1. PRODUCT NAME
TEC® Ultimate 6 Plus Mortar (487)

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
TEC® Ultimate 6 Plus is a high performance, polymer modified, full contact (full coverage) mortar designed for the installation of ceramic, porcelain and natural stone tile. Unlike other mortars, Ultimate 6 Plus has a unique combination of features that allow grouting in 6 hours while providing extended open time. It is ideal for all gauged porcelain tile panels/ slabs and large heavy tile (LHT) installations. Ultimate 6 plus significantly reduces the need for back buttering and has exceptional non-sag / non-slump characteristics for wall and floor applications.

Key Features and Benefits
- Ideal for all Gauged Porcelain Tile Panels/Slabs and LHT installations
- NEW – Approved for indoor glass applications with intermittent water exposure (see page 2)
- NEW – Approved for setting and tiling under and over uncoupling membranes
- Extended open time and pot life
- Grout in as little as 6 hours
- Superior transfer - full coverage with minimum effort
- Non-sag for wall applications and non-slump for floor applications
- Mixes to an extremely smooth, creamy consistency providing superior handling
- Exceeds ANSI A118.4-TE and A118.11 specifications
- Interior/exterior use

Packaging
40 lb. (18.14 kg) moisture-resistant bags
Product #7200373511

Coverage
Coverage will vary with condition of substrate. Required trowel size will vary with the tile size, type and substrate uniformity. Select the trowel size that will ensure 100% coverage. Figures below are presented only as guidelines.

<table>
<thead>
<tr>
<th>Trowel Size</th>
<th>Approximate Coverage per 40 lbs. (18.14 kg)</th>
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<tbody>
<tr>
<td>1/4” x 3/16” (6 x 4.7 mm) V-notch trowel</td>
<td>182-204 sq. ft. (16.9-19.0 m²)</td>
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<tr>
<td>3/16” x 1/4” x 1/4” (6 x 6 x 6 mm) square-notch trowel</td>
<td>91-102 sq. ft. (8.4-9.5 m²)</td>
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<tr>
<td>1/4” x 3/16” x 1/4” (6 x 9 x 6 mm) square-notch trowel</td>
<td>75-85 sq. ft. (7.0-7.9 m²)</td>
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<tr>
<td>3/16” x 3/16” x 3/16” (9 x 9 x 9 mm) square-notch trowel</td>
<td>60-68 sq. ft. (5.6-6.3 m²)</td>
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<tr>
<td>1/2” x 1/8” x 1/8” (12 x 12 x 12 mm) square-notch trowel</td>
<td>45-51 sq. ft. (4.2-4.7 m²)</td>
</tr>
<tr>
<td>3/16” x 1/8” x 1/8” (19 x 14 x 9 mm) rounded-notch trowel</td>
<td>30-34 sq. ft. (2.8-3.2 m²)</td>
</tr>
<tr>
<td>Euro-notch trowel</td>
<td>26-33.5 sq. ft. (2.4-3.1 m²)*</td>
</tr>
<tr>
<td>slant-notch trowel</td>
<td>25-30 sq. ft. (2.3-2.8 m²)*</td>
</tr>
</tbody>
</table>

*Based on application to both the substrate and tile back

Suitable Substrates
When properly prepared, suitable substrates include:
- Cured concrete, cured mortar beds, brick and masonry (interior and exterior installations)
- APA Grade Trademarked Exposure 1 Plywood (Underlayment grade or better, two layers, 1 1/8” (28 mm) total minimum thickness for joints 16” (40 cm) o.c., interior floors only)
- Gypsum wallboard (dry interior wall areas only)
- Water resistant gypsum wallboard (i.e.: greenboard, interior walls only, dry to intermittent water exposure only)
- Cementitious backer units (CBU) or glass mat backerboard
- Existing ceramic tile and natural stone, provided existing flooring is well-bonded to an approved substrate
- Vinyl composition tile, asphalt tile, linoleum or non-cushioned vinyl sheetgoods provided such surfaces are single layered, well-bonded to an approved substrate and properly prepared
- Adhesive residue (except tacky or pressure-sensitive adhesive). Mechanically remove the adhesive to expose at least 80% of the concrete surface. Random specks of adhesive and the appearance of a brown surface stain are acceptable
- Extruded foam waterproof board
- Uncoupling membranes

H.B. Fuller Construction Products Inc. (“HBF-CP”) will warrant Ultimate 6 Plus with the use of 3/4” floor-rated underlayment OSB as an approved substrate for the installation of uncoupling membranes.

For gypsum underlayment, TEC® Multipurpose Primer must be applied directly to the gypsum underlayment prior to application of Ultimate 6 Plus for bonding of the uncoupling membrane. Please see the Multipurpose Primer product data sheet for dilution ratios and application instructions.

