

# Kitchen Tile replacement

## Water Proof Trough and Drains

### Kettle Area and Prep Area

Philadelphia VAMC, 3900 Baltimore AVE, Philadelphia PA 19104

Provide Labor and Material necessary for replacing Tile and water proof drains and trough in kitchen Kettle and prep area As follows:

#### Phase I: Kettle Area

1. Remove Kitchen equipment, Store equipment in designated area provided by VA Engineer, protect equipment remove Floor and cove base.
2. Remove Trough drain and floor drains in working area.
3. Install new Stainless Steel trough, 6" deep receptor and sediment bucket and Grating.
4. Install new floor drain in front the middle walking box, install clean out per national plumbing code.
5. Install new tile and water proof system MAPEI or equal.
6. Reinstall equipment connect piping, power, test and restart equipment.
7. Work Duration for this phase is 15 Calendar days from installing the ICRA wall by the VA.
8. Work is per SK-1 and SK-2

#### Phase II: Prep area

1. Remove Kitchen equipment, Store equipment in designated area provided by VA Engineer, protect equipment remove Floor and cove base.
2. Remove all floor drains in working area.
3. Install new floor drains and clean outs, per Plumbing National code.
4. Submit cuts for Tile, drains, water proof system for VA engineer approval.
5. Install new tile and water proof system MAPEI or equal.
6. Reinstall equipment reconnect piping, power, test and restart equipment.
7. Work Duration for this phase is 15 Calendar days from installing the ICRA wall by the VA.
8. Work is per SK-1.

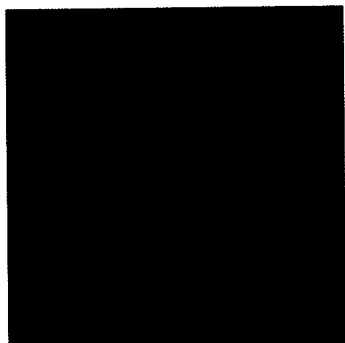
**General Comments for Phase I and Phase 2:**

1. The contractor shall schedule in two weeks in advance with Plumbing foreman at 215-823-4127. Work will schedule in accordance with kitchen schedule, no disturbance of kitchen work during Meals services.
2. The contractor shall lock out and Tag out all Energy source, electrical, Water, Steam concurrently with the VA personal. Coordinate with Plumbing Foreman.
3. Tile is Quarry Texture Dal-Tile or equal, Submit for VA for approval and color selection.
4. The contractor shall start working immediately after the VA completes the ICRA wall for each phase. Each phase is 15 days. The project duration is 60 Calendar days.
5. Water proof all drains and trough to prevent water leakage per manufacturer installation instructions. MAPEI or equal. Submit cuts for VA approval.
6. Trough is subway style 304 stainless Steel, 6 "deep with Sediment Basket.
7. Work is to perform between 8:00 PM and 5:00AM.
8. The plumbing work shall be performed in accordance with national plumbing code. The contractor must be certified plumber. Submit at least 3 similar projects in health care facility.
9. Tile work and water proofing, shall be completed by tile craftsmen , with at least five years experienced , submit at least 3 similar projects in health care facility.
10. The VA will install ICRA wall for each phase to prevent dust migrating to kitchen, the contractor shall control any dust creation.
11. End

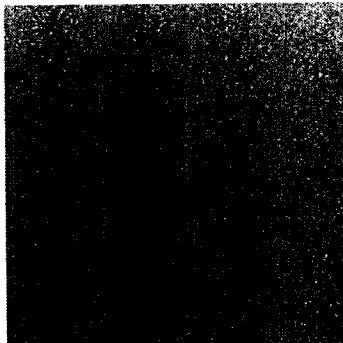
# QUARRY TEXTURES™

The unglazed, textured surface makes these pavers naturally stain- and slip-resistant. Available in six rustic color-through choices, Quarry Textures is the perfect choice for both residential and commercial floors.

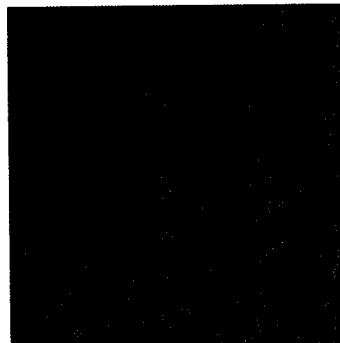
## *Field tile*



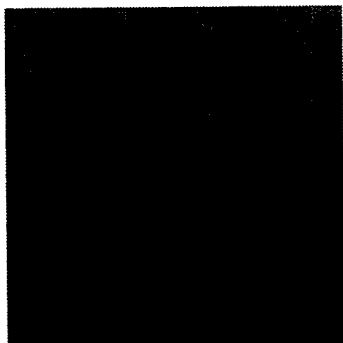
DIABLO RED 0T01 (1)



