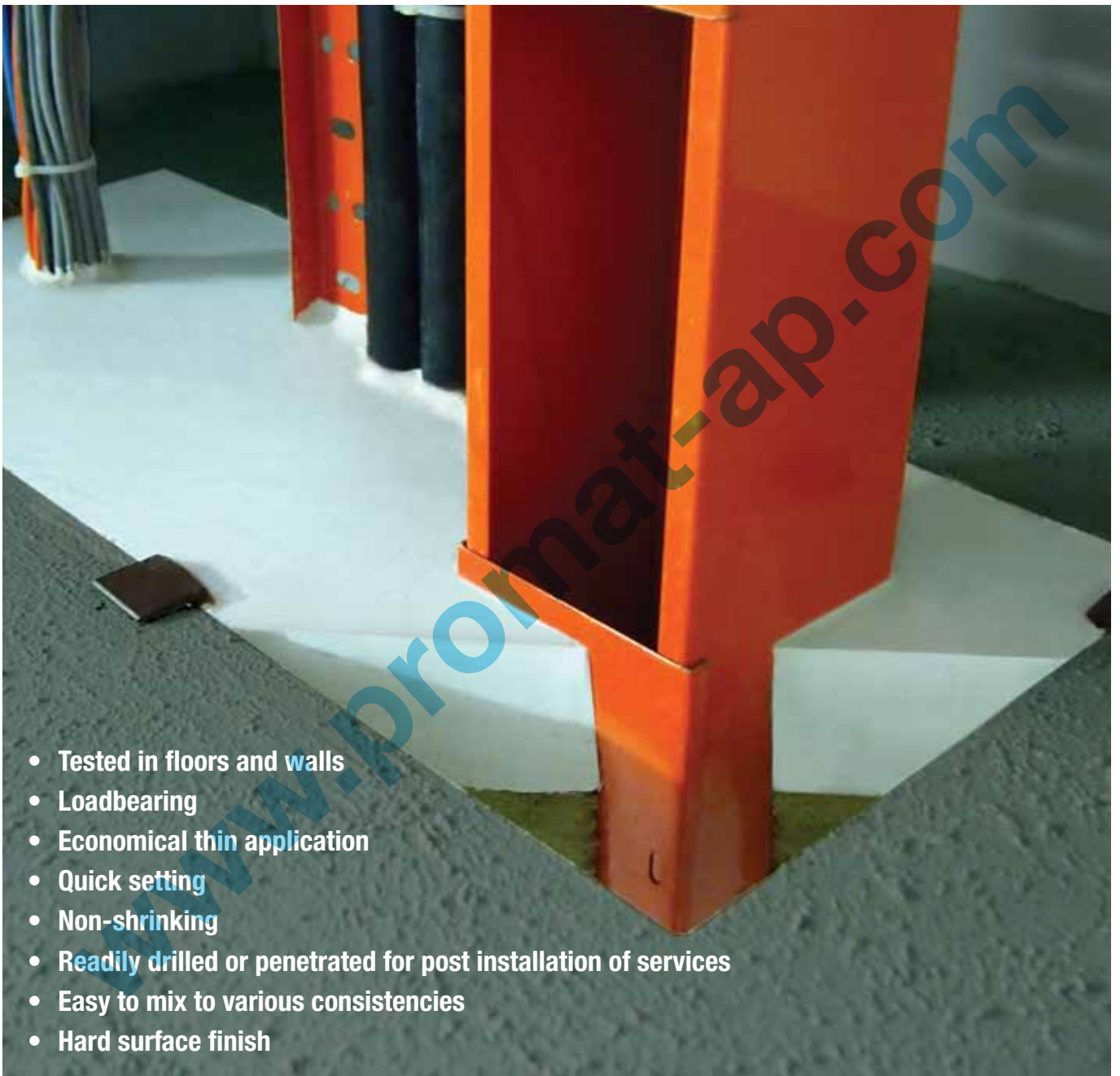


Promat



PROMASTOP® Cement For Cables And Pipes Penetration Seals



- Tested in floors and walls
- Loadbearing
- Economical thin application
- Quick setting
- Non-shrinking
- Readily drilled or penetrated for post installation of services
- Easy to mix to various consistencies
- Hard surface finish



Floors

For loadbearing capabilities, tests have been carried out on PROMASTOP® Cement. An unpenetrated floor opening of size 1000mm x 500mm, with 100mm thick reinforced PROMASTOP® Cement achieved an FRL of -/360/360 after which it successfully supported a load of 1000kg.

