



Fire Mortar-360™

6 Hours Fire-Rated Mortar

Load bearing fire-rated mortar for floor & walls. Provides up to 6 hours protection from fire and smoke around pipes, cables, ducting and dampers

Approved to AS1530.4(2005) up to -/360/360



Installation Guide

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KEY BENEFITS

- Offers up to -/360/360 FRL
- Can be reactivated to extend working time
- Suitable for indoor and outdoor use
- Acoustic insulation
- Free of halogens, asbestos, fibres and silica
- Non-toxic
- Load bearing
- Large opening sizes

INTRODUCTION



FireMortar-360 is a unique one-part synthetic mortar which can be trowelable or pourable, suitable for sealing opening in walls and floors to prevent the passage of fire and smoke.

The purpose of this document is to provide guidance to approved installers and suppliers who are engaged in fire stopping of opening through floors and compartment walls using the FireMortar-360 Mortar System.

FireMortar-360 will provide both load bearing or a non-load bearing fire barrier.

Installers involved in the installation of the FireMortar-360 Mortar System must receive relevant training from the BOSS Fire & Safety Technical Services team, or from an approved supplier and be certified accordingly.

Correct installation procedures must be followed to provide an approved fire barrier to the specification required and to maintain a high standard of workmanship and quality.

THE FIRE MORTAR-360 SYSTEM

FireMortar-360 is a hydrate sulphate based pre-mixed blend and consists of inorganic inert fillers and foamed perlite. When mixed with water it produces a trowelable or pourable consistency suitable for fire barrier seals through opening in floors and walls.

FireMortar-360 is non-combustible and can be easily designed to provide either load-bearing or non-bearing seals for 2, 4 or 6 hour fire barrier. It provides an excellent seal around services and a strong bond to surrounding masonry.

Sizes available:	20kg bags
Product code:	FM360
Colour:	Off white
Density:	1100kg/m ³
FRL:	Up to -/360/360
Fire barrier:	6 hours at 100mm thickness 4 hours at 75mm thickness 4 hours at 50mm thickness
Rw Rating:	46dB reduction at 100mm

A unique feature of FireMortar-360 is that it can be reactivated for up to 2 hours by remixing with small quantities of water every 30 minutes, thereby reducing or eliminating waste.

Once the seal is suitably dry, the maximum loadbearing capability of the seal is limited to 1.5kN/m² which is generally considered more than adequate for maintenance personnel access. For increased loading reinforcement requirements up to 5kN/m², please consult the BOSS Fire & Safety Technical Services team.

PREPARATION

1. Ensure that all service penetrations are complete and installed in accordance with regulatory and site specifications
2. Remove all unnecessary combustible materials from the penetration
3. Brush all loose products from the inner surface of the hole and surrounding area
4. Place plastic sheet beneath the working area to contain any falling materials
5. Remove lagging or insulation on ducts or pipes to ensure a good seal with FireMortar-360

INSTALLATION

1. Install formwork supporting the penetration seal. Suitable materials are mineral fibre, steel, timber or polystyrene. All combustible formwork materials should be removed once FireMortar-360 has set. For wall installations, it may be necessary to install formwork from both sides of the opening and fill the void from the upper most gap.
2. If reinforcement is required, ensure the correct load bearing capacity is used. If the penetration is to be non-load bearing, ensure the penetration is no greater than 1200mm x 1200mm. The maximum size for non-load bearing seals in 1.44m².
3. Ensure that all reinforcement steel is fixed positively using expanding Rawl bolts or suitable fire-rated anchors.
4. Mix the dry FireMortar-360 powder to the required quantity of water. Use the mix ratios below to achieve the correct consistency.

<i>Pourable Grade:</i>	<i>Powder:Water = 3:2</i>
<i>Trowelable Grade:</i>	<i>Powder:Water = 2:1</i>

5. Pour approximately 15mm depth of FireMortar-360 into the base of the seal, covering the formwork totally and closing any small voids around the services. Leave to dry for approximately 30 minutes.

6. Fill the opening to the required depth with FireMortar-360 to achieve the correct fill rating, as follows:

FireMortar-360 thickness (mm)	Max Opening size (mm)	FRL
50	600 x any length*	-/240/60
50	1200 x 1200	-/240/60
75	600 x any length*	-/240/120
75	1200 x 1200	-/240/120
100	600 x any length*	-/240/240
100	1200 x 1200	-/240/240
100	720 x 720	-/360/360

7. Smooth the surface using a float or similar finishing tool.
8. When formwork is removed, fill any gaps using a trowelable grade of FireMortar-360 to complete the installation. Full cure is 8 weeks.
9. Apply the required labelling, detailing date, type of seal and installer.

COVERAGE

FireMortar-360 should be mixed with between 10 and 13.5 litres of water, depending on required consistency. When mixed, 20kg of FireMortar-360 will produce up to 35.3 litres of mix, which will fill an area of 0.353m² of clear opening of 100mm depth.

To fill an area of 1m² at 100mm seal thickness, less than 3 x 20kg bags of FireMortar-360 are required. Approximately 29 bags of FireMortar-360 are required to fill 1m³.



LIMITATION

BOSS Fire & Safety Pty Ltd has provided the above technical information in good faith and to the best of its knowledge. This information was deemed to be correct at the time of publication. Should any data come to BOSS Fire & Safety's attention relating to the fire resistance or performance of the product described, BOSS Fire & Safety reserve the right to amend this report.

BOSS Fire & Safety strive to constantly improve and develop products so this information may change without notice.

FURTHER TECHNICAL INFORMATION

For additional technical information on the performance of FireMortar-360 or other BOSS products please contact our Technical Services team on:

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