**MAPEI**®

# Ultracolor® Plus FA

## Rapid-Setting, "All-in-One" Grout Replacement for Sanded and Unsanded Grouts

## DESCRIPTION

*Ultracolor Plus FA* with DropEffect™ technology is an ultra premium, fine-aggregate, fast-setting, polymer-modified, color-consistent, nonshrinking, efflorescence-free grout for joint widths from 1/16" to 3/4" (1,5 to 19 mm). DropEffect reduces surface absorption to help repel water, dirt and grime from penetrating grout joints. *Ultracolor Plus FA* is specially formulated with MAPEI's High-Hydrated Cement Technology (HCT™) to eliminate the common problems related to Portland-cement grout, such as color consistency and efflorescence. Along with offering higher polymer content, HCT reduces absorption and increases stain resistance when compared with standard-performance cement grouts. *Ultracolor Plus FA* is formulated with 10% recycled content and meets the ANSI A138.1 specification for GreenSquared certification.

## FEATURES AND BENEFITS

- Fine aggregate (FA) allows for narrow joint widths and improved cleanability
- No efflorescence (free of Portland cement)
- Easy to install and stain-resistant
- No sealer required

## INDUSTRY STANDARDS AND APPROVALS

- ISO 13007: Classification CG2WAF
- ANSI: Meets or exceeds ANSI A118.6 and A118.7 industry standards
- SCS GreenSquared: Certified per ANSI A138.1

| LEED v3 Points Contribution | LEED Points |
|---|---|
| MR Credit 5, Regional Materials* | Up to 2 points |

IEQ Credit 4.1, Low-Emitting Materials –
Adhesives & Sealants .................................................................1 point

IEQ Credit 4.3, Low-Emitting Materials –
Flooring Systems ..........................................................................1 point

| LEED v4 Points Contribution | LEED Points |
|---|---|
| MR Credit Material Ingredient Reporting – Health Product Declaration (HPD) | 1 point |

*\* Using this product may help contribute to LEED certification of projects in the categories shown above. Points are awarded based on contributions of all project materials.*

## WHERE TO USE

- Commercial and residential construction suitable for both interior and exterior installations
- For grouting dimensional stone, slate, granite, stone agglomerates and most types of ceramic, ceramic mosaic, quarry, brick paver, porcelain, glass and clay tiles
- For application in submerged conditions (swimming pools, spas, water features and fountains), allow for 72 hours of curing time.
- For use where grout will be exposed to foot traffic within 3 to 4 hours
- For joint widths from 1/16" to 3/4" (1,5 to 19 mm)

## LIMITATIONS

- Sealing is not required. However, a high-performance penetrating grout sealer may still be applied from MAPEI's *UltraCare*™ family of sealers, which includes Penetrating Plus Stone, Tile & Grout Sealer; and Penetrating

Plus SB Stone & Porcelain Tile Sealer. Follow the directions provided in the *UltraCare* Maintenance Guide.

- Do not use when a highly chemical-, impact- and stain-resistant grout is required or in heavy industrial tile installations. Instead, use an appropriate MAPEI epoxy grout (see the respective Technical Data Sheet [TDS] for details).

- When grouting in temperatures above 80°F (26°C), see the Technical Bulletins at www.mapei.com or consult MAPEI's Technical Services Department.

Consult MAPEI's Technical Services Department for installation recommendations regarding substrates and conditions not listed.

## SURFACE PREPARATION

- Certain tiles with high absorption, surface porosity or rough surfaces may require sealing before grouting to prevent permanent staining.

- The application of a grout release over certain types of porcelain or textured surface tiles or stone may be advantageous where a fine surface porosity might trap fine particles or color pigments. Seek the advice of the tile or stone manufacturer and site-test (mock up) on separate samples before grouting.

