



# GLASS-MATE™

## GLASS TILE MORTAR

### KEY FEATURES

- For installing mosaic and glass tile
- Bright white enhances glass tile appearance
- Mix with Bostik 425™ Multi-Purpose Acrylic Latex Admixture additive for submerged tile installations

### DESCRIPTION

Bostik Glass-Mate™ is a premium, polymer-modified, thinset mortar that exhibits superior bond strength, durability, non-sag properties and workability. Its bright white color and high polymer content make it ideal for setting individual glass tiles, sheet mounted glass tile and most types of tile or natural stone in thinset applications over a variety of substrates.

Glass-Mate™ offers unmatched adhesion and toughness which, when used with Bostik Dimension® RapidCure™ Glass-Filled, Pre-Mixed, Urethane Grout offers the most robust system available today for glass tile installation. The superior adhesion of Glass-Mate™, combined with the flexibility and toughness of Dimension® RapidCure™, provide a system engineered to optimally accommodate the thermal expansion and contraction inherent in glass tile. This unique feature set results in an installation that is significantly less prone to tile or grout joint cracking due to severe temperature fluctuations. Glass-Mate™ offers excellent non-sag characteristics.

Glass-Mate™ contains 1% post-consumer, recycled content and when used along with Bostik Dimension® RapidCure™ Glass-Filled, Pre-Mixed, Urethane Grout (60% pre-consumer, recycled glass) offers unmatched specification criteria for projects seeking USGBC LEED® certification. Glass-Mate™ contains Bostik's Blockade™ antimicrobial protection. This mortar also contains antimicrobial protection which helps protect against the growth of bacteria, mold and mildew.

Installations over substrates such as exterior grade plywood (interior dry areas only), or in submerged applications, require Glass-Mate™ to be mixed with Bostik 425™ Multi-Purpose Acrylic Latex Admixture instead of water.



### TYPICAL PHYSICAL PROPERTIES

Open Time at 70°F (21.1°C)	20-30 minutes
Adjustment Time at 70°F (21.1°C)	15-20 minutes
Pot Life at 70°F (21.1°C)	1-2 hours
Initial Set at 70°F (21.1°C)	6-8 hours
Final Set at 70°F (21.1°C)	8-10 hours
Exceeds ANSI A118.4 and A118.11 requirements	
Heavy Traffic, Frost or Rain	7 Days
Water Submersion (When mixed with Bostik 425™ Multi-Purpose Acrylic Latex Admixture instead of water)	21 Days per ANSI 137.2.7

## WHERE TO USE

Residential & Commercial – Most interior/exterior floors, walls and countertops.

## SUITABLE TILE OR STONE

- Sheet mounted mosaics (glass, ceramic, porcelain or stone)
- Individual glass tiles up to 6" x 6" (15 cm x 15 cm) or 36 square inches of glass, ceramic, porcelain, most natural stone, pavers, quarry and saltillo tile, most marble and granite, up to 15" x 15" (38 cm x 38 cm)

## SUITABLE SUBSTRATES

(When Mixed With Water)

- Concrete (dry, cured at least 28 days)
- Cement block, brick, cement mortar beds, self-leveling underlayments
- Gypsum wallboard and plaster (interior walls in dry areas only)
- Cementitious backer board (see manufacturer's installation guidelines)
- Bostik Ultra-Set® Advanced; Gold Plus™ and Black-Top™ membranes

## SUITABLE SUBSTRATES

(When Mixed With Bostik 425™ Multi-Purpose Acrylic Latex Admixture)

- Substrates listed above
- Structurally-sound APA and CANPLY Group 1 exterior grade plywood (interior, residential and light commercial in dry areas only)
- Existing, well-bonded, properly prepared ceramic or porcelain tile, cement terrazzo, quarry tile, pavers and natural stone (interior, dry conditions only)

**Note:** Glass tile may not be suitable over some substrates (such as plywood). See current TCNA Handbook for Glass Tile Selection and Installation. Follow tile manufacturer's recommendations for substrates or membranes.

## DIRECTIONS FOR USE

Read and understand the technical and safety data sheets completely before beginning installation. Follow applicable ANSI, NTCA and TCNA installation standards. Refer to [www.bostik-us.com](http://www.bostik-us.com) for the most recent product information and safety data sheet prior to installation

## SURFACE PREPARATION

All surfaces must be structurally sound, clean, free of dust, dirt, oil, grease, water, curing compounds, sealers, waxes or any contaminants that may inhibit proper bond. TCNA recommends roughing or scarifying glazed tile substrates.

