MIXED SERVICE APERTURE

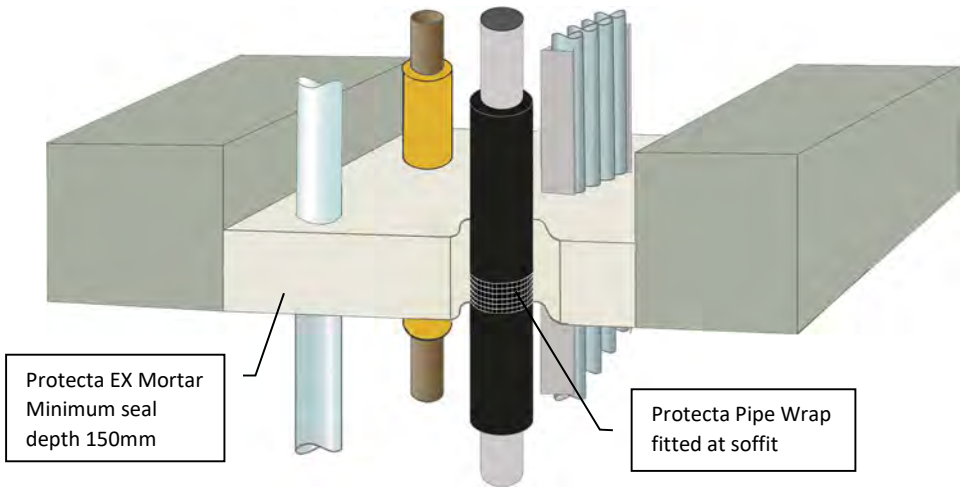
Fire Classification EI 120

Sound Reduction 48 dB

Installation Instructions

1. Ensure the faces of the aperture opening are free of dust and any other contaminants. The faces may be moistened for better adhesion.
2. Bare metal passing through the seal must be protected against corrosion using a suitable primer/protection system.
3. The seal can be positioned to either side of the construction or anywhere in between.
4. When sealing hollow floor slabs or boards, the seal should be level with the soffit side. There must be sufficient thickness of concrete below the void for the depth of mortar. Where this is not the case, tubular voids should be plugged, with for instance a PU foam, and the whole thickness of the floor should be cast with the mortar.
5. Install a shutter board to achieve the required thickness of mortar. Make sure that this achieves a very tight seal.
6. Pour clean water into a suitable mixing vessel and add the mortar to obtain the required consistency. Mix steadily at low speed and ensure that any lumps of powder are fully dispersed. Always add the mortar to the water, do not reverse this mixing process. For casting a 2 to 1 mix is suitable (mortar to water).
7. Once the desired consistency is achieved pour or trowel the mortar onto the shutter board making sure that it flows into all corners and around services. Apply a firm pressure to the mortar to eliminate any trapped air bubbles. Build up to the required depth.

ETA 21/0071



Loadbearing Properties

Soft body impact, serviceability 500Nm. Soft body impact, safety in use 700Nm. Hard body impact serviceability 6Nm. Hard body impact, safety in use 10Nm. Concentrated load to 15kN on size up to 1500mm x1000mm (no failure), 4.85kN on sizes up to 1200mm x 2400mm.

Minimum separations and limitations

An aperture can include several services, and they may also be different. The minimum permitted separation between adjacent seals/apertures is 100mm. Services should be a minimum of 30mm from seal edges. Services within the seal do not require a minimum separation, except where Protecta® FR Pipe Wraps are used, which should be a minimum of 30mm from other services in the aperture. The total amount of cross sections of services (including insulation) should not exceed 60% of the penetration area.

Products	Protecta EX Mortar Protecta FR Pipe Wrap
Construction	Minimum floor thickness of 150 mm and comprise aerated concrete or concrete with a minimum density of 650kg/m^3

Services

1. Cables, with or without cable trays
2. Steel pipes
3. Copper pipes
4. Alupex pipes
5. Plastic pipes
6. Composite pipes
7. Conduits
8. Ventilation ducts

For full specification see pages 2 - 5.

Indoor air comfort test results

- EMICODE EC 1^{PLUS} – Complies
- BREEAM-NOR – Complies
- DIBt – Complies
- LEED – Complies

Durability

Z_2 - Intended for use in internal conditions with humidity classes other than Z_1, excluding temperatures below 0 °C.

As a part of our policy of on-going product development and testing, we reserve the right to modify, alter or change product specifications without giving notice. All information contained in this document is given in good faith and is provided for guidance only. Any drawings provided are for illustrative purposes only. As Polyseam has no control over the methods or competence of installation and of prevailing site conditions, no warranties, expressed or implied, is intended to be given as to the actual performance of the product mentioned or referred to herein and no liability whatsoever will be accepted for any loss, damage or injury arising from the use of the information given.

For all technical details on the products specified please refer to the technical data sheets that can be found on http://www.protecta.eu

Polyseam Ltd, 15 St Andrews Road, Huddersfield, West Yorkshire, HD1 6SB, United Kingdom
Tel: +44 (0) 1484 421 036

NTS	K.B. 21/9/21