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 = 0.4m² 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 = 0.25m² @ 75mm thick (-/120/120)
- 1 x 20kg = 0.20m² @ 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.

MODELS AVAILABLE

<table>
<thead>
<tr>
<th>Product code</th>
<th>Product</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMM420</td>
<td>M4 Mortar</td>
<td>20kg bag</td>
</tr>
</tbody>
</table>

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
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Note: The Tech Sheet is an uncontrolled document, If printed please refer to the Tech-Sheet on the website to check if this document is valid.
**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**

<table>
<thead>
<tr>
<th>Service penetration</th>
<th>Fire protection</th>
<th>Insulation protection</th>
<th>Wall/floor type</th>
<th>Minimum Element thickness (mm)</th>
<th>FRL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Electrical cables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cable tray with electrical cables, 3 core + Earth [Single cables up to Ø 54mm (185mm²) and groups of cables up to Ø 21mm each].</td>
<td>M4 Mortar (≥75mm)</td>
<td>Mineral fibre (≥450 grade), 50mm thick, min. 600mm long, OR Radiation guard</td>
<td>Masonry or concrete walls</td>
<td>140</td>
<td>-/120/120 OR -/120/60 (with no Insulation protection)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Concrete floors</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>Cable tray with electrical cables, single core [Single cables up to Ø 42mm (630mm²)].</td>
<td>M4 Mortar (≥75mm)</td>
<td>Mineral fibre (≥450 grade), 50mm thick and min. 900mm long, OR Radiation guard</td>
<td>Masonry or concrete walls</td>
<td>140</td>
<td>-/120/120 OR -/120/60 (with no Insulation protection)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Concrete floors</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td><strong>Metal pipes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metal (copper or ferrous e.g steel) pipes up to Ø 100mm nom. with at least 1.7mm nom. wall thickness.</td>
<td>M4 Mortar (≥75mm)</td>
<td>Mineral fibre (≥450 grade), 50mm thick and min. 1100mm long, OR Radiation guard</td>
<td>Masonry or concrete walls</td>
<td>140</td>
<td>Up to -/120/120 OR Up to -/120/- (with no Insulation protection)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Concrete floors</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>Metal (steel &amp; other ferrous) pipes up to Ø 114mm nom. with at least 4.7mm nom. wall thickness.</td>
<td>M4 Mortar (≥75mm)</td>
<td>Mineral fibre (450 grade), 50mm thick, min. 900mm long, OR Radiation guard</td>
<td>Masonry or concrete walls</td>
<td>140</td>
<td>Up to -/180/180 OR Up to -/180/60 (with no Insulation protection)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Concrete floors</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>Metal (copper or ferrous e.g steel) pipes up to Ø 50mm with at least 1.2mm nom. wall thickness.</td>
<td>M4 Mortar (≥116mm)</td>
<td>Mineral fibre (≥350 grade), 50mm thick, min. 600mm long OR Radiation guard</td>
<td>Masonry or concrete walls</td>
<td>140</td>
<td>Up to -/120/120 OR Up to -/120/- (with no Insulation protection)</td>
</tr>
</tbody>
</table>

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