**Note:** It is the user's responsibility to determine the condition and suitability of all surfaces before application.

## MIXING

1. **25 lb Bag:** Add 2.75 U.S. quarts (2.6 L) of clean, potable water [or Bostik 425™ Multi-Purpose Acrylic Latex Admixture instead of water] to a mixing pail. Add 25 lbs. Glass-Mate™ mortar to the pail while slowly mixing (150 to 600 RPM) to a smooth creamy consistency.
2. **9 lb Bag:** Add 1 quart (.95 L) of clean, potable water [or Bostik 425™ Multi-Purpose Acrylic Latex Admixture instead of water] to a mixing pail. Add 9 lbs. Glass-Mate™ mortar to the pail while slowly mixing (150 to 600 RPM) to a smooth creamy consistency.
3. Do not re-temper by adding more liquid or powder. No slake required.

## APPLICATION

1. Review tile manufacturer's specifications to verify product suitability for specific installations and installation methods.
2. Select a notched trowel (see chart) with sufficient depth to achieve >80% mortar coverage for ceramic or porcelain tile for all interior installations; >95% coverage for exterior installations, commercial floors and wet applications. Glass tile installations require 100% continuous coverage. It may be necessary to "back-butter" tile to achieve these requirements. Back-buttering is typically required on all tiles larger than 4" x 4" (10 cm x 10 cm). See current ANSI standard and TCNA Handbook for proper installation specifications.  
**Note:** If the appropriate coverage is not achieved, a larger trowel may be required.
3. Install at temperatures between 50°F (10°C) - 100°F (37.8°C).
4. Use flat edge of trowel to apply a thin coat of Glass-Mate™ to substrate.
5. Apply additional Glass-Mate™ to substrate and apply in one direction with trowel. For transparent glass tile and mosaics, "knock down" trowel ridges with flat edge of trowel so ridges are not visible after the tile has been installed.
6. Spread only as much Glass-Mate™ that can be tiled before thinset "skins over" (approximately 20 minutes). If skinning occurs before tile is installed, remove and re-apply Glass-Mate™.
7. Install the tile into wet Glass-Mate™ with slight back/forth motion (perpendicular to trowel ridges) to ensure maximum coverage and bond. Periodically lift some tiles to check for proper thinset transfer.
8. Tap installed tiles with flat surface of rubber grout float to flatten mortar ridges and achieve "in-plane" tile installation.
9. Remove excess Glass-Mate™ from tile face and from tile joints so at least 2/3 of tile depth remains for grout.

## CLEAN-UP

Clean all tools with soap and water. Do not allow material to dry on surface of tile.

## CURING

Keep all foot traffic off the installation until tile is firmly set (approximately 12 hours). Set times are dependent upon temperature, humidity, porosity of substrate and tile size.





## GROUTING

Depending on ambient, slab, and material temperatures, grouting can generally begin after 12 hours with most Bostik grouting systems. Allow 48 hours before grouting with any Bostik EzPoxy™ or any 100% solids epoxy grout. Allow 24-48 hours before grouting with Bostik pre-mixed grouts.

## LIMITATIONS

- **DO NOT APPLY OVER:** Dimensionally unstable substrates such as hardwood flooring, oriented strand board (OSB), particle board, Masonite, luan, or similar unstable substrates; substrates containing asbestos or metal.
- **DO NOT USE:** In installations where deflection exceeds L/240 (1" in 20 feet). For marble and limestone, refer to the Marble Institute Of America's or TCNA Handbook for deflection recommendations.

## RECOMMENDED TROWELS FOR MAXIMUM PERFORMANCE

Coverage 85-100 ft <sup>2</sup>	Coverage 70-80 ft <sup>2</sup>	Coverage 50-60 ft <sup>2</sup>	Coverage 30-35 ft <sup>2</sup>
 <p><b>3/16" X 5/32"</b> V-Notch</p>	 <p><b>1/4" X 1/4"</b> Square-Notch</p>	 <p><b>1/4" X 3/8"</b> Square-Notch</p>	 <p><b>1/2" X 1/2"</b> Square-Notch</p>

Trowel size is suggested to maximize mortar transfer/coverage. Periodically check coverage during installation. Uneven substrate may require the use of either a leveling/patching material, or larger notched trowel for proper mortar coverage.

