



## MULTI-PURPOSE FLEX MORTAR

### Description

Multi-Purpose Flex Mortar is a single-component, high-performance, polymer-modified mortar to be mixed only with water.

### Where to Use\*

- Most interior/exterior\* installations on floors and walls.
- Installation of ceramic and porcelain tile, quarry tile, pavers, Saltillo tile, and many types of marble, granite and natural stone.

\* See *Limitations*

### Features and Benefits

- Polymer-enriched for high performance and deformability
- Smooth and creamy consistency makes it easy to apply

### Industry Standards & Approvals

Refer to the MSDS (Material Safety Data Sheet) for specific data related to VOC's, Health & Safety, and Handling of Product

**ANSI:** Exceeds ANSI A118.4 and ANSI 118.11 Bond Strength Requirements

### Product Performance Properties

#### ANSI Specification

28-Day Test	Test Method	ANSI Specification
Impervious ceramic (porcelain) mosaics shear strength	ANSI A118.4	>200 psi (1,38 MPa)
Glazed wall tile shear strength	ANSI A118.4	>300 psi (2,07 MPa)
Quarry tile to quarry tile shear strength	ANSI A118.4	>150 psi (1,03 MPa)
Quarry tile to plywood shear strength	ANSI A118.11	>150 psi (1,03 MPa)

### Shelf Life and Application Properties\*

At 73° F (23° C) and 50% relative humidity

Shelf life.....1 year

Open time.....30 minutes

Pot life.....> 2 hours

Time before grouting.....16 to 24 hours

\* *Cold temperature or high humidity may alter these properties*

### Approximate Product Coverages\*

#### 50 lbs (22,7 kg)

Square-notch, 1/4" X 1/4" X 1/4" (6 X 6 X 6 mm)	75-90 sq. ft. (6,97 to 8,36 m <sup>2</sup> )
Square-notch, 1/4" X 3/8" X 1/4" (6 X 10 X 6 mm)	55-65 sq. ft. (5,11 to 6,04 m <sup>2</sup> )

\* *Trowel dimensions are width/depth/space. Actual coverages will vary according to substrate profile and tile type*



### **Limitations**

- Do not use for commercial exterior vertical applications such as facades.
  - Do not install at temperatures below 40° F (4° C) or above 95° F (35° C).
  - Do not use for moisture-sensitive stone (green marble, some limestones and granites), agglomerate tiles or resin-backed tiles. Instead use suitable epoxy or urethane adhesives. See respective data sheet for more information.
  - Do not use over dimensionally unstable substrates such as hardwood flooring, oriented strand board (OSB), substrates containing asbestos, or metal. See suitable substrates below.
  - Use white Multi-Purpose Flex Mortar when installing light-colored stones and translucent marble.
  - Do not use for installations subject to prolonged water immersion.
  - Not recommended for areas subject to severe freeze/thaw conditions.
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### **Suitable Substrates**

- Concrete (cured at least 28 days)
  - Masonry cement block, brick, cement mortar beds and leveling coats
  - Cement backer units (CBU) – see manufacturer’s installation guidelines
  - APA and COFI Group 1 exterior-grade plywood (interior, residential and light commercial in dry conditions only)
  - Properly prepared vinyl composition tile (VCT) and cutback residue (interior only).
  - Properly prepared existing ceramic and porcelain tile, quarry tile and pavers (interior only)
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### **Substrate Preparation**

- All substrates should be structurally sound, stable, dry, clean and free of any substance or condition that may reduce or prevent proper adhesion and must be in accordance with ANSI A108.5 standards.
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### **Mixing Steps**

- Before starting, take appropriate safety precautions. See MSDS for details
- In a clean mixing container, pour approximately 1-1/2 U.S. gals. (5,69 L) of clean potable water.
- Gradually add 50-lbs (22,7 kgs) of powder while slowly mixing.
- Use a low-speed mixing drill (approximately 300 rpm), with an angled cross blade mixer or double box mixer. Mix thoroughly until mixture becomes a smooth, homogenous, lump-free paste. Avoid prolonged mixing.
- Let mixture stand (“slake”) for 10-15 minutes.
- Remix
- If mixture becomes heavy or stiff, remix without adding more liquid or powder.

### **Product Application**

- Choose a notched trowel (see chart) with sufficient depth to achieve > 80% mortar contact to both the tile and substrate for all interior applications and > 95% for exterior installations, commercial floor and wet applications. It may be necessary to back-butter in order to reach these requirements. (Refer to ANSI A108.5 specifications and TCA Handbook guidelines.)
- With pressure, apply a coat by using the trowel’s flat side to key mortar into substrate.
- Apply additional mortar, combing it in a single direction with the trowel’s notched side.
- Spread only as much mortar as can be tiled before product skins over. Open time can vary with job-site conditions.
- Place the tiles firmly into the wet mortar. Push the tiles back and forth in a direction perpendicular to trowel lines, to collapse the mortar ridges and to help achieve maximum



- coverage. Ensure proper contact between mortar, tile and substrate by periodically lifting a few tiles to check for acceptable coverage.
- Remove excess mortar from the joint areas so that at least 2/3 of the tile depth is available for grouting (see ANSI A108.10 guidelines)
  - Provide for expansion and control joints as specified per TCNA Detail EJ171 or TTMAC Specification Guide 09 30 00 Detail 301EJ.
  - Clean tools and tile while mortar is fresh.
  - Protect from traffic for 24 hours. Protect from heavy traffic for 7 days.
  - Protect from frost and rain for 7 days