- Caution: Some types of glass, glazed ceramic tiles, marble, granite and marble agglomerates can be permanently stained, scratched, dulled or damaged when grouted with pigmented grout or sanded grout formulas. Generally, lighter-shade grout is best suited for grouting white or light-colored marble or granite. Take all the necessary precautions to ensure that the marble, granite or tiles are compatible with colored grouts. Check the tile or marble manufacturer's literature and test grout on a separate sample area before grouting to determine the suitability of the product with colored and/or sanded grouts.

- Before grouting, make sure that the tiles or stones are firmly set and that the adhesive or mortar is completely dry.

- Remove all spacers, pegs, ropes and strings.

- Grout joints must be clean and free of standing water, dust, dirt and foreign matter. Remove excess adhesive or mortar from the joint area so that 2/3 of the depth of the tile is left available for grouting.

- Clean the tile or stone surface thoroughly to remove dust, dirt and other contaminants that may cause grout discoloration.

See MAPEI's "Surface Preparation Requirements" document in the Reference & Installation Guides section of the Tile & Stone Installations Systems page on MAPEI's Website.

## MIXING

Choose all appropriate safety equipment before use. Refer to the Safety Data Sheet for details.

1. For best results, have the same person mix all of the grout. Consistent mixing techniques will promote more uniform results.

2. Before mixing the grout with water, dry-blend the product to avoid color variations in the finished grout, which may arise from pigment settling during shipment. If two or more bags are to be used, all of the contents should be dry-blended together.

3. Mix *Ultracolor Plus FA* with cool, clean water only. Do not mix with grout additives. Mix by using the following water-to-grout proportions:

| Water | *Ultracolor Plus FA* powder |
|---|---|
| 1 to 1.1 U.S. qts. (0,95 to 1,04 L) | 10 lbs. (4,54 kg) |
| 2.6 to 2.8 U.S. qts. (2,46 to 2,65 L) | 25 lbs. (11,3 kg) |

4. Pour the required measured amount of clean, cool water into a clean mixing container. Gradually add the proportionate amount of *Ultracolor Plus FA* while slowly mixing. To avoid shade variation of the finished joint, always add the powder to the water while being consistent in the mixing process and the quantity of water used from batch to batch.

5. Mix thoroughly with a low-speed mixer (at about 350 rpm) for about 3 to 5 minutes, or until obtaining a smooth, creamy, homogenous paste consistency and a uniform shading of the colored grout.

6. Avoid air entrapment from prolonged mixing, which will shorten the pot life.

7. Allow the grout to sit ("slake") in the container for about 2 to 3 minutes.

8. Remix for about 30 seconds without adding more liquid or powder.

9. Wash tools immediately with fresh water.

## PRODUCT APPLICATION

Read all installation instructions thoroughly before installation.

1. Use only at temperatures between 50°F and 100°F (10°C and 38°C). With temperatures above 85°F (29°C), use cold water to mix the powder.

2. Using consistent application and cleaning procedures will produce consistent results.

3. To aid in spreading the grout, slightly moisten the tile or stone surface with a damp sponge just before application. Do not flood the tiles or allow water to stand in the ungrouted joint areas.

4. Force *Ultracolor Plus FA* into the joints with a rubber grout float. Make sure all joints are well-compacted and free of voids and gaps.

5. Remove excess grout from the tile surface, moving the grout float diagonally to the joints while the *Ultracolor Plus FA* is still fresh.

6. The grout surface should be flush with the tile edge.

7. Some stiffening may occur before all material is used (usually within about 1 hour at room temperature). If this occurs, simply remix but do not add more liquid.

8. Provide for expansion and control joints as specified per TCNA Handbook method EJ171 or TTMAC Specification Guide 09300, Detail 301EJ.

9. Allow the *Ultracolor Plus FA* to firm up in the joints sufficiently to avoid damaging the grout surface – usually in 15 to 30 minutes, depending upon the temperature, humidity and absorption rate of the tile or stone. Nonvitreous wall tile that absorbs water quickly requires less time for grout to firm up – only 5 to 10 minutes after installation.

10. Use two buckets of cleaning water: one for rinsing the majority of the grout residue from the grout sponge, and one for moistening the sponge in clean water.

