



1. PRODUCT NAME

TEC® Ceramic Tile Adhesive for Walls and Floors

2. MANUFACTURER

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3. DESCRIPTION

Ceramic Tile Adhesive (TA-101) is an acrylic-based, multi-purpose ceramic and marble tile adhesive designed for the interior installation of ceramic or marble tile over selected wall, floor and countertop applications.

NOTE: Maximum tile size for floor applications is 8" x 8" (200 x 200 mm).

Key Features and Benefits

- For ceramic and marble tile
- Easy spreading
- Non slip
- Resilient bonds
- Meets ANSI A136.1, Type I and Type II specifications

Packaging

1 U.S. gallon plastic pails (3.78 L) Product #33-0002-5011
3.5 U.S. gallon plastic pails (13.25 L) Product #33-0002-1211

Coverage

Determine recommended trowel size based on tile type. Coverage will vary with the absorption of substrate and trowel size. Figures below are presented only as guidelines.

Tile Type	Recommended Trowel Size	Approximate Coverage per gallon (3.78 L)
Up to 6" x 6" (150 x 150 mm) including: ceramic mosaics standard wall tile, flat back and vitreous	$\frac{3}{16}$ " x $\frac{5}{32}$ " (4.5 x 4 mm) V-notch trowel	41-48 sq. ft. (3.8-4.5 m ²)
Over 6" x 6" (Over 150 x 150 mm) including: ceramic, vitreous, monocottura, quarry and marble, except green marble Maximum tile size for floor application is 8" x 8" (200 x 200 mm).	$\frac{1}{4}$ " x $\frac{1}{4}$ " x $\frac{1}{4}$ " (6 x 6 x 6 mm) square notch trowel	25-30 sq. ft. (2.3-2.8 m ²)
Heavy Tile including: heavy ceramic, vitreous, natural stone, slate and pavers Maximum tile size for floor application is 8" x 8" (200 x 200 mm).	$\frac{1}{4}$ " x $\frac{3}{8}$ " x $\frac{1}{4}$ " (6 x 10 x 6 mm) square notch trowel	20-25 sq. ft. (1.9-2.3 m ²)

Suitable Substrates

When properly prepared as detailed in Substrate Preparation, suitable substrates include:

- Concrete—well cured; on, above or below grade
- Cementitious backer units (CBU)
- Exterior Grade Plywood—APA Grade Trademarked Exposure 1 or better; minimum two- $\frac{5}{8}$ " (15 mm) layers; installed in accordance with TCA Installation Detail F142. **Not for marble tile applications.**
- Existing ceramic or resilient tile
- Coated glass mat backer board

- Gypsum wallboard (dry areas)
- Water resistant gypsum wallboard
- Cured portland cement plaster
- Masonry
- Plastic laminate

Substrate Preparation

Exterior Grade Plywood Floors—Wood subflooring must be structurally sound and securely fastened with screw type or ring shank nails and adhesive. Plywood flooring should be free from dust, dirt, oil, grease, etc. Installation requires two layers, minimum $\frac{5}{8}$ " (15 mm) exterior grade plywood subfloor and $\frac{5}{8}$ " (15 mm) exterior grade plywood underlayment on bridged floor joists 16" (40 cm) on center, with a maximum deflection of $\frac{1}{360}$ of the span. Joints in the top layer should be offset from joints in the bottom layer of plywood. A gap of $\frac{1}{8}$ " (3 mm) is required between overlay panels and $\frac{1}{4}$ " (6 mm) is required between panels and all materials they abut such as walls and posts. Adjacent edges of plywood panels shall not be more than $\frac{1}{32}$ " (0.8 mm) above or below each other. Follow TCA Installation Detail F142.

Cementitious Backer Units—Follow manufacturer's instructions.

Coated Glass Mat Backer Board—Reference TCA Installation Details F146, W245, B419 or B420.

Plastic Laminate—Roughen surface by sanding or scarifying. Rinse and allow to dry. Reference TCA Detail TR711.

Existing Ceramic Tile—Remove surface contaminants. Mechanically abrade with carborundum stone. Rinse and allow to dry. Reference TCA Installation Details TR712 or TR713.

Storage

Store in cool, dry location. Do not store open containers.

Shelf Life

Maximum of 1 year from date of manufacture in unopened container.

