



Kerapoxy CQ[®]

Premium Epoxy Grout and Mortar with Color-Coated Quartz



DESCRIPTION

Kerapoxy CQ is an improved, two-component, 100%-solids epoxy grout and mortar that is nonsagging/nonslumping in joints up to 3/8" (10 mm) in width, water-cleanable and easy to apply. *Kerapoxy CQ* uses a proprietary aggregate to achieve its durable color, making it excellent for countertops, high-traffic areas, and areas needing stain and chemical resistance. Easy to maintain, *Kerapoxy CQ* will clean to the original color and contains BioBlock[®] technology to help protect against mold and mildew.

FEATURES AND BENEFITS

- Superior workability and water cleanability for ease of application
- Nonsagging and nonslumping in joints, for use in both floor and wall applications
- Color consistency and durability
- For grout joints from 1/16" to 3/8" (1,5 to 10 mm)
- No sealer required
- High stain resistance*

** With immediate cleaning and proper maintenance, Kerapoxy CQ grout is highly resistant to staining when exposed to most common household goods and cleaning agents. Long-term exposure to any material can increase the potential for staining grout.*

INDUSTRY STANDARDS AND APPROVALS

- ANSI: Meets A118.3 requirements
- ISO 13007: Classification R2/RG

LEED v4 Points Contribution

LEED Points

Health Product Declaration (HPD)* Up to 2 points

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

Additional Green Certifications

- Living Building Challenge (LBC) Red List Free: This product has been verified per the most current Red List on the LBC website.

WHERE TO USE

For use as a grout

- For grouting most ceramic, porcelain and quarry tiles; acid-resistant floor brick; pavers; and natural-stone tile***
- For grouting interior residential and commercial floor/wall applications
- For grouting exterior residential and commercial floor applications (contact MAPEI's Technical Services Department)
- For industrial, commercial and institutional installations with high-strength, chemical-resistant and nonsagging grout requirements, see "Chemical Resistance" chart in this document. For extreme industrial or commercial applications such as dairies, breweries and high-volume food kitchens, *Kerapoxy IEG CQ* is recommended.
- For heavy traffic areas such as subway stations, shopping malls and airport terminal buildings
- For areas requiring stain-resistant grout such as countertops and vanities



For use as a mortar

- For setting most ceramic, porcelain and quarry tiles, acid-resistant floor brick, pavers and natural-stone tile***
- For the installation of moisture-sensitive natural stone and their agglomerates. When setting light-colored marble, which can be stained by epoxy, use white *Granirapid*[®], white *Ultraflex™ RS* or white *Ultracontact™ RS* or white *Ultraflex LFT™ Rapid****
- For interior/exterior residential and commercial wall, floor and countertop installations
- For installations in areas subject to high water use or submerged conditions (such as gang showers, pools, spas and fountains)
- For industrial, commercial and institutional installations requiring Chemical Resistance, contact MAPEI's Technical Services Department.

*** *Marble, granite and slate are products of nature made from a vast combination of minerals and chemicals that may cause the material to behave or react in a manner beyond our control. Likewise, we do not have control over any of the materials or processes used in the manufacturing of agglomerates. Therefore, determine the suitability of all the materials before proceeding with the installation. To ensure desired results, a mockup installation is required before the actual installation.*

LIMITATIONS

For use as a grout

- Joint width should be between 1/16" and 3/8" (1,5 and 10 mm).
- Do not use for grouting white or translucent marble.
- Do not use in areas subject to excessive heat. Once cured, *Kerapoxy CQ* will resist temperatures up to 212°F (100°C).
- When used as a grout on exterior installations, color variations may occur over time, especially with lighter shades due to ultraviolet rays or environmental contaminants.

Note: Some types of glazed ceramic tiles, marble and granite as well as marble agglomerates can be permanently stained, scratched, dulled or damaged when grouted with pigmented, sanded and epoxy grout formulas. Take all the necessary precautions to ensure that the marble, granite or tiles are compatible with colored grouts. To determine the suitability of the product with colored and/or sanded grouts, check the tile or marble manufacturer's literature and test grout on a separate sample area before grouting.