11. Dip the sponge in a bucket of water and wring out the excess, so that the sponge does not drip water. Using very little pressure, pull the sponge diagonally across the grout joints to remove the excess grout from the tile surface. Also use the sponge to smooth the surface of the grout joint. Turn the sponge over and make another pass in an adjacent area. After using both sides, rinse the sponge in one bucket and wring out the excess water. Dip the sponge in the second bucket of water, wringing out the excess and continue the process.

12. Change the water in the buckets frequently to help limit the amount of haze that forms on the tile or stone surface.

13. To prevent discoloration and soft/powdery joints, avoid cleaning with excessive water.

14. To control color variations, buff the grouted surface with cheesecloth or a clean, dry cotton cloth when a haze is visible on the tile surface, usually 30 to 60 minutes after grouting. This should remove any remaining surface water or grout residue.

15. Wash tools immediately with fresh water.

16. Never use acid for cleaning marble, glazed tile or pigmented grout surfaces. If a persistent haze remains after normal cleaning, see the Technical Bulletins at www.mapei.com or consult MAPEI's Technical Services Department.

## PROTECTION

- Provide for dry, heated storage on site and deliver materials at least 24 hours before tilework begins.

- For at least 72 hours after completion, protect from rain and freezing, and do not immerse the installation in water.

- Floors: Keep the installation free from foot traffic for at least 3 hours after grouting.

- Walls: Protect the installation from impact, vibration and hammering on adjacent and opposite walls for 14 days after tile installation (see the TDS of the adhesive or setting system for details).

- Because temperature and humidity (during and after installation of tile) affect the final curing time of all cement-based materials, allow for extended periods of curing and protection when temperatures drop below 60°F (16°C) and/or when the relative humidity is higher than 70%.

## MAINTENANCE

- Grout must be cured for at least 24 hours before regular cleaning.

- MAPEI grout products are produced to the highest quality of standards. To maintain a clean tile surface, use a neutral-pH cleaner for maintaining the floor, followed by a clean water rinse.

- Do not use harsh chemical cleaners to maintain the tile surface. Before proceeding with cleaning, consult the cleaner's manufacturer for compatibility, use and application instructions. Remove or rinse fatty acid residue from the grout surface to avoid potential grout deterioration caused by prolonged exposure.

- A high-performance penetrating grout sealer may still be applied from MAPEI's *UltraCare* family of sealers, which includes Penetrating Plus Stone, Tile & Grout Sealer; and Penetrating Plus SB Stone & Porcelain Tile Sealer. Follow the directions provided in the *UltraCare* Maintenance Guide.

## ISO 13007 Classification

| Classification Code | Test Characteristics | Classification Requirement |
|---|---|---|
| CG2 (cementitious grout, improved) | Shrinkage | ≤ 0.30% shrinkage in 28 days |
| W (reduced water absorption) | Water absorption | ≤ 5 g after 4 hours |
| A (high abrasion resistance) | Abrasion resistance | ≤ 1,000 mm$^3$ |
| F (rapid-setting) | Compressive strength | ≥ 2,175 psi (15 MPa) after 24 hours |

## ANSI Specification

| Test Method | Specification Standard | Test Results |
|---|---|---|
| ANSI A118.7 – compression | 3,000 psi (20,7 MPa) at 28 days | 3,000 to 5,500 psi (20,7 to 37,9 MPa) at 28 days |
| ANSI A118.7 – shrinkage | < 0.20% at 27 days | < 0.20% at 27 days |
| ANSI A118.7 – tensile strength | 500 psi (3,45 MPa) at 28 days | 500 to 600 psi (3,45 to 4,14 MPa) at 28 days |
| ANSI A118.7 – water absorption | < 5% (50% relative humidity to immersion) | < 5% (50% relative humidity to immersion) |
| ANSI A118.7 – flexural strength | 1,000 psi (6,90 MPa) at 28 days | 1,000 to 1,400 psi (6,90 to 9,66 MPa) at 28 days |