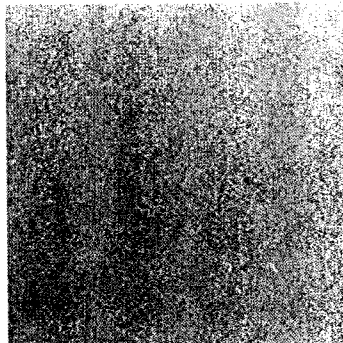
ASHEN GRAY 0T03 (2)



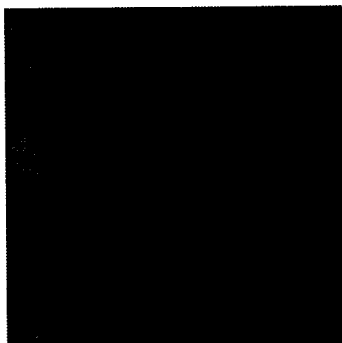
ADOBE BROWN 0T05 (2)



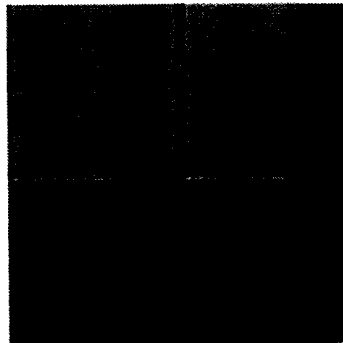
SAHARA SAND 0T08 (2)



DESERT TAN 0T09 (2)



ASHEN FLASH 0T04 (2)



ADOBE FLASH 0T06 (2)



RED FLASH 0T02 (1)

(1) and (2) indicate Price Groups, (1) being the least expensive.

Abrasive grain available in 6 x 6 and 8 x 8 sizes in 0T01, 0T03, 0T05, 0T08, 0T09 and 0T11 colors only.

QUARRY TILE  
QUARRY TEXTURES™



POST CONSUMER  
RECYCLED MATERIALS



PRE CONSUMER  
RECYCLED MATERIALS



MADE IN  
THE U.S.A.

**daltile®**  
DESIGN WITH CONFIDENCE™

## SIZES

		SQ. FT. CARTON	PCS. PER CARTON
6 x 6 Field Tile	(6" x 6") (15.2 cm x 15.2 cm)	11.00	44
8 x 8 Field Tile	(8" x 8") (20.3 cm x 20.3 cm)	11.00	25

## RESIDENTIAL USAGE

FLOORS	WALLS	COUNTERTOPS	EXTERIOR PATIOS	EXTERIOR POOL DECKS
F	W	C	EP	ED*

\* Abrasive grain only.

## COMMERCIAL USAGE

	INTERIOR			EXTERIOR	
	RESIDENTIAL	LIGHT COMMERCIAL	COMMERCIAL	RESIDENTIAL	COMMERCIAL
Floors/Patios	✓	✓	✓	✓	✓
Walls/Backsplashes	✓	✓	✓	✓	✓
Countertops	✓	✓	✓	✓	✓
Pool Decking*	✓	✓	✓	✓	✓
Pool Linings	✓	✓	✓	✓	✓

Suitable for exterior floors, including pool decks, and walls in freezing and non-freezing climates when proper installation methods are followed.

Suitable for industrial installations requiring high compressive strength.

\* Abrasive grain only.

## INSTALLATION

THICKNESS	GROUT JOINT RECOMMENDATION
1/2"	3/8"

## NOTES

We do not recommend light colored quarry tile in commercial kitchens unless properly sealed. It is necessary to follow the proper procedures and recommendations from the grout and maintenance products manufacturers.

Special care should be taken when grouting with dark pigmented colors. A grout release is recommended to prevent finely powdered pigments from lodging in the pores of the tile surface.

Suitable for use on ramps when ordered with abrasive.

Since there is shade variation in all natural products, the tile and trim supplied for your particular installation may not match these samples. Final selection should be made from actual tiles and trim and not from tile and trim samples or color reproductions. Manufactured in accordance with ANSI A137.1 standards.

Water, oil, grease, etc. create slippery conditions. Floor applications with exposure to these conditions require extra caution in product selection.

For additional information, refer to "Factors to Consider" at <http://daltile.com/factors-to-consider.cfm>.



POST CONSUMER  
RECYCLED MATERIALS



PRE CONSUMER  
RECYCLED MATERIALS



MADE IN  
THE U.S.A.

