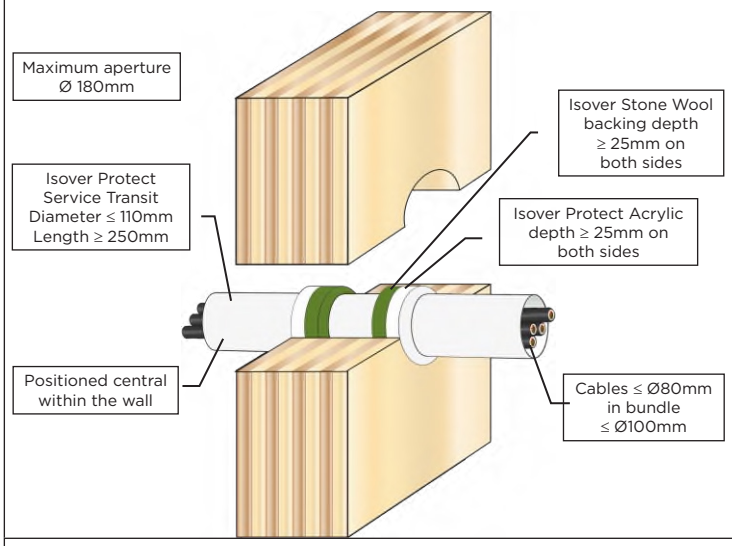
CABLES FIRE RESISTANCE EI 90 (E 90)

≥ 100MM TIMBER WALLS



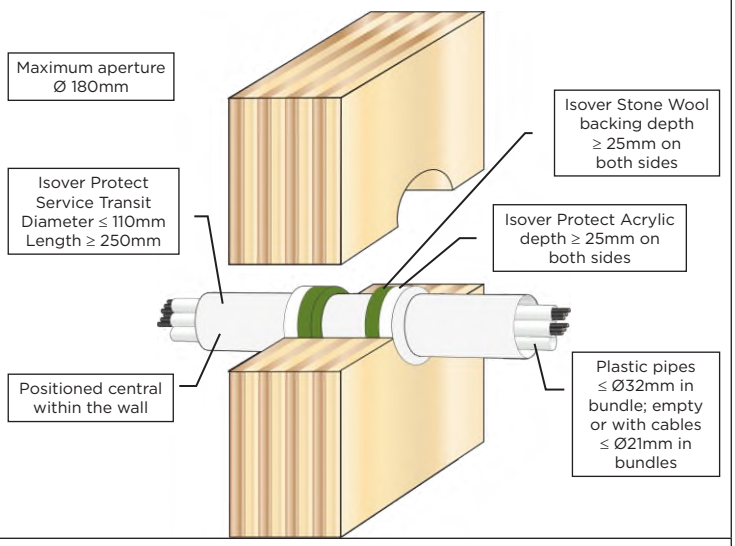
CABLES FIRE RESISTANCE EI 60 (E 90)

≥ 100MM TIMBER WALLS



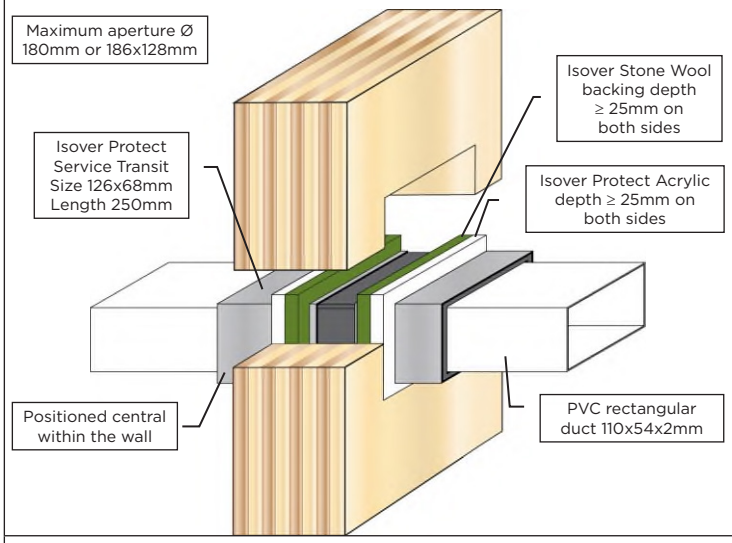
PLASTIC PIPES & CONDUITS FIRE RESISTANCE EI 90 U/C (E 90)

≥ 100MM TIMBER WALLS



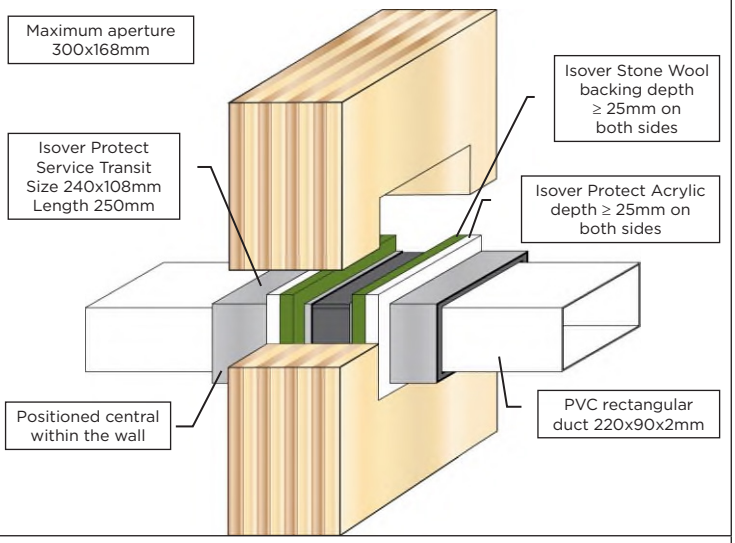
PLASTIC DUCT - FIRE RESISTANCE EI 90 U/U

≥ 100MM TIMBER WALLS



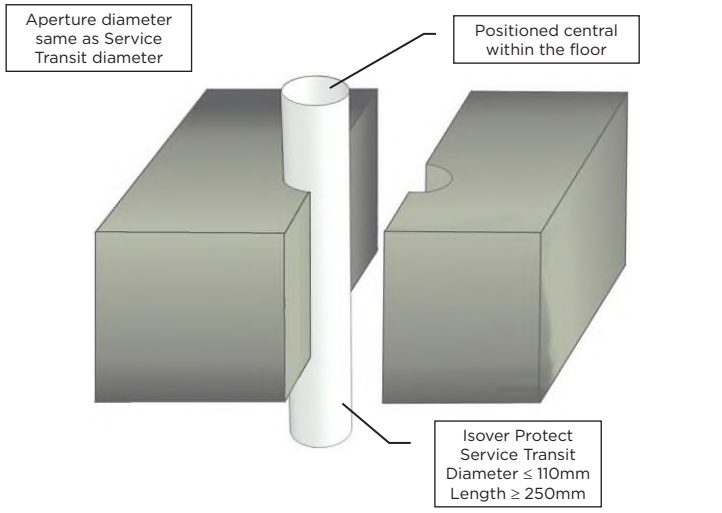
PLASTIC DUCT - FIRE RESISTANCE EI 90 U/U