For use as a mortar

- Do not install over substrates containing asbestos.
- Do not exceed 1/4" (6 mm) in epoxy mortar thickness under the tile.
- Do not apply over particleboard, presswood, oriented strand board (OSB), Masonite, chipboard, Lauan,

gypsum floor-patching compounds or similar dimensionally unstable substrates.

- Do not use for setting white or translucent marble.
- Do not install over peel-and-stick crack-isolation membranes or cutback adhesive residue.

SUITABLE SUBSTRATES

For use as a mortar

- Fully cured concrete (at least 28 days old)
- Cement block and brick masonry
- Cement mortars and leveling coats
- Exterior-grade plywood (interior residential floor and countertop applications in dry areas only)
- Cement backer units (CBUs)
- Existing ceramic tile
- Cement and epoxy terrazzo

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

SURFACE PREPARATION

The temperature of the substrate or tilework must be between 60°F and 90°F (16°C and 32°C) while grouting for best results. For proper curing, maintain this temperature range for 72 hours after application.

For use as a grout

- 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 cement particles or color pigments. Seek the advice of the tile or stone manufacturer and site-test (mock up) on separate samples before grouting.
- 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 tile depth is left available for grouting.
- Clean the tile or stone surface to remove dust, dirt, mortar, adhesive and other contaminants that may cause grout discoloration.

For use as a mortar

- 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 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. Parts A and B are packaged to exact quantity ratios for proper curing.
2. Pour out all material from the Part B container into Part A. To improve flowability, use a margin trowel to thoroughly scrape all material from the Part B container. Always mix complete units. Do not add other materials to this mixture.
3. Use a slow-speed mixer (at about 300 rpm), or manually mix smaller kits with a margin trowel.
4. Avoid prolonged mixing, which will trap air and shorten the pot life.
5. Mix thoroughly until a homogenous, consistent color is obtained. Scrape the edges of the mixing container at least once during mixing.
6. Wash tools immediately with water before the epoxy hardens. *Kerapoxy CQ* is extremely difficult to remove once cured.
7. Do not place the lid on the container after the material has been mixed.

PRODUCT APPLICATION

Read all installation instructions thoroughly before installation.

For use as a grout

1. Remove mixed product from the container and place it in small piles. (If grouting a wall, place the product on kraft paper laid on the floor.) *Kerapoxy CQ* is a thermosetting product, so that it sets up faster in a container or in a large mass.
2. Use a hard-rubber float with a sharp edge to force the grout into the joints in a continuous manner, leaving it flush with the tile edge.
3. Be certain that all joints are well-compacted and free of voids/gaps. Fill the joints with the maximum amount of grout possible.
4. Thoroughly remove excess *Kerapoxy CQ* from the face of the tile before it loses its plasticity or begins to set. This is most easily accomplished by holding the rubber float at a 90-degree angle to the tile surface and dragging the float across the tile surface diagonally to the grout lines, leaving as little epoxy grout on the tile surface as possible.
5. Clean tiles immediately after applying each unit of *Kerapoxy CQ*. Grout and clean in small areas. Do not attempt to use more than one *Kerapoxy CQ* unit before cleaning tiles. Do not allow *Kerapoxy CQ* to harden on the tile surface. On large projects, working in teams of 2 to 3 people will simplify the installation.
- 6a. For horizontal surfaces:
 - Apply a liberal amount of cold water to the freshly grouted area. Scrub the tile surface diagonally to the joint line using a nonwoven, nylon, white scouring pad (use a more aggressive pad if the tile has an abrasive surface). Apply enough pressure on the pad to loosen any film without removing grout from the joints. Rinse pads frequently while cleaning. Be careful not to get any water in the ungrouted joints.
 - To remove the loosened epoxy residue and water, drag a clean sponge diagonally across the tile surface. Use one side of the sponge for each pass over the tile, rinsing the sponge following the second pass and regularly changing water in the buckets to avoid residue buildup.
 - Do not allow excess water to remain on the tile surface, which would allow a film to form on the surface that would be difficult to remove once hardened.
 - In certain applications, a short-nap terry-cloth towel may be substituted for the sponge, which may work more effectively for removing the loosened epoxy residue and water. Using the "towel drag" method, hold the towel by two corners and drag it diagonally across the grout joints. Rinse the towel often and keep changing water in the buckets to avoid residue buildup.
 - Do not step on freshly cleaned tiles, as this could permanently damage the grout.
- 6b. For vertical surfaces:
 - Mist the surface using a spray bottle in small workable areas. Use a non-abrasive nylon scrubpad and apply enough pressure on the pad to loosen any film without removing grout from the joints. Rinse pads frequently while cleaning. Be careful not to get any water into the ungrouted joints.
 - To touch up grout joint imperfections during initial rinsing, the grout joint can be smoothed with a sharp-edged cellulosic sponge.
7. Perform a final wash within 15 to 20 minutes for best results. To aid in the cleaning process, 1 U.S. oz. (29,6 mL) of a clear dishwashing soap may be added (if needed) to a 3-gallon (11,4-L) pail of clean water. Use a clean, white scrubpad to loosen any remaining residue left on the tile from the first wash. Then follow the same cleaning process as referenced in the section above.
8. Check the installation the following day to make sure it is completely clean. If a tacky residue is found within 24 hours of installation, follow the above instructions for the cleaning removal process.
9. Use only fresh material to fill any voids discovered while cleaning.
10. Check the installation the same day before leaving the jobsite to make sure it is completely clean. If the tile surface has any shiny or tacky residue, remove it with the solution of liquid detergent and water mentioned in