All or selected items within this series are made in the USA.  
For more information visit [www.daltile.com/QuarryTextures](http://www.daltile.com/QuarryTextures)

## TRIM

	TYPE	NUMBER	SIZE	PCS. PER CARTON
	Bullnose	Q-1665*	6 x 6	44
	Bullnose Corner	QCRL-1665*	6 x 6	44
	Cove Base**	Q-3565*	5 x 6	44
	Cove Base Outcorner	QCR-L-3565*▲■	5 x 6	20
	Cove Base Inside Corner	QB-3565*	1 x 5	25
	Cove Base**	Q-3585*	5 x 8	24
	Bullnose	Q-1885	8 x 8	25
	Bullnose Corner	QCRL-1885	8 x 8	25

\* Available in abrasive grain

\*\* Cove Base trim is intended to coordinate with floor field tile in the standard 90-degree installation position.

▲ Not available in Flash colors; use coordinating solid color.

■ Special Order

## SHADE VARIATION



MEDIUM (V2)

Color variation within each tile.

## DYNAMIC C.O.F. (WET) : 2

The higher the rating, the higher the slip resistance.

1 < 0.42

2 ≥ 0.42

## STATIC C.O.F. (WET) : 2

1 0.50 - 0.59

2 ≥ 0.60

## TEST RESULTS

	ASTM#	RESULT (Non-Abrasive Grain)	RESULT (Abrasive Grain)
Water Absorption	C373	< 3.0%	< 3.0%
Breaking Strength	C648	> 400 lbs	> 400 lbs
Scratch Hardness	MOHS	7.0	7.0
Chemical Resistance	C650	Resistant	--
Dynamic C.O.F.	A137.1	≥ 0.42	≥ 0.42
Static C.O.F.	C1028	Wet: ≥ 0.60 Dry: ≥ 0.70	Wet: ≥ 0.60 Dry: ≥ 0.80

Dynamic C.O.F. (Wet) value as measured by the DCOF AcuTest™ helps to assess a product's suitability for a commercial environment. For more information, visit our website at [www.daltile.com/DCOF](http://www.daltile.com/DCOF).



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For more information about Daltile products and services, visit our website at [daltile.com](http://daltile.com)