≥ 100MM TIMBER WALLS



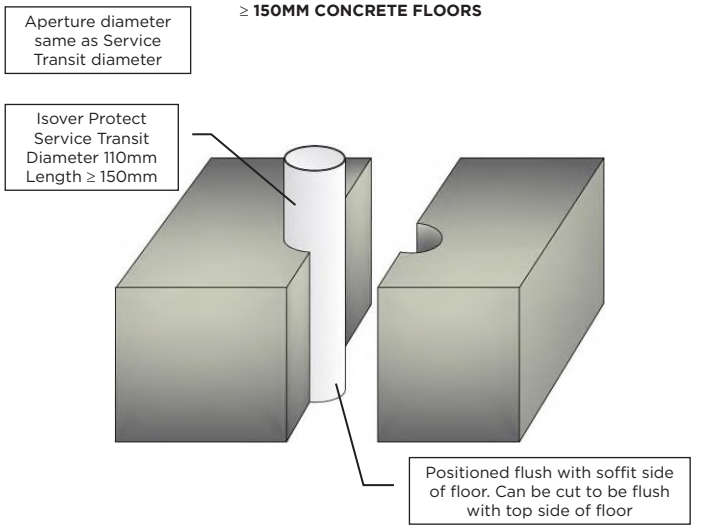
EMPTY - FIRE RESISTANCE EI 180 (E 240)

≥ 150MM CONCRETE FLOORS



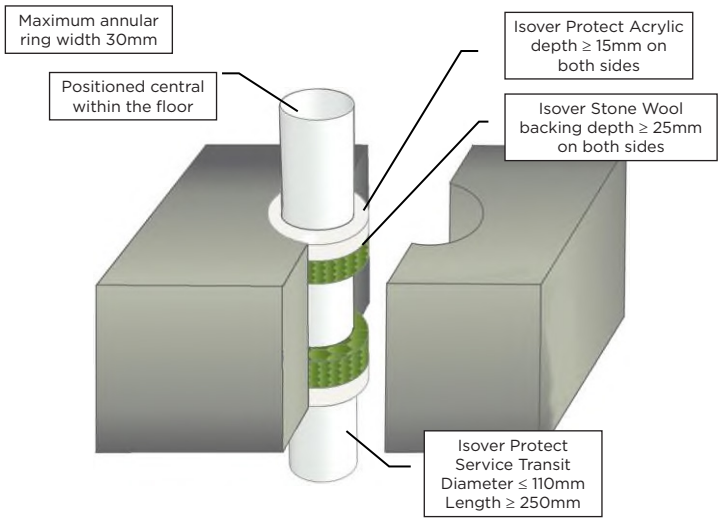
EMPTY - FIRE RESISTANCE EI 240

≥ 150MM CONCRETE FLOORS



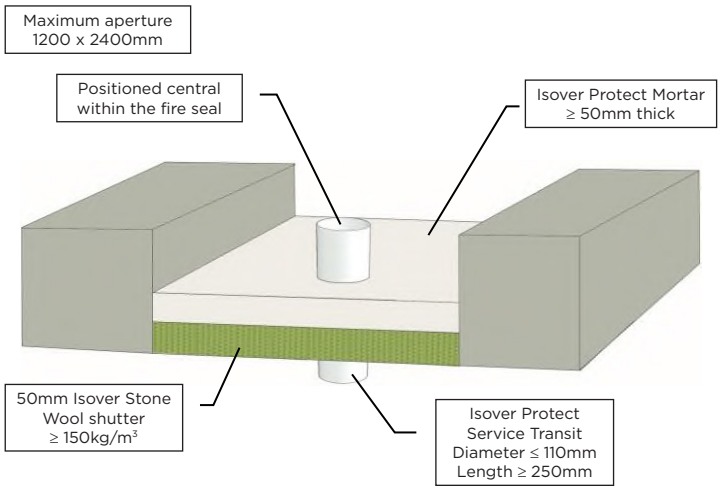
EMPTY - FIRE RESISTANCE EI 180 (E 240)

≥ 150MM CONCRETE FLOORS



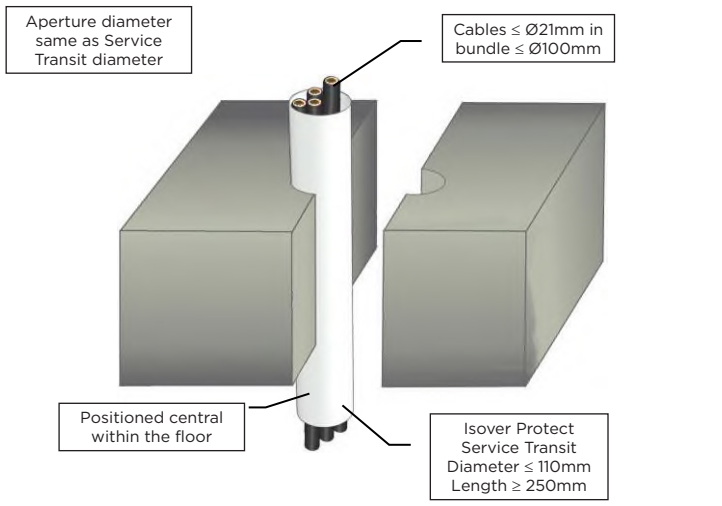
EMPTY - FIRE RESISTANCE EI 180 (E 180)

≥ 150MM CONCRETE FLOORS



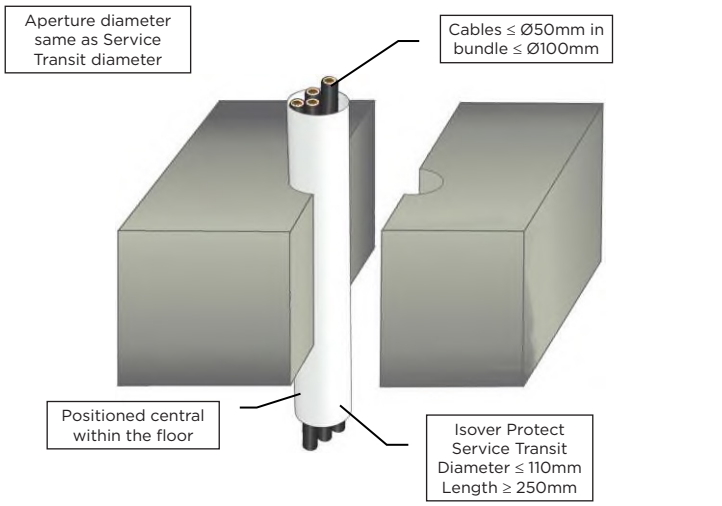
CABLES FIRE RESISTANCE EI 180 (E 180)

≥ 150MM CONCRETE FLOORS



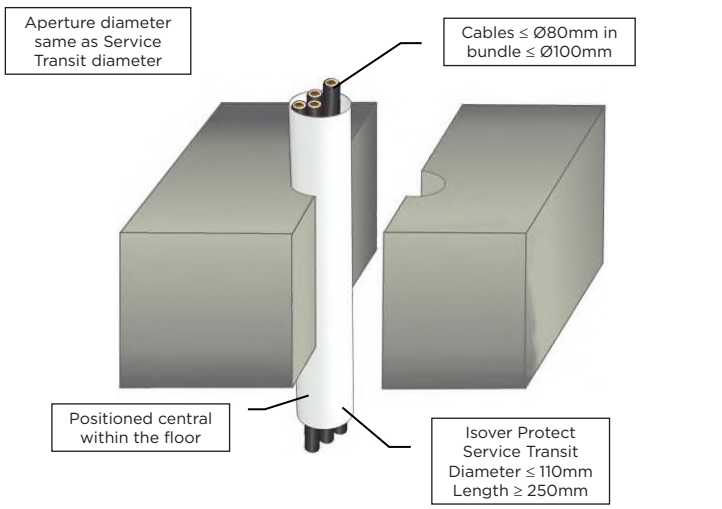
CABLES FIRE RESISTANCE EI 60 (E 180)

