

1. PRODUCT NAME

TEC® Skill Set™ Type 1 Mastic

2. MANUFACTURER

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3. DESCRIPTION

TEC® Skill Set™ Type 1 Mastic ready-to-use floor and wall adhesive can be used for installing ceramic, porcelain, natural stone, quarry and mosaic tile on interior floors and walls. Recommended for floor applications with tile up to 8" x 8" and wall applications with tile up to 12" x 12". It meets ANSI A136.1 Type 1 and 2 specifications, spreads easily, and sets quickly, and is easy to clean up.

Key Benefits and Features

- Creamy and easy to apply
- Ready-to-use
- Non-slip
- Water resistant

Packaging

1 quart plastic pail
1 gallon plastic pail
3.5 gallon plastic pail

Coverage

Coverage will vary with type of substrate. Coverages below are approximations. Do not exceed trowel recommendations.

	Approximate Coverage	
Trowel	3/16" x 5/32" V notch	1/4" x 1/4" x 1/4" Square notch
Tile Size	Up to 6" x 6"	Walls: 6" x 6" to 12" x 12" Floors: 6" x 6" to 8" x 8"
Coverage		
Per 1 quart	6-8 sq. ft.	4-5 sq. ft.
Per 1 gallon	27-32 sq. ft.	18-23 sq. ft.
Per 3.5 gallon	95-112 sq. ft.	63-81 sq. ft.

Suitable Substrates

Concrete (well cured; on, above or below grade), masonry, gypsum wallboard (walls and dry areas only); cementitious backer units (CBU), coated glass mat backer board, water resistant gypsum wallboard, cured Portland cement plaster, exterior grade plywood; APA Grade Trademarked Exposure 1 or better, minimum two 5/8" layers, joists 16" on center, installed in accordance with TCNA Installation Detail F 142, existing ceramic or resilient tile; plastic laminate.

Storage

Store in a cool, dry location.

Shelf Life

Maximum of 1 year from date of manufacture in unopened package. Bucket good for 6 months after opening. (Re-seal and store in cool, dry location, use within shelf life. Covering with plastic wrap directly on top of product prior to sealing container will help preserve freshness).

Limitations

Do not use with PVC heating mats or coils, polyethylene membranes or other membranes. Do not use on shower floors or pans, saunas, in steam showers, swimming pools, or any place that will receive standing water. Do not use for leveling or in excess of trowel recommendations. Not for use under most backer boards. Not for exterior use. Not for use where temperature will exceed 120°F (49°C). Do not use with resin or epoxy backed marble or with green marble. Not for use with ceramic accessories. Do not use over lauan or particle board. Not for use with lug backed floor tile. May discolor certain marble and granite, test in an inconspicuous area prior to use.

Cautions

FIRST AID MEASURES: In all cases, seek medical attention if symptoms develop or persist. EYES: Flush with water for 20 minutes. SKIN: Wash with soap and water. IF VAPORS INHALED: Remove to fresh air. IF SWALLOWED: Do not induce vomiting. WARNING! This product contains chemicals known to the State of California to cause cancer, birth defects or reproductive harm. KEEP OUT OF REACH OF CHILDREN. For Medical Emergency Information, call 1-888-853-1758.

This Product Data Sheet has been prepared in good faith on the basis of information available at the time of publication. It is intended to provide users with information about and guidelines for the proper use and application of the covered TEC® Skill Set™ brand product(s) under normal environmental and working conditions. Because each project is different, H.B. Fuller Construction Products Inc. cannot be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

4. TECHNICAL DATA

Physical Properties

TEC® Skill Set™ Type 1 Mastic Meets ANSI A136.1 Type I & II Specifications		
Description	ANSI Requirement	Typical Results
Shear Strength 28 Day, Room Temperature Type 1 Water Immersion After Accelerated Heat Aging	> 50 psi (0.34 MPa) > 50 psi (0.34 MPa) > 75% dry shear strength retention	Passes Passes Passes
Heat Resistance	Maintains at least 10 lb. static load in shear at 120°F (49°C) for 24 hours	Passes

Description	ANSI Requirement	Typical Results
Impact Test	All tiles remain bonded after impact	Passes
Stain Test	< 70% penetration	Passes
Stability in Storage	4 weeks minimum	Passes
Resistance to Mold Growth	No mold growth	Passes
Tested in accordance with American National Standards for Organic Adhesives for Installation of Ceramic Tile – ANSI A136.1, Type I & II Specifications.		

