



**PRODUCT INFORMATION**

**texrite total flex**

Extremely flexible mortar, for large and heavy tile stone installations

**TEXRITE TOTAL FLEX** is a high performance grade, enhanced dry-set mortar with pre-blended powdered latex polymer. It is composed of portland cement, sand and special additives and is used as a bond coat for setting thick marble, granite and other large unit tiles over a variety of substrates. **TEXRITE TOTAL FLEX** offers the ease of application and economy of dry-set mortars while significantly improves bond strength, freeze-thaw stability, flexibility and other qualities.

**TEXTURE:** Powder, consisting of portland cement, polymer additives and graded sand.  
**COLORS:** Gray and white.  
**PACKAGING:** 50lb (22.7 kg) bag.

- BASIC USE:**
- > Specially designed for installation massive and heavy tiles & stones in tough applications
  - > Perfect for glass tile installations
  - > For interior and exterior floors and walls
  - > Can be used up to ¾" thickness
  - > Excellent non-sag properties on vertical surfaces
  - > Specially formulated to withstand for submerged applications

**AREA OF USE:**  
 Suitable backings, when properly prepared, include plumb and true masonry, concrete, gypsum board (dry interior walls only), glass mesh mortar units, cured portland cement mortar beds, brick, ceramic tile and marble. In interior dry areas only, **TEXRITE TOTAL FLEX** may be used over exterior grade plywood.

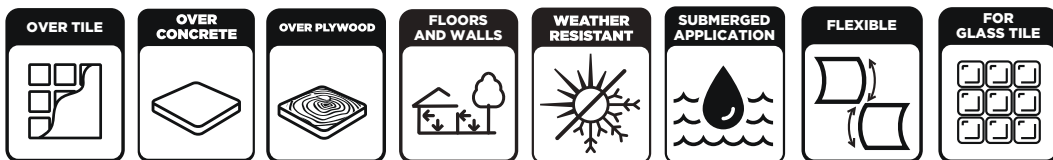
**BENEFITS:**  
 It has excellent water and impact resistance, is water cleanable, non-flammable and requires no soaking of tiles.

- LIMITATIONS:**
- > **TEXRITE TOTAL FLEX** must not be used directly over asphalt sheeting; vinyl covered wallboard, Masonite, lauan plywood, cement asbestos board, metal, glass, plastic, or gypsum mortars.
  - > Improperly cured or wet plywood, particle board, or strip wood surfaces are not considered suitable substrates.
  - > Some green and red marbles may warp when installed with setting materials containing water, which cause loss of bond and/or damage to the finish. This should be noted by the marble or stone supplier. These marbles must be set with Texrite's Epoxyplus (100% solids epoxy).
  - > Usage of gray **TEXRITE TOTAL FLEX** for setting light colored translucent marbles may produce shading in the marble. Use white **TEXRITE TOTAL FLEX** for setting light colored marble.
  - > Use in temperature range above 40 °F. Do not allow mortar to freeze for the first 72 hours.
  - > This product is not affected by prolonged contact with water, but does not form a waterproof barrier.

TECHNICAL DATA		
*Open time @ 70 °F (21 °C)		15 minutes
*Adjustability @ 70 °F (21 °C)		12 - 15 minutes
*Pot life @ 70 °F (21 °C)		2 hours
*Compressive strenght (psi)		> 3000
ASTM C-109		
Shear bond (psi) ANSI A118.4		
Non-vitreous tile 7 days	300 minimum	> 475
28 days	300 minimum	> 575
Porcelain tile 7 days	100 minimum	> 225
28 days	150 minimum	> 300
Vitreous tile (over wood) 7 days	100 minimum	> 200
ANSI A118.11 28 days	150 minimum	> 300

**APPLICABLE STANDARDS:**  
 Conforms to the requirements for dry-set mortars in ANSI A118.1, A118.4, A118.11, A118.15, A108.5, A108.11, A108.12.

