



# Ultracontact<sup>TM</sup> RS

**Premium Rapid-Setting Full-Contact Tile Mortar with Polymer**



## DESCRIPTION

Ultracontact RS is a premium, rapid-setting, polymer-modified, high-performance, full-contact mortar. Its superior wet-out characteristics achieve outstanding transfer to the back of the tile and eliminate the need for back-buttering. It is more fluid than traditional mortars, yet holds its ridges regardless of trowel size. It can be used in thin-set and medium-bed applications with all types of tile sizes. Ultracontact RS is FastTrack Ready™, allowing for grouting in 3 to 4 hours.

## FEATURES AND BENEFITS

- Complete transfer of mortar to tile
- Excellent for large tile and stone
- Interior/exterior use on floors for most applications
- Grout in 3 to 4 hours

## INDUSTRY STANDARDS AND APPROVALS

**ISO 13007:** Classification C2FP1

**ANSI:** Exceeds ANSI A118.4 and A118.11 bond strength requirements

<u>LEED Points Contribution</u>	<u>LEED Points</u>
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

\* Using this MAPEI 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

- Most interior/exterior residential and commercial installations on floors
- Installation of ceramic and porcelain tile, quarry tile, pavers, Saltillo tile, and most types of marble, granite and natural stone

## LIMITATIONS

- Install only at temperatures between 40°F and 95°F (4°C and 35°C).
- Do not use for moisture-sensitive stone (green marble, some limestone and granite), agglomerate tiles, cultured marble or resin-backed tiles. Instead, use suitable epoxy or urethane adhesives. See respective Technical Data Sheet for more information.
- Do not use over dimensionally unstable substrates such as hardwood flooring, oriented strand board (OSB), substrates containing asbestos, or metal. See "Suitable Substrates" section below.
- To use directly over gypsum-based patching or leveling substrates, apply suitable sealer before use. See MAPEI's Technical Bulletin 010506-TB, "Installing MAPEI Products Over Gypsum."
- Use a white mortar when installing light-colored stones and translucent marble.
- Installations of tile over nonporous surfaces, such as waterproofing membranes and existing tile, may require extended setting/curing times.
- Do not use for installations subject to prolonged water immersion.



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- *Ultracontact RS* is not recommended for areas subject to severe freeze/thaw conditions. Instead, use a liquid latex additive mortar system.
- Medium-bed mortars are not designed to correct uneven floors. Substrates should be flat and level before the installation of large-format tile.
- Consult MAPEI's Technical Services for installation recommendations regarding substrates and conditions not listed.

## SUITABLE SUBSTRATES

- Concrete (cured at least 28 days)
- Masonry cement block, brick, cement mortar beds and leveling coats
- Cement backer units (CBUs) – see manufacturer's installation guidelines
- APA and CANPLY Group 1 exterior-grade plywood (interior, residential and light commercial in dry conditions only)
- Properly prepared vinyl composition tile (VCT), vinyl and cutback residue (interior installations)
- Properly prepared existing ceramic and porcelain tile, cement terrazzo, quarry tile and pavers (interior and dry conditions only)
- MAPEI waterproofing, crack-isolation and sound-reduction membranes (limited to thin-set installations only when using weak stone)

## SUBSTRATE PREPARATION

- All substrates should be structurally sound, stable, dry, clean and free of any substance or condition that may reduce or prevent proper adhesion.
- See MAPEI's "Surface Preparation Requirements" document for tile and stone installation systems.

## MIXING

Note: *Ultracontact RS* handles differently than other mortars. When mixed to the correct water ratio, it will be runnier than traditional mortars. However, it will hold its ridges and support the tile. For the first bag, mix the full bag to the exact ratio to become accustomed to the exact factory specifications. Despite being fluid, *Ultracontact RS* actually uses less water than traditional mortars.

1. Before starting, take appropriate safety precautions. See Material Safety Data Sheet (MSDS) for details.
2. Into a clean mixing container, pour about 5 U.S. qts. (4,73 L) of clean potable water.
3. Gradually add 50 lbs. (22,7 kg) of powder while slowly mixing.
4. Use a low-speed mixing drill (at about 300 rpm), with an angled cross blade mixer or double box mixer.

Mix thoroughly until mixture becomes a smooth, homogenous, lump-free paste. Avoid prolonged mixing.

