MagniFlex™ Super 8820

Multipurpose, Polymer-Modified, Floor and Wall Tile Mortar

Meets or exceeds ANSI A118.4 and ANSI A118.11 requirements.

**Product Description**

*MagniFlex Super 8820* is a multipurpose, polymer-modified, dry-set mortar for setting tile and stone.

**Features**

- Excellent bond capacity.
- For setting floor and wall tile.
- Mix with water only.

**Uses**

- For residential (interior floor, countertop and wall; exterior floor and wall) and commercial (interior floor and wall, and exterior floor) installation of dimension stone, ceramic, porcelain and quarry tile over most traditional, well-prepared, nondeflecting substrates.
- Use when substrate temperature is between 4°C and 35°C (40°F and 95°F).
- When installing light-colored stones and translucent marble, use white *MagniFlex Super 8820*.
- Do not use over presswood, oriented strand board (OSB), particleboard, chipboard, Masonite, Lauan, gypsum floor-patching compounds, metal or similar dimensionally unstable substrates.
- Do not use for installations subject to prolonged water immersion (e.g., pools, fountains, showers and hot tubs).
- Do not use for setting moisture-sensitive natural stone such as green marble, green granite or their agglomerates, or for Rosso Levanto or Negro Marquina marble.
- Do not use on commercial exterior building facades such as shopping malls, high-rise residential units and office buildings.

**Substrate Requirements**

All surfaces must be structurally sound, level and clean of all substances than can impair the adhesive’s bond to the substrate. These include, but are not limited to, concrete sealers or curing agents, existing adhesive, dirt, wax, tar, paint and loose toppings. If the surface contains these substances, they must be mechanically removed. The use of solvents, adhesive removers or acid etching is not recommended.

**Technical Quick Reference**

**Recommended Trowel Sizes and Approximate Coverages**

Based on 22.7-kg (50-lb.) bag

<table>
<thead>
<tr>
<th>Trowel Size</th>
<th>Coverage</th>
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</thead>
<tbody>
<tr>
<td>6 x 6 x 6 mm</td>
<td>6.97 to 8.36 m² (75 to 90 ft²)</td>
</tr>
<tr>
<td>6 x 10 x 6 mm</td>
<td>5.11 to 6.04 m² (55 to 65 ft²)</td>
</tr>
</tbody>
</table>

* Coverages are for estimating purposes only. Actual coverages may vary according to substrate conditions, trowel used and setting practices. To ensure full contact, proper trowel selection is mandatory (see “Application”).

**Product Characteristics at 23°C (73°F)**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pot life</td>
<td>1-1/2 to 2 hours</td>
</tr>
<tr>
<td>Open time</td>
<td>Up to 20 minutes</td>
</tr>
<tr>
<td>Adjustibility</td>
<td>45 minutes</td>
</tr>
<tr>
<td>Initial set (before grouting)</td>
<td>16 to 24 hours</td>
</tr>
<tr>
<td>Final set (before general foot traffic)</td>
<td>72 hours after installation</td>
</tr>
<tr>
<td>Final set (before heavy traffic)</td>
<td>7 days</td>
</tr>
</tbody>
</table>

**Shear strength per ANSI A118.4 tests (at 28 days):**

<table>
<thead>
<tr>
<th>Material</th>
<th>Shear strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ceramic mosaic</td>
<td>1.93 MPa (280 psi)</td>
</tr>
<tr>
<td>Quarry tile to quarry tile</td>
<td>2.03 MPa (295 psi)</td>
</tr>
<tr>
<td>Quarry tile to plywood</td>
<td>1.31 MPa (190 psi)</td>
</tr>
</tbody>
</table>

**Packaging**

- 22.7-kg (50-lb.) bag

**Colors**

- Gray and white

**Shelf life**

- 12 months when stored in a dry, heated area. Protect from moisture.