Substrate Preparation
All substrates must be dry, structurally sound with maximum deflection per industry standards of 1/360 for ceramic tile installations and 1/180 for natural stone installations; and free from oil, grease, dust, paint, sealers or concrete curing compounds. All contaminants must be removed prior to installation of tile. Surface protrusions and tile glazes shall be removed by sanding, scraping or scarring. After preparation, remove all dust by vacuuming. For Gauged Porcelain Tile Panels/Slabs installation, reference the TEC® Thin Porcelain Panel Installation Guide on tecspecialty.com.

Notes: Vinyl asbestos tile or any substrate containing asbestos must not be sanded, scored or scarring because of the potential health hazard of breathing dust. Any substrate containing asbestos must be handled in accordance with existing EPA regulations. Contact your local EPA office.

Expansion joints must be provided in the tile work over all construction, control and expansion joints in the backing and where backing materials change. Follow ANSI A108.01 Section 3.7 Requirements for Expansion Joints. Maximum variations in all substrates must not exceed 1/4” in 10 ft. (6 mm in 3 m) and 3/16” in 1 ft. (1.6 mm in 0.3 m) from the required plane for tile less than 15” (381 mm) on all sides. Maximum variations in all substrates must not exceed 3/8” in 10 ft. (3 mm in 3 m) and 1/8” in 2 ft. (1.6 mm in 0.6 m) from the required plane for tile 15” (381 mm) or greater on any one side. For large non-level, interior surfaces use TEC® Level Set® 300 Self-Leveling Underlayment. For exterior surfaces or smaller areas of rough uneven substrates, use a scratch coat of TEC® Ultimate 6 Plus up to 1/4” (6 mm) thick. Allow to cure to walkable hardness before applying mortar bond coat.
Glass Tile Installation

TEC® Ultimate 6 Plus, with its proprietary formulation, has been tested and approved to be used with glass tile for the following applications:

1. Indoor applications only
2. Wall applications only
3. Intermittent water exposure (not for use with submerged applications).

Example such as:
- Kitchen Backsplash
- Shower wall accents

Note: When installing clear glass tile over waterproof membranes, visible mortar shadowing may occur.

The Materials approved are as follows:

1. Clear Glass tiles with no backing with maximum area of 16 in²
2. 12” x 12” Matted Mosaic Tiles with clear or painted Mesh backing
3. 12” x 12” Matted Subway Tiles with Mesh backing
4. Glass tiles with painted backing up to 16 in²

NOTE: Not all coatings used to colorize the back of glass tile are compatible with Portland cement based mortars. Please check with the manufacturer to determine if it will be compatible. For any questions on this, please call our Technical Support Hotline at 1-800-832-9023 for additional support.

Also, if you are looking to install a specific tile not listed in the above material list and would like to use Ultimate 6 Plus Mortar, please contact our Technical Support Hotline at 800-832-9023 for additional support.

In specifying a setting system for the bonding of glass tile, the following issues must be taken into consideration:

Glass Tile Type: Glass tile can be manufactured in a number of different ways such as clear, translucent with a colored body, or translucent with a colored backing. Each type has a different aesthetic appearance. The color and composition of the mortar can have an effect on the final appearance, especially with clear or translucent tile

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

Shelf Life
Maximum 1 year from date of manufacture in unopened package.

Limitations

- Not for installing green marble or other moisture-sensitive stone tile; use TEC® AccuColor™ EFX® Epoxy Grout and Mortar.
- For resin-backed marble see the TEC® Technical Bulletin "Installation Of Resin Backed Stone Tiles" at tecspecialty.com.
- Not for use over rubber, strip wood floors, oriented strand board, particle board, lauan plywood.
- For CDX plywood, use TEC® Super Flex™ mortar or TEC® XtraFlex™ acrylic mortar additive with TEC® Full Set Plus™ thin set mortar.
- Do not apply over single layer wood floors.
- Temperature of area to be tiled must remain above 50°F (10°C) for 72 hours.
- Certain natural stone tiles may be affected by mortar shadowing or staining. Test a small area prior to use to determine suitability.

Cautions
Read complete cautionary information printed on product container prior to use. For medical emergency information, call 1-888-853-1758.

**Clean-up**
Clean tools, hands, and excess materials from face of tile, while mortar is still fresh, with warm soapy water.

**Grouting/Curing**
Grouting may be accomplished when tiles are held firmly in place, typically 6 hours after installation is completed. No traffic is permitted over the tiles prior to grouting. Cold temperatures or high humidity may extend curing time. Unglazed tiles may require sealing prior to grouting so discolorations will not occur. 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

Conforms with LEED v4 low emitting interiors.
Compliant with (CDPH) Standard Method v1.2 VOC Emissions.