- **DO NOT USE:** To install moisture sensitive stone such as green, red or cultured marble, some limestone, green granite, agglomerate tiles, or resin-backed tiles. Instead, use a suitable epoxy, urethane adhesive or Bostik Reflex®.
- **DO NOT USE:** To install glass tile larger than 6" x 6"; over plywood on exterior or wet interior surfaces; for applications subject to heavy, commercial traffic.
- **DO NOT USE:** Where negative hydrostatic pressure can occur.
- For glass tile with a decorative coating on tile backing, contact glass tile manufacturer for setting recommendations.
- Installations of tile over nonporous surfaces (crack isolation or waterproofing membranes, and tile installed over existing tile) may require extended setting/curing times.
- Severe Temperature Fluctuations - For tile installations exposed to severe temperature fluctuations, mix Glass-Mate™ with Bostik 425™ Multi-Purpose Acrylic Latex Admixture (instead of water).
- **DO NOT DILUTE** Bostik 425™ Multi-Purpose Acrylic Latex Admixture with any other liquids.
- Submerged Tile Installations - For installations that will be continuously submerged, mix Glass-Mate™ with Bostik 425™ Multi-Purpose Acrylic Latex Admixture (instead of water). Consult the tile manufacturer regarding suitability for submerged installations. Scrim backed mosaic sheets must have a water insoluble scrim adhesive.
- Commercial Exterior Building Facades- Consult local building code requirements for suitability and height restrictions and the need for fasteners.

### PACKAGING

25 lb. bag, white formulation

9 lb. bag, white formulation

### DANGER

CORROSIVE WHEN WET. MAY CAUSE BURNS. IRRITATING TO SKIN, EYES AND RESPIRATORY TRACT. MAY CAUSE CANCER. Do not breathe dust. Do not get in eyes, on skin or on clothing. Do not swallow. Handle with care. Use only in a well-ventilated area or wear a mask. Wear protective clothing including gloves during handling. Wash thoroughly after handling. Store bag in a cool, dry area. Do not reuse bag.

### FIRST AID TREATMENT

Contains Portland Cement, Gypsum and Quartz Silica. If in eyes or on skin, rinse with water for at least 15 minutes. If on clothes, remove clothing. If breathed in, move person to fresh air. If swallowed, call a Poison Control Center or doctor immediately. Do not induce vomiting.

### STORAGE/SHELF LIFE

Store in a clean, dry area, off the ground on a pallet, not affected by freezing or hot temperatures. Shelf life is one year from date of manufacturing in unopened bags.

### VOC

0 g/L (as calculated per SCAQMD 1168).

### LIMITED WARRANTY

Limited Warranty found at [www.bostik-us.com](http://www.bostik-us.com) or call 800.726.7845. TO THE MAXIMUM EXTENT ALLOWED BY LAW, BOSTIK DISCLAIMS ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. UNLESS OTHERWISE STATED IN THE LIMITED WARRANTY, THE SOLE REMEDY FOR BREACH OF WARRANTY IS REPLACEMENT OF THE PRODUCT OR REFUND OF THE BUYER'S PURCHASE PRICE. BOSTIK DISCLAIMS ANY LIABILITY FOR DIRECT, INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES TO THE MAXIMUM EXTENT ALLOWED BY LAW. DISCLAIMERS OF IMPLIED WARRANTIES MAY NOT BE APPLICABLE TO CERTAIN CLASSES OF BUYERS AND SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU. It is the buyer's obligation to test the suitability of the product for an intended use prior to using it. The Limited Warranty extends only to the original purchaser and is not transferable or assignable. Any claim for a defective product must be filed within 30 days of discovery of a problem, and must be submitted with written proof of purchase.

### SHEAR BOND PROPERTIES (WHEN MIXED WITH WATER)

28 Day Shear Strength of Mortar to Glazed Wall Tile	ANSI A118.4	> 300 psi	Exceeds
28 Day Shear Strength of Mortar to Porcelain Mosaic Tile	ANSI A118.4	> 200 psi	Exceeds
28 Day Shear Strength of Mortar to Quarry Tile	ANSI A118.4	>150 psi	Exceeds
28 Day Cure Shear Strength Quarry Tile to Plywood	ANSI A118.11	>150 psi	Exceeds

### SHEAR BOND PROPERTIES (WHEN MIXED WITH BOSTIK 425™ MULTI-PURPOSE ACRYLIC LATEX ADMIXTURE)

ANSI Test Method	ANSI Requirement	Test Results
ANSI A118.4	> 300 psi	Exceeds
ANSI A118.4	> 200 psi	Exceeds
ANSI A118.4	> 150 psi	Exceeds
ANSI A118.11 (Section 4.1.2)	> 150 psi	Exceeds

\*All values represent minimum test results.

BOSTIK HOTLINE™

Smart help™  
**1-800-726-7845**

**Bostik, Inc.**  
11320 W. Watertown Plank Road  
Wauwatosa, WI 53226  
[www.bostik-us.com](http://www.bostik-us.com)

This document supersedes all previously published literature.