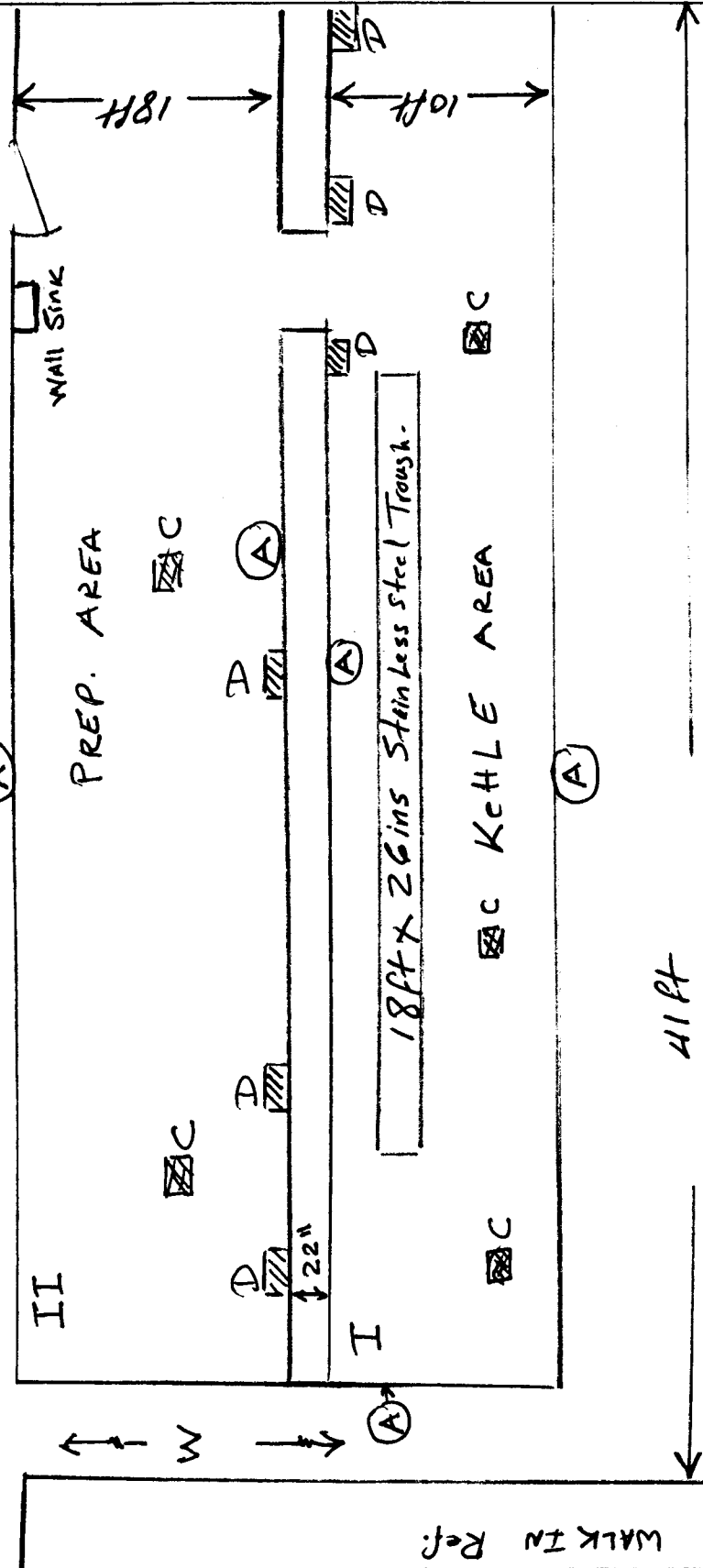
C: Clean out

(A): IRCA wall by VA

## I: Phase one

## II: Phase two

LI: phase two  
W: WALK WAY for POT WASH and WALK IN ACCESS.

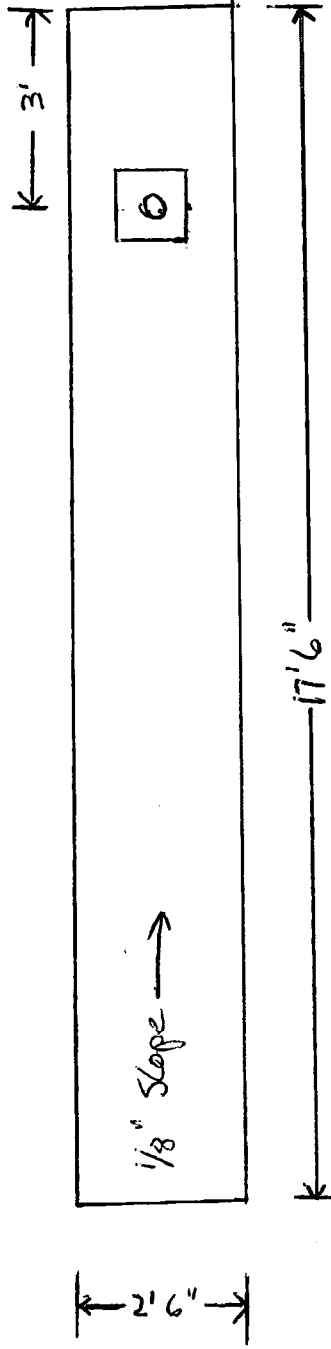
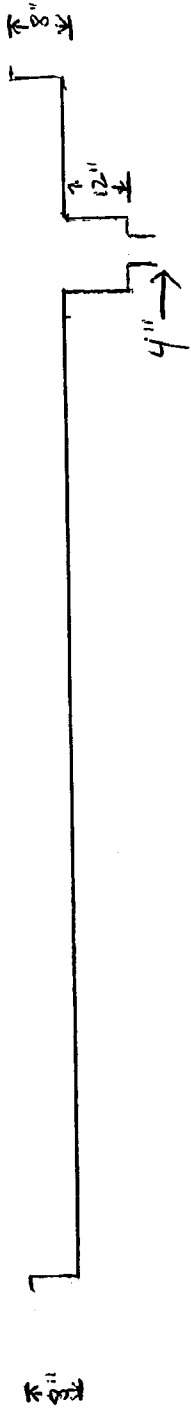