An unpenetrated floor opening of size 1000mm x 600mm, with 50mm mineral wool and 40mm thick unreinforced PROMASTOP® Cement successfully supported 7.56KN and a 70mm thick unreinforced PROMASTOP® Cement supported 10.21KN (non fire tested, non penetrated specimen).

Due to the likelihood of building movement, Promat recommends that on unreinforced floor systems, warning signs are placed upon the system. A steel plate or similar should be placed over the system if foot traffic is possible. See illustration on right.



PROMASTOP® Cement

PROMASTOP® Cement is a lightweight fire resistant cement supplied as a dry powder for on site preparation. It is mixed on site with clean water. This fine grade cement powder is white in colour for ease of identification and has a quick setting time. When the product is set, it presents a hard surface finish and does not shrink regardless of temperature change. It is readily drilled for post installation of services. When used in a floor applications, PROMASTOP® Cement can also provide some degree of load bearing capability depending on the thickness of the cement layer applied. Please consult Promat Technical Department to ascertain thickness required to meet a loadbearing performance requirement.

PROMASTOP® Cement has been tested for up to a 240 minutes fire resistance in masonry or concrete block walls and concrete floors. Tests were carried out in accordance with AS 1530: Part 4: 2005, BS476: Part 20: 1987 and EN1366: Part 3: 2009. Insulation on the penetrating services will vary depending upon the services that penetrate the barrier.

This system is not for use in lightweight steel stud partition walls.

PROMASTOP® Cement is white in colour and is packaged in convenient 20kg bags.

Recommended Specification

Where appropriate, with or without service penetrations, the specified floor/wall openings should be properly fire stopped using PROMASTOP® Cement capable of providing a fire resistance of -/120/120 or -/240/240 when tested and assessed in accordance with AS 1530: Part 4: 2005 and/or BS476: Part 20: 1987. Installation of any fire stopping product should be carried out according to the manufacturer's recommendations. Please consult Promat for more details.

Installation Guide

Maximum sizes of openings for PROMASTOP® Cement without the need to provide joints in the system are as follows:

Floors: Maximum 1500mm wide x 600mm
Walls: Maximum 600mm wide x 200mm

For larger openings, please consult Promat Technical Department.

Walls

Where the aperture is within hollow blocks or a cavity wall system, the cavities must be backfilled all round with PROMASTOP® Cement.

Coverage & Mixing Guide

When mixed with 15 to 19 litres (kg) of clean water, a 20kg bag will produce approximately 25 litres of mix which will cover an area approximately 1m² at 25mm deep or 0.5m² at 50mm deep. This equates to approximately 1.3 x 20kg bags per m² of clear opening at 30mm deep or 1.7 x 20kg bags at 40mm deep (other usage depths may be calculated directly from these figures). The final yield will depend upon the volume of water used. The figures given here are for guidance only.

PROMASTOP® Cement can be mixed to a consistency to suit the application. For floors, if services are close together, a wetter, "pourable" mix is preferred. For walls, it is always preferable to use a dry, "packing" mix. The amount of water used will also depend on the weather conditions at the time of mixing, but do not use a ratio of less than 2 : 1.

