Nupatch Bedding Mortar Data Sheet

Specification notes

Product: Nupatch Bedding Mortar

Supplier:
Arcon Construction Supplies
19-20 Prestwood Court
Leacroft Road
Warrington
WA3 6SB

Tel: 01925 852225

Email: mail@arconsupplies.co.uk
Web: www.arconsupplies.co.uk

Call 01925 852225 or visit Arcon Construction Supplies
... for more information on our flooring and construction products
Nupatch Bedding Mortar

Rapid Setting Mortar

Description
A pre-packed shrinkage compensated, polymer modified cementitious bedding mortar characterised by its rapid strength gain which enables work to be carried out with the minimum of disruption. Ideally suited for the bedding and raising of manhole frames, fixing of street furniture and as a general purpose rapid setting repair mortar. Nupatch Bedding Mortar has been designed to comply with the requirements of EN1504 Part 3 Class R4.

Advantages
- Rapid setting characteristics.
- Low water/cement ratio.
- Shrinkage compensated.
- Excellent adhesion to dense concrete and steel.
- Simple to use, only requires the addition of clean water.
- Excellent workability and finishing properties.
- May be used down to 0°C.
- Resistant to freeze/thaw cycle.
- Free from chloride additives.
- Low chromate (Cr (VI) <2ppm).
- Manufactured under BSI QA Scheme, ISO 9001, EN29001.
- Complies with the requirements of HD27/04, Chapter 3 part 11.

Applications
- Bedding and raising of manhole frames.
- Fixing of street furniture.
- Rapid setting of posts, railings, lamp standards, etc.
- High strength repair mortar
- Bedding for copings.

Technical Information

<table>
<thead>
<tr>
<th>Temp (°C)</th>
<th>Usable life</th>
<th>Compressive Strength, MPa</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12 Mins</td>
<td>1 Hour</td>
</tr>
<tr>
<td>20°C</td>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>

 Tested in accordance with EN12190.

- Water Addition: 2.2-2.85 Litres per 25kg pack
- W/C Ratio: 0.36 @ 2.85 Litres per 25kg pack
- Density: 2350 kg/m³
- Yield: Approx. 12 Litres per 25kg pack
- Maximum Aggregate Size: 4mm
- Cement Content: >600 kg/m³

www.nufins.com
## Technical properties of Nupatch Bedding Mortar.