## Complete Phase I First

## Phase II

Phase I  
Complete WALK Area After hours between 8:00PM and 5:00AM

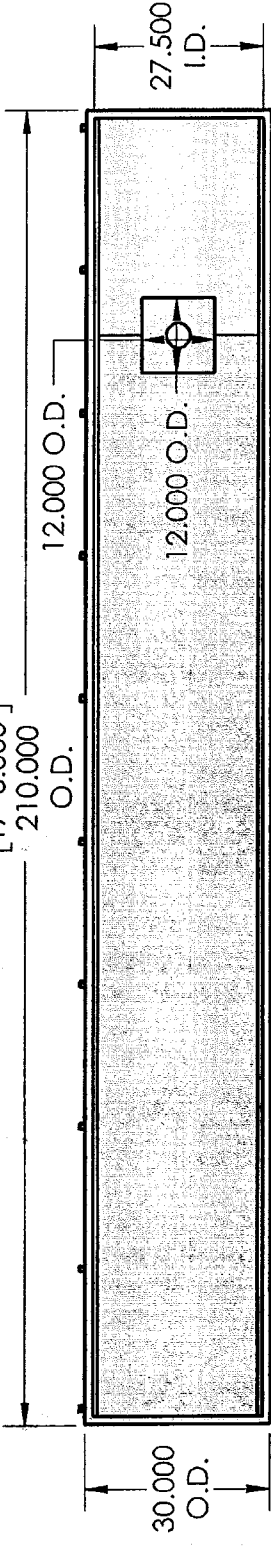
SK1 Not to Scale



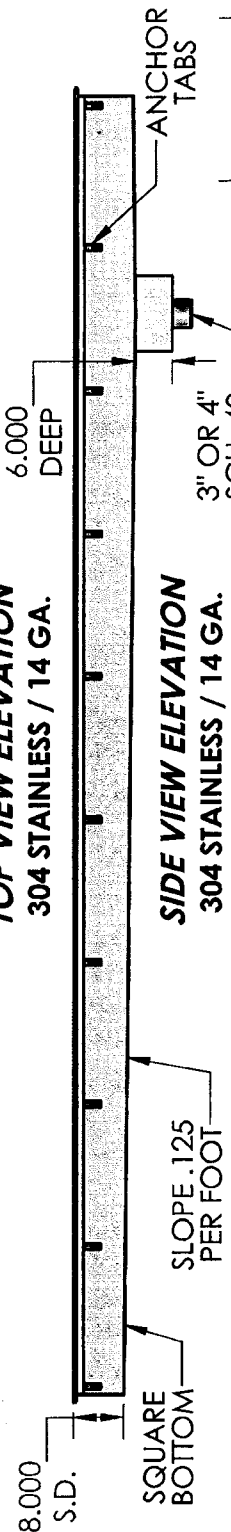
$\frac{3}{8}$ " SCALE  
 Bldg 2 MAIN Kitchen Trough Drain  
 Option # 2

SK 2  
 Not to Scale

[17'-6.000"]  
210.000  
O.D.

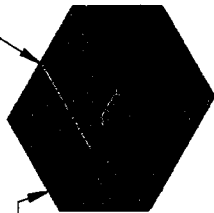


**TOP VIEW ELEVATION**  
304 STAINLESS / 14 GA.

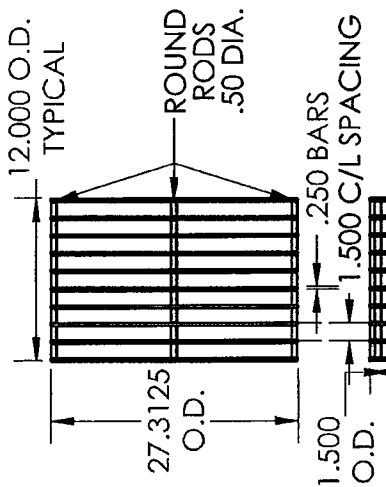


**SIDE VIEW ELEVATION**  
304 STAINLESS / 14 GA.

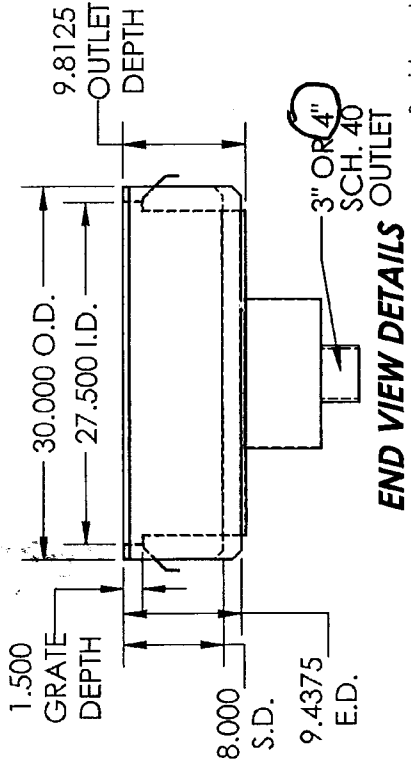
HOLES  
.25 DIA.  
.38 STAGGERED



**SEDIMENT BASKET**  
304 STAINLESS / 16 GA.



**SUBWAY STYLE GRATE**  
304 STAINLESS / .25 BAR X 1.50



**END VIEW DETAILS**

	NAME	DATE
Drawn By:	DC	06/16
Finish: Bead Blast		
Material: Stainless Steel		
Stainless Steel 304		

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- MADE IN THE USA -

**SDS - 30.0 X 17 FT-6 IN X 8.0**  
**SB TRENCH DRAIN**  
**WITH 1 CATCH BASIN**  
**QUOTE #17813**  
DO NOT SCALE DRAWING

