PROTECTA® FR IPT

INSTALLATION INSTRUCTIONS



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For guidance on fire sealing ventilation ducts, please refer to Protecta FR Damper's Technical Data Sheet.

General Product Description

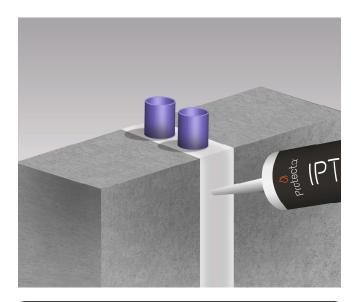
Protecta* FR IPT is a high performance, professional quality, one part ready to use sealant and adhesive. Based on an innovative new Inert Polymer Technology it is suitable for a wide variety of building trade applications including decorating, fire sealing, flooring, joinery, plumbing and tiling and out-performs conventional silicone, MSP, butyl and acrylic based products as a sealant and adhesive – free from dangerous emissions.

General Guide

Minimum separations and limitations: Services can be sealed as specified in the detailed drawings. Minimum separation between services and the edge of the seal within each aperture should be 10mm to allow for correct fitting of backing and seal depth. Minimum separation between apertures should be at least 30mm. For larger joint dimensions or apertures other than described in the detailed drawings, Protecta* FR Board or EX Mortar should be used.

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. Rigid walls must have a minimum thickness of 75 mm 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 150 mm and comprise aerated concrete or concrete with a minimum density of 650 kg/m³. The supporting construction must be classified in accordance with EN 13501-2 for the required fire resistance period. Services shall be supported at maximum 250 mm away from both faces of the wall constructions and 450 mm 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



Installation

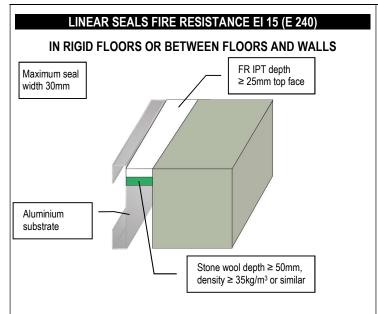
- All surfaces must be clean and sound, free from dirt, grease and other contaminants. The surfaces may be damp but not running wet. Use a wet brush to clean surfaces before application to remove loose material and to ensure good contact for adhesion. Primers are not usually required.
- As Protecta* FR IPT contains some water, in cases where corrosion protection is a problem; some metals may require a barrier between the sealant and the metal surface prior to this installation.
- When installing Protecta* FR IPT in hollow floor slabs or boards, tubular voids should be filled with stone wool normally the same thickness as the depth of the floor slab. Alternatively, simply fire seal on both sides
- Where single sided top face seals are described, these can also be used in composite floors (e.g., concrete filled, steel trapezoidal decking).
- 5. Refer to the drawings on following pages 2 to 4 for guidance on joint design/dimensions for fire sealing. If installation does not have to meet any specific fire specification, the depth of the joint should be at least half the width and not less than 6mm in order to obtain maximum performance as a sealant.
- 6. When installing any backing material, cut this slightly oversize and insert into the gap ensuring a tight friction fit. Ensure correct depth is achieved. The use of backing material is strongly recommended.
- 7. Cut nozzle to the desired angle and gun firmly into the joint to give a good solid fill. Strike off the sealant flush with the joint sides within ten minutes of application, before surface skinning occurs. The sealant will have medium shrinkage during cure and if a flush surface is required it is recommended to leave the sealant proud.
- 8. The sealant can be tooled to a smooth finish using a moist plastic stick or similar within 30 minutes of application. IPT Tooling designed for the optimum finish is recommended instead of soap and water as it forms a film between the stick and the sealant.
- Do not spray the sealant with water or other fluids before skin formation (<30 min). Uncured sealant is soluble in water prior to skinning due to its environmentally friendly IPT chemistry that uses water instead of solvents.
- 10. Protecta® FR IPT can be over-painted.

