MOONA-FG150 is a preblended cement-based masonry grout material which is used for filling hollow blocks, masonry unit cores, gaps and spaces behind walls.

MOONA-FG150 is a fine grout category suitable for internal and external applications in wet and dry conditions in the construction of masonry structures.

MOONA-FG150 is composed of hydraulic binders, selected manufactured aggregates, and special additives providing excellent workability and consistency for the poured grout.

Features/Advantages

- Pre-blended dry material that only requires the addition of potable water at site.
- Factory controlled ensuring high quality product with assured consistency.
- Designed for external and internal applications in humid and dry conditions.
- Easy to apply with excellent workability providing a faster construction process; saving cost, time and manpower.
- Excellent resistance to harsh weather conditions providing excellent durability.
- Strong bonding and adhesion on a variety of masonry types.
- In accordance with international specifications.

Conformity with Standards

MOONA-FG150 conforms to the following standards:

- ASTM C476
- ASTM C150
- ASTM C404

Technical Data

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Grey powder</td>
</tr>
<tr>
<td>Aggregate Size</td>
<td>Up to 2 mm</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>1.4 ± 0.1 kg/l</td>
</tr>
<tr>
<td>Wet Density</td>
<td>1.95 ± 0.1 kg/l</td>
</tr>
<tr>
<td>Working life</td>
<td>30 – 45 min</td>
</tr>
<tr>
<td>Setting Time</td>
<td>3 to 4 hours</td>
</tr>
<tr>
<td>Compressive Strength</td>
<td>≥ 15 N/mm²</td>
</tr>
<tr>
<td>Slump</td>
<td>200 – 280 mm</td>
</tr>
<tr>
<td>Grout Type</td>
<td>Fine conventional grout</td>
</tr>
<tr>
<td>Yield</td>
<td>Approx 550 l/t</td>
</tr>
<tr>
<td>Packing</td>
<td>Bulk, jumbo and small bags</td>
</tr>
<tr>
<td>Shelf Life</td>
<td>12 months</td>
</tr>
</tbody>
</table>

1 The above technical data are generated under laboratory conditions, some variations are expected due to weather, site, and application conditions which are beyond the control of the manufacturer.
2 Compressive strength at 28 days as per ASTM C109.
3 Slump at time of casting as per ASTM C143.
4 Grout type as per ASTM C476.
5 Jumbo bags are 1 ton each. Small bags are 50 kg each.
6 Under dry shaded conditions and in its original unopened packing.
Application Instructions

Surface Preparation

Surfaces must be clean, sound, and free from oil, grease or any material that may impair the adhesion and bonding of MOONA-FG150 with the substrate surface. Block surfaces should be prewetted with clean potable water without excess free surface water before applying MOONA-FG150.

Mixing

- **Mixing By Grout Power Machine**: Adjust the flow meter to obtain a mixed material with a slump meeting with the project specifications, as determined by test method ASTM C143 or equivalent testing methods.

- **Mechanical Batch Mixer Mixing**: Add 50 kg of MOONA-FG100 to 11 to 13 liters of clean potable water (always add the material to water, not water to the material). Mix with mechanical batch mixer at least 5 minutes until you obtain a mixed material with a slump that meets the project specifications, as determined by Test Method C143 or equivalent testing methods.

ASTM C476 requires that conventional grout shall be mixed to a slump of 200 to 280 mm as determined by Test Method ASTM C143/C143M.

Application

Pour the mixed MOONA-FG150 into hollow blocks, masonry unit cores, gaps or spaces behind walls within a period of 30 to 45 minutes after mixing. The use of a power grout pump is recommended for high lift grouting. The use of a pump provides efficient filling and fast pouring, which saves time and cost and allows for efficient grout pumping in towers and other high-rise structures.

Curing

Cure the applied MOONA-FG150 by spraying clean potable water on the surfaces of masonry walls 2 to 3 times daily for a period of 2 to 3 days.

Precautions & Limitations

Clean the tools with water before product hardening. In case of hardening, tools should be cleaned mechanically. Do not re-temper the mixed material. Do not apply MOONA-FG150 at an ambient temperature lower than 5°C. Do not mix MOONA-FG150 with any other material not recommended by Saudi Readymix. Protect MOONA-FG150 from direct sunlight, wind and rain during application. Saudi Readymix has no responsibility for the defects due to the improper or non-recommended use of the product. For further information contact Saudi Readymix.

Storage

Bags should be kept sealed, placed on wooden pallets above ground level and covered by a waterproof tarpaulin.

Health & Safety

Since MOONA-FG150 is a cement-based product so it is a highly alkaline material. Care should be taken during the use and storage of MOONA-FG150 to avoid direct contact with eyes and skin. The use of protective gloves and goggles during application is recommended. Wash the skin with soap and water in case of contact. In case of contact with the eyes, wash immediately with plenty amount of clean water and seek medical advice.

MOONA-FG150 is a noncombustible material as per BS EN 13501-1 (Class A1).

Legal Disclaimer:

The terms and conditions of Saudi Readymix legal disclaimer applies and are an integral part of this product data sheet. Please refer to the legal disclaimer document for further information.

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