Catalog No.  
**SDCTR-CUSTOM**

\*\*\*ALL DIMENSIONS ARE NOMINAL DIMENSIONS  
AND ARE SUBJECT TO CHANGE\*\*\*

Customer Signature: \_\_\_\_\_  
REV  
SHEET 1 OF 1

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# DAL-SEAL® CIS INSTALLATION INSTRUCTIONS

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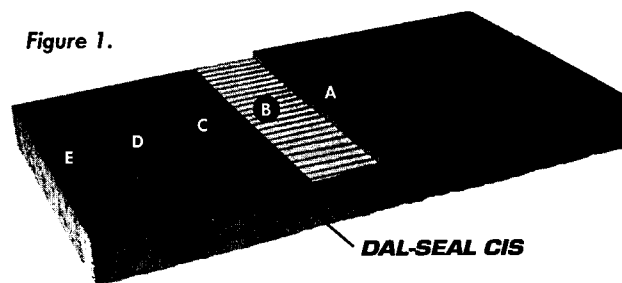
## 1. GENERAL INFORMATION

Dal-Seal CIS is a composite sheet membrane that is designed to isolate a tile surface from the damaging effects of substrate movement. With proper installation, CIS can reduce tile cracking and other damage, but CIS may not eliminate all the problems associated with substrate movement transferring to the tile or grout. The unique physical properties of Chlorinated Polyethylene (CPE) which allow it to absorb stress internally do have limits. These same physical properties lend themselves to installations where it is desirable to bridge substrate control joints to avoid cutting tile and interrupting tile designs or patterns. This sheet may be installed by a thin-bed method directly on properly prepared substrates per industry guidelines.

### NOTES:

- CIS is for interior applications. For exterior applications, use Noble Deck™.
- While the primary function of the sheet is crack isolation, this does not preclude normal industry practices or requirements – including joint placement. Use of this system to bridge cracks or construction joints with tile may not be an absolute solution.
- Install in strict compliance with these instructions, and comply with all applicable ANSI standards, TCNA recommendations and all applicable building codes.
- For any procedure not covered by these instructions, contact Dal-Tile Corporation.

Figure 1.



- CERAMIC, TERRAZZO TILE OR DIMENSION STONE
- THIN-SET BOND COAT APPROPRIATE FOR APPLICATION
- DAL-SEAL CIS MEMBRANE - 1/32" (.8MM)
- SHEET BOND COAT - 1/16" - 3/32" (1.6MM - 2.4MM)
- SUBSTRATE: CONCRETE, PLYWOOD, BACKER BOARD (BB), PRIMED GYPSUM UNDERLAYMENT AND RADIANT HEAT SYSTEMS\*

\*DAL-SEAL CIS R-value = 0.8

STANDARD:	ANSI A118.10	ANSI A118.12	ASTM C 627	Plumbing Code Listings
Description:	Load Bearing, Bonded, Waterproof Membranes for Thin-Set Ceramic Tile and Dimension Stone Installations	Crack Isolation Standard: "System Crack Resistance" (Jig Test)	Standard Test Method for Evaluating Ceramic Floor Tile Installation Systems using the Robinson Type Floor Tester	ICC-ES PMG-1059, IAPMO File #4339
Rating:	Passed	High Performance (> 1/8")	Extra Heavy	

**NOTE:** Refer to Dal-Seal CIS Product Description for additional product information.

## 2. MATERIALS

**2.1 PRODUCT:** Dal-Seal CIS is a thin .030" (0.8mm) bonded, load bearing sheet membrane for crack isolation.

**2.1.a COMPOSITION:** Dal-Seal CIS is a composite sheet made from an alloy of Chlorinated Polyethylene (CPE) with non-woven fabric laminated to both sides.

**2.2 BOND COAT:** Dal-Seal CIS should be bonded with NobleBond EXT, Dal-Bond 21 or an acrylic or polymeric modified thin-set mortar including rapid curing types which are recommended by the manufacturer for this application. Bonding agent must conform to the appropriate ANSI A118.4, TCNA Handbook recommendations, and bonding agent manufacturer's directions.

### NOTES:

- Job-site mortar mixes must conform to ANSI A108.5.
- Refer to bond coat manufacturer's instructions for cure time.



## 2. MATERIALS (CON'T.)

**2.3 WATERPROOF SEALANT:** For waterproofing applications, use Dal-Sealant 150 to seam sheets, seal penetrations (i.e., pipes, wire), drains, and terminal edges. Seal preformed corners to sheet.

**2.4 TOOLS:** Normal tile setting tools, scissors or utility knife, rubber hand roller, and linoleum roller (recommended 75 - 100 lbs.). Application of Dal-Sealant 150 for a waterproofing application requires a commercial grade caulk gun.