≥ 150MM CONCRETE FLOORS



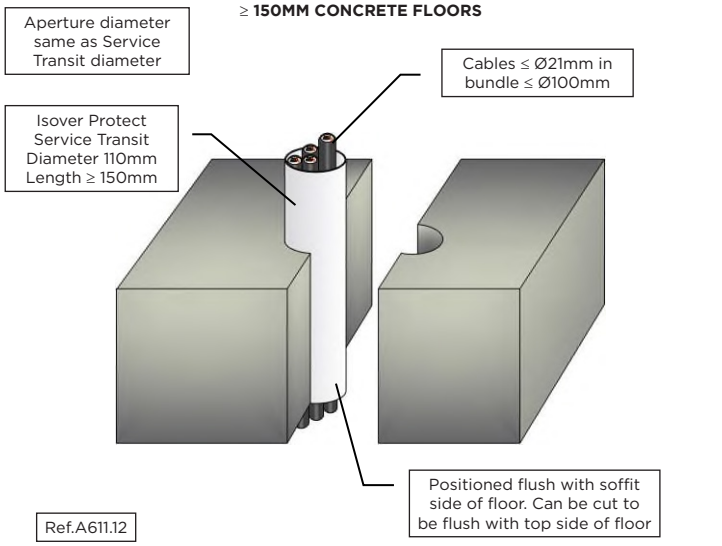
CABLES FIRE RESISTANCE EI 60 (E 90)

≥ 150MM CONCRETE FLOORS



CABLES FIRE RESISTANCE EI 180

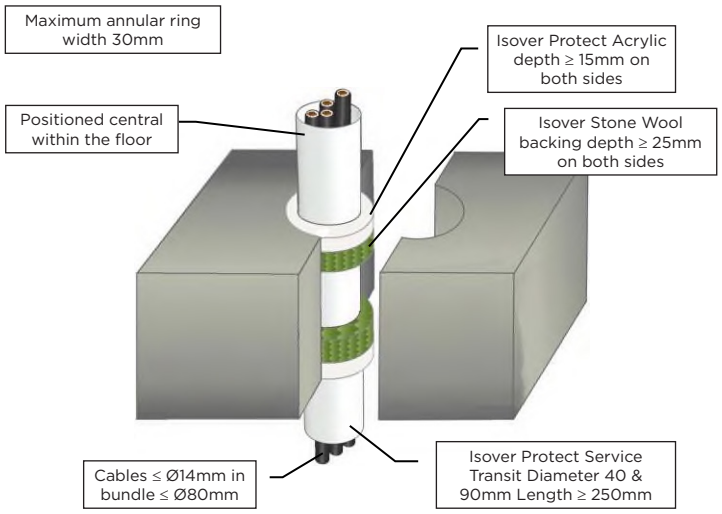
≥ 150MM CONCRETE FLOORS



Ref.A611.12

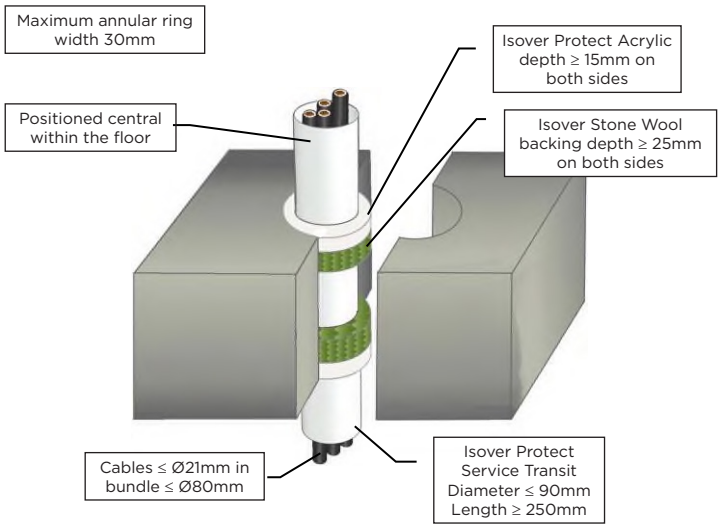
CABLES FIRE RESISTANCE EI 240 (E 240)

≥ 150MM CONCRETE FLOORS



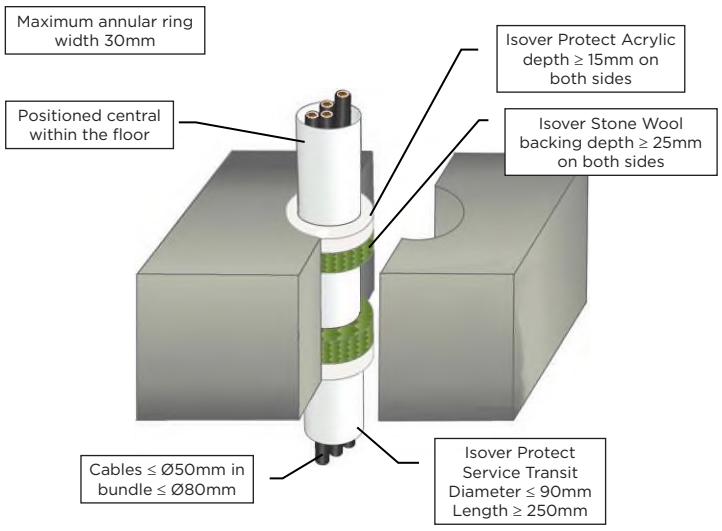
CABLES FIRE RESISTANCE EI 180 (E 240)

≥ 150MM CONCRETE FLOORS



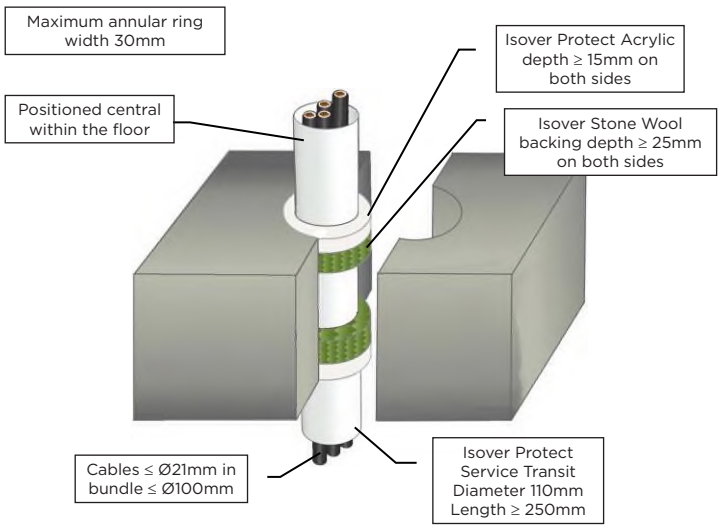
CABLES FIRE RESISTANCE EI 60 (E 240)

≥ 150MM CONCRETE FLOORS



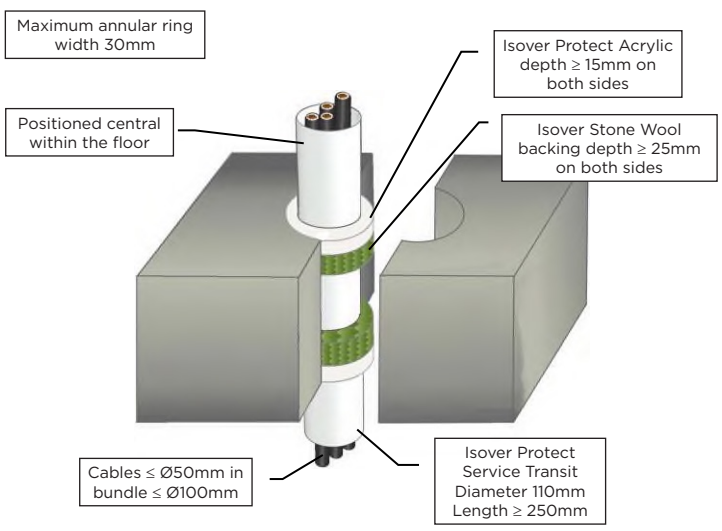
CABLES FIRE RESISTANCE EI 180 (E 180)

