

THIN SET

Dry Set Mortar

TILE SETTING WALLS AND FLOORS

MANUFACTURER:

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PRODUCT DESCRIPTION:

THIN SET mortar is a polymer modified Portland Cement based formulation with graded aggregates and other additives combined to achieve a high performance setting mortar for all ceramic, quarry, marble, pavers, and natural stone tiles on floors and walls. It will exceed ANSI A 118.4 when mixed with water.

USES:

- ▶ Walls or floors
- ▶ Interior or exterior
- ▶ Above and below grade
- ▶ Residential and heavy commercial applications
- ▶ Use over concrete, concrete block, masonry, gypsum board, Portland Cement beds, cement backer board, brick, ceramic tile, marble, and terrazzo

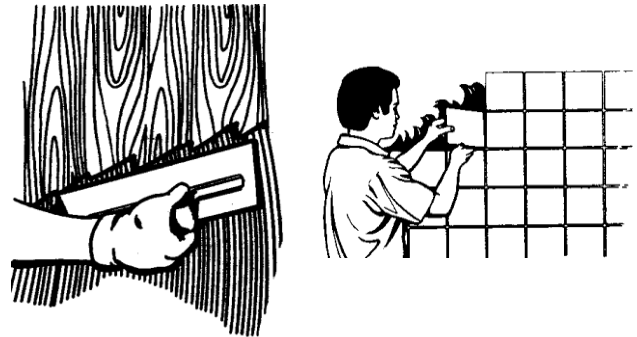
ADVANTAGES:

- ▶ Exceeds ANSI A 118.4
- ▶ Polymer modified, eliminating the need for costly additives
- ▶ Accepts absorbent and non-absorbent tiles
- ▶ Requires no presoaking of tiles
- ▶ Non-staining, water washable
- ▶ Highly water resistant
- ▶ Impact and vibration resistant
- ▶ Non-flammable

INSTALLATION:

Surface Preparation:

All surfaces must be structurally sound, dry, and free of



grease, oil, dirt, dust, curing compounds, sealers, coatings or any other foreign matter. Roughen all smooth, steel troweled concrete floors to ensure good bonding. Ceramic tile substrates should be abraded to ensure proper bonding.

Mixing:

For most applications we recommend using only clean water as *THIN SET* is already polymer modified. For applications requiring increased adhesion or where added strength and reduced shrinkage is desired, we recommend also using *EM-CRYL 600* (see label for suggested mixing proportions). We recommend using 5 quarts of water per 50 pound bag of *THIN SET*. Add liquid to a suitable clean container for mixing. Add *THIN SET* and blend to a thick lump-free mortar consistency. The proper consistency is such that when applied with a notched trowel the ridges formed will not flow or slump. If using a drill mixer, use a low speed, high torque drill not to exceed 600 RPM, fitted with a suitable mixing blade so as not to entrap air in the mix. Allow the mix to stand for 10-15 minutes, then remix before use. Mix occasionally during use.

Placement:

Using pressure, apply a thin skim coat with flat edge of trowel. Then using the proper sized notched trowel apply a second coat to form ridges. Leave only enough *THIN SET* to give 100% contact with the back of the tile and a mortar bed of 3/16" to 1/8". Trowel only in an area that can be tiled before the mortar skins over (15-20 minutes). If mortar skins over, remove and apply fresh mortar. Apply dry tiles with pressure and a slight twisting motion. Immediately beat tiles in to ensure maximum contact and bond. After setting several tiles, remove one or two and inspect, making sure tile backs are 100% covered with mortar. Back buttering of tiles may be necessary to ensure 100% coverage.

Curing:

THIN SET is self-curing. All traffic should be kept off of floor for a minimum of 48 hours. Jobsite temperature must remain between 45°F and 95°F for a minimum of 72 hours after installation. Grouting may be done after 24 hours if tiles are firmly set and kneeling boards are used.

Coverage:

When applied with a 1/4" x 3/8" x 1/4" square notched trowel, one 50 pound bag of *THIN SET* will cover approximately 50 square feet of surface. When applied with a 1/4" x 1/4" x 1/4" square notched trowel, one 50 pound bag will cover approximately 75 square feet of surface. When applied with a 3/16" x 3/16" V notched trowel, one 50 pound bag will cover approximately 100 square feet of surface.

Packaging:

Available in 50 pound multiwall paper bags with moisture barrier.

Colors:

Available in white and gray.

TECHNICAL DATA:

ShearBond Strength (ANSI A 118.4)	
Glazed Wall Tile (Vitreous Tile)	
28 days	800 psi
Impervious Ceramic Tile Mortar Tile (Non-Vitreous Tile)	
28 days	450 psi
Quarry Tile	
28 days	500 psi
ShearBond Strength to Plywood (ASTM C-882)	
28 days	200 psi
Compressive Strength (ASTM C- 109)	
28 days	3,600 psi
TCA Service Rating (ASTM C-627)	Extra Heavy
Set Time (ASTM C-266)	
Initial	4 hours
Final	7 hours
Open Time at 72°F	15-20 minutes
Pot Life at 72°F	3-4 hours

THIN SET exceeds ANSI 118.4 when mixed with water.

LIMITATIONS:

Do not apply over frozen or frost laden substrates. Temperature must remain above 45°F for a minimum of 72 hours after application.

CAUTION:

Contains Portland Cement CAS #65997-15-1. Freshly mixed cement products may cause skin injury. Avoid contact with skin where possible and wash exposed areas promptly with water. If any product gets into the eye, rinse immediately and repeatedly with water. If ingested, **do not** induce vomiting and get prompt medical attention. Also contains Sand CAS #14808-60-7. Avoid breathing dust. Prolonged exposure to dust may cause delayed lung injury (silicosis) or cancer IARC Class 2A. Wear NIOSH approved mask for silica dust. **Keep Out Of Reach Of Children.**

WARRANTY:

Due to the use of this product beyond our control, we assume no liability for damages of any kind, and the user accepts the product "as is" and without warranties, expressed or implied, from either Empire Blended Products or its agents. The suitability of the product for an intended use shall be solely up to the user. Our only obligation shall be to replace or pay for any material proved defective, with our liability limited to the purchase price of materials supplied by us.