Dr. Fixit Unigrount 500

HIGH PERFORMANCE NON-SHRINK GROUT FOR 10-100 MM

Description
Dr. Fixit Unigrount 500 is a high performance non-metallic, pre-mixed cementitious non-shrink grout for thickness, between 10 mm and 100 mm. Dr. Fixit Unigrount 500 is non-shrink, non-corrosive, non-oxidizing and is free from chlorides and nitrates.

Typical Applications
- Under-plate grouting pre-cast concrete,
- Bedding bearing plates,
- Anchor bolt fixing, packing and caulking,
- Filling precast joints and tie rod holes

Features
- Free of bleeding and settlement.
- Good fluidity for easy application in difficult to access areas.
- High non-corrosive bonding to steel and concrete.
- Excellent flow and high early strength characteristics.
- Non-shrink
- Chloride free.

Packaging
25 kg bags

Method of Application

1. SURFACE PREPARATION
- Concrete surfaces should be sound, stable, clean and free from laitance, paint, oil, grease, and any residual mould release agents and curing compounds.
- An abraded or profiled substrate surface is preferable. Metal surfaces should be free from any rust, scaling or paint and abraded to reveal clean, bright metal finish.
- Seal the formwork joints using a suitable sealant or gun grade adhesive to prevent leakage.
- Mineral surfaces should be thoroughly wetted with water for 3 - 4 hours prior to application of grout.

2. APPLICATION
- Dr. Fixit Unigrount 500 should be mixed in a high shear grout mixer for optimum dispersion and workability.
- Ensure the mixing water is below 25°C using ice if necessary, especially if the ambient temperature is Above 40°C. Ideal mixed grout temperature is 25 – 30°C.
- Add approximately 85% of the water required for the chosen consistency to the mixer and then slowly add the powder. Mix for 1 - 2 minutes and then add remaining water to the desired final consistency. Do not add more than the maximum recommended water quantity.
- Should the necessity arise, Dr. Fixit Unigrount 505 can be installed beyond 100 mm thickness by mixing 1:1 or 2:1 by weight of 10 mm clean, graded aggregates to a required consistency. This aggregate should be added at this stage prior to final mixing.
- Mix for an additional 2 – 3 minutes until a smooth, uniform, homogenous mix is achieved.
- Mix water as recommended for required consistency, pour the mixed grout via a hopper from one side only to avoid air entrainment. Maintain a head of at least 150-250 mm to ensure pressure to promote the material flow.
Particularly high strengths can be achieved by thorough ‘ram’ compaction of a ‘Drypack’ consistency mix of Dr. Fixit Unigrout 500.

- For large volume pouring it is advisable to use a diaphragm pump.
- Check for any grout loss through joints. Stop leakages with Dr Fixit Leak Plug.
- Good curing practice is essential for all exposed surfaces. Immediately after pouring apply Rokseal CM. Alternatively cure using water ponding, spray misting or covering with wet sheeting for a minimum of 7 days.

Precautions & Limitations
- Do not add extra water beyond recommended in any circumstances.
- Do not use in unrestrained areas as it may lead to cracks.
- Shoulder width between base plate and form work should be kept as minimum as possible.
- Ensure that the shuttering is suitably robust to withstand the weight of grout.

Consult our Technical Department for further details.

Technical Information (Typical properties @ 25 ± 2° C & 50 %R.H)

<table>
<thead>
<tr>
<th>Properties</th>
<th>Specification</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wet Density, kg/m³</td>
<td>ASTM C185-02</td>
<td>2200 ± 50</td>
</tr>
<tr>
<td>Consistency</td>
<td>ASTM C1107</td>
<td>Flowable @ 0.16 w/p</td>
</tr>
<tr>
<td>Expansion (Plastic)</td>
<td>ASTM C827</td>
<td>Upto 2.0 % positive Expansion</td>
</tr>
<tr>
<td>(Hardened)</td>
<td>ASTM C1090</td>
<td>0 - 0.3 %</td>
</tr>
<tr>
<td>Compressive Strength, N/mm²</td>
<td>ASTM C1091</td>
<td>25 min.</td>
</tr>
<tr>
<td>1 Day</td>
<td></td>
<td>60 min.</td>
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<tr>
<td>7 Days</td>
<td></td>
<td>80 min.</td>
</tr>
<tr>
<td>28 Days</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexural Strength, N/mm², 28 days</td>
<td>BS 6319 - 3</td>
<td>10 min.</td>
</tr>
<tr>
<td>Setting Time</td>
<td>Initial</td>
<td>4 - 5 hrs</td>
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<tr>
<td></td>
<td>Final</td>
<td>7 - 8 hrs</td>
</tr>
<tr>
<td>Water Requirement for Mix Consistency</td>
<td>Litres per Unit</td>
<td></td>
</tr>
<tr>
<td>Flow</td>
<td></td>
<td>4.0 litres</td>
</tr>
<tr>
<td>Plastic</td>
<td></td>
<td>3.5 litres</td>
</tr>
</tbody>
</table>

Theoretical Coverage
25 kg bag yields: 13.4 ltrs at flowable consistency
12.6 ltrs at plastic consistency

Storage
When stored in dry conditions in original unopened packaging this product has a shelf life of 12 months. Storage above 35°C and high humidity (above 50 %) will reduce shelf life and product performance.
Health and Safety
This product contains cement. Contact with skin may cause irritation. It should not be inhaled, and properly designed and maintained face mask should be used whilst handling, pouring and mixing the powder. Avoid contact with the product by working carefully, using a barrier cream and wearing protective gloves. If any contact does occur, wash thoroughly with soap and water. Use eye protection. Avoid contact with eyes, if such contact occurs irrigate with water for 20 minutes and seek medical advice. If mistakenly ingested, drink plenty of clean water and seek medical advice. See MSDS for further information.

DR. FIXIT offers a wide range of Structural Protection and Waterproofing systems