Double Duty™ Ceramic Tile Adhesive

1. PRODUCT NAME
TEC® Double Duty™ Ceramic Tile Adhesive

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™ is a premium ready-to-use resin-modified interior adhesive for superior tack and adhesion. Ideal for ceramic tile over walls and ceiling and for installers who prefer slightly longer working times. Approved for floor applications with tile up to 8” x 8” (200 x 200 mm) and wall applications with tile up to 13” x 13” (330 x 330 mm)

Not recommended for marble tile applications.

Key Features and Benefits
• Quick grab, non sag
• Strong, resilient bonds
• Tacky consistency
• Water resistant
• Exceeds ANSI A136.1, Type I and Type II specifications

Packaging
One gallon plastic pails (3.78 L) Product #3300075011
3.5 gallon plastic pails (13.25 L) Product #3300071211

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)</td>
<td>⅜” x ⅜” (4.7 x 4 mm)</td>
<td>41-48 sq. ft. (3.8-4.5 m²)</td>
</tr>
<tr>
<td>Over 6” x 6” (Over 150 x 150 mm)</td>
<td>¼” x ¼” x ¼” (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</td>
<td>⅛” x ⅛” x ⅛” (6 x 6 x 6 mm)</td>
<td>20-25 sq. ft. (1.9-2.3 m²)</td>
</tr>
</tbody>
</table>

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-⅜” (15 mm) layers; installed in accordance with TCA Installation Detail F142.
• Existing ceramic
• Coated glass mat backerboard
• Gypsum wallboard (dry areas)

• Water resistant gypsum wallboard
• Cured Portland cement plaster
• Masonry
• Plastic laminate

Substrate Preparation
Exterior Grade Plywood—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 ⅜” (15 mm) exterior grade plywood underlayment on bridged floor joists 16” (40 cm) on center, with a maximum deflection of ⅜ 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 ⅜” (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
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 marble.
• For green marble, use TEC® AccuColor EFX® Epoxy Grout and Mortar; for light-colored marble, use TEC® Double Duty™ Plus.
• 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.
• Not for exterior use.
• Not for use with lugs greater than 8” x 8” (200 x 200 mm) in floor applications; tiles larger than 13” x 13” (330 x 330 mm) in wall applications; use an appropriate TEC® mortar product.

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

For medical emergency information, call 1-888-853-1758.
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>Description</th>
<th>ANSI Requirement</th>
<th>Typical Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shear Strength</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conditioned Dry</td>
<td>&gt; 50 psi (0.34 MPa)</td>
<td>Passes</td>
</tr>
<tr>
<td>28 Day, Room Temperature</td>
<td>&gt; 50 psi (0.34 MPa)</td>
<td>Passes</td>
</tr>
<tr>
<td>Type I Water Immersion</td>
<td>&gt; 50 psi (0.34 MPa)</td>
<td>Passes</td>
</tr>
<tr>
<td>After Accelerated Heat Aging</td>
<td>&gt; 75% dry shear strength retention</td>
<td>Passes</td>
</tr>
<tr>
<td>Heat Resistance</td>
<td>Maintains at least 10 lb. (4.5 kg) static load in shear at 120°F (49°C) for 24 hours</td>
<td>Passes</td>
</tr>
<tr>
<td>Impact Test</td>
<td>All tiles remain bonded after impact</td>
<td>Passes</td>
</tr>
<tr>
<td>Stain Test</td>
<td>&lt; 70% penetration</td>
<td>Passes</td>
</tr>
<tr>
<td>Stability in Storage</td>
<td>4 weeks minimum</td>
<td>Passes</td>
</tr>
<tr>
<td>Resistance to Mold Growth</td>
<td>No mold growth</td>
<td>Passes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical Properties</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Paste</td>
</tr>
<tr>
<td>Color</td>
<td>Light Tan</td>
</tr>
<tr>
<td>Odor</td>
<td>Nil</td>
</tr>
<tr>
<td>Open Time [at 72°F (22°C)]</td>
<td>35 to 45 minutes</td>
</tr>
<tr>
<td>Wt./U.S. Gallon</td>
<td>11.5 lbs. ± .1 lb.</td>
</tr>
<tr>
<td>Wt./Liter</td>
<td>1.38 kg ± .01 kg</td>
</tr>
<tr>
<td>VOC/Liter of Material</td>
<td>88 grams</td>
</tr>
<tr>
<td>Foot Traffic Rating (ASTM C627)</td>
<td>Residential to light commercial</td>
</tr>
<tr>
<td>Freeze/Thaw Stability</td>
<td>Freeze/thaw stable. If frozen, thaw and stir before using</td>
</tr>
<tr>
<td>Storage</td>
<td>Store in cool, dry location. Do not store open containers.</td>
</tr>
<tr>
<td>Shelf Life</td>
<td>Maximum 1 year from date of manufacture in properly stored, unopened package.</td>
</tr>
</tbody>
</table>

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 35-45 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 1/16” (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 1/4 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 24 to 48 hours. Colder temperatures, high humidity, use of large semi vitreous tiles [6” x 6” (150 x 150 mm) or larger], 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