≥ 150MM CONCRETE FLOORS



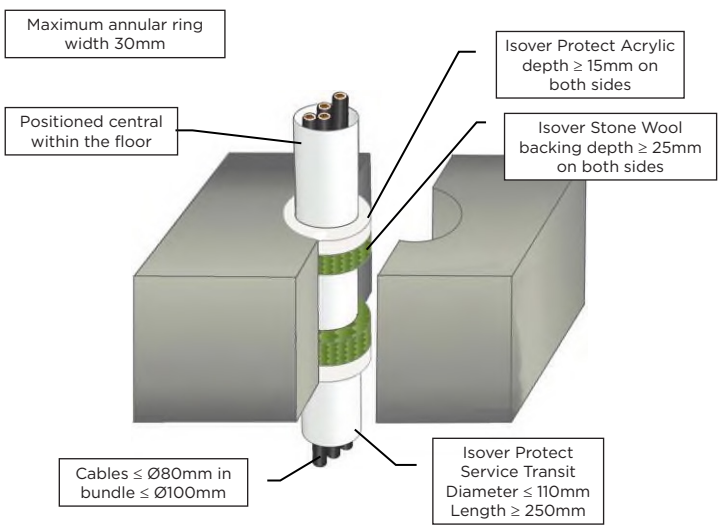
CABLES FIRE RESISTANCE EI 60 (E 180)

≥ 150MM CONCRETE FLOORS



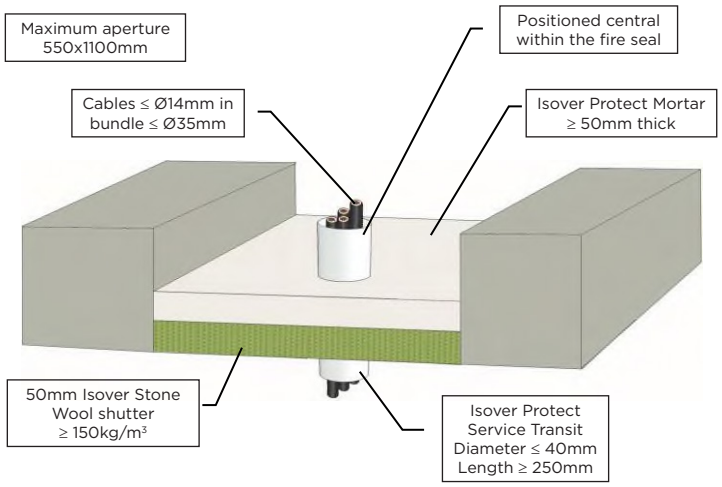
CABLES FIRE RESISTANCE EI 60 (E 90)

≥ 150MM CONCRETE FLOORS



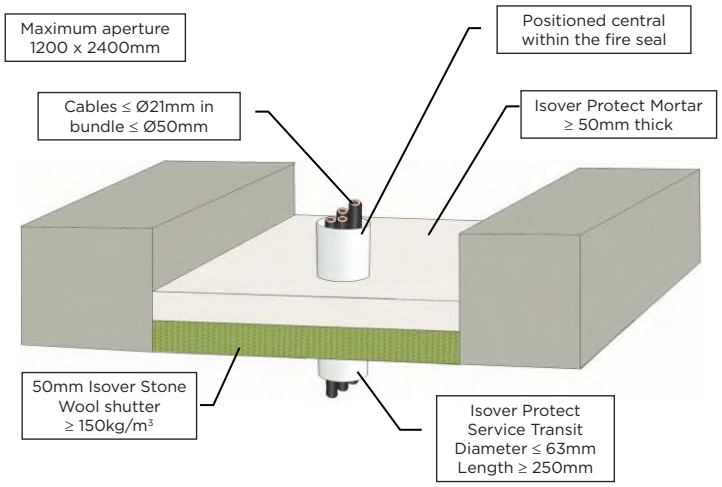
CABLES FIRE RESISTANCE EI 240 (E 240)

≥ 150MM CONCRETE FLOORS



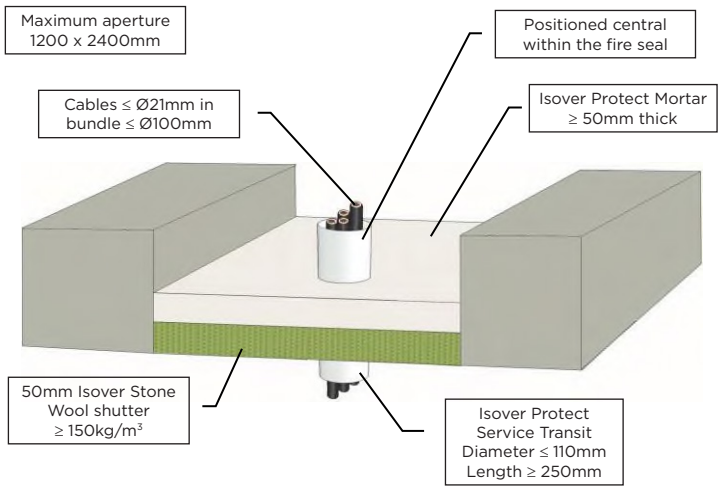
CABLES FIRE RESISTANCE EI 180 (E 180)

≥ 150MM CONCRETE FLOORS



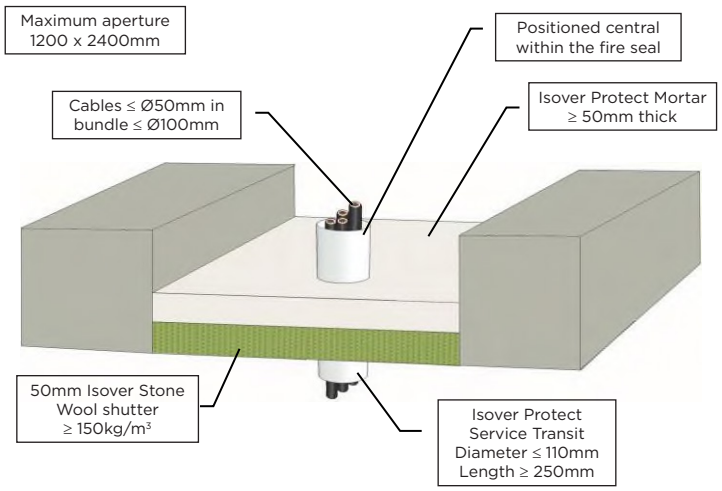
CABLES FIRE RESISTANCE EI 120 (E 120)

