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 6” x 6” (150 x 200 mm) and wall applications with tile up to 2” x 2” (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 2” x 2” (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) Canadian 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.

<table>
<thead>
<tr>
<th>Tile Type</th>
<th>Recommended Trowel Size</th>
<th>Approximate Coverage per gallon (3.78 L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 6” x 6” (150 x 150 mm) including: ceramic, mosaics standard wall tile, flat back, vitreous*, porcelain, marble and natural stone</td>
<td>⅞” x ⅞” (4.7 x 4 mm) V-notch trowel</td>
<td>41-48 sq. ft. (3.8-4.5 m²)</td>
</tr>
<tr>
<td>Over 6” x 6” (Over 150 x 150 mm) including: ceramic, vitreous*, monocottura and quarry</td>
<td>⅔” x ⅔” x ⅔” (6 x 6 x 6 mm) square notch trowel</td>
<td>25-30 sq. ft. (2.3-2.8 m²)</td>
</tr>
<tr>
<td>Heavy Tile including: heavy, ceramic, vitreous*, natural stone, slate and pavers</td>
<td>⅝” x ⅝” x ⅛” (6 x 9 x 6 mm) square notch trowel</td>
<td>20-25 sq. ft. (1.9-2.3 m²)</td>
</tr>
</tbody>
</table>

*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-⅛” (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 ⅛” (15 mm) exterior grade plywood subfloor and ⅛” (15 mm) exterior grade plywood underlayment on bridged floor joists 16” (40 cm) on center, with a maximum deflection of ⅛” of the span. Joints in the top layer should be offset from joints in the bottom layer of plywood. A gap of ⅛” (3 mm) is required between overlay panels and ¼” (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 ⅛” (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® AccuColor EFX® 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 product(s) under normal environmental and working conditions. Because each product(s) under normal environmental and working conditions.
TEC® Double Duty™ Plus White Ceramic Tile Adhesive

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

<table>
<thead>
<tr>
<th>Double Duty™ Plus White Ceramic Tile Adhesive (123)</th>
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<tbody>
<tr>
<td>Description</td>
</tr>
<tr>
<td>Shear Strength</td>
</tr>
<tr>
<td>Conditioned Dry</td>
</tr>
<tr>
<td>28 Day, Room Temperature</td>
</tr>
<tr>
<td>Type I Water Immersion</td>
</tr>
<tr>
<td>After Accelerated Heat Aging</td>
</tr>
<tr>
<td>Heat Resistance</td>
</tr>
<tr>
<td>Impact Test</td>
</tr>
<tr>
<td>Stain Test</td>
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<tr>
<td>Stability in Storage</td>
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<tr>
<td>Resistance to Mold Growth</td>
</tr>
</tbody>
</table>

Physical Properties

<table>
<thead>
<tr>
<th>Description</th>
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<tbody>
<tr>
<td>Physical State</td>
</tr>
<tr>
<td>Color</td>
</tr>
<tr>
<td>Odor</td>
</tr>
<tr>
<td>Open Time (at 72°F (22°C))</td>
</tr>
<tr>
<td>Wt./U.S. Gallon</td>
</tr>
<tr>
<td>Wt./Liter</td>
</tr>
<tr>
<td>VOC/Liter of Material</td>
</tr>
<tr>
<td>Foot Traffic Rating (ASTM D627)</td>
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<tr>
<td>Freeze/Thaw Stability</td>
</tr>
<tr>
<td>Storage</td>
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<tr>
<td>Shelf Life</td>
</tr>
</tbody>
</table>

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.

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