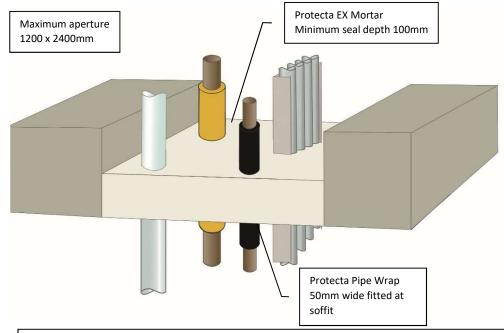
Installation Instructions

- 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 installing Protecta® EX Mortar in hollow floor slabs or boards, level the fire seal with the soffit side. Ensure there is sufficient thickness of concrete below the void for the depth of mortar. Where this is not the case, 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.
- 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 pour enough mortar to obtain the required consistency. Mix well to avoid lumps. Always add the mortar to the water, do not reverse this mixing process.
- 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.





MIXED SERVICES APERTURE - EX MORTAR 100mm - CONCRETE FLOOR



Loadbearing Properties: NOTE following for Health and Safety requirements -

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. Services within the system Protecta® FR Board seal do not require a minimum separation, except pipes where pipe insulation penetrates the seal and plastic pipe penetrations which should be a minimum of 30 mm from other services in the aperture. Services should be a minimum of 25mm from seal edges. The total amount of cross sections of services (including insulation) should not exceed 60% of the penetration area. The minimum permitted separation between adjacent apertures is 200mm.

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

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System/FPA Register ID# FC407 For Fire Classifications refer to relevant systems in this website

Products Protecta EX Mortar Protecta FR Pipe Wrap Minimum floor thickness of Construction 100mm and comprise aerated concrete or concrete with a minimum density of 650kg/m³

Services

- 1. Cables ≤ Ø21mm, single or bundled, unsheathed cables/wires ≤ Ø24mm and PVC conduits ≤ Ø16mm, with or without cable travs
- 2. Steel pipes ≤ Ø16mm (C/U)
- 3. Steel pipes ≤ Ø165mm with 13 19mm thick continuous foam insulation and 1 layer of wrap
- 4. Steel pipes ≤ Ø324mm with 25mm thick continuous foam insulation and 2 layers wrap
- 5. Steel pipes ≤ Ø324mm with 26 50mm thick continuous foam insulation and 3 layers wrap
- 6. Steel pipes ≤ Ø324mm with 20-80mm thick continuous stone wool insulation
- 7. Steel pipes ≤ Ø40mm with ≥ 20mm thick interrupted stone wool insulation
- 8. Steel pipes $\leq \emptyset 219$ mm with ≥ 30 mm thick interrupted stone wool insulation
- 9. Copper pipes Ø6mm
- 10.Copper pipes ≤ Ø12mm with 9mm thick continuous foam insulation and 2 layers wrap
- 11. Copper pipes ≤ Ø54mm with 20-80mm thick continuous stone wool insulation
- 12. Copper pipes $\leq \emptyset 54$ mm with ≥ 20 mm thick interrupted stone wool insulation
- 13. Alupex pipes ≤ Ø20mm
- 14. Alupex pipes ≤ Ø16mm with 9mm thick continuous foam insulation and 2 layers wrap
- 15. Alupex pipes \leq Ø75mm with \geq 20mm thick interrupted stone wool insulation
- 16. Plastic pipes ≤Ø40mm
- 17. Plastic pipes ≤Ø110mm with 2 layers pipe wrap
- 18. Plastic pipes ≤Ø125mm with 4 layers pipe wrap
- 19. Plastic pipes ≤Ø160mm with 6 layers pipe wrap
- 20. PEX pipe-in-pipes ≤ Ø25mm
- 21. Conduits of PVC-U & PVC-C plastic pipes ≤ Ø110mm with 2 layers pipe wrap

NTS K.B. 23/5/18