

DESCRIPTION

MAPEI Flexcolor CQ is a professional-grade, ready-to-use specialty grout for precision commercial and residential installations with porcelain, ceramic and natural-stone tiles. *MAPEI Flexcolor CQ* can be used to grout interior/ exterior tile, and its dense composition helps to prevent water-based stains by providing water repellency to the grout surface. *MAPEI Flexcolor CQ* is formulated with the latest innovation in quartz aggregate, which ensures color consistency, ease of cleanability and improved workability. In addition, this grout can be used on sensitive tile surfaces once tested, requires no sealer and cures naturally from evaporation of the low level of water in the formulation.

Comparison testing of *MAPEI Flexcolor CQ* versus traditional Portland-cement grout has verified that *MAPEI Flexcolor CQ* is 30% more cost-efficient (based on typical rates of installers) and requires 65% less time to install.

FEATURES AND BENEFITS

- Stain- and chemical-resistant grout formulation with no sealing required
- Easy cleanability, color consistency and improved workability
- Dries to a hard, uniform color surface in 24 hours and will not stain surfaces
- Crack-resistant and shrinkage-controlled formulation, with no efflorescence

- BioBlock[®] technology for mold and mildew resistance
- Is used straight from the pail, without the need to add water
- Specialized pail design with flip-top hinged lid

INDUSTRY STANDARDS AND APPROVALS

 ANSI: Although ready-to-use grouts do not yet have ANSI requirements, MAPEI Flexcolor CQ meets or exceeds specific tests in ANSI A118.3 and A118.6 covering other grout types.

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's Website.

WHERE TO USE

- For grout joints from 1/16" to 1/2" (1,5 to 12 mm)
- Use for grouting interior and exterior floor, walls, countertops and backsplashes.
- Use for glass tile/mosaics as well as porcelain, ceramic and natural-stone tile (such as granite, travertine, slate, marble and polished marble), quarry, and cement-based terrazzo.
- Use for grouting intermittent wet conditions such as bathtub surrounds, shower walls and shower floors.
- Steam cleaning and power washing of MAPEI Flexcolor CQ is acceptable after 6 to 7 days. Do not use a power-washer setting with greater than 1,800 psi.



- Use for interior/exterior commercial and residential installations under Res 1, 2, 3 and 6 and Com 1, 2, 3 and 6 per TCNA Environmental Classifications. *MAPEI Flexcolor CQ* is not for installations in submerged areas or areas hotter than 125°F (52°C).
- For heavy industrial installations where fatty acids are present, such as commercial kitchens, use MAPEI's *Kerapoxy*[®] *IEG CQ.*

LIMITATIONS

- Use only at temperatures between 50°F and 95°F (10°C and 35°C). Drying time will vary depending on temperature, humidity, tile porosity and grout joint depth/width.
- *MAPEI Flexcolor CQ* cures faster in lower humidity conditions (less than 50% is ideal).
- Do not use in water submersion installations such as pools and hot tubs.
- *MAPEI Flexcolor CQ* is not recommended for installation in steam rooms or saunas.
- Do not use in areas exposed to continuous high surface temperatures (greater than or equal to 140°F [60°C]), such as areas near fireplaces or wood stoves.
- Some types of sensitive tiles such as glass mosaic or marble can be permanently stained, scratched, dulled or damaged when grouting. Always test the grout on a separate sample area before grouting to determine the suitability of the tile with the grout color selected.
- Do not use for distressed or tumbled travertine tiles if no grout is desired in the pits of these tiles.
- Do not use with pebble-stone or river-rock tile or mosaics, irregularly shaped tile or stone, or any time the grout joint width or depth equals or exceeds 1/2" (12 mm).
- Do not use for commercial kitchen floors or environments where "no-rinse" enzymatic cleaners will be used.

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

SURFACE PREPARATION

- Before grouting, make sure that tiles are firmly set and the adhesive or mortar is completely dry.
- Remove all tile spacers.
- 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 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 Installation Systems page on MAPEI's Website.

MIXING

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

• No mixing is required.

PRODUCT APPLICATION

Read all installation instructions thoroughly before installation. Using consistent application procedures will produce consistent results.

- 1. To aid in spreading the grout, slightly moisten the tile surface with a damp, rounded grout sponge just before application.
- 2. Force the grout into the joints with a medium- to hardrubber float held at a 45-degree angle to the tile surface.
- 3. Make sure all joints are well-compacted and are free of voids and gaps.
- 4. Remove excess grout from the tile surface, holding the float at an almost 90-degree angle to the surface and moving the float diagonally to the joints while the grout is still fresh.
- 5. The grout surface should be flush with the tile edge.

