

KER 129 GRAY / KER 130 WHITE GRANI/RAPID



RAPID-CURING LATEX HYDRAULIC MORTAR SYSTEM
MEETS ANSI A118.4 SHEAR BOND STRENGTH REQUIREMENTS



DESCRIPTION

A particularly fast-setting, fast-curing, two-component latex hydraulic mortar for interior and exterior thin-set installation of natural and agglomerated marbles and granites and all kinds of ceramic floor and wall tiles. Because of its extraordinarily low shrinkage and quick hydration characteristics, GRANI/RAPID allows tiled surfaces to be ready for light traffic after about 3 hours and is completely cured after only 24 hours. Its excellent bonding and mechanical properties make it resistant to impact, vibration, temperature changes, aging, and mild cleaning chemicals.

USES

1. For interior and exterior floor, wall and ceiling installations.
2. For rapid retiling of floors and walls that have to be ready for use within a very short time, such as supermarkets, factories, hospitals, airports, shopping malls, etc.
3. For use as a rapid-set medium-bed mortar for setting large size or high lugged and heavy ribbed-back ceramic tiles and stone.
4. For installing all types of natural stone, natural marble, (except Rosso Levanto and Negro Marquina marble; or green marble, green granite or their agglomerates), natural granite, impervious porcelain tile and all other ceramic tile. For installing white, light colored or translucent marble, use WHITE GRANI/RAPID.

LIMITATIONS

1. Do not use for setting Rosso Levanto, Negro Marquina marble or any green marble and green marble agglomerates. Use PLANICRETE® W or KERAPOXY®.

Note: Marble, granite, and slate are products of nature made from a vast combination of minerals and chemicals which may cause the material to behave or react in a manner beyond our control. Neither do we have control over any of the material and process used in the manufacturing of agglomerates. Therefore, determine the suitability of all materials before proceeding with the installation.

2. Do not use over particle board, masonite, chipboard, Luan, gypsum floor patching compounds, metal or similar dimensionally unstable substrates.
3. Do not use at temperatures below 40°F (4°C) or above 95°F (37°C).

RECOMMENDED SUBSTRATES

- Fully cured concrete (28 days old)
- Concrete and masonry block
- Gypsum drywall panels (in dry areas only)
- Cementitious backer units
- Properly prepared existing ceramic tiles
- Properly prepared old cement terrazzo
- Exterior grade plywood (interior residential floor and countertop applications in dry areas only)
- Properly prepared existing vinyl asbestos tile (VAT)
- Properly prepared existing cutback adhesive
- Cured PLANICRETE® W membrane (see data sheet for details)

NOTE

Consult MAPEI's Technical Department for recommendations concerning installation over other substrates and if special conditions exist.

SETTING INSTRUCTIONS

1. SURFACE PREPARATION

SEE SURFACE PREPARATION SHEET [A]

2. MIXING

- 2.1 In a clean mixing container pour 1.5 US gal. (5,6 L) of undiluted GRANI/RAPID liquid and gradually add 50 lbs. (22,7 kg) GRAY or 46 lbs. (20,9 kg) WHITE GRANI/RAPID powder while slowly mixing.
- 2.2 Use a low speed mixer (approximately 300 RPM).
- 2.3 Mix thoroughly to a homogeneous and smooth consistency.
- 2.4 Do not slake. Spread immediately.
- 2.5 Do not mix more material than can be installed in a 30 minute period. The set time depends on temperature and humidity.
- 2.6 Wash tools and hands with soap and water immediately after mixing.