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CHEMICAL RESISTANCE (tested according to ISO 13007)

Resistance to chemicals depends on the concentration, temperature and duration of exposure. For long-term durability and improved grout appearance, clean up spills immediately after they occur.

Laboratory tests reveal variable resistance to certain chemicals. The following table may be considered as a general guide for *Kerapoxy CQ* applications at 73°F (23°C).

For recommendations regarding chemicals not listed or concentrations exceeding the levels stated, contact MAPEI's Technical Services Department.

Legend

- ++ Excellent resistance
- + Good resistance; long exposure could cause some deterioration; clean surface rapidly with water
- Poor or no resistance

Product Types	Concentration	Laboratory	Long Time	Short Time
ACIDS				
Vinegar	2.5%	++	++	++
	5%	++	+	++
	10%	-	-	-
Hydrochloric acid	10%	++	++	++
Chromic acid	20%	-	-	-
Citric acid	10%	++	++	++
Formic acid	2.5%	++	++	++
	10%	-	-	-
Lactic acid	2.5%	++	++	++
	5%	++	+	++
	10%	+	-	+
Nitric acid	10%	++	+	++
	50%	-	-	-
Phosphoric acid	50%	++	++	++
	75%	+	-	+
Sulfuric acid	1.5%	++	++	++
	10%	++	++	++
	96%	-	-	-
Tannic acid	10%	++	++	++
Oxalic acid	10%	++	++	++
Oleic acid		-	-	-
BASE AND SALT SOLUTIONS				
Ammonia solution	25%	++	++	++
Caustic soda	50%	++	++	++
Hypochlorite solution				
• Act. CL 6.4 g/L		++	+	++
• Act. CL 165 g/L		-	-	-
Sodium hyposulfite		++	++	++
Calcium chloride		++	++	++
Iron chloride		++	++	++
Sodium chloride		++	++	++
Sodium chromate		++	++	++
Sugar		++	++	++
Aluminum sulfate		++	++	++
Potassium permanganate				
	5%	++	+	++
	10%	+	-	+
Caustic potash	50%	++	++	++
Hydrogen peroxide	1%	++	++	++
	10%	++	++	++
	25%	++	++	++
Sodium bisulfite		++	++	++
OILS AND COMBUSTIBLE PRODUCTS				
Gasoline		++	++	++
Turpentine		++	++	++
Diesel fuel		++	++	++
Peanut oil		++	++	++
Tar		++	+	+
Olive oil		++	++	++
Heating oil		++	++	++
SOLVENTS				
Acetone		-	-	-
Ethylene glycol		++	++	++
Glycerol		++	++	++
Methylcellosolve		-	-	-
Perchloroethylene		-	-	+
Carbon tetrachloride		+	-	+
Chloroform		-	-	-
Methylene chloride		-	-	-
Toluene		-	-	+
Carbon disulfide		+	-	+
Mineral spirits		++	++	++
Benzene		-	-	+
Trichloroethane		-	-	-
Xylene		-	-	-