CLEANUP

- Cleaning should begin after the surface develops a dry, skinned-over appearance – within 5 to 10 minutes, depending upon the temperature, humidity and absorption rate of the tile. Grout small areas of between 30 to 40 sq. ft. (2,79 to 3,72 m²) at a time, so that cleaning can begin before the grout skins over and dries on the tile surface.
- 2. Move a moderately damp, rounded grout sponge across the tile surface in a circular motion to loosen grout and to shape the joints. Drag a clean and moderately damp sponge diagonally across the tile joints, applying slight pressure. Use one side of the sponge for each pass over the tile, rinsing the sponge after the second pass.

Note: Under certain conditions, a milky film can appear on the grout surface. This film will dissipate in 20 to 30 minutes after the washing step is completed.

- 3. Change the water bucket frequently to prevent the development of a haze on the tile surface.
- 4. If residue is observed on the tile surface, a final wash can be performed (if needed) about 1 hour after the initial wash. If needed in the cleaning process, add 1 U.S. oz. (30 mL) of a clear dishwashing soap to a pail containing 3 U.S. gals. (11,4 L) of clean water; then use a clean, white, moistened scrub pad to loosen any remaining grout residue and a moistened sponge to remove the residue.





ANSI Specification

Test Method	Specification Standard	Test Results	
ANSI A118.3, chemical resistance	Conforms to ASTM C267	Pass (see the Chemical Resistance	
(ASTM C267)	CONTONNIS TO ASTIM C207	table below)	
ANSI A118.3, vertical sag in joints	No noticeable change in joint shape	Pass	
ANSI A118.3, cleanability	ANSI A118.3	Pass	
ANSI A118.6*, compressive strength	Cement grouts ≥ 3,000 psi (20,7 MPa)	4,922 psi (33,9 MPa)	
	at 28 days	7,522 psi (55,5 ivil a)	

* Modified ANSI method: 28 days at 73°F (23°C) in a grout joint

Chemical Resistance (ASTM C267)**

Ammonia	Pass
Bleach	Pass
Potassium hydroxide, 3%	Pass
Acetic acid, 3%	Pass
Acetic acid, 10%	Pass
Ammonium chloride	Pass
Citric acid, 3%	Pass
Citric acid, 10%	Pass
Lactic acid	Pass
Peanut oil	Pass
Olive oil	Pass
Phosphoric acid, 3%	Pass
Phosphoric acid, 10%	Pass
Sulfamic acid, 3%	Pass
Sulfamic acid, 10%	Pass
Hydrochloric acid, 3%	Pass
Hydrochloric acid, 10%	Pass
Sulfuric acid, 3%	Pass

** Testing conducted after 28-day full cure, with 24-hour full immersion

Product Performance Properties

Laboratory Tests	Results
Hardness at 72 hours (Shore A)	85
Foot traffic rating (ASTM C627)	Medium commercial rating; passes 10 cycles
ASTM C627 Robinson Floor Testing	Passes 10 cycles for a rating of moderate commercial grade
VOCs (Rule #1168 of California's SCAQMD)	44 g per L
VOCs (Section 01350 of California's CDPH)	Passed
Abrasion (Gabbrielli Abrasimeter) – modified ISO 13007-4	7 days \leq 450 mm ³
method – for cement grouts	$28 \text{ days} \le 400 \text{ mm}^3$
Water absorption (TCNA method) – 14 days at 73°F (23°C)	Pass
and 2 days in water	1 855

Shelf Life and Product Characteristics

Shelf life	18 months at 73°F (23°C) and 50% relative humidity		
	if unopened and if opened but stored with a closed lid		
	Available in MAPEI's palette of 40 colors organized into 5		
Colors	color collections. Refer to MAPEI's grout/caulk color palette.		
	Sample grout color chips are available upon request.		
Odor	Slight latex odor, with no ammonia smell		

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

Protect from light foot traffic	24 hours
Protect from normal foot traffic	48 hours
Protect from commercial/heavy foot traffic	6 to 7 days
Full cure	3 days

[†] Protection and curing times will vary depending on ambient temperature, substrate temperature and humidity.