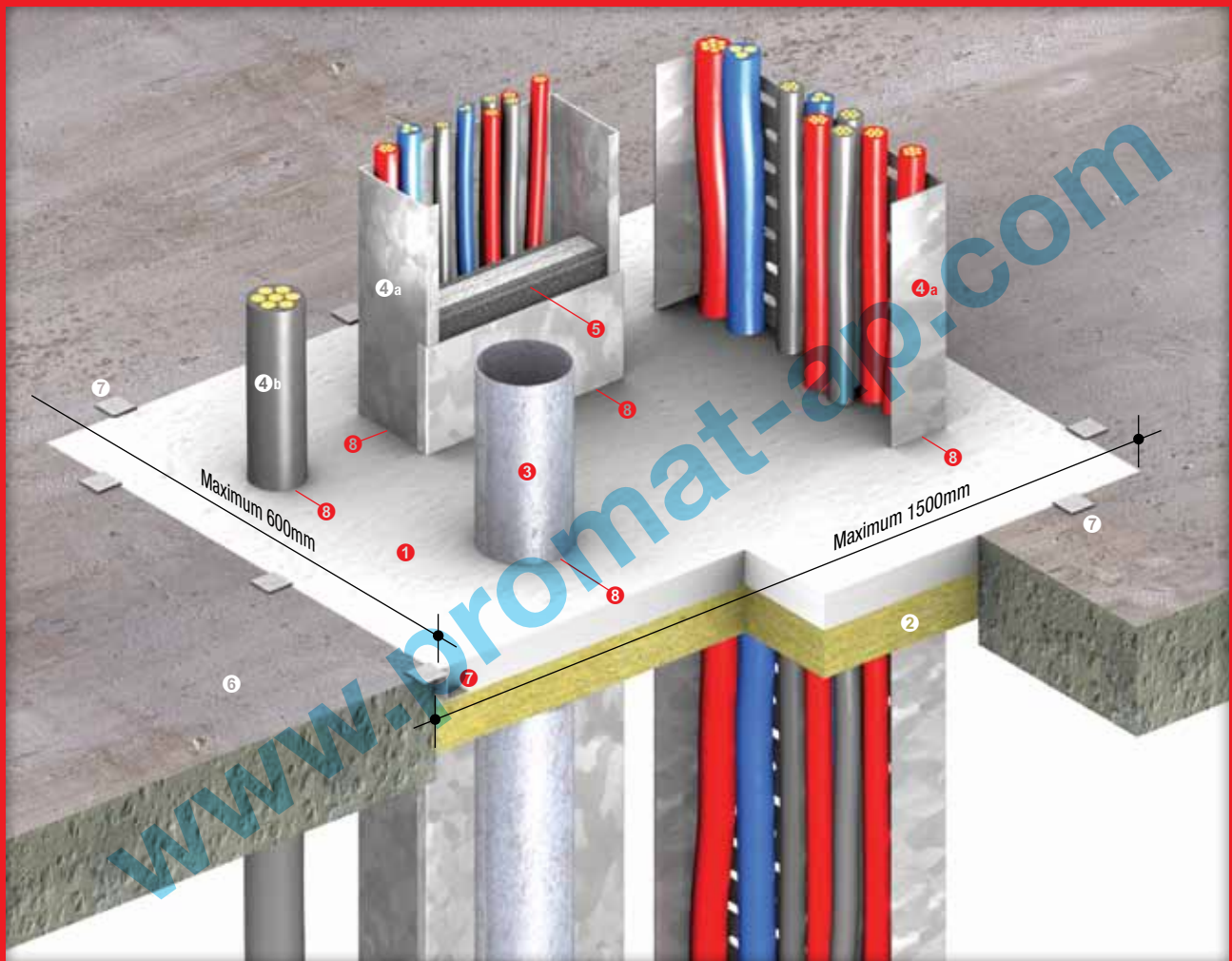
"Pourable" mix: 2kg of cement compound to 1.8 litres of water.

"Packing" mix: 2kg of cement compound to 1.35 litres of water.

For best surface finish use a ratio of 2 : 1.33 (cement : water). Note should be taken that the order of mixing water and cement compound is important as it will affect the consistency of the mix. Always add cement compound into water and not the opposite.

The mix will remain useable for approximately 30 minutes but this will depend upon the weather conditions and amount of water used. Do not attempt to remix by adding water after setting has commenced.

