

## MORTAR

### M4 lightweight Fire Rated Mortar

#### DESCRIPTION

A water-based, lightweight, high insulation expanding mortar which provides a fire barrier for up to 4 hours for openings with building service penetrations. It contains no toxic or smoke producing materials and is water resistant after curing.

#### APPLICATIONS

Especially designed to reinstate concrete floor and masonry wall openings around building services such as electrical cables, metal or copper pipes, cable trays, and plastic pipes when used with Pyropanel Pyroraps. Perfect for filling fire rated steel door frames with Pyropanel fire doors.

#### FEATURES

- Fully certified to Australian Standards AS 1530.4 and AS 4072.1 for up to 4 hours of fire rating at 100mm thick, or 2 hours rating when 75mm thick, as blank panels.
- 20kg bags.
- Suitable for floor and wall penetration applications as shown in examples on sheet 2.
- Suitable for use with Pyropanel Pyroraps with plastic pipes (Refer PAS-04 tech-sheet for more details)
- Suitable for packing Pyropanel steel door frames (refer Pyropanel BUILD tech-sheets for various wall options).
- Water resistant after drying.
- Maximum size in floor = 500mm wide x any length @ 75mm thickness. Refer table on page 2 for penetrations.
- Maximum size in wall = 0.4m<sup>2</sup> with maximum 800mm in any direction. Refer table on page 2 for penetrations.
- Note:** For uninsulated metal/cable penetrations, a mineral fibre insulation may be required to maintain insulation level due to heat transfer via the penetrating element.
- Australian made.
- 12 months shelf life.

#### APPROXIMATE YIELD

- 1 x 20kg = 0.25m<sup>2</sup> @ 75mm thick (-/120/120)
- 1 x 20kg = 0.20m<sup>2</sup> @ 100mm thick (-/240/240)

#### HANDLING & STORAGE

- Store in a dry place.
- Keep out of reach of children and animals.
- Avoid contact with food.
- Flush eyes with clean water - if irritation persists, seek medical attention.
- If swallowed, rinse mouth with water. Consult a doctor immediately if large quantity has been swallowed.

#### INSTRUCTIONS

- Mix contents of bag with 15 litres of water (nominal) - mix only with water.
- Provide form work under opening and trowel in mortar.
- Leave formwork in place for at least 24 hours.
- Note: in large floor penetrations, key in mortar to slab along top edge.
- See page 3 for frame filling instructions.



M4 Mortar bag

#### MODELS AVAILABLE

Product code	Product	Details
PMM420	M4 Mortar	20kg bag

#### HOW TO SPECIFY

Eg, "Fire rated sealant to be Pyropanel "M4 Mortar" fire rated, expanding lightweight mortar, installed as per manufacturers instructions".

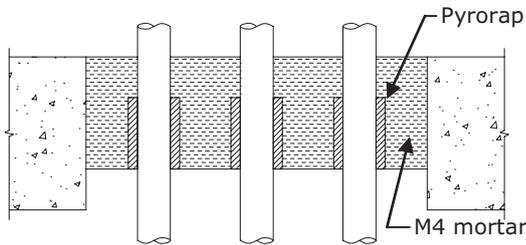
#### Pyropanel Developments Pty Ltd

235 Huntingdale Rd, Oakleigh, Vic 3166  
Ph: (03) 9837 8500 Fax: (03) 9837 8550  
Email: [sales@pyropanel.com.au](mailto:sales@pyropanel.com.au)  
Web: [www.pyropanel.com.au](http://www.pyropanel.com.au)

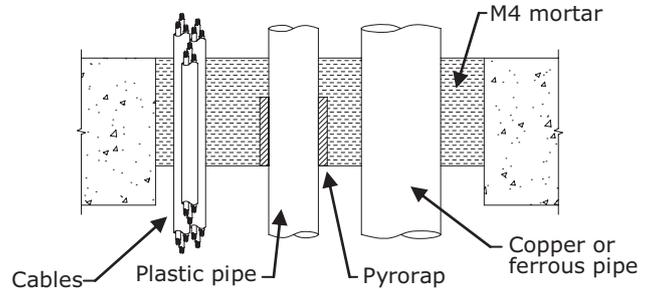
#### Distributed by:

# M4 lightweight Fire Rated Mortar

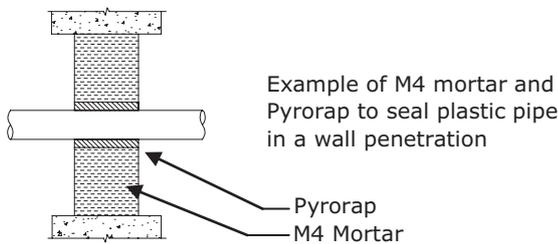
## TYPICAL APPLICATIONS



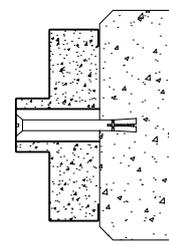
Example of M4 mortar used with Pyroraps to seal plastic pipes in a floor penetration



Example of M4 mortar sealing electrical cables, copper and ferrous pipes, and used with Pyroraps to seal plastic pipes



Example of M4 mortar and Pyrorap to seal plastic pipe in a wall penetration



Example of steel frame packed with M4 Mortar

## PENETRATION CONFIGURATIONS

Service penetration	Fire protection	Insulation protection	Wall/floor type	Minimum Element thickness (mm)	FRL
<b>Electrical cables</b>					
Cable tray with electrical cables, 3 core + Earth [Single cables up to Ø 54mm(185mm <sup>2</sup> ) and groups of cables up to Ø 21mm each].	M4 Mortar (≥75mm)	Mineral fibre (≥450 grade), 50mm thick, min. 600mm long, OR Radiation guard	Masonry or concrete walls	140	-/120/120 OR -/120/60 (with no Insulation protection)
			Concrete floors	150	
Cable tray with electrical cables, single core [Single cables up to Ø 42mm (630mm <sup>2</sup> )].	M4 Mortar (≥75mm)	Mineral fibre (≥450 grade), 50mm thick and min. 900mm long, OR Radiation guard	Masonry or concrete walls	140	-/120/120 OR -/120/60 (with no Insulation protection)
			Concrete floors	150	
<b>Metal pipes</b>					
Metal (copper or ferrous e.g steel) pipes up to Ø 100mm nom. with at least 1.7mm nom. wall thickness.	M4 Mortar (≥75mm)	Mineral fibre (≥450 grade), 50mm thick and min. 1100mm long, OR Radiation guard	Masonry or concrete walls	140	Up to -/120/120 OR Up to -/120/- (with no Insulation protection)
			Concrete floors	150	
Metal (steel & other ferrous) pipes up to Ø 114mm nom. with at least 4.7mm nom. wall thickness.	M4 Mortar (≥75mm)	Mineral fibre (450 grade), 50mm thick, min. 900mm long <sup>#</sup> OR Radiation guard	Masonry or concrete walls	140	Up to -/180/180 <sup>#</sup> , *Insulation 120 if 600mm long mineral fibre is used. OR Up to -/180/- (with no Insulation protection)
			Concrete floors	150	
Metal (copper or ferrous e.g steel) pipes up to Ø 50mm with at least 1.2mm nom. wall thickness.	M4 Mortar (≥116mm)	Mineral fibre (≥350 grade), 50mm thick, min. 600mm long OR Radiation guard	Masonry or concrete walls	140	Up to -/120/120 OR Up to -/120/- (with no Insulation protection)