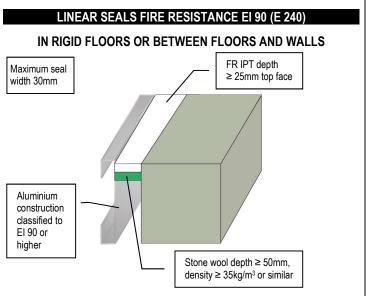




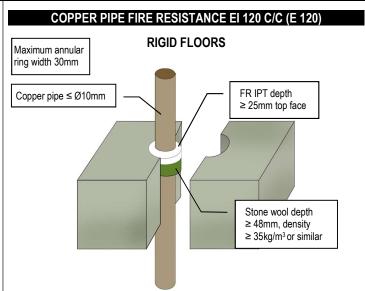
LINEAR SEALS FIRE RESISTANCE EI 180 (E 240) LINEAR SEALS FIRE RESISTANCE EI 240 IN RIGID FLOORS OR BETWEEN FLOORS AND WALLS IN RIGID FLOORS OR BETWEEN FLOORS AND WALLS FR IPT depth FR IPT depth Maximum seal Maximum seal ≥ 25mm any position ≥ 15mm on both sides width 30mm width 30mm Protecta Mineral Fibre BIO depth ≥ 48mm or similar Stone wool depth ≥ 20mm, density ≥ 33kg/m3 or similar on both sides LINEAR SEALS FIRE RESISTANCE EI 20 (E 240) **LINEAR SEALS FIRE RESISTANCE EI 60 (E 240)** IN RIGID FLOORS OR BETWEEN FLOORS AND WALLS IN RIGID FLOORS OR BETWEEN FLOORS AND WALLS FR IPT depth FR IPT depth Maximum seal Maximum seal ≥ 25mm top face ≥ 25mm top face width 30mm width 30mm Steel Steel substrate construction on one or both classified to EI sides of the 60 or higher on fire seal one or both sides of the Stone wool depth ≥ 50mm, fire seal Stone wool depth \geq 50mm, density ≥ 33kg/m3 or similar density ≥ 33kg/m³ or similar **LINEAR SEALS FIRE RESISTANCE EI 45 (E 180) LINEAR SEALS FIRE RESISTANCE EI 120 (E 180)** IN RIGID FLOORS OR BETWEEN FLOORS AND WALLS IN RIGID FLOORS OR BETWEEN FLOORS AND WALLS FR IPT depth FR IPT depth Maximum seal Maximum seal ≥ 15mm on both sides ≥ 15mm on both sides width 30mm width 30mm Steel Steel substrate construction classified to EI on one or both 120 or higher sides of the on one or both fire seal sides of the fire seal Stone wool depth ≥ 25mm, Stone wool depth ≥ 25mm, density ≥ 33kg/m³ or similar density ≥ 33kg/m³ or similar on both sides on both sides

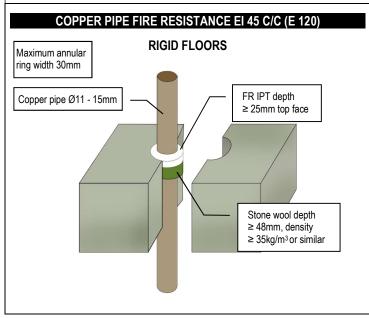


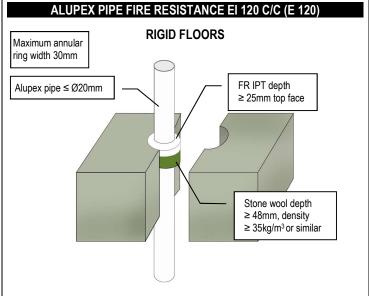




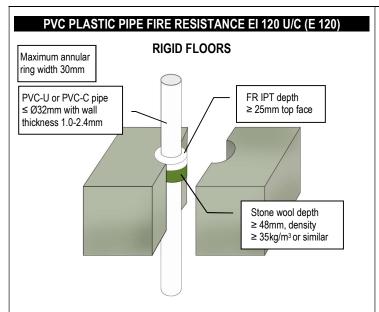
STEEL PIPE FIRE RESISTANCE EI 120 C/U (E 120) RIGID FLOORS FR IPT depth ≥ 25mm top face Stone wool depth ≥ 48mm, density ≥ 35kg/m³ or similar

