REPAMERK 301
Cement Based, Structural Repair Mortar

Description

REPAMERK 301 is a cement based single component, polymer and fiber reinforced, thixotropic structural repair mortar with high strength.

Fields of Application

- To repair of the reinforced concrete elements,
- To protect concrete against sulphate and chlorine,
- To repair and protect underground structures,
- Structural and non-structural repairs of high strength concrete elements
- To repair light and medium traffic floors,
- To repair the tie-rod and cone holes.

Features and Benefits

- Non-shrink.
- Applicable as 10-40 mm thickness at one layer.
- Perfect bonding to the concrete and steel.
- High compressive strength.
- Does not sag due to the thixotropic behavior.
- Waterproof.
- Resistant to chloride, sulphate and oils.
- Easy to apply, mixed with only water.

Technical Data

<table>
<thead>
<tr>
<th>Content</th>
<th>Mineral fillers, polymer modified special cement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Grey</td>
</tr>
<tr>
<td>Mixing Ratio</td>
<td>25 kg REPAMERK 301 : max. 4 L water</td>
</tr>
<tr>
<td>Mixture Density</td>
<td>2,25±0,1 g/cm³</td>
</tr>
<tr>
<td>Adhesion Strength (Concrete)</td>
<td>&gt;2,0 N/mm² (28 days) (TS EN 1542)</td>
</tr>
<tr>
<td>Compressive Strength</td>
<td>&gt;20 N/mm² (1 day) (TS EN 196)</td>
</tr>
<tr>
<td></td>
<td>&gt;50 N/mm² (7 days)</td>
</tr>
<tr>
<td></td>
<td>&gt;60 N/mm² (28 days)</td>
</tr>
<tr>
<td>Flexural Strength</td>
<td>&gt;7 N/mm² (28 days) (TS EN 1542)</td>
</tr>
</tbody>
</table>
Technical Data Sheet

REPAMERK 301
Cement Based, Structural Repair Mortar

<table>
<thead>
<tr>
<th>Elastic Modulus</th>
<th>&gt;20000 N/mm² (28 days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capillary Water Absorption</td>
<td>&lt; 0,5 kg/m².saat²⁵ (TS EN 13057)</td>
</tr>
<tr>
<td>Service Temperature</td>
<td>-20°C to +400°C</td>
</tr>
<tr>
<td>Application Temperature</td>
<td>+5°C to 30°C</td>
</tr>
<tr>
<td>Application Tools</td>
<td>Trowel</td>
</tr>
<tr>
<td>Pot Life</td>
<td>30 minutes</td>
</tr>
<tr>
<td>Curing Time</td>
<td>24 hours</td>
</tr>
<tr>
<td>Pedestrian Traffic</td>
<td>28 days</td>
</tr>
<tr>
<td>Fully Curing</td>
<td></td>
</tr>
<tr>
<td>HS Code</td>
<td>3214.10.90.00.00</td>
</tr>
</tbody>
</table>

**Application Procedure**

**Preparation of Substrate**
Concrete surface must be sound, clean and dry. Surface must be clean off dust, dirt, rust, oil and all contaminants. If there is a water leakage, it must be drained or properly plugged. Concrete surfaces must be saturated with water before application. Immediately before pouring, surface should be wetted, then remove all excess or standing water from within any formwork.

**Application Method**
25 kg REPAMERK 301 is poured into maximum 4 liters of water and mix for 3-4 minutes under low speed mixer until having a homogenous consistency. Let the mortar have rest for 4 minutes and re-mix for 30 seconds. Prepared mortar should be applied within 30 minutes in 20°C. REPAMERK 301 is applied on the surface by using a steel trowel or spray gun. Application thickness should be between 10-40 mm. If needed second coat should be applied after 24 hours in same way. If required more smooth finish, water should be sprayed onto the mortar and the surface should be finished with using steel or wooden trowel. Application surface must be protected from the rain, wind, frost etc. during first 24-48 hours after finishing repair.

**Consumption**
For 10 mm thickness approximately 19,2 kg/m² powder is required. Recommended application thickness is min. 10 mm / max. 40 mm.
REPAMERK 301
Cement Based, Structural Repair Mortar

Packaging
25 kg kraft bag

Shelf Life
12 months in original, unopened package.

Storage
Store in dry area between +5°C and +35°C. Protect from heat, freezing and direct sunlight.

Cleanup Information
Clean tools and equipment with water immediately after use. Dried material can only be removed mechanically.

Cautions / Limitations
- Application surface must be protected from the rain, wind, frost etc. during first 24-48 hours after finishing repair.
- Do not use curing material.
- Substrate pH must be at least 5.5.
- Prepared repair mortar must be applied within 30 minutes at 20°C.
- It may be harmful with skin contact.
- Do not apply in freezing conditions or during precipitation.
- Protect applied materials from rain, freezing, foot traffic and continuous high humidity until completely dry.
- Do not use when air and surface temperatures are below +5°C and above +35°C.
- Allow 4 weeks before washing or cleaning for full cure.

Health and Safety

Warning! Cause eye and skin irritation. If eye or skin contact, get immediate medical attention. If swallowed, do not induce vomiting. Call a physician or poison control center. Never give anything by mouth to an unconscious person.
Technical Data Sheet

REPAMERK 301
Cement Based, Structural Repair Mortar

Wash hands thoroughly after handling. Wear protective clothing, gloves, eye and face protection. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Dispose of unused, contents, container and other contaminated wastes in accordance with local, state, federal and provincial regulations.

Keep container closed when not in use. Keep out of the reach of children.

**Limited Warranty:** This product is subject to a written limited warranty which can be obtained free of charge from BAUMERK Company. Please contact with technical service department for further information and support.