**INSTALLATION: PREPARATORY WORK**  
 All surfaces on which tiles are to be set must be structurally sound, completely clean and free of frost and in an atmosphere above 40 °F (4 °C) and below 90 °F (32 °C) during its initial cure (72 hours).



### LIMITATION OF TILES

When using **TEXRITE TOTAL FLEX** on vertical surfaces, tiles with surface area of 1 ft<sup>2</sup> (0.09 m<sup>2</sup>) or less shall not weigh in excess of 5 lbs/ft<sup>2</sup> (24.4 kg/m<sup>2</sup>) to maintain tile position without sagging or slumping. Tiles with surface area of greater than 1 ft<sup>2</sup> (0.09 m<sup>2</sup>) should be tested to determine non-sag suitability of product by installing 3 test areas with actual tiles on the actual substrate. For tiles beyond the weight limit provisions may include adding spacers, mechanical clips and anchors for the retention of spacing or alignment. The additions of clips and anchors shall be added to comply with local building codes and local safety compliance for installation in vertical application above 2-stories. The building architect/building engineer shall be responsible for proper anchor sizes, types and placement for multi-story vertical applications. (reference: MIA-BSI requirements).

### CEMENTITIOUS SUBSTRATES

Area must be clean and dry. Remove all efflorescence, grease, oil, dirt, dust, paint, sealers, curing compounds, asphalt, cut back residue, old adhesives and other foreign matter. Failure to remove these items causes bond loss and void product warranty. Roughen smooth steel troweled concrete. Remove foreign matter and/or roughen surface by mechanical scarified or shot-blasting to prepare surface. Dampen porous surfaces with clean water before installing the mortar and leave no puddles or remaining water on surface for best conditions. Substrate deflection shall not exceed 1/240 that of the span.

### PLYWOOD SUBSTRATES

**TEXRITE TOTAL FLEX** may be used over properly prepared exterior grade plywood on floors. All wooden flooring, when placed over conventional floor joist or other systems should be of a design and thickness so as to maintain a substrate of deflection not to exceed 1/360 of span, including live and dead load. Further, the area to receive **TEXRITE TOTAL FLEX** should be exterior grade plywood only, secured with screw-type nails and glued where possible. A gap of 1/8" - 3/16" (3-5 mm) shall be left between sheets of plywood to allow for expansion. In addition, all plywood surfaces must be for interior use only and protected from exposure to water.

### NON-CEMENTITIOUS SUBSTRATES

All non conforming surfaces such as strip wood, old plaster or painted surfaces should be covered with a cleavage membrane topped with a 3/8" to 3/4" (10-20 mm) reinforced mortar bed for walls and a 1 1/4" (32 mm) reinforced mortar bed for floors. After a minimum of 20 hours, the dry-set mortar may be applied to the mortar bed.

### MIXING

Add cool, drinkable water and dry powder **TEXRITE TOTAL FLEX** in a clean container. Stir by hand tool or low RPM (less than 300) drill mixer into a lump-free, mortar paste consistency. Drill mixer paddle or wand should be "open-loop" design to not add air or weaken the mortar. Mortar should be very soft paste mixture that does not slump, slide or flow from container, tool or trowel. Allow freshly mixed mortar to slake (wait) for 10 minutes, then re-stir into a paste to get maximum working and spreading time. Do not add any additional water after this point. Stir mortar occasionally to prevent firm set of mortar. If a mortar sets firm in container discard it and re-mix a new batch. Mix approximately 5 quarts (5.2 liters) per 50 lb (22.7 kg) bag. **TEXRITE TOTAL FLEX** must be mixed with Texrite's Latex Bond Admix 150 or Acrylic Admix 150 FS liquid in lieu of water for all exterior application or bonding porcelain tile and other low absorption tiles.

### TILE OVER TILE AND OTHER SURFACES

It is absolutely essential that the existing tile and other surfaces be well bonded. The surfaces must be prepared in accordance with the requirements for cementitious surfaces. It is also necessary to abrade the surface to assure proper bonding. Other surfaces include terrazzo and marble and vinyl composition tile. Remove all waxes, sealers and coatings that would interfere with the bond.