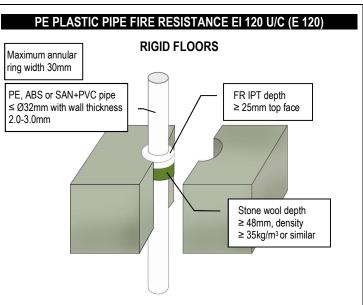




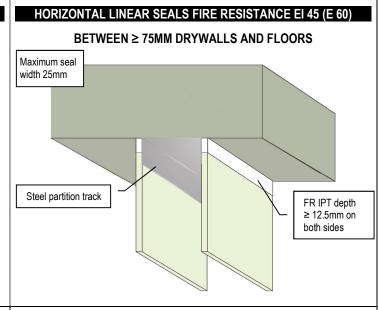




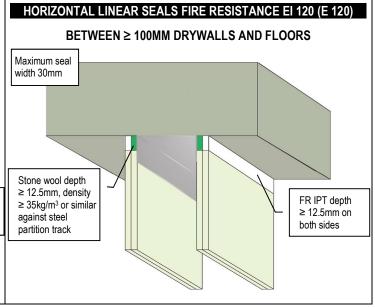




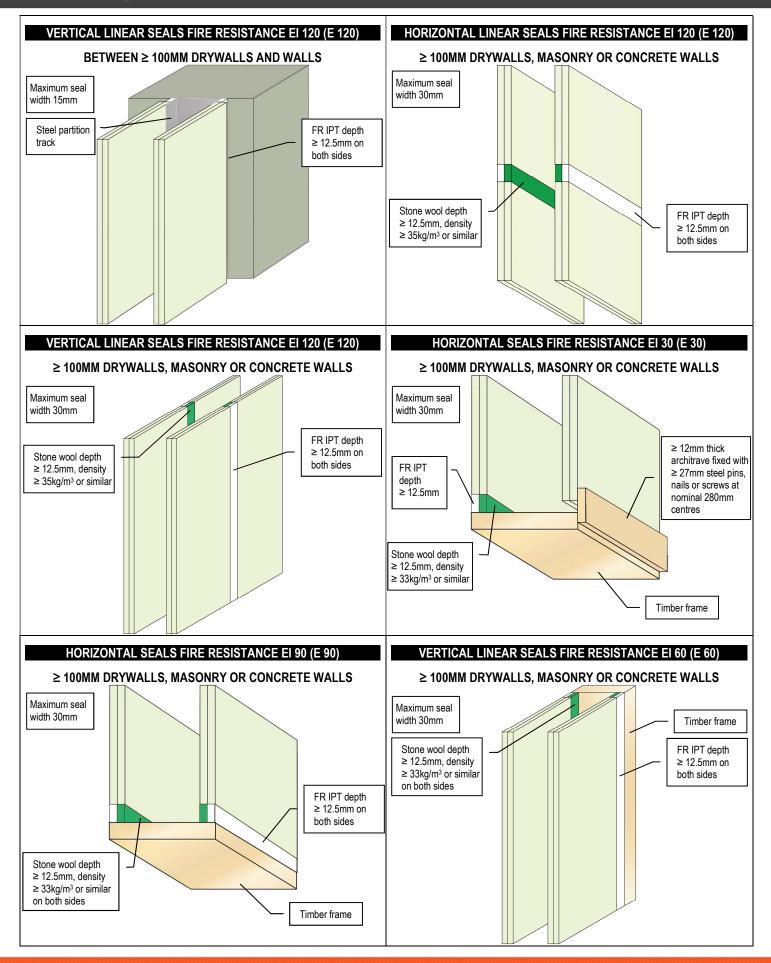
PP PLASTIC PIPE FIRE RESISTANCE EI 120 U/C (E 120) RIGID FLOORS PP pipe ≤ Ø32mm with wall thickness 1.8-4.4mm FR IPT depth ≥ 25mm top face Stone wool depth ≥ 48mm, density ≥ 35kg/m³ or similar