Limitations

Interior use only. Do not use for setting fixtures or green marble. For green marble, use TEC AccuColor EFX® Epoxy Grout and Mortar. Do not use over surfaces such as tempered hardboard, pressboard, cement asbestos board, particle board, oriented strand board, gypsum patches, synthetic flooring (linoleum, asphalt and vinyl tile) or similar unstable substrates. Do not use for underwater applications or where hydrostatic pressure exists. Do not use for floor applications of tiles with lugs; use an appropriate TEC mortar product. Maximum tile size for floor applications is 8" x 8" (200 x 200 mm). Extensive laboratory testing has shown that marble installed with Ceramic Tile Adhesive (TA-101) will return to its original color after water in the adhesive has evaporated, typically 3 to 4 weeks.

Marble, a quarried material, may vary in porosity and chemical composition. TEC recommends testing the selected marble prior to installation for discoloration using the following method: Spread adhesive on a marble sample and allow to cure for 3 to 4 weeks. Check for discoloration.

Cautions

Read complete cautionary information printed on product container prior to use. 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 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

Applicable Standard

Tested in accordance with American National Standards for Organic Adhesives for Installation of Ceramic Tile—ANSI 136.1, Type I

Ceramic Tile Adhesive for Walls and Floors, TA-101		
Description	ANSI Requirement	Typical Results
Shear Strength Conditioned Dry 28 Day, Room Temperature Type I Water Immersion After Accelerated Heat Aging	> 50 psi (0.34 MPa) > 50 psi (0.34 MPa) > 50 psi (0.34 MPa) > 75% dry shear strength retention	Passes Passes Passes Passes
Heat Resistance	Maintains at least 10 lb. (4.5 kg) static load in shear at 120°F (49°C) for 24 hours	Passes
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

Physical Properties

Description	
Physical State	Paste
Color	White
Odor	Nil
Open Time [at 72°F (22°C)]	20 to 35 minutes
Wt./U.S. Gallon	12.5 lbs. ± .2 lb.
Wt./Liter	1.49 kg ± .1 kg
VOC/Liter of Material	0.4 grams 0.8 grams less water
Foot Traffic Rating (ASTM C627)	Residential to light commercial
Freeze/Thaw Stability	Freeze/thaw stable to -10°F (-23°C). If frozen, slowly bring material back to room temperature and stir before using.
Storage	Store in cool, dry location. Do not store open containers.
Shelf Life	Maximum 1 year from date of manufacture in properly stored, unopened package.

5. INSTALLATION INSTRUCTIONS

Application

1. All tiling materials, room and adhesive should be at a minimum 50°F (10°C) for 24 hours before and 48 hours after installation.
2. For best results, pre-measure and pre-cut all tile prior to spreading adhesive.

3. Apply adhesive using flat side of trowel to promote better substrate contact, then comb in one direction with the notched side of the trowel. Spread only an area that can be tiled while surface is still tacky (typically 25-35 minutes). Do not set tile if a skin has formed on the adhesive.
4. Press tiles into setting bed, then push in a direction perpendicular to the notched trowel ridges to achieve optimum coverage. Apply adhesive in a heavy enough layer so that complete contact (no voids, 100% coverage) between mortar and tile is accomplished when tile is positioned. Proper installation requires a minimum of 1/32" (0.8 mm) continuous layer of adhesive between tile and substrate. Periodically remove and check a tile to assure proper coverage. Keep a minimum of 2/3 of the joint depth between tiles for grouting.

Clean-up

Clean tools, hands, and excess materials from face of tile, while adhesive is still fresh, with warm soapy water. Dried adhesive must be removed with mineral spirits.

Grouting/Curing

Tile may be grouted as soon as adhesive is set and tiles are held firmly in place, typically after 6 hours for 4 1/4" (108 mm) wall tiles. Floor tile greater than 6" x 6" (subject to size limitations) usually require at least 24 hours to set. Colder temperatures, high humidity, use of large vitreous tiles [6" x 6" (150 x 150 mm) or larger], or non-breathing back-ups will extend set times. The use of TEC brand grouts is highly recommended.

6. AVAILABILITY AND COST

Availability

TEC Premium Tile and Stone Installation Products are available nationwide. To locate a distributor in your area, please contact:

Phone: 800-832-9002

Website: tecspecialty.com

Cost

Contact your local TEC Distributor.

7. WARRANTY

For warranty details, see your sales associate or tecspecialty.com.

8. MAINTENANCE

Not applicable

9. TECHNICAL SERVICES

Technical assistance

Information is available by calling the Technical Support Hotline.

Toll Free: 1-800-832-9023

Fax: 630-952-1235

Technical and safety literature

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

10. FILING SYSTEM

Division 9



tecspecialty.com