≥ 150MM CONCRETE FLOORS



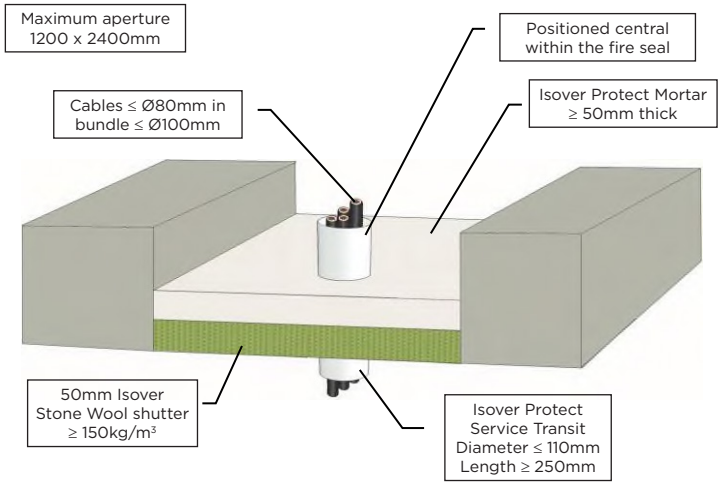
CABLES FIRE RESISTANCE EI 60 (E 120)

≥ 150MM CONCRETE FLOORS



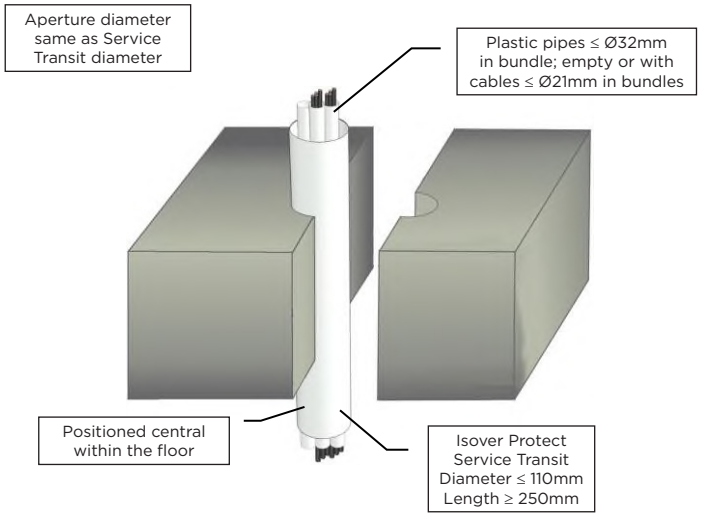
CABLES FIRE RESISTANCE EI 60 (E 90)

≥ 150MM CONCRETE FLOORS



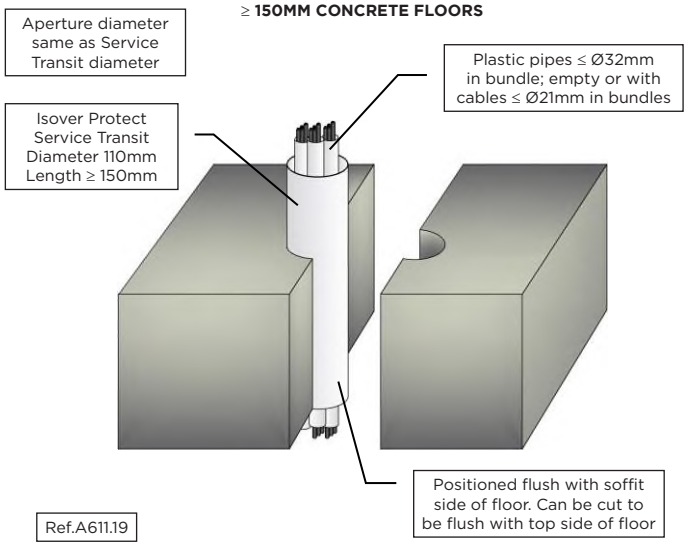
PLASTIC PIPES & CONDUITS FIRE RESISTANCE EI 180 C/U (E 180)

≥ 150MM CONCRETE FLOORS



PLASTIC PIPES & CONDUITS FIRE RESISTANCE EI 240 U/C

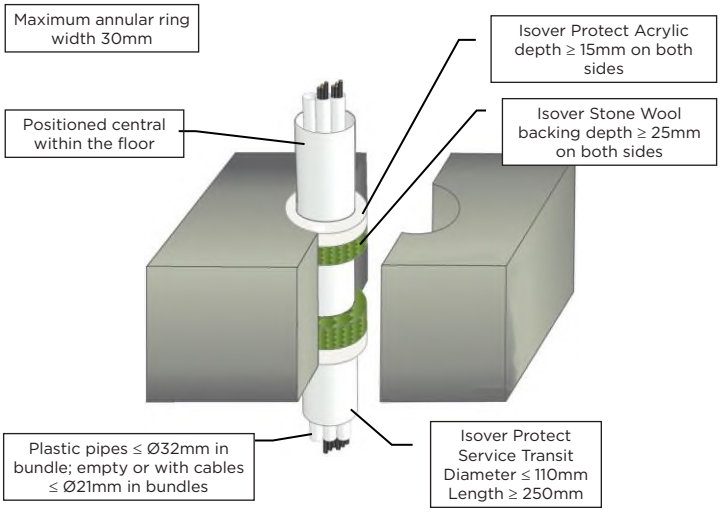
≥ **150MM CONCRETE FLOORS**



Ref.A611.19

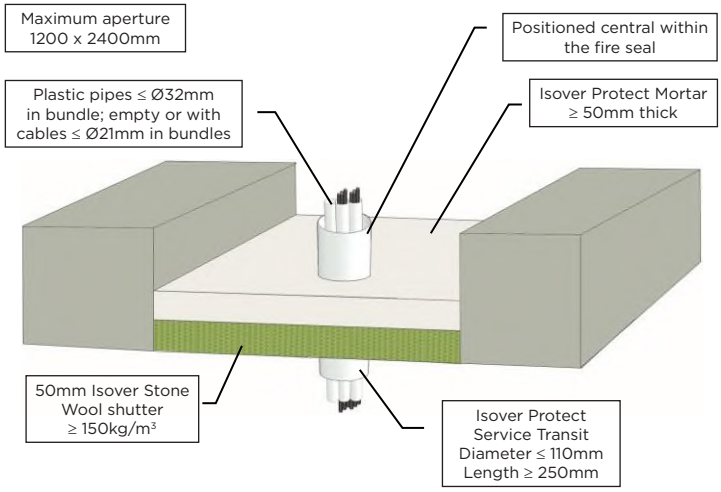
PLASTIC PIPES & CONDUITS FIRE RESISTANCE EI 180 C/U (E 180)

≥ **150MM CONCRETE FLOORS**



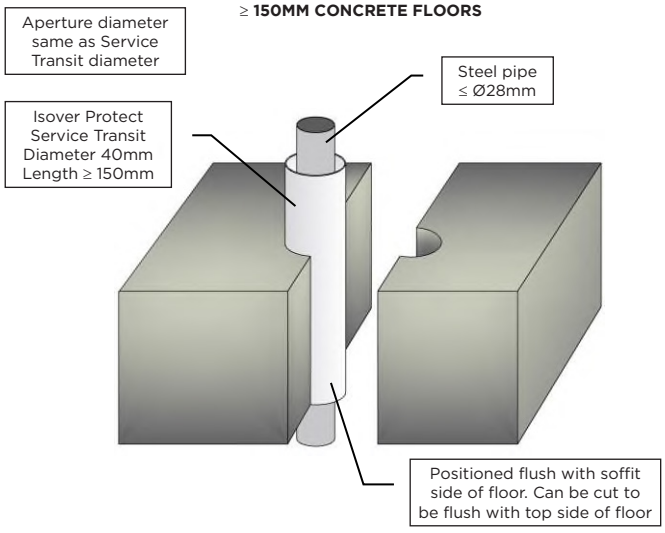
PLASTIC PIPES & CONDUITS FIRE RESISTANCE EI 120 C/U (E 120)