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## 3. PLANNING & LAYOUT

**3.1** Install correct width of NobleSeal of CIS for either full or partial coverage.

**3.1.a FULL COVERAGE:** For maximum protection in new construction or renovations, install NobleSeal CIS over the entire area to be tiled. See TCNA F125-FULL-11.

**3.1.b PARTIAL COVERAGE:** For isolating cracks or joints, the width of the sheet must equal the tile bridging the crack or joint plus one full tile on either side (i.e. a minimum 3 tiles on the NobleSeal). See section 9 - CAD Details. See TCNA F125-PARTIAL-11.

### NOTES:

a) When tile is installed on diagonal line, minimum sheet width is 2.5 times the diagonal dimension of the tile (i.e. Diagonal width of 12" tile is 17" X 2.5 = 42.5").

b) Minimum width of sheet is 24" regardless of tile size.

1) For areas wider than one sheet width, butt sheets of CIS together.

**NOTE:** Waterproofing requires a 2" overlap of sheet membrane (refer to section 6.1).

2) Follow TCNA recommendations regarding movement joints in the tile field.

3) It is not necessary to align cracks or control joints in the substrate with the grout joints in the tile field.

c) In extensively cracked areas, it may be more cost effective to remove all the tile and cover the affected area with CIS.

**3.1.c SHEET DIMENSIONS AVAILABLE:**

2' x 50' (0.6m x 15.2m) roll =	100 sq. ft. (9.3m <sup>2</sup> )
3' x 50' (0.9m x 15.2m) roll =	150 sq. ft. (13.9m <sup>2</sup> )
4' x 50' (1.2m x 15.2m) roll =	200 sq. ft. (18.6m <sup>2</sup> )
6' x 50' (1.8m x 15.2m) roll =	300 sq. ft. (27.9m <sup>2</sup> )

### 3.2 SHEET BOND COAT:

**3.2.a NOBLEBOND EXT:** Use in wet or dry areas. Porosity and condition of the substrate can affect coverage, but NobleBond EXT will generally provide the following coverage:

If moisture content is < 5 lbs./1000 sq. ft./24 hours, use without EXT Primer: **90 to 110 sq. ft./gallon.**

If moisture content is between 5 - 8 lbs./1000 sq. ft./24 hours, use with EXT Primer: **100 to 120 sq. ft./gallon.**

**3.2.b DAL-BOND 21:** Use in dry areas only. Dal-Bond 21 is a latex-based adhesive for interior horizontal applications. It is not for use in wet areas. Dal-Bond 21 allows the sheet more movement than cement based mortars. It also allows tile to be installed immediately after sheet placement as it does not require further curing. Refer to Dal-Bond 21 Installation Instructions on container label. Dal-Bond 21 will generally provide the following coverage:  
150-175 sq.ft./gal.

**NOTE:** Dal-Bond adhesives allow for more movement than cement based mortars. They also allow tile to be installed immediately after sheet placement, as they do not require further curing. Refer to instructions on label.

**3.2.c LATEX MODIFIED THIN-SET:** See manufacturer's coverage rate.

**3.2.c.1 Cold Weather Procedure:** Consult bond coat manufacturer for safe low-temperature limits and cure times. Dal-Seal sheet membranes remain flexible to -25°F.

**3.2.c.2 Hot Weather Procedure:** Consult bond coat manufacturer for safe high-temperature limits and mixing procedures for these specific conditions.

**3.3 DAL-SEALANT 150 (WATERPROOFING ONLY):** A 10.3 oz. tube of Dal-Sealant 150 seams approximately 40 linear ft.

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## 4. PREPARATION & PROCEDURES

**>>>>>RECOMMENDED:** Test materials and method under job-site conditions to confirm suitability.

**4.1 INSPECTION:** Substrate must meet requirements set forth by the TCNA and ANSI A108 and A118 standards. Report in writing any deficiencies that might affect performance of the system.

### NOTES:

a) Dal-Seal CIS will not compensate for structural deficiencies in the substrate.

b) Review all detail drawings (see Section 9 - CAD DETAILS).

**4.2 PROCEDURE:** To incorporate Dal-Seal CIS into a thin-bed installation, prepare substrate and select bond coat.

**4.3 SUBSTRATES:** Substrate condition for sheet is the same as tile (see TCNA guidelines). Slabs on, above or below grade should be tested for moisture content and pH. Slabs must be flat. Floor preparation (e.g. leveling, patching) should be done prior to installation of sheet.

**4.3.a DEPRESSIONS:** Floors with depressions may cause sheet to span over these depressions. Remedy by filling the depression prior to installation of sheet. Follow appropriate industry guidelines.