**Cleanup**

- With clean water while fresh

**Health and safety**

- Consult the Material Safety Data Sheet (MSDS) for safe-handling instructions.
Approved Substrates Properly Prepared
(see “Substrate Requirements for Tile” document for preparation details):
• Fully cured concrete (at least 28 days old).
• Masonry block.
• Concrete mortars and leveling coats.
• Properly prepared Group 1, CC or better, exterior-grade plywood (interior residential and light commercial dry conditions only).
• Gypsum plaster and gypsum wallboard (properly primed walls only).
• Cement backer units.
• Interior installations over properly prepared and well-bonded unglazed tile, cement terrazzo, vinyl composition tile (VCT), vinyl asbestos tile (VAT) and cutback adhesive residue.

Note: Consult Technical Services (1-888-243-6263) for installation recommendations regarding substrates and conditions not listed.

Mixing
1. Mix only as much MagniFlex™ Super 8820 as can be used in 1-1/2 to 2 hours.
2. Pour 5.68 L (1.5 U.S. gals.) of cold, clean water into a clean container.
3. Gradually add 22.7 kg (50 lbs.) of MagniFlex Super 8820 while slowly mixing (about 5 minutes at 300 rpm).
4. Mix thoroughly (about 2 minutes) to a smooth consistency.
5. Wait 10 to 15 minutes.
6. Remix (about 2 minutes) without adding more water or powder.
7. If stiffening occurs before all material is used (about 1-1/2 to 2 hours), remix by hand or machine, but do not add more water.
8. Wash tools and hands with water.

Application
1. Pick a notched trowel (see chart) with enough depth to achieve at least 85% contact of MagniFlex Super 8820 to the back of tile for all interior applications. For commercial as well as marble, granite and other natural-stone installations, achieve at least 95% contact in accordance with applicable ANSI specifications.
2. Apply a thin coat of MagniFlex Super 8820 into substrate with the trowel’s flat side.
3. Apply second coat and use trowel’s notched side to comb MagniFlex Super 8820 in a single direction for an even-setting bed.
4. Do not spread more MagniFlex Super 8820 than can be covered with tile within 15 to 20 minutes (about 1.86 m² [20 ft²]).
5. Before MagniFlex Super 8820 surface “skins over” on substrate, place tiles firmly into position with a slight twisting motion to ensure good contact with MagniFlex Super 8820. Remove any skinned-over MagniFlex Super 8820 and replace with fresh material.
6. Follow immediately with thorough beat-in to flatten ridges or notches into a continuous bed. Allow at least 25% of tile thickness to be embedded into the MagniFlex Super 8820.
7. Make alignments and adjustments within 45 minutes of beat-in procedure.
8. Clean tile surface with damp towel.
9. Do not disturb, grout or walk on tiles for at least 24 hours after installation.
10. Wash tools and hands with water.

Expansion and Control Joints
1. Provide for expansion and control joints within the tile work where specified or where necessary. Refer to TTMAC handbook.
2. Do not cover any expansion joints with MagniFlex Super 8820.
3. Cut tiles on both sides along the edges of expansion joints or control joints.
4. Protect tilework with metal strips along both edges of structural building expansion joints.
5. Install specified compressible bead and sealant in all expansion and control joints.

Grouting
Allow tile to reach initial set (16 to 24 hours) before grouting with appropriate Chembond® grout.

Protection
1. Provide for dry, heated storage on site and deliver materials at least 24 hours before tilework begins.
2. Floors: Keep from general traffic for a minimum of 72 hours after installation. Plywood or stepping boards may be used after 24 hours when occasional stepping on the floor is unavoidable.
3. Walls: Protect from impact, vibration and heavy hammering on adjacent and opposite wall for at least 14 days after installation.

Important Notice
Before using, user shall determine the suitability of the product for its intended use, and user alone assumes all risks and liability whatsoever in connection therewith. Any claim shall be deemed waived unless made in writing to us within fifteen (15) days from date it was, or reasonably should have been, discovered.