

PROMASEAL® FyreStrip Seals Of Movement Joints & Gaps



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PROMASEAL® FyreStrip is a highly compressible, flexible, fire resistant expansion strip seal which is used where movement joints are formed in the structure of a building. It consists of layers of PROMASEAL® Grafitex intumescent material bonded to a special foam and it has been successfully tested for up to 240 minute fire resistance for movement joint seals within concrete/masonry compartment floors and walls (with an equal or greater fire resistance level).

The flexibility of PROMASEAL® FyreStrip is suitable for use in a variety of configurations. The fire resistance performance of PROMASEAL® FyreStrip will vary depending on applications and types of the penetrating elements. The gap width for which the FyreStrip will be inserted and the orientation of the insertion will affect the level of its fire resistance performance.

PROMASEAL® FyreStrip has been tested up to 240 minute fire resistance in accordance with the criteria of BS 476: Part 20: 1987 and AS 1530: Part 4: 2014 for high movement control joints in building elements. These typical applications include:

- Joints between old and new constructions that are aligned, i.e. the existing building is being extended.
- Joints in floor slabs that are used for vehicles and require a high degree of flexibility.
- Gaps between floor slabs and fascia panels.

Selection of correct materials

The thickness of PROMASEAL® FyreStrip is determined by the minimum or maximum width of the gap expected during the lifetime of the building element. The thicknesses should not be less than the maximum expected widths (please refer to the table on opposite page). The depth of PROMASEAL® FyreStrip is a function for the gap width and the required fire resistance performance.

PROMASEAL® FyreStrip is available in 1000mm lengths.

It may be readily cut to suit a particular length. When more than one length is required for sealing a joint, ensure that the two strips are tightly abutted so that there is no gap between the adjoining ends. At the ends of each joint, ensure the strip is fitted tight to the adjoining surface.

If a smoke or water seal is required, apply a suitable sealant in accordance with the manufacturer's instructions.

PROMASEAL® FyreStrip is non loadbearing. If the area of installation is trafficable, a suitable plate should be fixed over the joint. Such plates must also allow for the expected movement.

PROMASEAL® FyreStrip is suitable for use in concrete/masonry floors and walls with a fire resistance level equal or greater than 240 minutes. For lightweight partitions, 120

minute fire resistance can be achieved in movement joints up to a maximum gap width of 55mm.

Installation

As the thickness of PROMASEAL® FyreStrip is determined by the minimum or maximum width of the gap expected during the lifetime of the building element, it is therefore important to insert the PROMASEAL® FyreStrip so that the Grafitex sits parallel to the direction of movement. One end of the appropriate size of the FyreStrip is simply compressed between fingers and thumb until it can be inserted into the required gap. Make sure the label is facing outwards.

The strip can then be progressively pushed in to the joint. If it is difficult to insert, the strip may be knocked in to place with a hammer handle, rubber mallet or by placing a piece of timber along the length of the strip and knocking the timber.

Alternatively, the strip can be inserted in between two sleeves of sheet metal to provide ease of installation. Once in position the two sleeves can be withdrawn and reused. It is advisable to insert each strip progressively along its length.

For joints at the top of hollow block and cavity walls, the block must be sealed for a minimum of one course or the cavity wall will need to be capped on top. The strip must be centrally located in the wall or floor joint. In cold conditions it is advisable to store the strip in a warm atmosphere immediately prior to installation as this improves compressibility.