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ISO 13007 Classification

Classification Code	Test Characteristics	Classification Requirement
RG (reaction resin grout)	Abrasion resistance [†]	≤ 0.015 cu. in. (250 mm ³)
	Flexural strength [†]	> 4,350 psi (30 MPa)
	Compressive strength [†]	> 6,525 psi (45 MPa)
	Shrinkage [†]	< 0.06 in./3.28 ft. (1,5 mm/m)
	Water absorption [†]	< 0.0002 lb. (0,1 g)
R2 (reaction resin adhesive, improved)	Shear adhesion strength	≥ 2 N/mm ²
	Shear adhesion strength after water immersion	≥ 2 N/mm ²
	Open time: tensile adhesion strength	≥ 0,5 N/mm ² after not less than 20 minutes
	Shear adhesion strength after thermal shock	≥ 2 N/mm ²

[†] 28-day cure

ANSI Specification

Test Method	Specification Standard	Test Results
ANSI A118.3 (5.1) – water cleanability	80 minutes	Pass
ANSI A118.3 (5.2)		
Initial setting time	> 2 hours	Pass
Service setting time	< 7 days	Pass
ANSI A118.3 (5.3) – shrinkage	< 0.25%	Pass
ANSI A118.3 (5.4) – sag	No change	Pass
ANSI A118.3 (5.5) – quarry shear bond	> 1,000 psi (6,90 MPa)	Pass
ANSI A118.3 (5.6) – compressive strength	> 3,500 psi (24,1 MPa)	Pass
ANSI A118.3 (5.7) – tensile strength	> 1,000 psi (6,90 MPa)	Pass
ANSI A118.3 (5.8) – thermal shock	> 500 psi (3,45 MPa)	Pass

Shelf Life and Product Characteristics (before mixing)

Shelf life	2 years when stored in original, unopened packaging at 73°F (23°C)
Physical state	Resin (Part A) and hardener (Part B)
Colors	Available in MAPEI's palette of 40 colors, organized into 5 color collections. Refer to MAPEI's grout/caulk color chart. Sample color chips are available upon request.
VOCs (Rule #1168 of California's SCAQMD)	8 g per L

Protect containers from freezing in transit and storage. Provide for heated storage on site and deliver all materials at least 24 hours before work begins.

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

Pot life ^{††}	45 to 60 minutes
Full cure ^{††}	14 days
Application temperature range	60°F to 90°F (16°C to 32°C)

^{††} Pot life and curing time will vary depending on ambient temperature, substrate temperature and humidity.

Packaging

Size
Kit: 1 U.S. qt. (946 mL)
Kit: 1 U.S. gal. (3,79 L)
Kit: 2 U.S. gals. (7,57 L)