### EXPANSION JOINTS

Install expansion joints around all perimeters or restraining surfaces where possible to allow for expansion movement. Never bridge an expansion, contraction or construction joint. Add additional joints for large areas and areas subject to the sunlight, heat/cold temperatures in accordance with local building codes. See EJ171 in TCNA Handbook for detailed specifications. Remove all thinset mortar, grout and debris from joints before backer rod and sealant are placed.

### MIXING

**TEXRITE TOTAL FLEX** should be only added to clean potable water. Mix thoroughly until smooth, lump-free, thick paste consistency and let mortar slake for 15 minutes, then remix. If mechanical mixer is used, it must be a low RPM (150 or less) to avoid entrapping air into the mortar. Do not add water or additional powder after slaking period. The proper mortar consistency is such that when approximately 1" of material is on a margin trowel, it may be turned upside down and material does not slump or fall of the trowel. Do not use mortar after initial set in bucket. During use, remix mortar occasionally.

### APPLICATION

Apply the wet mortar to the bond surface with flat-side of trowel in a scraping or scratching motion to drive the wet mortar into the surface. Then take additional mortar with the notched-side of trowel to form and comb the ridges. Trowel the mortar ridges in one straight direction helps to prevent hollow tiles and maximized bond contact. Tiles with deep patterns, high lugs or on those with irregular texture on the back surface may require "back buttering" to ensure 100% coverage of back of tiles. Proper method of bonding of tiles requires embedding, pressing and sliding tiles perpendicular to wet mortar ridges to have a nominal mortar thickness of 3/32" - 3/4" (3-20 mm) and 100% coverage. During the setting of tile, it is advisable to occasionally remove a tile to be sure mortar has not skinned over and sufficient transfer is being made. Do not adjust tiles in mortar after they have been set past 10-15 minutes. NOTE: As a practical test, it is recommended that three or more separate twelve inch square areas of tile be bonded to the properly prepared surface with the actual tile and bonding materials that will be used on the finished installation. These should be allowed to cure for 3-7 days and then removed with a hammer and chisel. At this point, one can determine if adequate bond has been obtained or if a problem exists.

### TROWEL RECOMMENDATION

Suitable for providing a minimum 3/32 - 3/4" (3 - 20 mm) bed thickness. Refer to coverage chart for proper trowel size.

### CLEANING:

Water is all that is needed to remove uncured product.

### COVERAGE:

A 50 lb (22.7 kg) bag using a square-notched trowel covers: 1/4" X 1/4" = 77 sq ft, 1/4" X 3/8" = 66 sq ft, 1/2" X 1/2" = 40 sq ft

### CURING AND GROUTING:

A minimum cure is obtained in 12 to 24 hours depending on ambient temperatures. Normal grouting should be done 48 hours later after tiles have been set except for setting beds in excess of 3/8" which require 72 hours before grouting.

### STORAGE LIFE:

One year if kept dry in sealed bag.

**SAFETY - CAUTION:** May cause eye, skin or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. Contains portland cement. If any cement or cement mixtures get into eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed cement, mortar, concrete or grout may cause skin injury. Avoid contact with skin where possible and wash exposed skin areas promptly with water.

### KEEP OUT OF REACH OF CHILDREN

**GUARANTEE:** The recommendations, suggestions, statements and technical data in this bulletin are based on our best knowledge. They are given for informational purposes only and without any responsibility for their use. The responsibility for the seller and manufacturer is only to replace that portion of the product of this manufacturer, which proves to be defective due to the quality of the ingredients or the manufacturing process itself. However, since handling and use is beyond our control, we do not guarantee the results to be obtained. Only written statements signed by an officer of the manufacturer are binding on the manufacturer or seller. Nothing in this bulletin should be interpreted as a recommendation for a use, which violates any patent rights.