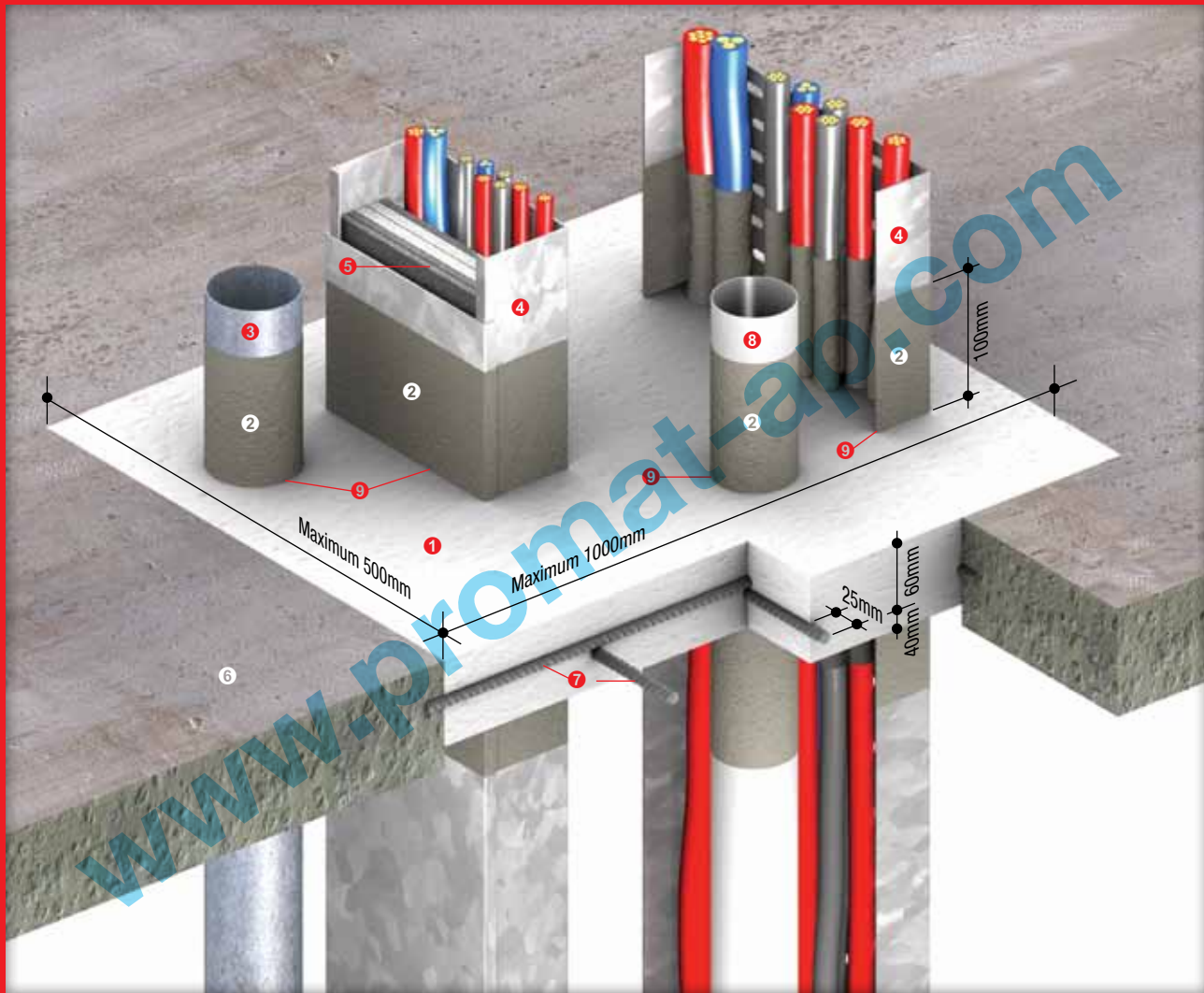
In some applications it may be necessary to provide bond breakers around services that may move as a result of natural building or thermal movement. This can be achieved using PROMASEAL® IBS™. Always apply a bead of PROMASEAL® AN Acrylic Sealant at the junction of the services and the cement as this will provides a smoke, water and movement seal.