Packaging

Size

Pail: 0.5 U.S. gal. (1,89 L)

Pail: 1 U.S. gal. (3,79 L)

Pail: 2 U.S. gals. (7,57 L)

Approximate Coverage* per 0.5 U.S. gal. (1,89 L)

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)
2" x 2" x 1/4"	50 sq. ft.	25 sq. ft.	17 sq. ft.	13 sq. ft.	9 sq. ft.	7 sq. ft.
(50 x 50 x 6 mm)	(4,65 m²)	(2,32 m²)	(1,58 m²)	(1,21 m²)	(0,84 m²)	(0,65 m²)
4-1/4" x 4-1/4" x 1/4"	107 sq. ft.	54 sq. ft.	35 sq. ft.	27 sq. ft.	17 sq. ft.	13 sq. ft.
(108 x 108 x 6 mm)	(9,94 m²)	(5,02 m²)	(3,25 m²)	(2,51 m²)	(1,58 m²)	(1,21 m²)
6" x 6" x 1/4"	150 sq. ft.	75 sq. ft.	50 sq. ft.	35 sq. ft.	24 sq. ft.	19 sq. ft.
(150 x 150 x 6 mm)	(13,9 m²)	(6,97 m²)	(4,65 m²)	(3,25 m²)	(2,23 m²)	(1,77 m²)
8" x 8" x 3/8"	135 sq. ft.	58 sq. ft.	45 sq. ft.	35 sq. ft.	24 sq. ft.	17 sq. ft.
(200 x 200 x 10 mm)	(12,5 m²)	(5,39 m²)	(4,18 m²)	(3,25 m²)	(2,23 m²)	(1,58 m²)
12" x 12" x 3/8"	204 sq. ft.	103 sq. ft.	68 sq. ft.	51 sq. ft.	35 sq. ft.	25 sq. ft.
(300 x 300 x 10 mm)	(19,0 m²)	(9,57 m²)	(6,32 m²)	(4,74 m²)	(3,25 m²)	(2,32 m²)
24" x 6" x 3/8"	160 sq. ft.	80 sq. ft.	52 sq. ft.	40 sq. ft.	27 sq. ft.	20 sq. ft.
(610 x 150 x 10 mm)	(14,9 m²)	(7,43 m²)	(4,83 m²)	(3,72 m²)	(2,51 m²)	(1,86 m²)
24" x 12" x 3/8"	272 sq. ft.	140 sq. ft.	90 sq. ft.	68 sq. ft.	45 sq. ft.	33 sq. ft.
(610 x 300 x 10 mm)	(25,3 m²)	(13,1 m²)	(8,36 m²)	(6,32 m²)	(4,18 m²)	(3,07 m²)

Approximate Coverage* per 1 U.S. gal. (3,79 L)

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)
2" x 2" x 1/4"	103 sq. ft.	50 sq. ft.	33 sq. ft.	24 sq. ft.	15 sq. ft.	11 sq. ft.
(50 x 50 x 6 mm)	(9,57 m²)	(4,65 m²)	(3,07 m²)	(2,23 m²)	(1,39 m²)	(1,02 m²)
4-1/4" x 4-1/4" x 1/4"	221 sq. ft.	109 sq. ft.	72 sq. ft.	54 sq. ft.	35 sq. ft.	26 sq. ft.
(108 x 108 x 6 mm)	(20,5 m²)	(10,1 m²)	(6,69 m²)	(5,02 m²)	(3,25 m²)	(2,42 m²)
6" x 6" x 1/4"	313 sq. ft.	155 sq. ft.	103 sq. ft.	77 sq. ft.	50 sq. ft.	37 sq. ft.
(150 x 150 x 6 mm)	(29,1 m²)	(14,4 m²)	(9,57 m²)	(7,15 m²)	(4,65 m²)	(3,44 m²)
8" x 8" x 3/8"	278 sq. ft.	138 sq. ft.	91 sq. ft.	68 sq. ft.	45 sq. ft.	33 sq. ft.
(200 x 200 x 10 mm)	(25,8 m²)	(12,8 m²)	(8,45 m²)	(6,32 m²)	(4,18 m²)	(3,07 m²)
12" x 12" x 3/8"	417 sq. ft.	208 sq. ft.	138 sq. ft.	103 sq. ft.	68 sq. ft.	50 sq. ft.
(300 x 300 x 10 mm)	(38,7 m²)	(19,3 m²)	(12,8 m²)	(9,57 m²)	(6,32 m²)	(4,65 m²)
24" x 6" x 3/8"	334 sq. ft.	166 sq. ft.	110 sq. ft.	82 sq. ft.	54 sq. ft.	40 sq. ft.
(610 x 150 x 10 mm)	(31,0 m²)	(15,4 m²)	(10,2 m²)	(7,62 m²)	(5,02 m²)	(3,72 m²)
24" x 12" x 3/8"	557 sq. ft.	278 sq. ft.	184 sq. ft.	138 sq. ft.	91 sq. ft.	68 sq. ft.
(610 x 300 x 10 mm)	(51,7 m²)	(25,8 m²)	(17,1 m²)	(12,8 m²)	(8,45 m²)	(6,32 m²)