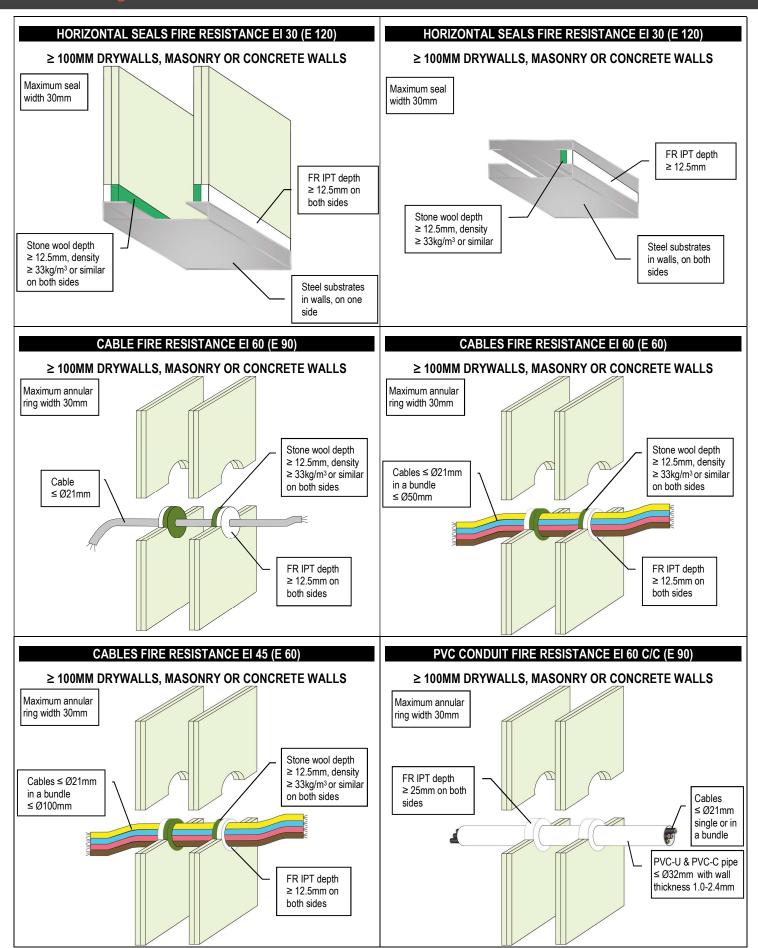




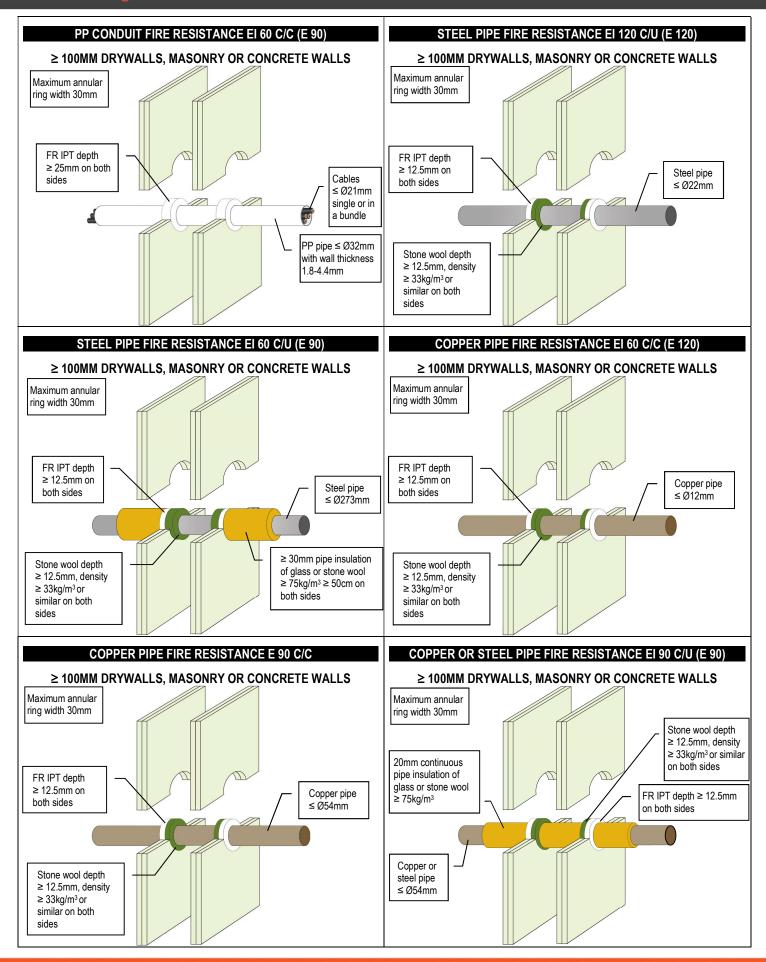






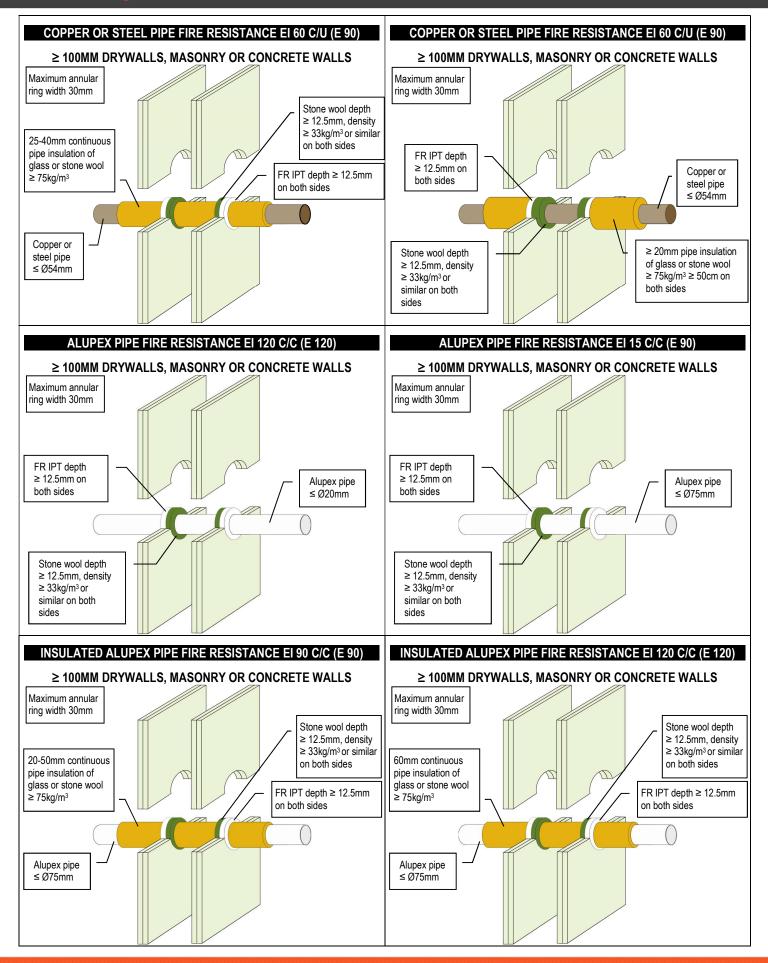