Up to -/120/120 or -/240/240 fire resistance in accordance with the requirements of BS 476: Part 20: 1987, EN1366: Part3: 2009 and AS 1530: Part 4: 2005, depending on application and types of the penetrating elements

The insulation time is the measured time to insulation failure on the surface of the PROMASTOP® Cement. In some instances, where insulation measured upon the penetrating elements is the required criteria, this time to insulation failure can be substantially shorter, e.g. metal pipe penetrating the floor slabs. If insulation measured upon the penetrating elements is a specified performance criteria, please consult Promat.

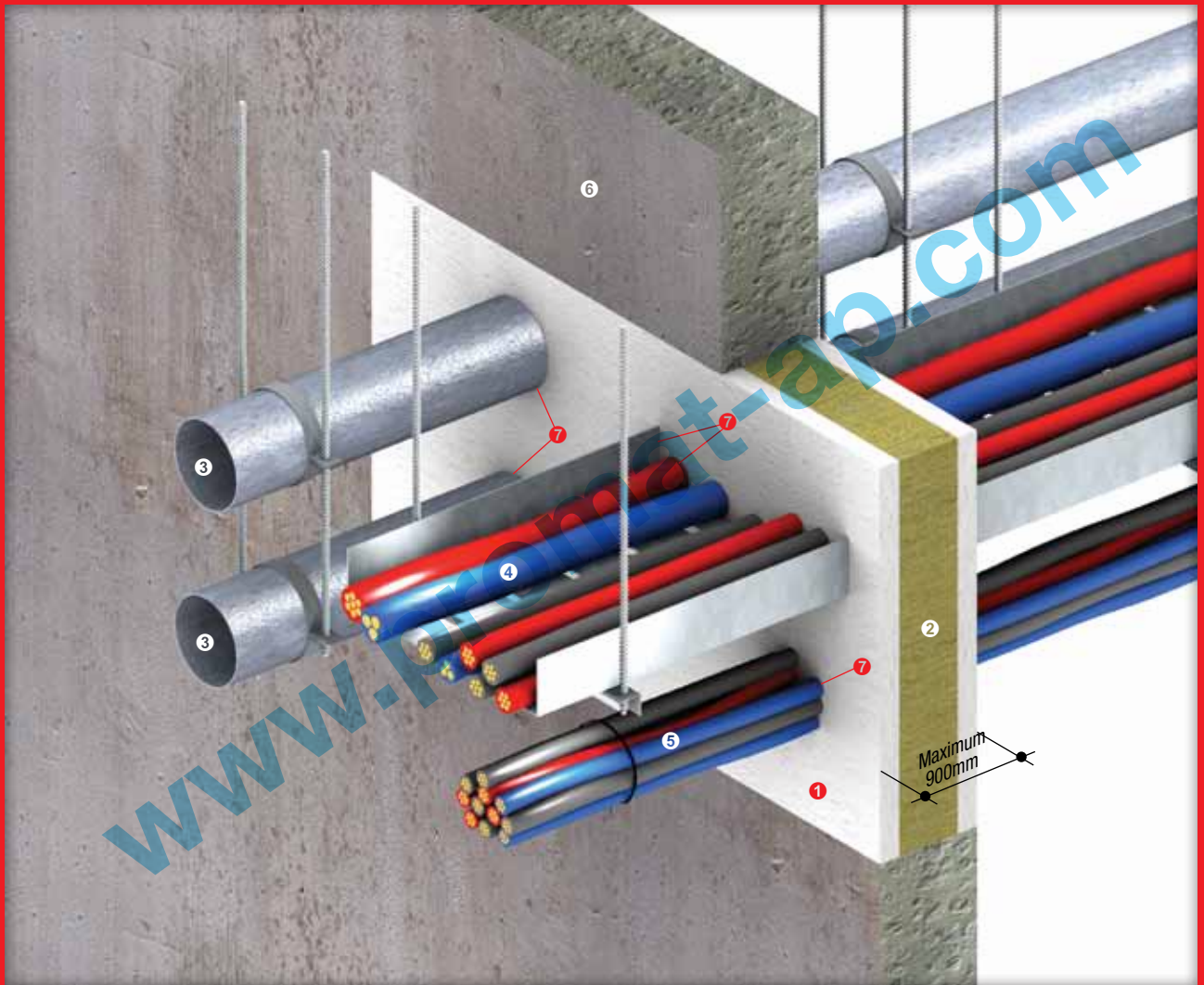
- ① PROMASTOP® Cement:
30mm thick for up to -/120/120 fire resistance
40mm thick for up to -/240/240 fire resistance
- ② 1 layer of mineral wool 120kg/m³ x 50mm thick
- ③ Non combustible metal pipe
- ④a Electrical cables supported with cable tray or steel trunking
- ④b Cable with Armaflex coverings
- ⑤ PROMASEAL® Electrical Junction Seal (see page 51 for details)
- ⑥ Masonry or concrete floor slabs
- ⑦ Steel Z clips 25mm wide at nominal 300mm centres
- ⑧ All joints, contact points between the penetrating elements and floor slabs caulked with PROMASEAL® AN Acrylic Sealant as bond breakers to secure the elements from natural building or thermal movement, and as a barrier to passage of cold smoke or water