3. APPLICATION

- 3.1 Use the recommended notched trowel (see chart) with sufficient depth to achieve an 80% minimum mortar contact to the back of the tiles for all interior applications. For exterior installations, commercial floor and shower applications, and when installing marble, granite and agglomerate tile floors, achieve coverage in accordance with applicable ANSI specifications and TCA guidelines.
- 3.2 Using the flat edge of the trowel, spread a thin, pressure-applied coat to the substrate. Then apply additional material and comb the surface using the notched side of the trowel to achieve an even setting bed. Do not spread more material than can be covered with tile within 5 to 10 minutes maximum. [approx. 20 sq. ft. (2 m²)].
Note: When back-buttering is required, a helper should proceed with this operation simultaneously while the mechanic is spreading the GRANI/RAPID mortar on the substrate.
- 3.3 Do not soak tiles before installation. Before installing slate or marble, granite and their agglomerates, wipe the back side of the stone with a damp cloth to remove any residue or dust left over from the manufacturing process.
- 3.4 Set tiles firmly into position with a slight twisting motion before skinning occurs. Should skinning occur, scrape off the skinned mortar and replace it with fresh material.
- 3.5 Follow immediately with proper and thorough beat-in procedure to flatten the ridges or notches into a continuous setting bed, allowing at least 25% of the thickness of the tiles to be imbedded in the mortar. Check pieces periodically to ensure that there is sufficient mortar contact with the reverse side of the tiles or stones.
- 3.6 Make all alignments and adjustments immediately after beat-in (within 30-40 minutes).
- 3.7 Clean all joints and wipe smudges from the tile face with a damp towel before material hardens.
- 3.8 Wash tools and hands with water while material is still fresh.

4. EXPANSION AND CONTROL JOINTS

- 4.1 Provide for expansion and control joints where specified. REFER TO THE MOST RECENT TCA HANDBOOK FOR CERAMIC TILE INSTALLATION, DETAIL EJ-171.
- 4.2 Do not cover or bridge any expansion joints 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.
- 4.5 Install the specified compressible bead and sealant in all expansion and control joints.

5. GROUTING

Do not disturb, grout, or walk over tiles for at least 2 1/2 hours after installation. When this material is installed in cooler temperatures, a longer curing time may be required before grouting. Allow tiles to reach a firm set then grout with the appropriate MAPEI grout.

6. PROTECTION

- 6.1 Protect material from freezing during transportation and storage. GRANI/RAPID liquid is freeze-thaw stable down to temperatures of 0°F (-18°C). However, it is wise to protect all water-based materials from prolonged exposure to deep-freezing. If frozen, do not stir GRANI/RAPID liquid until completely thawed.
- 6.2 Provide for dry, heated storage on site and deliver materials at least 24 hours before tilework begins.
- 6.3 Protect finished tilework against weather, freezing and complete water immersion for at least 7 days after completion of the work.
- 6.4 Floors: Protect floors from traffic for at least 3 to 4 hours after installation. Prohibit heavy traffic on floors for at least 24 hours after installation.
- 6.5 Walls: Protect walls from impact, vibration and hammering on adjacent and opposite walls for at least 24 hours after installation.
- 6.6 Since temperature and humidity (during and after installation of tile) affect the final curing time of all cement-based and epoxy materials, allow for extended periods of cure and protection when temperatures drop below 60°F (15°C) and/or when the relative humidity is higher than 70%.

TECHNICAL DATA

Pot life at 72°F (22°C)	30 - 40 minutes
Open time at 72°F (22°C)	Approximately 20 minutes
Adjustability time	Approximately 40 minutes
Ready for grout	Approximately 3 hours
Ready for light foot traffic	Approximately 3 - 4 hours
Flexibility	Moderate

	Flexural strength	Compressive strength
After 24 hours	570 psi (3,9 MPa)	2145 psi (14,8 MPa)
After 7 days	1210 psi (8,3 MPa)	3575 psi (24,6 MPa)
After 28 days	1350 psi (9,3 MPa)	4500 psi (31,0 MPa)

BOND STRENGTH

	24 hrs dry	7 days dry	24 hrs dry plus 1 hr at 140°F (60°C)	7 days dry plus 1 hr at 140°F (60°C)	24 hrs dry plus 21 days in water	7 days dry plus 21 days in water
Glass mosaics	215 psi (1,5 MPa)	286 psi (2 MPa)	429 psi (3 MPa)	429 psi (3 MPa)	200 psi (1,4 MPa)	215 psi (1,5 MPa)
Agglomerated marble	257 psi (1,8 MPa)	249 psi (1,7 MPa)	543 psi (3,8 MPa)	500 psi (3,5 MPa)	286 psi (2 MPa)	286 psi (2 MPa)
Porcelain tiles	215 psi (1,5 MPa)	472 psi (3,3 MPa)	472 psi (3,3 MPa)	458 psi (3,2 MPa)	229 psi (1,6 MPa)	243 psi (1,7 MPa)
Granit '90' (Repla)	143 psi (1 MPa)	229 psi (1,6 MPa)	229 psi (1,6 MPa)	286 psi (2 MPa)	71.5 psi (0,5 MPa)	71.5 psi (0,5 MPa)
Black slate	229 psi (1,6 MPa)	358 psi (2,5 MPa)	458 psi (3,2 MPa)	572 psi (4 MPa)	215 psi (1,5 MPa)	215 psi (1,5 MPa)