<table>
<thead>
<tr>
<th>Properties</th>
<th>Standard</th>
<th>Performance Requirement</th>
<th>Declared Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td></td>
<td></td>
<td>Grey Powder</td>
</tr>
<tr>
<td>Mixing water</td>
<td></td>
<td></td>
<td>2.2-2.85 Litres per 25kg</td>
</tr>
<tr>
<td>Chloride-ion content</td>
<td>EN1015-17</td>
<td>≤ 0.05%</td>
<td>≤ 0.05%</td>
</tr>
<tr>
<td>Maximum aggregate size</td>
<td></td>
<td></td>
<td>4mm</td>
</tr>
<tr>
<td>Water/cement ratio</td>
<td></td>
<td></td>
<td>0.36 @ 2.85 Litres per 25kg</td>
</tr>
<tr>
<td>Cement content</td>
<td></td>
<td></td>
<td>&gt;600kg/m³</td>
</tr>
<tr>
<td>Layer minimum thickness</td>
<td></td>
<td></td>
<td>10mm</td>
</tr>
<tr>
<td>Density</td>
<td></td>
<td></td>
<td>Approx. 2350 kg/m³</td>
</tr>
<tr>
<td>Working time</td>
<td></td>
<td></td>
<td>10-15 Minutes</td>
</tr>
<tr>
<td>Temperature for application</td>
<td></td>
<td></td>
<td>3°C to 35°C</td>
</tr>
<tr>
<td>Compressive Strength @ 2.5 Litres per Pack</td>
<td>EN 12190</td>
<td>≥ 45 MPa</td>
<td>8 MPa @ 1 Hour, 30 MPa@ 2 Hour, 40 MPa@ 4 Hour, 50 MPa@ 24 Hour, 65 MPa@ 7 Day</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>EN12390-6</td>
<td></td>
<td>&gt;3.0 MPa</td>
</tr>
<tr>
<td>Flexural Strength</td>
<td>BS6319-3</td>
<td></td>
<td>10 MPa</td>
</tr>
<tr>
<td>Modulus of Elasticity, In Flexure</td>
<td>BS6319-3</td>
<td></td>
<td>&gt;20 GPa</td>
</tr>
<tr>
<td>Modulus of Elasticity, In Compression</td>
<td>EN13412</td>
<td>≥ 20 GPa</td>
<td>&gt;20 GPa</td>
</tr>
<tr>
<td>Adhesion - Concrete</td>
<td>EN1542</td>
<td>≥ 2.0 MPa</td>
<td>&gt;2.0 MPa</td>
</tr>
<tr>
<td>Adhesion after freeze/thaw (50 cycles with salt)</td>
<td>EN13687-1</td>
<td>≥ 2.0 MPa</td>
<td>&gt;2.0 MPa</td>
</tr>
<tr>
<td>Adhesion after thunder shower (30 cycles)</td>
<td>EN13687-2</td>
<td>≥ 2.0 MPa</td>
<td>&gt;2.0 MPa</td>
</tr>
<tr>
<td>Adhesion after dry cycling (30 cycles)</td>
<td>EN13687-4</td>
<td>≥ 2.0 MPa</td>
<td>&gt;2.0 MPa</td>
</tr>
<tr>
<td>Skid Resistance</td>
<td>EN13036-4</td>
<td></td>
<td>Class 1</td>
</tr>
<tr>
<td>Carbonation resistance</td>
<td>EN13295</td>
<td>d&lt;sub&gt;c&lt;/sub&gt; ≤ ref. concrete</td>
<td>d&lt;sub&gt;c&lt;/sub&gt; ≤ ref. concrete</td>
</tr>
<tr>
<td>Capillary absorption</td>
<td>EN13057</td>
<td>≤ 0.5 kg/m²/Hr&lt;sup&gt;0.5&lt;/sup&gt;</td>
<td>≤ 0.5 kg/m²/Hr&lt;sup&gt;0.5&lt;/sup&gt;</td>
</tr>
<tr>
<td>Cracking tendency</td>
<td>Coutinho Ring Test</td>
<td>No cracking after 180 days</td>
<td></td>
</tr>
</tbody>
</table>

Technical data shown are statistical results and do not correspond to guaranteed minima. Tolerances are those described in appropriate performance standards.

1 N/mm<sup>2</sup> = 1 MPa
1 kN/mm<sup>2</sup> = 1 GPa

Kingston House, 3 Walton Road, Pattinson North, Washington, Tyne & Wear, NE38 8QA, United Kingdom
T: +44(0) 191 416 8360 F: +44(0) 191 415 5966 W: www.nufins.com E: info@usluk.com

This information and/or specification contained herein or in our literature or given by Nufins, its employees, distributors, agents or representatives with regard to its product or their use or application are given in good faith, but no liability is accepted for any loss or damage (including direct or consequential loss or loss of profits) from the use of products because Nufins has no control over how its products are used and applied.
**Surface Preparation**
The substrate must be clean and sound, hence all grease, oil, dust and laitance must be removed by scarifying. The edges of the repair must be recessed at least 10mm. Thoroughly moisten surface but ensure no free water remains.

**Mixing & Placement**
Nupatch Bedding Mortar should be mixed using a forced action mixer. The mixing drum should be pre-wetted and any remaining water drained away. Add the water to the mixing drum and gradually add all of the powder component whilst the drum is turning. Continue mixing for two minutes to produce a hydrated and cohesive mortar which is ready for immediate use.
Place the mixed mortar to the desired thickness, allowing for compaction and bed the component. Minimum bed thickness 10mm. Finish as required and clean all equipment immediately with water.

**Packaging**
Nupatch Bedding Mortar is available in 25kg units. (Yield approximately 12 Litres).

**Storage**
Nupatch Bedding Mortar should be stored in cool, dry conditions and protected from damp.

**Health & Safety**
Nupatch Bedding Mortar does not present any undue hazard and is non-toxic. However, as it is alkaline, gloves should be worn and any material should be washed from the skin and eyes before it dries with clean water. The normal standards of hygiene should be observed and the use of a barrier cream is advisable.

**Limitations**
The minimum application thickness should be 10mm. Minimum application temperature is 3°C. For low temperature applications ensure the substrate has not frozen. Please contact Nufins technical department for advice.

**Technical Support**
Through our technical department and laboratories we can offer a comprehensive service to specifiers and contractors. Technical representatives are available to provide further information and arrange demonstrations.