≥ **150MM CONCRETE FLOORS**



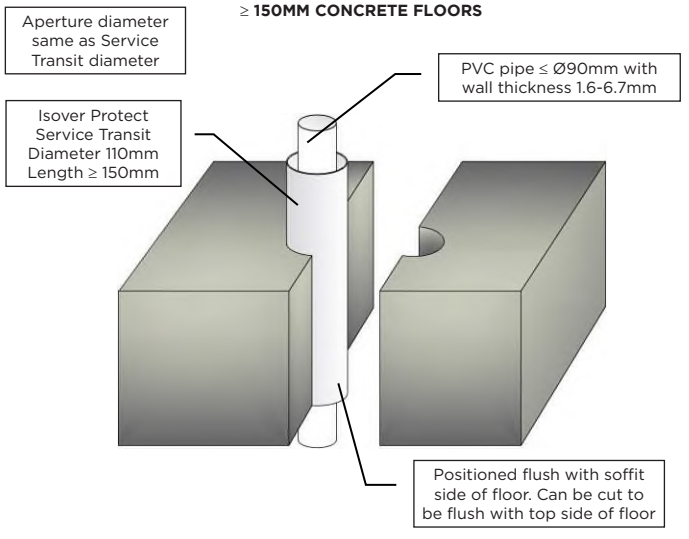
STEEL PIPE FIRE RESISTANCE EI 240 C/U

≥ **150MM CONCRETE FLOORS**



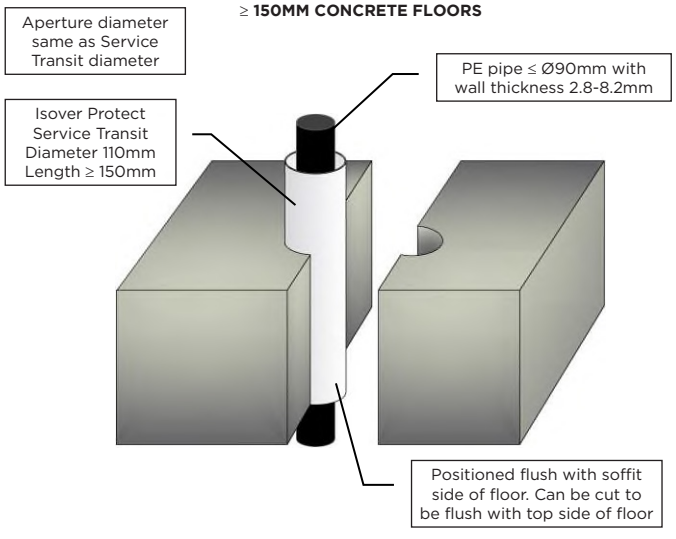
PVC PLASTIC PIPE FIRE RESISTANCE EI 240 U/C

≥ **150MM CONCRETE FLOORS**



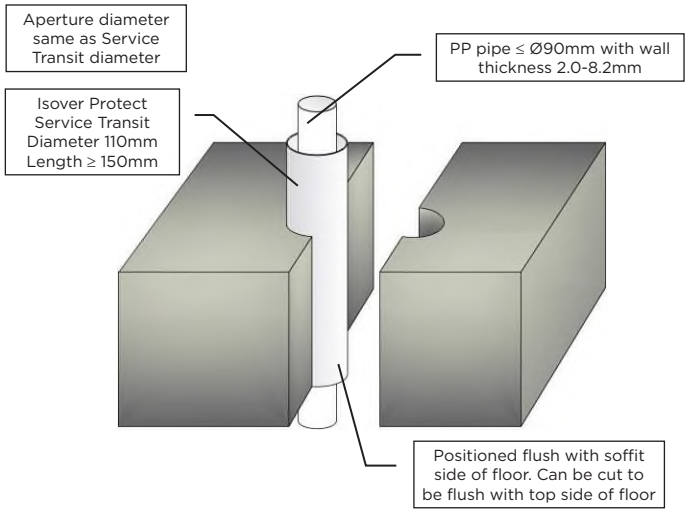
PE PLASTIC PIPE FIRE RESISTANCE EI 180 U/C

≥ **150MM CONCRETE FLOORS**



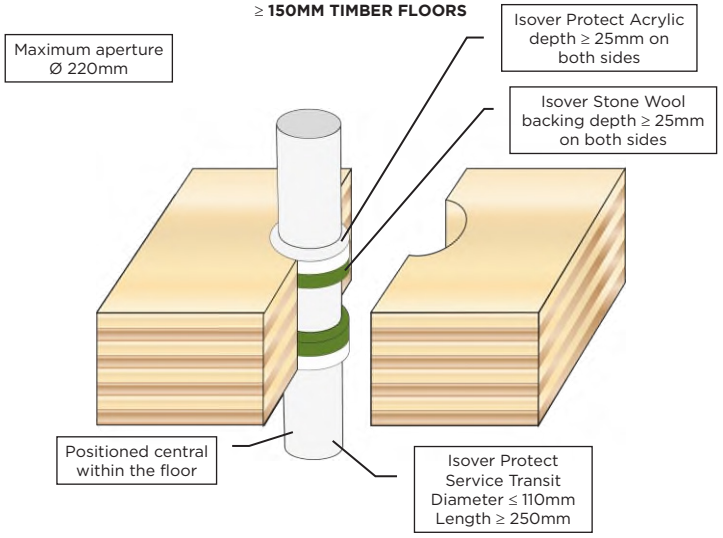
PP PLASTIC PIPE FIRE RESISTANCE EI 180 U/C

≥ 150MM CONCRETE FLOORS



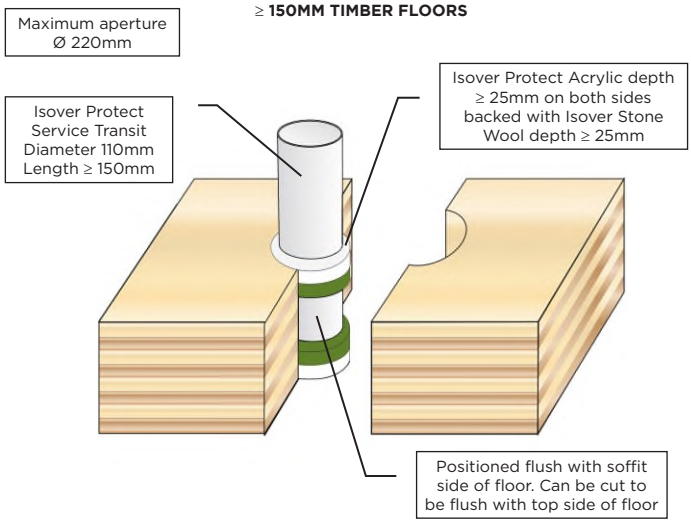
EMPTY - FIRE RESISTANCE EI 120 (E 120)