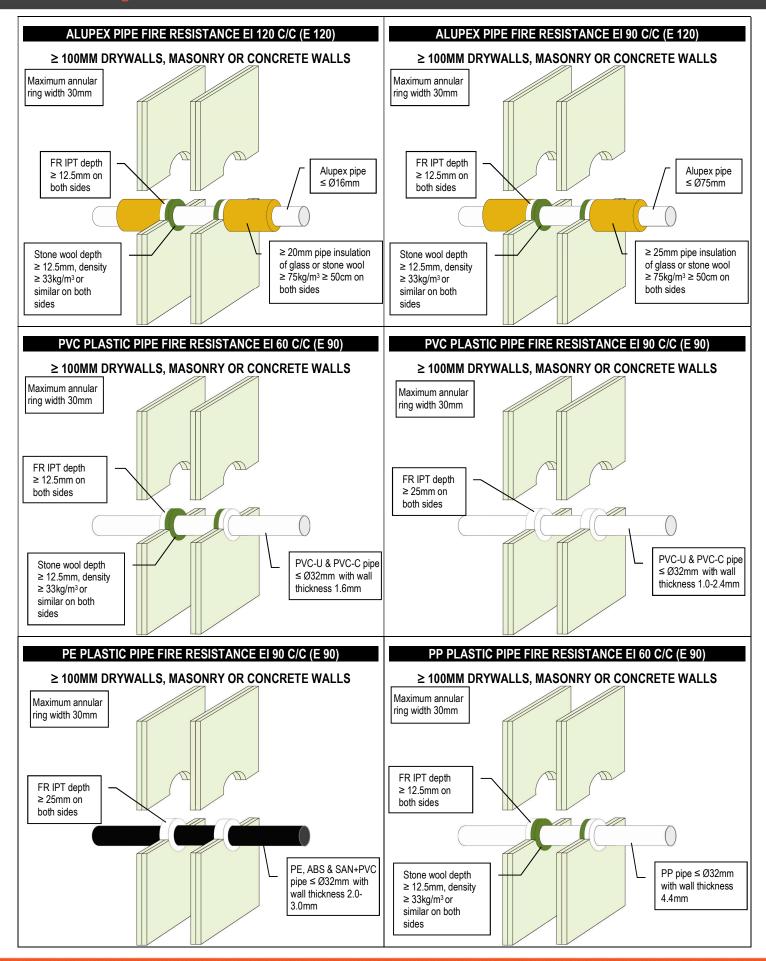






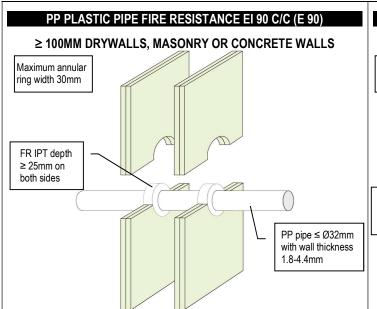


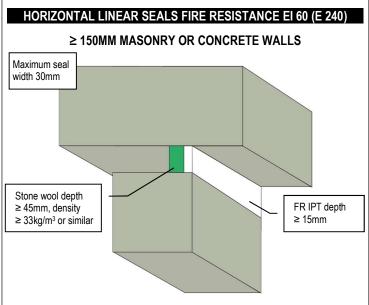












HORIZONTAL SEALS FIRE RESISTANCE EI 240 ≥ 150MM MASONRY OR CONCRETE WALLS Maximum seal width 30mm Stone wool depth ≥ 45mm, density ≥ 33kg/m³ or similar on both sides FR IPT depth ≥ 15mm on both sides