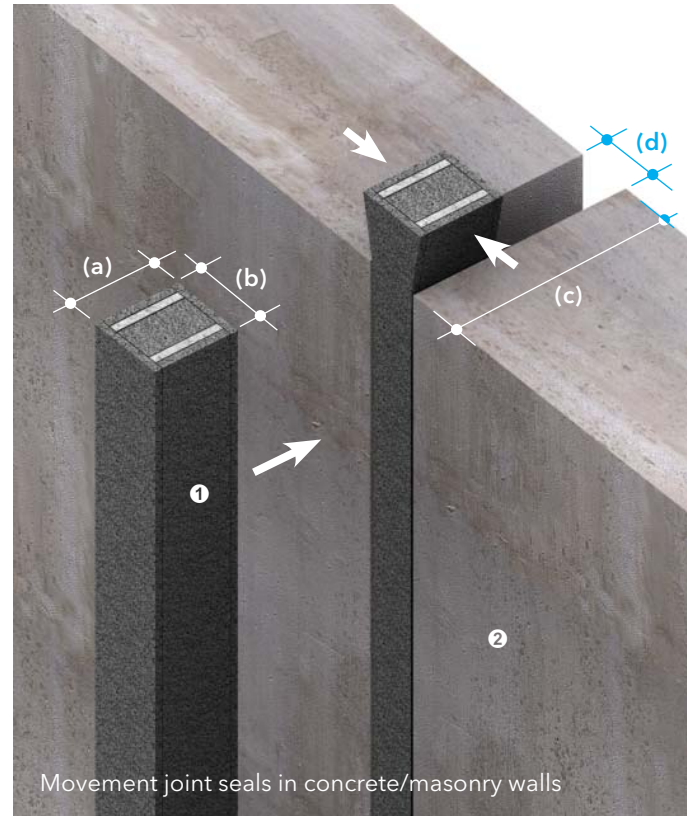
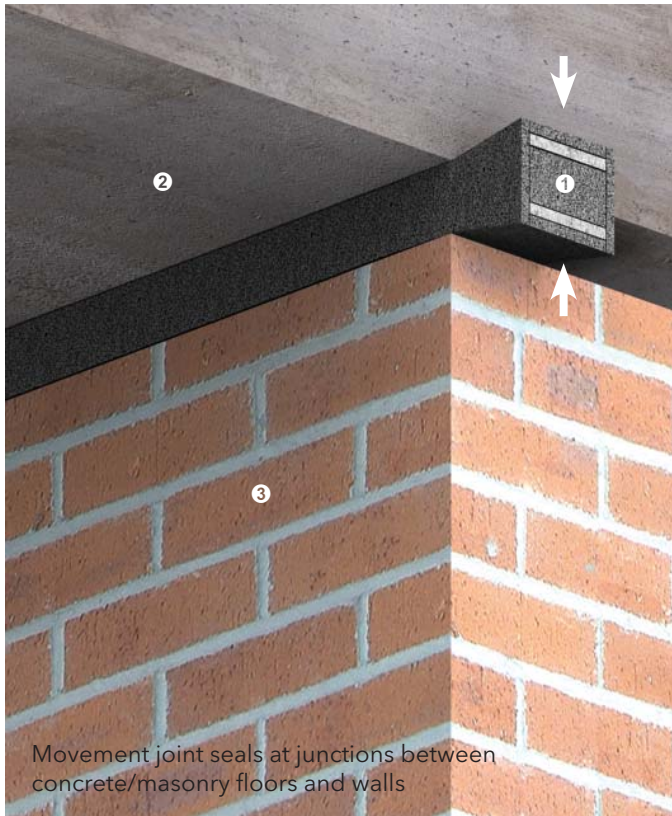
The strip may readily be cut to suit a particular length. When more than one length of PROMASEAL® FyreStrip is required in a joint, ensure the two pieces are butted tight together and there is no gap between the adjoining ends.

At the ends of each joint, it is essential to fit the strip to the adjoining surface. If a smoke or water seal is required, apply a suitable sealant according to the instructions of the sealant manufacturer.

If the area where the PROMASEAL® FyreStrip is installed is designed to be trafficable, a suitable plate should be fixed over the joint, always allowing for movement.

PROMASEAL® FyreStrip sealing systems are non loadbearing. It is advisable to place a visible warning sign near all barriers to identify its characteristics/inherent properties, with wording similar as follows:

WARNING: THIS IS A FIRE RESISTANT BARRIER. DO NOT DISTURB. DO NOT WALK OR PLACE ANY LOADS ON OR AGAINST THE BARRIER. IF THE BARRIER IS DAMAGED CONTACT (name of installer) IMMEDIATELY.



Up to -/240/240 fire resistance in accordance with the requirements of BS 476: Part 20: 1987 and/or AS 1530: Part 4: 2014, depending on applications and types of penetrating elements. Movement joints at the top of the hollow block and cavity walls AND the cavity within the hollow block walls must be sealed for a minimum one strip of PROMASEAL® FyreStrip, otherwise the hollow block and cavity walls will need to be capped

- ❶ PROMASEAL® FyreStrip
- ❷ Fire resistant concrete/masonry floors or walls
- ❸ Brick walls

Guide to thicknesses for movement joint seals

Code no.		FS 20	FS 40	FS 50	FS 80	FS 100
(a) Depth of FyreStrip	mm	70* 90	70* 90	90	100	120
(b) Width of FyreStrip	mm	28	46	56	84	124
(c) Minimum thickness of penetrating elements	mm	170 (-/240/240) 150 (-/180/180) 120 (-/120/120)	170 (-/240/240) 150 (-/180/180) 120 (-/120/120)	170 (-/240/240) 150 (-/180/180) 120 (-/120/120)	170 (-/240/240) 150 (-/180/180) 120 (-/120/120)	170 (-/240/240) 150 (-/180/180) 120 (-/120/120)
(d) Minimum gap width for insertion of FyreStrip	mm	16	24	32	48	64
Minimum gap width at full compression	mm	12	16	24	36	44
Maximum gap width at full expansion	mm	20	40	50	80	100

* Up to -/240/- fire resistance in accordance with the requirements of BS 476: Part 20: 1987. Movement joints at the top of the hollow block and cavity walls AND the cavity within the hollow block walls must be sealed for a minimum one layer of PROMASEAL® FyreStrip.

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Through its subsidiaries, the group offers an extensive range of products: small and large roofing materials, cladding and building boards, passive fire protection systems.

Etex aims to be a professional, solid partner for all kinds of building projects.