Up to -/360/360 fire resistance in accordance with the requirements of BS 476: Part 20: 1987 and AS 1530: Part 4: 2005, depending on application and types of the penetrating elements

The insulation time is the measured time to insulation failure on the surface of the PROMASTOP® Cement. In some instances, where insulation measured upon the penetrating elements is the required criteria, this time to insulation failure can be substantially shorter; e.g. metal pipe penetrating the floor slabs. If insulation measured upon the penetrating elements is a specified performance criteria, please consult Promat.

- ❶ PROMASTOP® Cement of 100mm deep
- ❷ PROMASEAL® Bulkhead Sealer (only required where insulation measured on the services is required)
- ❸ Non combustible metal pipe
- ❹ Electrical cables supported with cable tray or steel trunking
- ❺ PROMASEAL® Electrical Junction Seal (see opposite page for details)
- ❻ Masonry or concrete floor slabs
- ❼ 12mm steel reinforcement bars at 250mm centres
- ❽ Plastic pipe, mounted flush with underside of the mineral wool using PROMASTOP® UniCollar® (or PROMASEAL® Retrofit Collar)
- ❾ All joints, contact points between the penetrating elements and floor slabs caulked with PROMASEAL® AN Acrylic Sealant as bond breakers to secure the elements from natural building or thermal movement, and as a barrier to passage of cold smoke or water



Up to -/120/120 or -/240/240 fire resistance in accordance with the requirements of BS 476: Part 20: 1987 and AS 1530: Part 4: 2005, depending on application and types of the penetrating elements

The insulation time is the measured time to insulation failure on the surface of the PROMASTOP® Cement. In some instances, where insulation measured upon the penetrating elements is the required criteria, this time to insulation failure can be substantially shorter, e.g. metal pipe penetrating the wall. If insulation measured upon the penetrating elements is a specified performance criteria, please consult Promat.

- ❶ PROMASTOP® Cement:
25mm thick for up to -/120/120 fire resistance
50mm thick for up to -/240/240 fire resistance
- ❷ 1 layer of 140kg/m³ x 50mm thick mineral wool
- ❸ Non combustibile metal pipe
- ❹ Electrical cables supported with cable tray
- ❺ Electrical cable with cable tie
- ❻ Masonry or concrete wall
- ❼ All joints, contact points between the penetrating elements and floor slabs caulked with PROMASEAL® AN Acrylic Sealant as bond breakers to secure the elements from natural building or thermal movement, and as a barrier to passage of cold smoke or water

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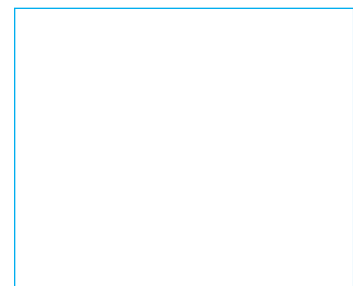
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