## Shelf Life and Product Characteristics (before mixing)

| | |
|---|---|
| Shelf life | 1 year when stored in original, unopened packaging at 73°F (23°C) in a dry area |
| Physical state | Powder |

## Application Properties at 73°F (23°C) and 50% relative humidity

| | |
|---|---|
| Mixing ratio | Per 10 lbs. (4,54 kg) of grout powder: 1 to 1.1 U.S. qts. (0,95 to 1,04 L) of water<br><br>Per 25 lbs. (11,3 kg) of grout powder: 2.6 to 2.8 U.S. qts. (2,46 to 2,65 L) of water |
| VOCs (Rule #1168 of California's SCAQMD) | 0 g per L |
| Pot life* | 30 minutes to 1 hour |
| Application temperature range | 50°F and 100°F (10°C and 38°C) |
| Curing time* | 72 hours |

*\* Pot life and curing time vary based on jobsite conditions, including cold temperatures or high humidity.*

## Packaging

| Size |
|---|
| Bag: 10 lbs. (4,54 kg) |
| Bag: 25 lbs. (11,3 kg) |

**Approximate Coverage***

| Per 10 lbs. (4,54 kg). Coverages in sq. ft. (m²). | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Tile Size** | **Grout Joint Width** | | | | | | | |
| | **1/16"** (1,5 mm) | **1/8"** (3 mm) | **3/16"** (4,5 mm) | **1/4"** (6 mm) | **3/8"** (10 mm) | **1/2"** (12 mm) | **5/8"** (16 mm) | **3/4"** (19 mm) |
| 1" x 1" x 1/4" (25 x 25 x 6 mm) | 39 (3,62) | 20 (1,86) | 13 (1,21) | 10 (0,93) | 7 (0,65) | 5 (0,46) | 4 (0,37) | 4 (0,37) |
| 2" x 2" x 1/4" (50 x 50 x 6 mm) | 78 (7,25) | 39 (3,62) | 26 (2,42) | 20 (1,86) | 13 (1,21) | 10 (0,93) | 8 (0,74) | 7 (0,65) |
| 3" x 3" x 1/4" (75 x 75 x 6 mm) | 117 (10,9) | 59 (5,48) | 39 (3,62) | 30 (2,79) | 20 (1,86) | 15 (1,39) | 12 (1,11) | 10 (0,93) |
| 4" x 8" x 1/2" (100 x 200 x 12 mm) | 104 (9,66) | 52 (4,83) | 35 (3,25) | 26 (2,42) | 18 (1,67) | 13 (1,21) | 11 (1,02) | 9 (0,84) |
| 4-1/4" x 4-1/4" x 1/4" (108 x 108 x 6 mm) | 165 (15,3) | 83 (7,71) | 55 (5,11) | 42 (3,90) | 28 (2,60) | 21 (1,95) | 17 (1,58) | 14 (1,30) |
| 6" x 6" x 1/4" (150 x 150 x 6 mm) | 233 (21,6) | 117 (10,9) | 78 (7,25) | 59 (5,48) | 39 (3,62) | 30 (2,79) | 24 (2,23) | 20 (1,86) |
| 6" x 6" x 1/2" (150 x 150 x 12 mm) | 117 (10,9) | 59 (5,48) | 39 (3,62) | 30 (2,79) | 20 (1,86) | 15 (1,39) | 12 (1,11) | 10 (0,93) |
| 6" x 24" x 3/8" (150 x 610 x 10 mm) | 249 (23,1) | 125 (11,6) | 83 (7,71) | 63 (5,85) | 42 (3,90) | 32 (2,97) | 25 (2,32) | 21 (1,95) |
| 8" x 8" x 3/8" (200 x 200 x 10 mm) | 207 (19,2) | 104 (9,66) | 69 (6,41) | 52 (4,83) | 35 (3,25) | 26 (2,42) | 21 (1,95) | 18 (1,67) |
| 12" x 12" x 3/8" (300 x 300 x 10 mm) | 311 (28,9) | 156 (14,5) | 104 (9,66) | 78 (7,25) | 52 (4,83) | 39 (3,62) | 32 (2,97) | 26 (2,42) |
| 12" x 24" x 3/8" (300 x 600 x 10 mm) | 414 (38,5) | 207 (19,2) | 138 (12,8) | 104 (9,66) | 69 (6,41) | 52 (4,83) | 42 (3,90) | 35 (3,25) |
| 13" x 13" x 3/8" (330 x 330 x 10 mm) | 337 (31,3) | 169 (15,7) | 113 (10,5) | 85 (7,90) | 57 (5,30) | 43 (3,99) | 34 (3,16) | 29 (2,69) |
| 18" x 18" x 3/8" (457 x 457 x 10 mm) | 466 (43,3) | 233 (21,6) | 156 (14,5) | 117 (10,9) | 78 (7,25) | 59 (5,48) | 47 (4,37) | 39 (3,62) |
| 20" x 20" x 3/8" (508 x 508 x 10 mm) | 518 (48,1) | 259 (24,1) | 173 (16,1) | 130 (12,1) | 87 (8,08) | 65 (6,04) | 52 (4,83) | 44 (4,09) |
| 24" x 24" x 3/8" (610 x 610 x 10 mm) | 621 (57,7) | 311 (28,9) | 207 (19,2) | 156 (14,5) | 104 (9,66) | 78 (7,25) | 63 (5,85) | 52 (4,83) |
| 32" x 32" x 3/8" (812 x 812 x 10 mm) | 828 (76,9) | 414 (38,5) | 276 (25,6) | 207 (19,2) | 138 (12,8) | 104 (9,66) | 83 (7,71) | 69 (6,41) |