≥ 150MM TIMBER FLOORS



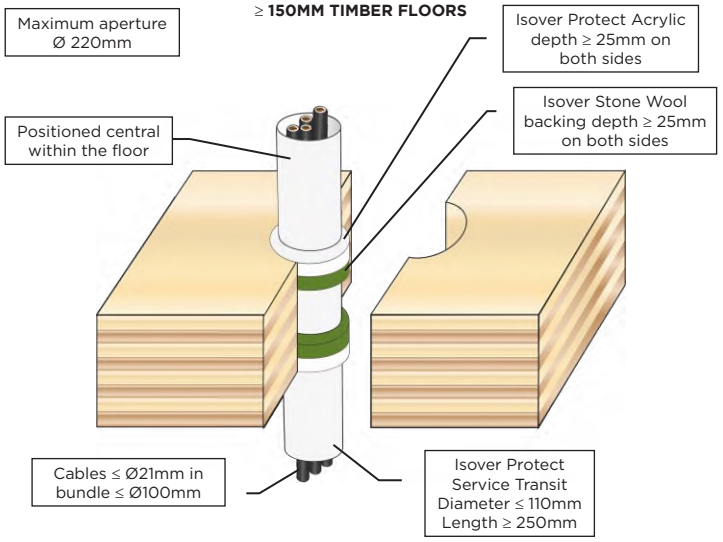
EMPTY - FIRE RESISTANCE EI 120

≥ 150MM TIMBER FLOORS



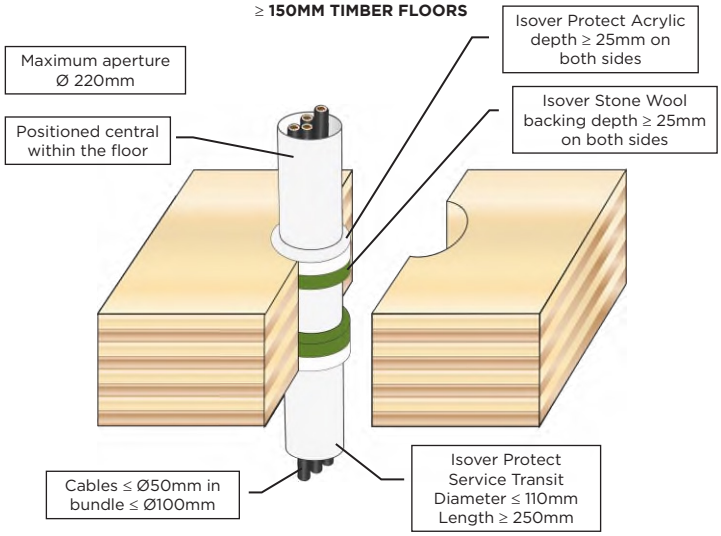
CABLES FIRE RESISTANCE EI 120 (E 120)

≥ 150MM TIMBER FLOORS



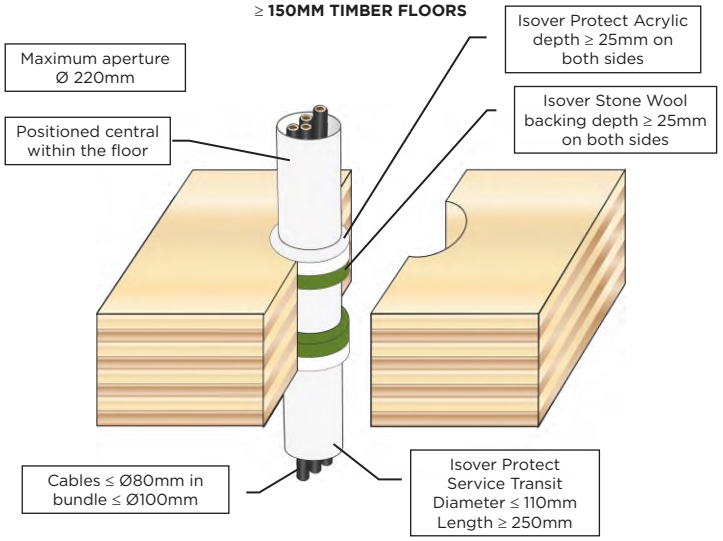
CABLES FIRE RESISTANCE EI 60 (E 120)

≥ 150MM TIMBER FLOORS



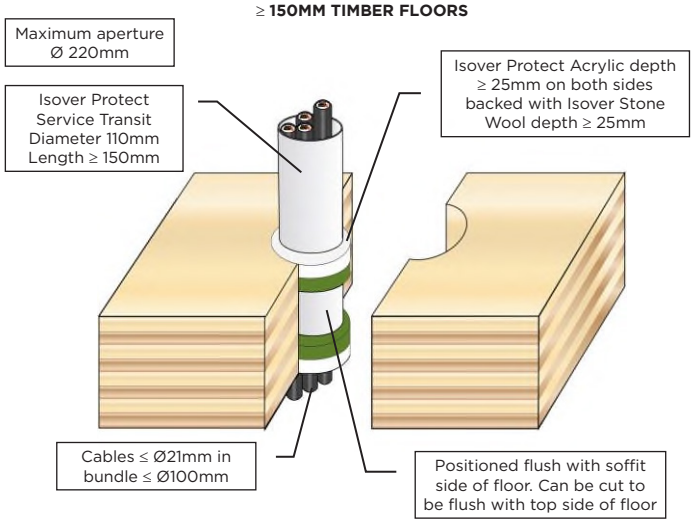
CABLES FIRE RESISTANCE EI 60 (E 90)

≥ 150MM TIMBER FLOORS



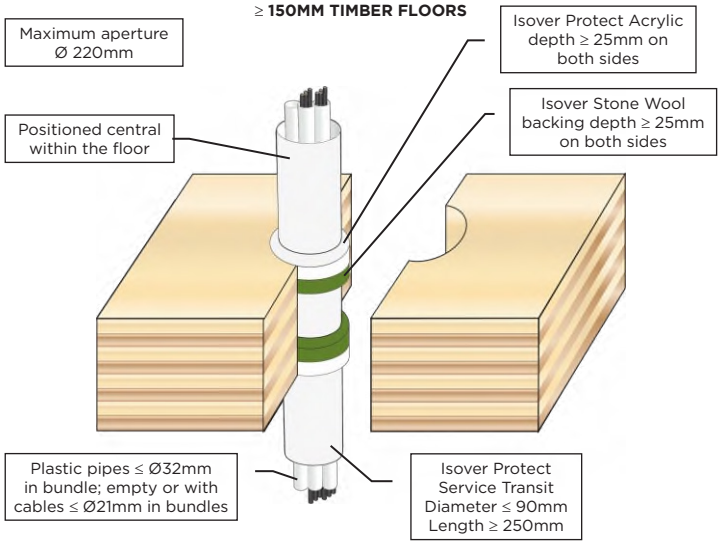
CABLES FIRE RESISTANCE EI 120

≥ **150MM TIMBER FLOORS**



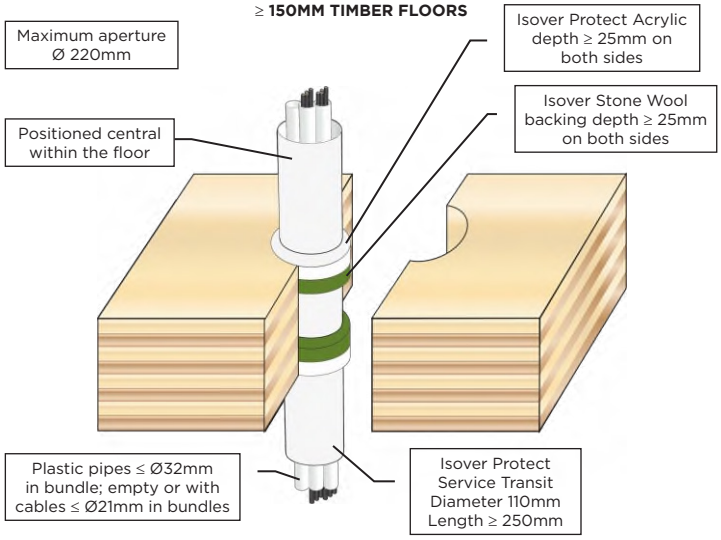
PLASTIC PIPES & CONDUITS FIRE RESISTANCE EI 60 C/U (E 120)

