



# Ultracontact™

**Ultra premium, full-contact mortar**



## DESCRIPTION

*Ultracontact* is an ultra premium, normal-setting, polymer-modified, high-performance full-contact mortar. *Ultracontact* meets or exceeds ANSI A118.4 and A118.11 requirements when mixed with water.

## USES

This unique product can be used to install most types of small, normal and large modular tile such as ceramic, mosaic, porcelain, marble, granite and slate. Its superior wet-in characteristics achieve outstanding backing transfer and eliminate the need for back-buttering. It is more fluid than traditional dry-set mortars, yet holds its ridges nicely regardless of trowel size. It can be used in both thin-bed and medium-bed applications with all types of tile sizes. For fast-track projects, *Ultracontact* is available in a rapid-setting version called *Ultracontact RS* that offers superior drying-out characteristics and high, early mechanical strength.

## RECOMMENDED SUBSTRATES

- Fully cured concrete
- Cement backer units (CBUs)
- Group 1 exterior-grade plywood
- Properly prepared vinyl asbestos tile (VAT) and vinyl composition tile (VCT)
- Properly prepared unglazed ceramic tile

- Properly prepared cutback adhesive residue
- Properly prepared cement terrazzo

## TECHNICAL INFORMATION

- *Ultracontact* handles differently than any other dry-set mortar. When mixed to the correct water ratio, it will be runnier than traditional mortars. However, it will hold its ridges nicely and support the tile. For the first bag, we recommend mixing the full bag to the exact ratio to become accustomed to the exact factory specifications. Despite being fluid, *Ultracontact* actually uses less water than traditional dry-set mortars.
- The mixing ratio with water is: 5 U.S. qts. per 50 lbs. (4,73 L per 22,7 kg) bag.
- To ensure full contact, proper trowel selection is mandatory. Selection will vary depending on the tile size, thickness and substrate condition (see "Application").
- *Ultracontact* is not recommended for use over presswood, particleboard, chipboard, Masonite, Luan, gypsum floor-patching compounds, metal or similar dimensionally unstable material.
- *Ultracontact* is not recommended for projects subject to freeze/thaw, prolonged water immersion or temperature extremes. Instead, use the *Kerabond/Keralastic™* or *Granirapid®* system.
- *Ultracontact* is not recommended for setting moisture-sensitive natural stones. Instead, use *Kerapoxy®* or *Planicrete® W*.

# Ultracontact™



- For light-colored or translucent marble, use white *Ultracontact* instead of gray.
- The recommended application temperature range is 45°F to 95°F (7°C to 35°C).

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

## INSTRUCTIONS

### 1. Surface Preparation

For complete details on preparing surfaces to receive ceramic tile and natural stone, see MAPEI's Surface Preparation Requirements document.

### 2. Mixing

- 2.1 **50 lbs. (22,7 kg) bag:**
  - 2.1.1 Pour in about 5 U.S. qts. (4,73 L) of clean water. Gradually add a full bag of *Ultracontact* powder while slowly mixing.
  - 2.1.2 Use a low-speed mixer (at about 300 rpm or less).
  - 2.1.3 Mix thoroughly to a homogenous and smooth consistency.
  - 2.1.4 Allow material to stand ("slake") for about 10 minutes.
  - 2.1.5 Remix without adding more liquid or dry powder.
  - 2.1.6 Mix only as much material as can be used in 2 hours.

### 3. Application

- 3.1 Select a typical notched trowel (see chart) with sufficient depth to achieve a minimum of 90% contact to the back of the tile or stone. The superior wet-in characteristics of *Ultracontact* are a dramatic improvement over traditional mortars, but proper trowel selection is key. Trowel selection will vary depending on the tile size, thickness and substrate condition.
- 3.2 Key mortar into substrate with flat side of trowel. This ensures complete contact with the pores of the substrate.
- 3.3 Comb the mortar in a single direction. Troweling in a "swirl" pattern is not recommended.
- 3.4 Spread only enough mortar that can be covered within 20 to 30 minutes. Any wet mortar that has "skinned" over should be scraped off and replaced with fresh material.
- 3.5 Place each tile firmly into position over the wet mortar and move it in a lateral motion adjacent to the ridges so it will completely shear the mortar ridges and give positive transfer to the tile.

### 4. Expansion and Control Joints

- 4.1 Provide for expansion and control joints as specified per TCA detail EJ-171.
- 4.2 Do not cover or bridge any expansion joint with mortar or surfacing material.
- 4.3 Cut tiles on both sides along the edges of expansion joints.
- 4.4 Protect tilework with metal strips along both edges of structural building expansion joints.