| Per 25 lbs. (11,3 kg). Coverages in sq. ft. (m²). | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Tile Size** | **Grout Joint Width** | | | | | | | |
| | **1/16"** (1,5 mm) | **1/8"** (3 mm) | **3/16"** (4,5 mm) | **1/4"** (6 mm) | **3/8"** (10 mm) | **1/2"** (12 mm) | **5/8"** (16 mm) | **3/4"** (19 mm) |
| 1" x 1" x 1/4" (25 x 25 x 6 mm) | 97 (9,01) | 49 (4,55) | 33 (3,07) | 25 (2,32) | 17 (1,58) | 13 (1,21) | 10 (0,93) | 9 (0,84) |
| 2" x 2" x 1/4" (50 x 50 x 6 mm) | 194 (18,0) | 97 (9,01) | 65 (6,04) | 49 (4,55) | 33 (3,07) | 25 (2,32) | 20 (1,86) | 17 (1,58) |
| 3" x 3" x 1/4" (75 x 75 x 6 mm) | 291 (27,0) | 146 (13,6) | 97 (9,01) | 73 (6,78) | 49 (4,55) | 37 (3,44) | 30 (2,79) | 25 (2,32) |
| 4" x 8" x 1/2" (100 x 200 x 12 mm) | 259 (24,1) | 130 (12,1) | 87 (8,08) | 65 (6,04) | 44 (4,09) | 33 (3,07) | 26 (2,42) | 22 (2,04) |
| 4-1/4" x 4-1/4" x 1/4" (108 x 108 x 6 mm) | 413 (38,4) | 207 (19,2) | 138 (12,8) | 104 (9,66) | 69 (6,41) | 52 (4,83) | 42 (3,90) | 35 (3,25) |
| 6" x 6" x 1/4" (150 x 150 x 6 mm) | 582 (54,1) | 291 (27,0) | 194 (18,0) | 146 (13,6) | 97 (9,01) | 73 (6,78) | 59 (5,48) | 49 (4,55) |
| 6" x 6" x 1/2" (150 x 150 x 12 mm) | 291 (27,0) | 146 (13,6) | 97 (9,01) | 73 (6,78) | 49 (4,55) | 37 (3,44) | 30 (2,79) | 25 (2,32) |
| 6" x 24" x 3/8" (150 x 610 x 10 mm) | 621 (57,7) | 311 (28,9) | 207 (19,2) | 156 (14,5) | 104 (9,66) | 78 (7,25) | 63 (5,85) | 52 (4,83) |