Physical Properties

Description	
Base	Acrylic Latex
Physical State	Paste
Color	White
Odor	Nil
Open Time [at 72°F (22°C)]	20-35 minutes
Wt./U.S. Gallon	12.5 lbs. ± .2 lbs.
VOC/Liter of Material	6 grams (calculated); 8 grams less water
Foot Traffic Rating (ASTM C627)	Residential to light commercial

5. INSTALLATION INSTRUCTIONS

Surface Preparation

All surfaces must be clean, dry, free of dirt, dust, grease, oil, loose paint, wallpaper, and residues of old adhesive, or any foreign matter which might impair adhesion where TEC® Skill Set™ Type 1 Mastic is spread. Painted enameled walls and floors must be thoroughly scored or sanded to insure a bond to the original base wall or floor. Do not sand any floors or adhesives that are known or suspected to contain asbestos. **Installations where concrete is damp or the concrete is subject to moisture vapor emissions can fail.**

Application

The adhesive, tile, and room should be maintained at a minimum temperature of 60°F for 24 hours prior to installation. The minimum 60°F temperature must be maintained during the entire installation, and for a minimum of 48 hours following.

Use a 3/16" x 5/32" V-notched trowel for installation of tile up to 6" x 6". For tiles larger than 6" x 6", use a 1/4" x 1/4" x 1/4" square-notched trowel. Maximum tile size: for walls is 12" x 12" for floors is 8" x 8".

Only apply the amount of adhesive to surface that can be tiled over in 15 minutes. **DO NOT SET TILE IF SKIN HAS FORMED ON THE ADHESIVE.** If adhesive skin has formed, remove and re-apply. This time will vary with the temperature, humidity, and the substrate. Apply the adhesive to the substrate first with the flat side of the trowel. Then comb with the notched side of the trowel in one direction. Firmly press tiles into the adhesive and move them perpendicularly across the ridges. Do not slide tiles against each other. Periodically remove and check a tile to assure complete coverage.

Dry Time

Cure times will vary with size and porosity of substrate (porcelain tile takes considerably longer to cure), humidity and temperature (cooler temperatures will extend set times). No traffic is permitted on tiles prior to curing. Grouting may begin once adhesive is firmly set up. Up to 6" x 6" wall tiles require wait time of 6 hours or longer. Over 6" x 6" tile or any floor tile application requires at least 24-48 hours. Check to determine readiness by trying to twist the tile and see if it moves. If it does, additional cure time is required. If the tile won't twist but you hear a wet suction sound when the tile is stepped on, additional cure time is also required. The use of TEC® Skill Set™ brand grouts is highly recommended.

Full cure takes at least 48-72 hours depending on conditions.

For glass tile, refer to TEC® Skill Set™ Glass Tile Mortar. For marble and granite installations, test in an inconspicuous area as discoloration may occur. Most discoloration disappears after 30 days. For proper curing, do not abut marble tiles together.

Clean-up

While adhesive is still fresh, clean tools, hands, and excess material from face of tile with warm soapy water.

6. WARRANTY

For details about our limited warranties, see your sales associate or tecskillset.com.

7. TECHNICAL SERVICES

Technical Assistance

Information is available by calling the Technical Service Helpline. Toll Free: 800-832-9023
Fax: 630-952-1235

Technical and Safety Literature

To acquire technical and safety literature, please visit our website at tecskillset.com.