Approximate Coverage*

• For use as a grout**

Coverage per 1 U.S. qt. (946 mL)				
Tile Size	Grout Joint Width			
	1/16" (1,5 mm)	1/8" (3 mm)	1/4" (6 mm)	3/8" (10 mm)
1" x 1" x 1/4" (25 x 25 x 6 mm)	14 sq. ft. (1,30 m ²)	8 sq. ft. (0,74 m ²)	4 sq. ft. (0,37 m ²)	3 sq. ft. (0,28 m ²)
2" x 2" x 1/4" (50 x 50 x 6 mm)	27 sq. ft. (2,51 m ²)	14 sq. ft. (1,30 m ²)	8 sq. ft. (0,74 m ²)	6 sq. ft. (0,56 m ²)
3" x 3" x 1/4" (75 x 75 x 6 mm)	40 sq. ft. (3,72 m ²)	20 sq. ft. (1,86 m ²)	11 sq. ft. (1,02 m ²)	8 sq. ft. (0,74 m ²)
4" x 4" x 3/8" (100 x 100 x 10 mm)	35 sq. ft. (3,25 m ²)	18 sq. ft. (1,67 m ²)	9 sq. ft. (0,84 m ²)	7 sq. ft. (0,65 m ²)
4" x 8" x 1/2" (100 x 200 x 12 mm)	35 sq. ft. (3,25 m ²)	18 sq. ft. (1,67 m ²)	9 sq. ft. (0,84 m ²)	6 sq. ft. (0,56 m ²)
4" x 8" x 3/4" (100 x 200 x 19 mm)	23 sq. ft. (2,14 m ²)	12 sq. ft. (1,11 m ²)	6 sq. ft. (0,56 m ²)	4 sq. ft. (0,37 m ²)
4" x 8" x 1-1/8" (100 x 200 x 29 mm)	15 sq. ft. (1,39 m ²)	8 sq. ft. (0,74 m ²)	4 sq. ft. (0,37 m ²)	3 sq. ft. (0,28 m ²)
4" x 8" x 1-3/8" (100 x 200 x 35 mm)	13 sq. ft. (1,21 m ²)	6 sq. ft. (0,56 m ²)	3 sq. ft. (0,28 m ²)	2 sq. ft. (0,19 m ²)
4-1/4" x 4-1/4" x 1/4" (108 x 108 x 6 mm)	56 sq. ft. (5,20 m ²)	28 sq. ft. (2,60 m ²)	15 sq. ft. (1,39 m ²)	10 sq. ft. (0,93 m ²)
6" x 6" x 1/4" (150 x 150 x 6 mm)	78 sq. ft. (7,25 m ²)	40 sq. ft. (3,72 m ²)	20 sq. ft. (1,86 m ²)	14 sq. ft. (1,30 m ²)
6" x 6" x 1/2" (150 x 150 x 12 mm)	39 sq. ft. (3,62 m ²)	20 sq. ft. (1,86 m ²)	10 sq. ft. (0,93 m ²)	7 sq. ft. (0,65 m ²)
8" x 8" x 3/8" (200 x 200 x 10 mm)	69 sq. ft. (6,41 m ²)	35 sq. ft. (3,25 m ²)	18 sq. ft. (1,67 m ²)	12 sq. ft. (1,11 m ²)
10" x 10" x 3/8" (250 x 250 x 10 mm)	86 sq. ft. (7,99 m ²)	44 sq. ft. (4,09 m ²)	22 sq. ft. (2,04 m ²)	15 sq. ft. (1,39 m ²)
12" x 12" x 1/2" (300 x 300 x 12 mm)	78 sq. ft. (7,25 m ²)	39 sq. ft. (3,62 m ²)	20 sq. ft. (1,86 m ²)	13 sq. ft. (1,21 m ²)
16" x 16" x 3/8" (406 x 406 x 10 mm)	138 sq. ft. (12,8 m ²)	69 sq. ft. (6,41 m ²)	35 sq. ft. (3,25 m ²)	24 sq. ft. (2,23 m ²)