| Tile Size | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 8" x 8" x 3/8"<br>(200 x 200 x 10 mm) | 518<br>(48,1) | 259<br>(24,1) | 173<br>(16,1) | 130<br>(12,1) | 87<br>(8,08) | 65<br>(6,04) | 52<br>(4,83) | 44<br>(4,09) |
| 12" x 12" x 3/8"<br>(300 x 300 x 10 mm) | 776<br>(72,1) | 388<br>(36,0) | 259<br>(24,1) | 194<br>(18,0) | 130<br>(12,1) | 97<br>(9,01) | 78<br>(7,25) | 65<br>(6,04) |
| 12" x 24" x 3/8"<br>(300 x 600 x 10 mm) | 1,035<br>(96,2) | 518<br>(48,1) | 345<br>(32,1) | 259<br>(24,1) | 173<br>(16,1) | 130<br>(12,1) | 104<br>(9,66) | 87<br>(8,08) |
| 13" x 13" x 3/8"<br>(330 x 330 x 10 mm) | 841<br>(78,1) | 421<br>(39,1) | 281<br>(26,1) | 211<br>(19,6) | 141<br>(13,1) | 106<br>(9,85) | 85<br>(7,90) | 71<br>(6,60) |
| 18" x 18" x 3/8"<br>(457 x 457 x 10 mm) | 1,164<br>(108) | 582<br>(54,1) | 388<br>(36,0) | 291<br>(27,0) | 194<br>(18,0) | 146<br>(13,6) | 117<br>(10,9) | 97<br>(9,01) |
| 20" x 20" x 3/8"<br>(508 x 508 x 10 mm) | 1,294<br>(120) | 647<br>(60,1) | 432<br>(40,1) | 324<br>(30,1) | 216<br>(20,1) | 162<br>(15,1) | 130<br>(12,1) | 108<br>(10,0) |
| 24" x 24" x 3/8"<br>(610 x 610 x 10 mm) | 1,552<br>(144) | 776<br>(72,1) | 518<br>(48,1) | 388<br>(36,0) | 259<br>(24,1) | 194<br>(18,0) | 156<br>(14,5) | 130<br>(12,1) |
| 32" x 32" x 3/8"<br>(812 x 812 x 10 mm) | 2,069<br>(192) | 1,035<br>(96,2) | 690<br>(64,1) | 518<br>(48,1) | 345<br>(32,1) | 259<br>(24,1) | 207<br>(19,2) | 173<br>(16,1) |

*Ultracolor® Plus FA*

*\* Coverage shown is for estimating purposes only. Actual jobsite coverage may vary according to actual tile size and thickness, exact joint width, job conditions and grouting methods. Consult MAPEI's Technical Services Department or use the grout calculator at www.mapei.com to determine the amount of product needed for project criteria not shown.*

Refer to the SDS for specific data related to health and safety as well as product handling.

## RELATED DOCUMENTS

| Technical Bulletin: Grout Cleaning | 041101-T* |
|---|---|
| Grout Troubleshooting Guide | TSIS Reference and Installation Guides* |
| Technical Bulletin: How to Install Grout in Hot Weather | 010404-TB* |

*\* At www.mapei.com*

## STATEMENT OF RESPONSIBILITY

Before using, user shall determine the suitability of the product for its intended use and user alone assumes all risks and liability whatsoever in connection therewith. **ANY CLAIM SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING TO US WITHIN FIFTEEN (15) DAYS FROM DATE IT WAS, OR REASONABLY SHOULD HAVE BEEN, DISCOVERED.**

*We proudly support the following industry organizations:*