

Super-Tek One Step  
HIGH PERFORMANCE POLYMER-MODIFIED THIN-SET MORTAR

For installing ceramic, porcelain, quarry, marble, pavers and other natural stone tiles on floors and walls.

1. MANUFACTURER

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2. PRODUCT DESCRIPTION

High performance polymer-modified Portland cement thin-set mortar for interior or exterior installation of ceramic, porcelain, quarry, marble, pavers and other natural stone tiles on floors and walls.

- o Excellent Bond To Most Substrates, Including Plywood
- o Interior/Exterior Use
- o Exceeds ANSI A118.4
- o Residential to Heavy Commercial Use

3. INSTALLATION

APPROVED SUBSTRATES: Properly prepared concrete, concrete block, plumb and true masonry, gypsum board, cured Portland cement beds, exterior grade plywood (interior floors only), cement backer board, brick, ceramic tile, marble, and terrazzo.

DO NOT USE OVER: Hardwood, masonite, chipboard, flakeboard, presswood, asbestos board, vinyl flooring, lauan plywood, OSB, metal, gypsum based levelers, glass, plastic, cutback adhesive residue, laminate counter tops, or other similarly unstable substrates.

PLEASE NOTE: 1) Not for use with Green Marble or similar moisture sensitive tiles prone to "curling".  
2) Use white thin-set mortar when installing light colored marble and light colored grouts.

INSTALLATION: All installations must be set in accordance with the most recent publication of the Tile Council of America's "Handbook For Ceramic Tile Installations" and the following guidelines.

CARPENTRY REQUIREMENTS FOR PLYWOOD FLOORS (INTERIOR ONLY): 1) Installation requires two layers of APA exterior plywood, underlayment grade or better, with a minimum total thickness of 1 1/4". Fasten layers with screw nails located 6" centers along plywood edges and 8" centers each way throughout the sheet. 2) The subfloor must consist of a minimum of 5/8" exterior plywood or 1" nominal boards over bridged floor joists 16" on center with a maximum deflection of 1/360 of the span. 3) The top layer must consist of a minimum of 5/8" exterior plywood with offset end and edge joints at least two inches from the subfloor joints. 4) Leave a 1/8" to 1/4" space between top layer sheet edges and all materials they abut such as walls, drains, posts, etc. These joints should be filled with the setting mortar when tiles are being installed. Adjacent edges of plywood must not be more than 1/32" above or below each other. 5) Install plywood with rough or knotty side exposed to enhance mechanical adhesion of thin-set mortar to plywood. 6) Enhanced adhesion may be attained by priming the plywood with either SUPER-TILER™ or SUPER-WELD™.

**MIXING:** Add approximately 6 quarts of cool, clean water to 50 lbs. of One-Step Thin-Set Mortar and mix to a thick, paste-like consistency. Use slow speed bucket mixers or mortar box for mixing, do not use high-speed drills. Allow mixture to slake (stand) for 10-15 minutes, and then remix before applying. Mixture should be stirred occasionally during use, do not retemper. Pot life is approximately 2-3 hours depending on temperature and humidity.

**APPLICATION:** All surfaces must be clean and free of dust, grease, wax, and foreign matter. 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. 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 insure 100% coverage. Do not use at temperatures below 45°F (7°C) or above 95°F (35°C).

**CURING:** All traffic should be kept off of floors 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 accomplished in 24 hours if tiles are firmly set and kneeling boards are used. To ensure quality joints use one of Super-Tek's high performance grouts.

**WARNING! EYE AND SKIN IRRITANT. BREATHING DUST MAY CREATE LUNG CANCER RISK. CONTAINS CRYSTALLINE SILICA AND PORTLAND CEMENT.** Avoid contact with eyes, skin and clothing. Avoid breathing dust. Wash thoroughly after handling. In case of eye contact, immediately flush with plenty of water for at least 15 minutes, consult a physician immediately. For skin contact, wash affected area with soap and water. For additional information, see Material Safety Data Sheet (MSDS) for this product.

#### 4. TECHNICAL DATA

One Step mixed with water

ANSI A118.4 -1999 Test/Test Results

28 Day Shear Strength (Glazed Wall Tile) ----- >595 psi

28 Day Shear Strength (Impervious Ceramic Mosaic Tile) ----- >390 psi

Shear Bond Quarry Tile/Plywood ----- >205 psi

TCA Service Rating ASTM C-627 ----- > Extra Heavy

Physical Properties

Open Time at 72°F (22°C) ----- >50 minutes

Pot Life at 72°F (22°C) ----- 2-3 hour

#### 5. COVERAGE:

Ceramic, quarry, vitreous & natural stone tiles (includes lug-backed tiles) up to 12" X 12" in size: 1/4" x 3/8" x 1/4" Square-notched trowel. Approx. coverage 50-55 sq. ft. per 50 lb. bag.

Ceramic, quarry, & vitreous tiles up to 6" X 6" in size: 1/4" x 1/4" x 1/4" Square-notched trowel. Approx. coverage 75-85 sq. ft. per 50 lb. bag.

Ceramic mosaics: 3/16" x 3/16" V-notched (saw tooth) trowel. Approx. coverage 100-115 sq. ft. per 50 lb. bag.

**Trowel Sizes Note:** When installing tiles larger than 12" x 12" use appropriate sized trowel to ensure 100% coverage of tile back (i.e. 3/4" U- notched trowel). Coverage will vary.

#### 6. PACKAGING:

50 lb bags. Color: Grey & White.

#### 7. SHELF LIFE:

One year when stored in original packaging in a dry, ventilated place. Exposure to moisture will shorten the shelf life.

#### 8. NOTICE AND WARRANTY DISCLAIMER:

The MANUFACTURER has provided the enclosed Instructions/Recommendations [I/R] to assist the USER in the application of this product. These I/Rs are not warranted to be comprehensive, complete, thorough or conclusive as regards any specific installation. It is the USER'S obligation to ensure that the product is suitable for its intended use and that it is compatible with existing conditions or applications of other coincident or adjoining materials. The liability of the SELLER and the MANUFACTURER, whether express or implied, whether in contract or in tort, arising out of warranties, representations, instructions or defects from any cause shall be limited exclusively to replacing the product, provided the same is proved defective, or refunding the purchase price upon return of the unused product. In no event will SELLER or MANUFACTURER be liable for consequential damages, including but not limited to, loss of materials, costs of labor, loss of profits, costs of replacement goods, or other commercial loss. The USER accepts the product AS IS, and without warranties expressed or implied.

#### 9. TECHNICAL ASSISTANCE

Information is available by calling Super-Tek Products:

Mon. thru Fri. (Hours 8:00 AM to 4:30 PM EST)

Telephone: (718) 278-7900 ext. 111

FAX: (718) 204-6013

To receive product information or Material Safety Data Sheets via fax 24 hours 7 days, call: (718) 278-5311