Approximate Coverage*

• For use as a grout**

Coverage per 1 U.S. gal. (3,79 L)				
Tile Size	Grout Joint Width			
	1/16" (1,5 mm)	1/8" (3 mm)	1/4" (6 mm)	3/8" (10 mm)
1" x 1" x 1/4" (25 x 25 x 6 mm)	56 sq. ft. (5,20 m ²)	31 sq. ft. (2,88 m ²)	18 sq. ft. (1,67 m ²)	14 sq. ft. (1,30 m ²)
2" x 2" x 1/4" (50 x 50 x 6 mm)	108 sq. ft. (10,0 m ²)	56 sq. ft. (5,20 m ²)	31 sq. ft. (2,88 m ²)	22 sq. ft. (2,04 m ²)
3" x 3" x 1/4" (75 x 75 x 6 mm)	159 sq. ft. (14,8 m ²)	82 sq. ft. (7,62 m ²)	43 sq. ft. (3,99 m ²)	31 sq. ft. (2,88 m ²)
4" x 4" x 3/8" (100 x 100 x 10 mm)	140 sq. ft. (13,0 m ²)	72 sq. ft. (6,69 m ²)	37 sq. ft. (3,44 m ²)	26 sq. ft. (2,42 m ²)
4" x 8" x 1/2" (100 x 200 x 12 mm)	139 sq. ft. (12,9 m ²)	71 sq. ft. (6,60 m ²)	37 sq. ft. (3,44 m ²)	25 sq. ft. (2,32 m ²)
4" x 8" x 3/4" (100 x 200 x 19 mm)	93 sq. ft. (8,64 m ²)	47 sq. ft. (4,37 m ²)	24 sq. ft. (2,23 m ²)	17 sq. ft. (1,58 m ²)
4" x 8" x 1-1/8" (100 x 200 x 29 mm)	62 sq. ft. (5,76 m ²)	32 sq. ft. (2,97 m ²)	16 sq. ft. (1,49 m ²)	11 sq. ft. (1,02 m ²)
4" x 8" x 1-3/8" (100 x 200 x 35 mm)	51 sq. ft. (4,74 m ²)	26 sq. ft. (2,42 m ²)	13 sq. ft. (1,21 m ²)	9 sq. ft. (0,84 m ²)
4-1/4" x 4-1/4" x 1/4" (108 x 108 x 6 mm)	223 sq. ft. (20,7 m ²)	114 sq. ft. (10,6 m ²)	59 sq. ft. (5,48 m ²)	41 sq. ft. (3,81 m ²)
6" x 6" x 1/4" (150 x 150 x 6 mm)	313 sq. ft. (29,1 m ²)	159 sq. ft. (14,8 m ²)	82 sq. ft. (7,62 m ²)	56 sq. ft. (5,20 m ²)
6" x 6" x 1/2" (150 x 150 x 12 mm)	156 sq. ft. (14,5 m ²)	79 sq. ft. (7,34 m ²)	41 sq. ft. (3,81 m ²)	28 sq. ft. (2,60 m ²)
8" x 8" x 3/8" (200 x 200 x 10 mm)	277 sq. ft. (25,7 m ²)	140 sq. ft. (13,0 m ²)	72 sq. ft. (6,69 m ²)	49 sq. ft. (4,55 m ²)
10" x 10" x 3/8" (250 x 250 x 10 mm)	345 sq. ft. (32,1 m ²)	174 sq. ft. (16,2 m ²)	89 sq. ft. (8,27 m ²)	60 sq. ft. (5,57 m ²)
12" x 12" x 1/2" (300 x 300 x 12 mm)	310 sq. ft. (28,8 m ²)	156 sq. ft. (14,5 m ²)	79 sq. ft. (7,34 m ²)	54 sq. ft. (5,02 m ²)
16" x 16" x 3/8" (406 x 406 x 10 mm)	551 sq. ft. (51,2 m ²)	277 sq. ft. (25,7 m ²)	140 sq. ft. (13,0 m ²)	94 sq. ft. (8,73 m ²)

• For use as a mortar

Trowel Size	Coverage per 1 U.S. qt. (946 mL)	Coverage per 1 U.S. gal. (3,79 L)	Coverage per 2 U.S. gals. (7,57 L)
1/4" x 1/4" x 1/4" (6 x 6 x 6 mm), square-notch	4.5 sq. ft. (0,42 m ²)	18 sq. ft. (1,67 m ²)	36 sq. ft. (3,34 m ²)
5/32" x 5/32" (4 x 4 mm), V-notch	10 sq. ft. (0,93 m ²)	40 sq. ft. (3,72 m ²)	80 sq. ft. (7,43 m ²)

* Trowel dimensions are width/depth/space. 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.

** When grouting abrasive or slip-resistant floor tiles, anticipated coverage can be dramatically decreased. Alternatives to the traditional grouting technique, such as a grout bag or commercial sealant gun, may be of assistance. Consult MAPEI's Technical Services Department for approximate coverage not shown in the above table or use the grout calculator at www.mapei.com.

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