### 5. Grouting

- 5.1 Do not disturb or walk over the tiles for about 16 to 24 hours after installation. At cooler floor temperatures, a longer curing time may be required before grouting.
- 5.2 Grout joints with the appropriate MAPEI grout.

### 6. Protection

- 6.1 Provide for dry, heated storage on site and deliver materials at least 24 hours before tilework begins.
- 6.2 Protect floors from general foot traffic for at least 16 to 24 hours after grouting. Protect from heavy commercial traffic and equipment for 7 days.
- 6.3 Because temperature and humidity (during and after installation of tile) affect the final curing time of all bonding materials, allow for extended periods of cure and protection when job-site temperatures drop below 60°F (16°C) and/or when relative humidity is higher than 70%.

## TECHNICAL DATA

**References:** Meets or exceeds ANSI 118.4 requirements

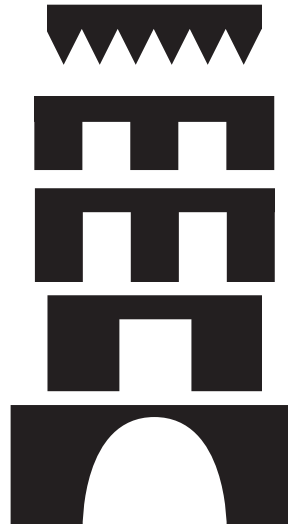
Pot life .....	About 2 hours
Open time .....	20 to 30 minutes
Adjustability .....	45 minutes
Initial set (before grouting) .....	16 to 24 hours
Final set (before light traffic) .....	24 hours after grouting
Final set (before heavy traffic) .....	7 days
Shear strength tests (at 28 days)	
Impervious mosaics .....	320 psi (2,21 MPa)
Quarry tile to quarry tile .....	335 psi (2,31 MPa)
Quarry tile to plywood .....	230 to 250 psi (1,59 to 1,72 MPa)
Cleanability .....	With water while fresh
Colors .....	Gray, white
Shelf life .....	12 months when stored in a dry location and sealed in original containers at room temperature
Health and safety .....	Consult the Material Safety Data Sheet (MSDS) for safe-handling instructions.

## PACKAGING

50 lbs. (22,7 kg)

## TYPICAL TROWELS AND APPROXIMATE COVERAGES\* (per 50 lbs. [22,7 kg])

3/16" x 3/16" x 3/16" .....	110 to 130 sq. ft.
(4,5 x 4,5 x 4,5 mm) .....	(10,2 to 12,1 m <sup>2</sup> )
1/4" x 1/4" x 1/4" .....	70 to 90 sq. ft.
(6 x 6 x 6 mm) .....	(6,50 to 8,36 m <sup>2</sup> )
1/4" x 3/8" x 1/4" .....	50 to 65 sq. ft.
(6 x 10 x 6 mm) .....	(4,65 to 6,04 m <sup>2</sup> )
3/8" x 3/8" x 3/8" .....	35 to 45 sq. ft.
(10 x 10 x 10 mm) .....	(3,25 to 4,18 m <sup>2</sup> )
3/4" x 9/16" x 3/8" .....	25 to 30 sq. ft.
(19 x 14 x 10 mm) .....	(2,32 to 2,79 m <sup>2</sup> )



\* Trowel dimensions are width/depth/space. Coverages shown are approximate and are given for estimating purposes only. Actual job-site coverages may vary according to substrate conditions, type of trowel used and setting practices.

## NOTICE

*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.*

## MAPEI

### Headquarters of the Americas

1144 East Newport Center Drive  
Deerfield Beach, Florida 33442  
Phone: (954) 246-8888  
Fax: (954) 246-8800

### Customer Service

1-800-42-MAPEI (1-800-426-2734)

### Technical Services

1-800-992-6273 (U.S. and Puerto Rico)

1-800-361-9309 (Canada)

### Additional Information

Website: [www.mapei.com](http://www.mapei.com)

### MAPEI – USA

Ft. Lauderdale, Florida  
Fredericksburg, Virginia  
Garland, Texas  
San Bernardino, California  
South River, New Jersey  
Tempe, Arizona  
West Chicago, Illinois

### MAPEI – Canada

Laval, Quebec  
Delta, British Columbia  
Brampton, Ontario

### MAPEI – Argentina

Buenos Aires

### MAPEI – Puerto Rico

Dorado

### MAPEI – Venezuela

Caracas

For the most current  
product data, visit  
[www.mapei.com](http://www.mapei.com).



PR4215 UCTD\_I05Ev  
© 2005 MAPEI Corporation. All Rights Reserved.  
Printed in the USA