5. Do not slake. Spread immediately.
6. If mixture becomes heavy or stiff, remix without adding more liquid or powder.

## PRODUCT APPLICATION

1. Choose a notched trowel (see chart) with sufficient depth to achieve > 80% mortar contact to both the tile and substrate for all interior applications; and > 95% for exterior installations, commercial floor and wet applications. It may be necessary to back-butter in order to reach these requirements. (Refer to ANSI A108.5 specifications and TCA Handbook guidelines.)
2. With pressure, apply a coat by using the trowel's flat side to key mortar into substrate.
3. Apply additional mortar, combing it in a single direction with the trowel's notched side.
4. Spread only as much mortar as can be tiled before product skins over. Open time can vary with jobsite conditions.
5. Place the tiles firmly into the wet mortar. Push the tiles back and forth in a direction perpendicular to trowel lines, to collapse the mortar ridges and to help achieve maximum coverage. Ensure proper contact between mortar, tile and substrate by periodically lifting a few tiles to check for acceptable coverage.
6. Remove excess mortar from the joint areas so that at least 2/3 of the tile depth is available for grouting (see ANSI A108.10 guidelines).

## EXPANSION AND CONTROL JOINTS

Provide for expansion and control joints as specified per TCNA Detail EJ171 or TTMAC Specification Guide 09 30 00, Detail 301MJ. Do not cover expansion joints with mortars.

## CLEANUP

Clean tools and tile while mortar is fresh.

## PROTECTION

1. Protect floors for 3 to 4 hours before grouting. Protect from heavy traffic for 24 hours.
2. Protect from rain for 7 days.

## Product Performance Properties

### ISO 13007 Classification

Classification Code	Classification Requirement
C2 (cementitious, improved adhesion)	≥ 145 psi (1 MPa) after standard aging, heat aging, water immersion and freeze/thaw cycles
F (fast-setting)	≥ 72.5 psi (0,5 MPa) at 6 hours
P1 (normal adhesion to plywood)	≥ 72.5 psi (0,5 MPa)

### ANSI Specification

Test Method	ANSI Specification	Test Results
ANSI A118.4 – shear strength, impervious ceramic (porcelain) mosaics	> 200 psi (1,38 MPa) at 28 days	325 to 440 psi (2,24 to 3,03 MPa)
ANSI A118.4 – shear strength, glazed wall tile	> 300 psi (2,07 MPa) at 28 days	370 to 485 psi (2,55 to 3,34 MPa)
ANSI A118.4 – shear strength, quarry tile to quarry tile	> 150 psi (1,03 MPa) at 28 days	425 to 485 psi (2,93 to 3,34 MPa)
ANSI A118.11 – shear strength, quarry tile to plywood	> 150 psi (1,03 MPa) at 28 days	230 to 285 psi (1,59 to 1,97 MPa)

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

Shelf life	1 year
Open time*	10 to 20 minutes
Pot life*	30 minutes
Time before grouting	3 to 4 hours
VOCs (Rule #1168 of California's SCAQMD)	0 g/L

\* Open time and pot life vary based on jobsite conditions.

### Packaging

Product Code	Size and Color
2030050 U.S.	Bag: 50 lbs. (22,7 kg), gray
2030051 U.S.	Bag: 50 lbs. (22,7 kg), white
203005021 Canada	Bag: 50 lbs. (22,7 kg), gray
203005121 Canada	Bag: 50 lbs. (22,7 kg), white

### Approximate Product Coverages\* per 50 lbs. (22,7 kg)

Typical Trowel	Coverage
1/4" x 1/4" x 1/4" (6 x 6 x 6 mm) 	75 to 90 sq. ft. (6,97 to 8,36 m <sup>2</sup> )
1/4" x 3/8" x 1/4" (6 x 10 x 6 mm) 	55 to 65 sq. ft. (5,11 to 6,04 m <sup>2</sup> )
1/2" x 1/2" x 1/2" (12 x 12 x 12 mm) 	38 to 45 sq. ft. (3,53 to 4,18 m <sup>2</sup> )
3/4" x 9/16" x 3/8" (19 x 14 x 10 mm) 	25 to 30 sq. ft. (2,32 to 2,79 m <sup>2</sup> )

\* Trowel dimensions are width/depth/space. Actual coverages will vary according to substrate profile and tile type.

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## RELATED DOCUMENTS

Reference Guide: Surface Preparation Requirements for tile and stone installation systems	RGTO309*
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\* At [www.mapei.com](http://www.mapei.com).

Refer to MAPEI's Material Safety Data Sheet (MSDS) for specific data related to VOCs, health and safety, and handling of product.

## 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:



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For the most current **BEST-BACKED™** product data and warranty information, visit [www.mapei.com](http://www.mapei.com).

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