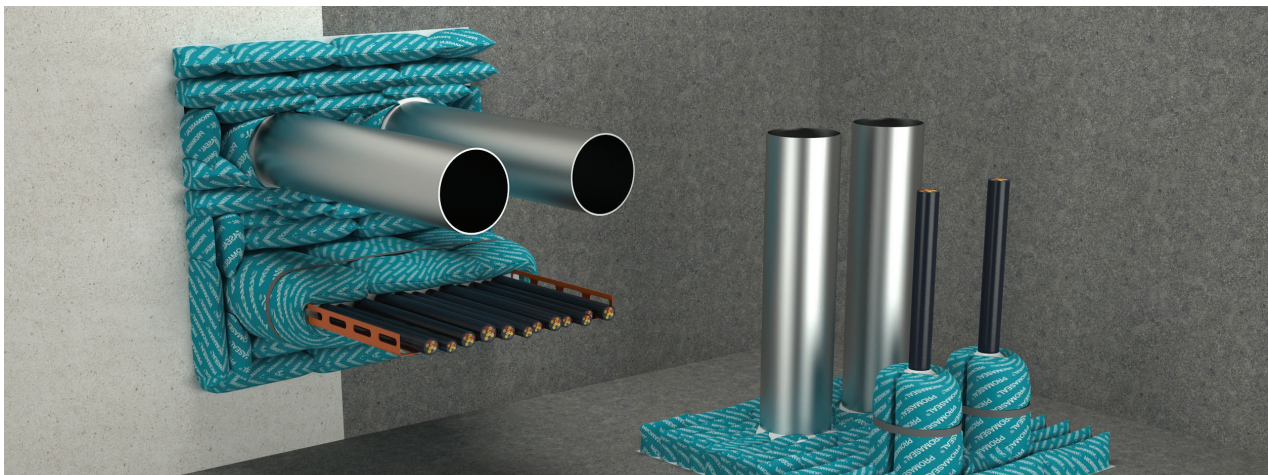


Promat

PROMASEAL® Pillows

Installation Instructions

PROMASEAL® Pillows are manufactured from treated cloth filled with a high density, granulated fire seal mineral wool. When exposed to fire, the pillows remain in place and char, thus forming a fire barrier of a solid mass of insulating material.



PROMASEAL® Pillows have been tested to AS1530: Part 4: 2014, BS476: Part 20: 1987, BS EN1366:Part 3: 2009 and achieved a Fire Resistance Level (FRL) of up to -/180/180 in floors, masonry and lightweight walls of the same or greater fire resistance. The FRL will be dependent upon the thickness of the building element and the type and size of any penetrating services.

The pillows are available in four sizes:

1. Extra Large, nominal size 300 x 600 x 40mm
2. Large, nominal size 300mm x 250mm x 40mm
3. Medium, nominal size 200mm x 250mm x 40mm
4. Small, nominal size 100mm x 250mm x 40mm

Installation Methods

Penetration seals in Concrete / masonry floors

The basic PROMASEAL® Pillows sealing system is up to 180 minutes FRL when applied to unpenetrated situations in floors. Various types of service penetrations have been evaluated within the system and achieved a range of fire resistance levels. Please consult Promat for full information.

Maximum dimensions for floor openings is 0.25m² or 500mm x 500mm. If the width is less than 180mm, then the length of the opening can be unlimited.

PROMASEAL® Pillows must be tightly packed into the openings, starting at one edge and moulded to overhang the perimeter of the floor slab for support. Place the PROMASEAL® Pillows along one full side of the opening and gradually work into the centre of the opening. For the small, medium, and large pillows the 250mm length should be perpendicular to the element being penetrated.

All subsequent layers of PROMASEAL® Pillows must be staggered (overlapped), similar in a manner to the way bricks or blocks are laid. Ensure that the pillows are packed very firmly into position, using a rubber or wooden mallet or similar implement.