Approximate Coverage* per 2 U.S. gals. (7,57 L)

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)
2" x 2" x 1/4"	209 sq. ft.	104 sq. ft.	69 sq. ft.	51 sq. ft.	34 sq. ft.	25 sq. ft.
(50 x 50 x 6 mm)	(19,4 m²)	(9,66 m²)	(6,41 m²)	(4,74 m²)	(3,16 m²)	(2,32 m²)
4-1/4" x 4-1/4" x 1/4"	445 sq. ft.	222 sq. ft.	148 sq. ft.	110 sq. ft.	73 sq. ft.	55 sq. ft.
(108 x 108 x 6 mm)	(41,3 m²)	(20,6 m²)	(13,7 m²)	(10,2 m²)	(6,78 m²)	(5,11 m²)
6" x 6" x 1/4"	628 sq. ft.	314 sq. ft.	209 sq. ft.	156 sq. ft.	104 sq. ft.	78 sq. ft.
(150 x 150 x 6 mm)	(58,3 m²)	(29,2 m²)	(19,4 m²)	(14,5 m²)	(9,66 m²)	(7,25 m²)
8" x 8" x 3/8"	558 sq. ft.	279 sq. ft.	185 sq. ft.	139 sq. ft.	92 sq. ft.	69 sq. ft.
(200 x 200 x 10 mm)	(51,8 m²)	(25,9 m²)	(17,2 m²)	(12,9 m²)	(8,54 m²)	(6,41 m²)
12" x 12" x 3/8"	838 sq. ft.	418 sq. ft.	279 sq. ft.	209 sq. ft.	139 sq. ft.	104 sq. ft.
(300 x 300 x 10 mm)	(77,9 m²)	(38,8 m²)	(25,9 m²)	(19,4 m²)	(12,9 m²)	(9,66 m²)
24" x 6" x 3/8"	670 sq. ft.	335 sq. ft.	223 sq. ft.	167 sq. ft.	111 sq. ft.	83 sq. ft.
(610 x 150 x 10 mm)	(62,2 m²)	(31,1 m²)	(20,7 m²)	(15,5 m²)	(10,3 m²)	(7,71 m²)
24" x 12" x 3/8"	1,117 sq. ft.	558 sq. ft.	372 sq. ft.	279 sq. ft.	185 sq. ft.	139 sq. ft.
(610 x 300 x 10 mm)	(104 m²)	(51,8 m²)	(34,6 m²)	(25,9 m²)	(17,2 m²)	(12,9 m²)

* 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.









Continued from Page 2

- If joints are not fully flush, *MAPEI Flexcolor CQ* can be re-applied after 24 hours of drying by repeating steps 1 through 4. The product will bond to itself.
- 6. Clean tools and the surface with fresh water while the product is wet.

PROTECTION AND MAINTENANCE

- Light foot traffic is acceptable 24 hours after grouting.
- To develop stain resistance and for a full cure, allow 3 days before water exposure.
- Protect the product from freezing. However, if product does freeze, allow the product to return to room temperature before use. *MAPEI Flexcolor CQ* was tested in the cured state and passed 25 cycles of freeze/thaw testing at 0°F (-18°C) for 16 hours and 8 hours at 74°F (23°C) per cycle.
- If haze residue or "picture framing" is experienced after installation, use MAPEI's *UltraCare*[™] Epoxy Grout Haze Remover and *UltraCare* Heavy-Duty Stone, Tile & Grout Cleaner.
- Although sealing is not required, MAPEI's UltraCare products can be used for care and maintenance of the grout surface. MAPEI's UltraCare water-based products are fully compatible with MAPEI Flexcolor CQ.

RELATED DOCUMENTS

Reference Guide: Surface	
Preparation Requirements for tile and	RGT0309*
stone installation system	

* At www.mapei.com

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

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in effect at the time of the MAPEI product installation. For the most up-to-date TDS and warranty information, please visit our website at

LEGAL NOTICE

www.mapei.com. <u>Any Alterations to the</u> <u>Wording or requirements contained</u> <u>IN or derived from this tds shall</u> <u>Void all related mapei warranties</u>.

Before using, the user must determine the suitability of our products for the intended use,

and the user alone assumes all risks and liability. 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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Technical Services

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

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

Services in Mexico 0-1-800-MX-MAPEI (0-1-800-696-2734)

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