



Double Duty™ Plus White Ceramic Tile Adhesive

1. PRODUCT NAME

TEC® Double Duty™ Plus White Ceramic Tile Adhesive (123)

2. MANUFACTURER

H.B. Fuller Construction Products Inc.
1105 South Frontenac Street
Aurora, IL 60504-6451 U.S.A.
800.552.6225 Office
800.832.9023 Technical Support
800.952.2368 Fax
tecspecialty.com

3. DESCRIPTION

Double Duty™ Plus is a premium ready-to-use white 100% acrylic interior adhesive. Excellent for setting marble and ceramic tile over interior walls and floors. Approved for floor applications with tile up to 8" x 8" (200 x 200 mm) and wall applications with tile up to 20" x 20" (500 x 500 mm). Bright white, non-staining formula is perfect for light-colored stone and grout.

Key Features and Benefits

- Best for marble, natural stone and ceramic tile
- Installs up to 20" x 20" (500 x 500 mm) porcelain with no slip
- Quick grab, no slip up to 7 pounds per square foot (34.17 kgs/m²)
- Non staining
- Strong, resilient bonds
- Exceeds ANSI A136.1, Type I and Type II specifications
- Contributes to LEED® project points
- Low VOC

Packaging

1 quart plastic pails (946 mL) Canadian	Product #3307215111
1 gallon plastic pails (3.78 L)	Product #3307215011
3.5 gallon plastic pails (13.25 L)	Product #3307211211

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, vitreous*, porcelain, marble and natural stone	3/16" x 5/32" (4.7 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 and quarry Maximum tile size for floor application is 8" x 8" (200 x 200 mm).	1/4" x 1/4" x 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).	1/4" x 3/8" x 1/4" (6 x 9 x 6 mm) square notch trowel	20-25 sq. ft. (1.9-2.3 m ²)

*Double Duty™ Plus is NOT recommended for use with glass tile.

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-5/8" (15 mm) layers; installed in accordance with TCA Installation Detail F142. **Do not use to install marble tile on plywood.**

- Existing ceramic tile
- Coated glass mat backerboard
- 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 5/8" (15 mm) exterior grade plywood subfloor and 5/8" (15 mm) exterior grade plywood underlayment on bridged floor joists 16" (40 cm) on center, with a maximum deflection of 1/360 of the span. Joints in the top layer should be offset from joints in the bottom layer of plywood. A gap of 1/8" (3 mm) is required between overlay panels and 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 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 Backerboard—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

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

Shelf Life

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

Limitations

- Not for exterior use.
- 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.
- Not for use over anti-fracture & waterproofing membranes, sheets or mats.
- 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 using tiles with lugs; use an appropriate TEC® mortar product.
- Extensive laboratory testing has shown that marble installed with Double Duty™ Plus will return to its original color after water in the adhesive has evaporated, typically 3 to 4 weeks.

Note: 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 A136.1, Type I

Double Duty™ Plus White Ceramic Tile Adhesive (123)		
Description	ANSI Requirement	Typical Results
Shear Strength Conditioned Dry 28 Day, Room Temperature	> 50 psi (0.34 MPa) > 50 psi (0.34 MPa)	Passes 280 psi (1.92 MPa)
Type I Water Immersion	> 50 psi (0.34 MPa)	95-118 psi (0.65-0.81 MPa)
After Accelerated Heat Aging	> 75% dry shear strength retention	95-98%
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	6 month minimum
Resistance to Mold Growth	No mold growth	Passes

Greater than: > Greater than or equal to: ≥ Less than: < Less than or equal to: ≤

Physical Properties

Description	
Physical State	Paste
Color	White
Odor	Nil
Open Time [at 72°F (22°C)]	45 to 55 minutes
Wt./U.S. Gallon	12.2 lbs. ± 0.5 lb.
Wt./Liter	1.46 kg ± 0.06 kg
VOC/Liter of Material	25 grams 44 grams less water
Foot Traffic Rating (ASTM C627)	Residential to light commercial
Freeze/Thaw Stability	Freeze/thaw stable to -5°F (-20°C). If frozen, slowly bring material back to room temperature and stir before using.
Storage	Protect from freezing. 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. The substrate must be structurally sound, clean, dry and plumb. Remove all grease, sealers, dirt, wallpaper, etc. Scarify all painted surfaces; loose or “squeaky” floors should be glued, nailed or screwed down tightly.
2. All tiling materials, room and adhesive should be at a minimum 50°F (10°C) for 24 hours before and 48 hours after installation.
3. Remove any dust from tile backs. Pre-measure and pre-cut all tile.

4. Spread adhesive using the flat side of trowel, applying even pressure, then comb the surface with the trowel’s notched side to establish an even setting bed. Press individual tile or tile sheets into adhesive, using care to maintain accurate joint alignment and spacing.
5. For trowel sizes ¼" x ¼" x ¼" (6 x 6 x 6 mm) or larger move tiles in direction perpendicular to the notched trowel ridges ¼" (6 mm) and back, to achieve optimum coverage of tiles with adhesive, avoiding air pockets under the tile.
6. If adhesive skins over (typically 30-35 minutes); remove and re-apply fresh adhesive.

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 standard wall tiles, under ideal conditions. 6" x 6" (150 x 150 mm) floor tiles or larger usually require a minimum of 24 hours to set. NOTE: Colder temperatures, high humidity, use of large semi-vitreous tiles, or non-porous substrates and non-porous tile will extend set times. The use of TEC® brand grouts is highly recommended.

6. AVAILABILITY

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

Phone: 800-832-9002
Website: tecspecialty.com

7. LIMITED WARRANTY

The product(s) covered by this Product Data Sheet are sold subject to a Limited Warranty and related terms. H.B. Fuller Construction Products disclaims the implied warranties of merchantability and fitness for a particular purpose and all incidental and consequential damages arising out of the sale, purchase or use of this product. For Limited Warranty details visit tecspecialty.com. To obtain a hard copy of the Limited Warranty call H.B. Fuller Construction Products at 800-832-9023 or mail a written request to the address in Section 2 of this Product Data Sheet.

8. MAINTENANCE

Not applicable

9. TECHNICAL SERVICES

Technical and safety literature

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

10. FILING SYSTEM

Division 9



tecspecialty.com



H.B. Fuller Construction Products Inc.
1105 South Frontenac Street
Aurora, IL 60504-6451