Ensure all gaps around the services and at the edge of the penetration are fully and properly sealed with PROMASEAL® -A Acrylic Sealant. To prevent removal of the pillows, it is recommended to seal the topside of the installed pillows with 1-2mm of PROMASEAL® -A Acrylic Sealant of fix a wire mesh under the floor opening.

PROMASEAL® Pillows

Installation Instructions

Penetration Seals in fire resistant plasterboard or concrete/masonry walls

The basic PROMASEAL® Pillow sealing system is up to FRL -/180/180 when applied to unpenetrated situations in walls. Various types of service penetrations have been evaluated within the system and achieved a range of fire resistance levels. Please consult Promat for full information.

Maximum Dimensions for wall openings is up to 1000mm wide x 600mm high. If the height is less than 180mm, then the width can be unlimited.

PROMASEAL® Pillows must be tightly packed into the openings, starting at the bottom and mould them to overhang the facings of the wall. Place the PROMASEAL® Pillows along one full row of the opening and gradually work towards the top of the opening. For the small, medium, and large pillows the 250mm length should be perpendicular to the element being penetrated.

All subsequent layers of PROMASEAL® Pillows must be staggered (overlapped), similar in a manner to the way bricks or blocks are laid. Ensure that the pillows are packed very firmly into position, using a rubber or wooden mallet or similar implement. Ensure all gaps around the services and at the edge of the penetration are fully and properly sealed with PROMASEAL® -A Acrylic Sealant.

In steel or timber framed lightweight walls, the edges of the wall lining around the opening must be restrained by trimming out with additional framing and lining.

PROMASEAL® Pillows are also approved for use in Speedpanel walls for openings up to 1000mm wide x 700mm high. The area around the penetration must be thickened with 20mm PROMATECT® 100 boards on each face of the wall. Contact Promat for further details. To prevent removal of the pillows, it is recommended to seal the installed pillows with 1-2mm of PROMASEAL® -A Acrylic Sealant of fix a wire mesh over the wall opening.

Use of Extra Large size PROMASEAL® Pillows, Mesh Guards and PROMASEAL® SupaWrap

To achieve the insulation criteria for metal pipes and cables additional measures are required to slow the

conduction of heat along these services. For the PROMASEAL® Pillows there are multiple options available. Where cable trays or bunches of cables pass through fire resistant barriers, Extra Large Size PROMASEAL® Pillows can be used directly in contact with the penetrating services to provide insulation criteria as well as integrity. The pillows need to be held on to the services with metal straps or Stainless Steel Cable Ties. If the opening is larger, other sizes of pillows can be used to fill in the rest of the opening. For other services such as metal pipes, it is advisable to use PROMASEAL® SupaWrap.

As an alternative, a mesh guard can be applied to cable trays, bunches of cables or metal pipes. The guard must be spaced 50mm away from the service and be the following lengths. 100mm for cables, cable trays and steel or cast iron pipes up to 100mm diameter. 500mm for copper pipes up to 150mm and steel or cast iron pipes from 100 to 150mm diameter.

Usage Rate (Guide Only)

Approximately 120 pillows will fill 1m² or opening, but a mixture of sizes is required to do the job properly when you have services passing through. As a "rule of thumb" for 1m² of clear area, a combination of various pillow sizes will be required. The following shows a possible combination of pillows that could be used:

- Large Pillows: approximately 90 bags
- Medium Pillows: approximately 45 bags
- Small Pillows: approximately 15 bags.

This is for "clear area" without services. The installer will need to determine the coverage for services. E.g for 0.5m² clear opening, the usage rate could be multiplied by 0.5. Further, for 0.75m² clear opening, the usage rate should be multiplied by 0.75. For the Extra Large Pillows, generally you will need to allow for 2 per service that is within the penetration.

Promat provides a wide range of systems for compartmentation, fire resistant air and cable ducts, structural steel protection. Fire stopping and partitions. For assistance with any passive fire protection problems, please consult Promat.