≥ **150MM TIMBER FLOORS**



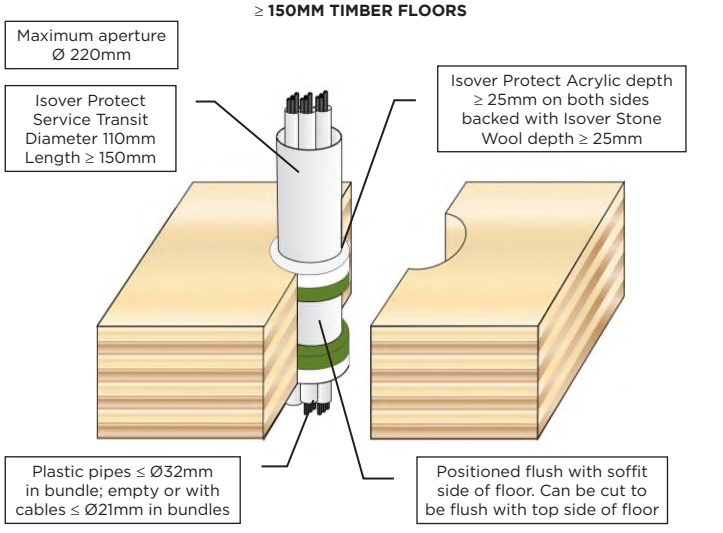
PLASTIC PIPES & CONDUITS FIRE RESISTANCE EI 120 C/U (E 120)

≥ **150MM TIMBER FLOORS**



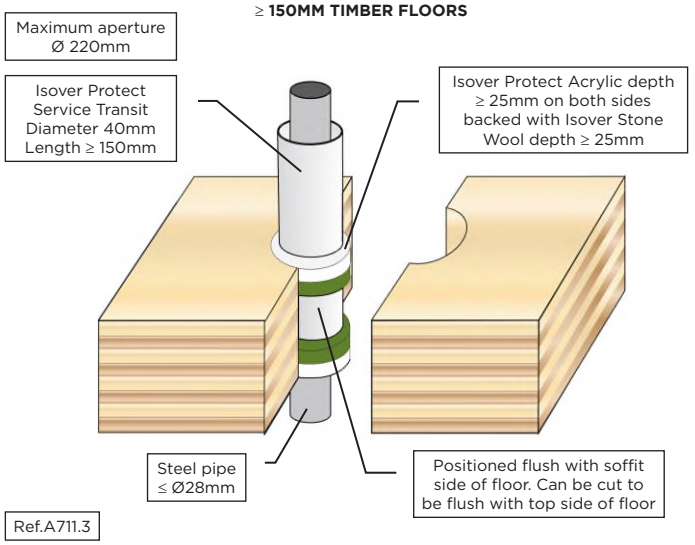
PLASTIC PIPES & CONDUITS FIRE RESISTANCE EI 120 U/C

≥ **150MM TIMBER FLOORS**



STEEL PIPE FIRE RESISTANCE EI 120 C/U

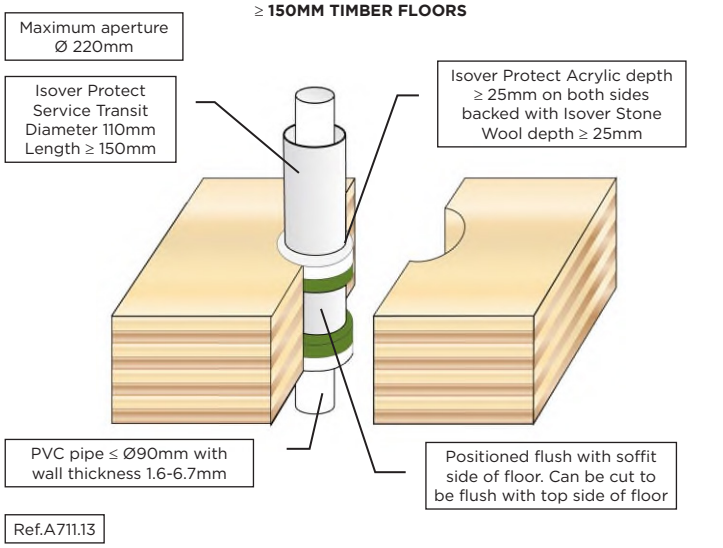
≥ **150MM TIMBER FLOORS**



Ref.A711.3

PVC PLASTIC PIPE FIRE RESISTANCE EI 120 U/C

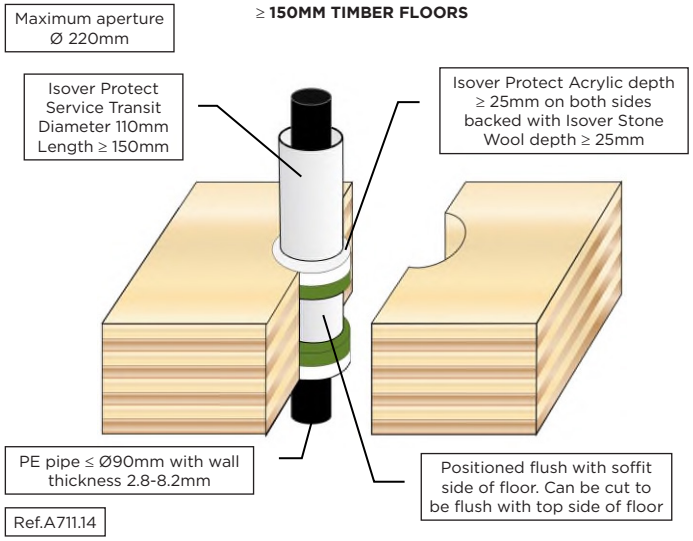
≥ **150MM TIMBER FLOORS**



Ref.A711.13

PE PLASTIC PIPE FIRE RESISTANCE EI 120 U/C

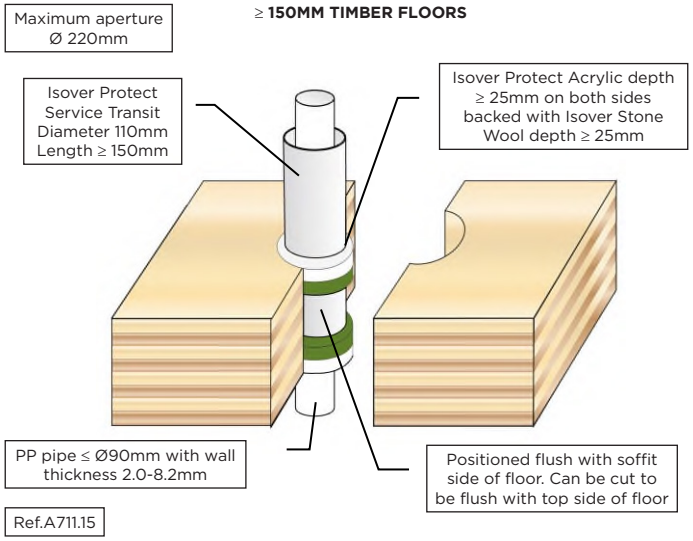
≥ **150MM TIMBER FLOORS**



Ref.A711.14

PP PLASTIC PIPE FIRE RESISTANCE EI 120 U/C

≥ **150MM TIMBER FLOORS**



Ref.A711.15

The information in this publication is consistent with current knowledge and our experiences at the time of printing (refer to the print note on the right side). Knowledge and experience are constantly evolving. Therefore, you must ensure to use the latest version of this publication. The described applications of the products cannot consider all the specific circumstances of each individual case. Therefore, you should verify the suitability of our products for the intended purpose. Our Technical Advisory is happy to answer any questions.

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