



Fast Set Ultimate Large Tile Mortar

1. PRODUCT NAME

TEC® Fast Set Ultimate Large Tile Mortar
(386/387)

2. MANUFACTURER

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3. DESCRIPTION

TEC® Fast Set Ultimate Large Tile Mortar is a high performing, polymer-modified, full-contact (full-coverage) mortar for installing ceramic, porcelain and natural stone tile. It is ideal for use as a medium bed mortar for heavy and large format tile in both interior and exterior applications. (maximum mortar thickness of 3/4" (19 mm) after the tile is embedded). It can also be used in standard thin-set applications. As a medium bed mortar it significantly reduces the need for back-buttering. It also provides extended open time and has non-sag/non-slump characteristics for wall and floor applications.

Key Features and Benefits

- Fast curing formula – grout in 3-4 hours
- Thinset or medium-bed application
- Ideal for use with heavy and large format tile
- Approved for setting and tiling on uncoupling membranes
- Non-sag for wall applications and non-slump for floor applications
- Extended open time
- Mixes to a smooth, creamy consistency for superior handling
- Superior transfer – full coverage with minimum effort
- Interior/exterior use
- Exceeds ANSI A118.4TF and A118.11 specifications
- Zero VOC
- Contains recycled materials*

* Gray formula contains 5% pre-consumer recycled material. White formula contains 5% post-consumer recycled material.

Packaging

40 lb. (18.14 kg) plastic bags

Gray
White

Product #15035872
Product #15035871

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.

| Trowel Size | Approximate Coverage per 40 lbs. (18.14 kg) |
|---|---|
| 1/4" x 1/4" x 1/4" (6 x 6 x 6 mm) square-notched trowel | 91-102 sq. ft. (8.4-9.5 m ²) |
| 1/4" x 3/8" x 1/4" (6 x 9 x 6 mm) square-notch trowel | 75-85 sq. ft. (7.0-7.9 m ²) |
| 3/8" x 3/8" x 3/8" (9 x 9 x 9 mm) square-notch trowel | 60-68 sq. ft. (5.6-6.3 m ²) |
| 1/2" x 1/2" x 1/2" (12 x 12 x 12 mm) square-notch trowel | 45-51 sq. ft. (4.2-4.7 m ²) |
| 3/4" x 3/16" x 3/8" (19 x 14 x 9 mm) rounded-notch trowel | 30-34 sq. ft. (2.8-3.2 m ²) |

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 joists 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.
- Uncoupling membranes

Some uncoupling membrane manufacturers list gypsum underlayment and oriented strand board (OSB) as suitable substrates for their uncoupling membranes. H.B. Fuller Construction Products Inc. ("HBF-CP") does not recommend direct application of Fast Set Ultimate to either of these materials. TEC® Multipurpose Primer must be applied directly to gypsum underlayments or OSB prior to application of Fast Set Ultimate 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 1/720 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 scarifying. After preparation, remove all dust by vacuuming.

Notes: Vinyl asbestos tile or any substrate containing asbestos must not be sanded, scored or scarified 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 1/16" in 1 ft. (1.6 mm in 0.3 m) from the required plane. For large non-level, interior surfaces use TEC® EZ Level® Premium Self Leveling Underlayment. For exterior surfaces or smaller areas of rough uneven substrates, use a scratch coat of TEC® Fast Set Ultimate Large Tile Mortar up to 1/4" (6 mm) thick. Allow to cure to walkable hardness before applying mortar bond coat.

Storage

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

Shelf Life

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

Limitations

- Only install when the temperature is between 40-95°F (4-35°C).
- 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.

- For non-green marble tile applications, use white TEC® Fast Set Ultimate Large Tile Mortar.
- 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 40°F (4°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.

Applicable Standard

Exceeds ANSI A118.4F and A118.11 specifications
ISO 13007: Classification C2TP1

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.

| TEC® Fast Set Ultimate Large Tile Mortar (386/387) | | | | | |
|--|--------------------------------------|---------|--------------------------|-------------------------------------|-----------------|
| ANSI Standard | Test | Section | Test Duration/Conditions | ANSI Specification | Typical Results |
| A118.11 | Shear Strength to Quarry Tile | 4.1.2 | 28 day plywood | >150 psi (10.5 kg/cm ²) | 220 |
| A118.4 | Glazed Wall Tile Shear Strength | 7.1.2 | 7 day | >300 psi (2.07 MPa) | 430 |
| | Porcelain Mosaic Tile Shear Strength | 7.2.5 | 28 day | >200 psi (1.38 MPa) | 330 |
| | Quarry Tile Shear Strength | 7.3.2 | 28 day | 150 psi (1.03 MPa) | 385 |
| A118.4E | Open Time | 5.3.6 | 10 minute | 75 psi (0.5 MPa) at 10 minutes | 415 |

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

4. TECHNICAL DATA

Physical Properties

| Description | |
|---------------------------------|---|
| Physical State | Dry powder |
| Color | Available in white and gray |
| Pot Life | 50 minutes |
| Initial Cure [at 72°F (22°C)] | 3-4 hours |
| Final Cure | 21 days |
| Foot Traffic Rating (ASTM C627) | Residential to Extra Heavy Commercial (depending on substrate) |
| 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

Mixing

For best results, maintain all tiling materials, substrates, room and adhesives at 50°-70°F (10-21°C) for 24 hours before and 48 hours after installation. In a clean mixing container, add TEC® Fast Set Ultimate Large Tile Mortar to clean, cool water as specified in the chart.

| Application | Water |
|---------------------------------|--------------------------------|
| Medium-bed or Wall Applications | 6 to 6½ quarts (5.6 to 6.1 L) |
| Thin Set Floor Applications | 6½ to 6¾ quarts (6.1 to 6.4 L) |

Add clean, cool water to a clean mixing container. Add ½ bag of TEC® Fast Set Ultimate Large Tile Mortar and mix until all powder is consumed. Add final ½ bag and mix until powder is consumed. Be cautious not to over-water. Consistency will loosen during mixing process. Mix material for two (2) minutes to a smooth and creamy consistency. Avoid breathing dust and contact with eyes and skin. Avoid using high speed mixing, not to exceed 300 rpm, to prevent entraining air.

Application

Apply mortar 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 10-15 minutes). Press tiles

into setting bed, then push in a direction perpendicular to the notched trowel ridges to achieve optimum coverage. Apply mortar in a heavy enough layer so that complete contact (no voids) between mortar and tile is accomplished when tile is positioned. Irregularities in substrate may require "back-buttering" of large tiles to achieve complete coverage and firm support. Periodically remove and check a tile to assure proper coverage. Keep a minimum of ⅓ of the joint depth between tiles for grouting. Open time and tile hand adjustability may vary with job site conditions. Stir occasionally during use to maintain the smooth, creamy consistency of the product. **Do not add additional water.**

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 3 to 4 hours after installation is completed. No traffic is permitted over the tiles prior to grouting. Cold temperatures or high humidity may extend curing time, working time, and pot life. Hot temperatures or low humidity may decrease curing time, working time, and pot life. 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



To learn more, visit TECspecialty.com



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