Note: Minimum value according to U.E.A.T.C. standard 71.5 psi (0,5 MPa)

PACKAGING

Powder	Liquid
50 lbs. (22,7 kg) bag, gray	1.5 US gal. (5,6 L) jug
46 lbs. (20,9 kg) bag, white	55 US gal. (207 L) drum

COLOR

Gray and white

SHELF LIFE

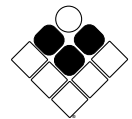
12 months when stored in original sealed containers at room temperature in a dry heated area.
Protect from moisture and freezing.

APPROXIMATE COVERAGES

Square notched trowels	
1/4" x 1/4" x 1/4" (6 mm x 6 mm x 6 mm)	70 - 90 sq. ft. (6,5 - 8,4 m ²)
1/4" x 3/8" x 1/4" (6 mm x 10 mm x 6 mm)	55 - 65 sq. ft. (5,1 - 6 m ²)
U notched trowel	
5/8" x 3/4" (16 mm x 19 mm)	23 - 28 sq. ft. (2,1 - 2,6 m ²)

NOTE

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.



Ceramic Tile Distributors Association

CTDA



NOTICE

We shall not be liable for incidental and consequential damages, as defined under the uniform commercial code, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instruction or for other than the intended use. 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. Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from date it was, or reasonably should have been discovered.

MAPEI

NORTH AMERICAN HEADQUARTERS

1501 Well Street
Garland, TX 75041-4046
Phone: (972) 271-9500
Fax: (972) 271-9464

CUSTOMER SERVICE

1-800-42-MAPEI

TECHNICAL SERVICE

1-800-992-6273
(U.S. and Puerto Rico)
1-800-361-9309 (Canada)

UNITED STATES

Arizona

401 South Smith Road
Tempe, AZ 85281-2925
Phone: (602) 968-7722
Fax: (602) 966-9659

California

1900 East Wright Circle
Anaheim, CA 92806-6028
Phone: (714) 385-0155
Fax: (714) 978-0614

Florida

1851 N.W. 22nd Street
Ft. Lauderdale, FL 33311-2940
Phone: (954) 485-8575
Fax: (954) 485-9081

Illinois

530 Industrial Drive
West Chicago, IL 60185-1828
Phone: (630) 293-5800
Fax: (630) 293-5079

New Jersey

P.O. Box 105, Off Whitehead Ave.
South River, NJ 08882
Phone: (732) 254-8001
Fax: (732) 254-9103

Virginia

300 Nelms Circle
Fredericksburg, VA 22406
Phone: (540) 310-0111
Fax: (540) 310-4887

CANADA

Québec

2900 Francis-Hughes Avenue
Laval, QC H7L 3J5
Phone: (450) 662-1212
Fax: (450) 662-0444

British Columbia

831 Cliveden Avenue
New Westminster, BC V3M 5R6
Phone: (604) 521-1843
Fax: (604) 521-6291

Ontario

351 Hanlan Road, Units 7 to 11
Vaughan, ON L4L 3T1
Phone: (905) 856-7774
Fax: (905) 856-7874

PUERTO RICO

Road 2 km 26.2 BO. Espinosa
Dorado, Puerto Rico 00646
Phone: (787) 270-4162
Fax: (787) 883-0119

VENEZUELA

1^{ra} Ave. entre 4^a y 5^a transversal
No. 1-25 Urbanización Montecristo
1071 Caracas, Venezuela
Phone: (58-2) 237-1669
Fax: (58-2) 237-3284

® Registered Trademark
Printed in Canada
03/99