**4.3.b RENOVATIONS:** Remove cracked tile and one row of adjacent tile (refer to appropriate detail). Inspect and renovate substrate to comply with ANSI standards. Determine that surfaces adjoining cracks are level (see Figure 5).

**4.4 INSTALLER:** Must be familiar with Dal-Tile Corporation's current written instructions, TCNA Handbook recommendations and ANSI A108 and A118 standards. Contractor must be experienced with installation procedures for Dal-Tile Corporation products or be instructed by a Dal-Tile Corporation representative prior to commencing work.

## 5. BONDING SHEET TO SUBSTRATE

**5.1 SPREAD BOND COAT:** Deposit sufficient amount of appropriate sheet bond coat with correct trowel in an area approximately 6 to 8 sq. ft. (1.8m<sup>2</sup> to 2.1m<sup>2</sup>) and unroll sheet into tacky bonding agent before skin can begin to form. If skinning over occurs, remove original application and re-spread fresh bond coat. Make full contact between sheet & substrate.

**NOTE:** All ridges of bond coat must be parallel to allow air under sheet to escape when embedding (see Figure 1).

**5.1.a DAL-BOND 21:** Follow instructions on container.

**5.1.b NOBLEBOND EXT:** Follow instructions on container.

**5.1.c LATEX MODIFIED THIN-SET MORTAR:** Use a trowel that provides full coverage of thin-set (e.g. 1/8"-1/4" (3.2m-6.4m) "V" notched trowel).

### NOTES:

a) Variation in trowel size, angle at which trowel is held, mixing ratio or any combination thereof may be necessary to achieve maximum contact. Fine notched trowels increase "skinning" rate.

b) Control high temperature by shading, misting substrate with water, working at night or any combination of these techniques.

c) Do not disturb cementitious thin-set bond coat until it has cured.

**5.2 LAY SHEET:** Center proper width sheet over crack (see 3.1.a). When more than one sheet is required (width or length), butt edges tightly or overlap and make single cut through overlap to produce a tight butt joint.

**5.3 EMBED SHEET:** Embed Dal-Seal CIS into bond coat (flatten all trowel ridges). For horizontal areas, use 75 - 100 lb. roller. Work from center of sheet to edges. Pull roller edge-to-edge in overlapping passes. Start at end of first sheet installed, progressing to area installed last. Use a small hand roller or straight edge to remove air pockets in areas where larger roller will not fit. Use rubber hand roller or flat side of trowel with heavy pressure on vertical surfaces.

**5.4 COVERAGE:** Complete coverage of substrate and full penetration of bond coat into the fabric is required. Prior to curing, lift sheet and inspect for full contact. If rows or ridges of bonding agent are seen, membrane has not been properly embedded and additional rolling is necessary.

**5.5 DRYING:** To prevent outer edges from lifting, curling or drying prematurely, use weight (i.e., tile, mortar, etc.). Screen work area from wind.

**5.6 PROTECTION OF SHEET:** If not covered by wearing surface, protect the installed sheet from damage and all foot or vehicular traffic (use mortar skim coat, rugs, plywood, etc.).

**NOTE:** After installation, sheet must be kept clean to enable tile to bond. If necessary, skim coat or clean with vacuum.

## 6. ADDITIONAL APPLICATIONS

**NOTE:** Refer to current Dal-Seal TS Installation Instructions.

**6.1 WATERPROOFING:** Provide required slope to drain. Cover entire area plus flashing and allow 2" (50mm) for seaming.

**6.2 SEAMING & JOINING:** For areas wider or longer than one sheet, use Dal-Sealant 150 to seam sheets together.

**6.2.a** Overlap sheets 2" (50mm) minimum.

**6.2.a.1** Apply one 3/16" bead of DalSealant 150 at 1/2" from the edge of the sheet being overlapped.

**6.2.a.2** Overlap sheets and flatten with roller or by pressing with trowel.

**NOTE:** Beads must be continuous without skips or voids.

### 6.3 FLASHINGS, UPTURNS AND CORNERS

**6.3.a** Turn sheet up vertical surface 1" to 2" higher than flood plane.

**6.3.b** Lap corners: Bond overlap and seal inside corner with Dal-Sealant 150.

**6.3.c** Preformed Inside or Outside/Dam Corners: Bond to sheet and/or substrate with Dal-Sealant 150.

**6.4 DRAINS:** All drains must have clamping ring to secure membrane to drain body. Inspect floor to insure that proper slope has been provided to eliminate ponding of water on top of membrane.

**6.4.a** Remove strainer and clamping ring.

**6.4.b** Place Dal-Seal CIS over drain body. Press membrane to feel outline of drain opening. Cut drain opening.

**6.4.c** Carefully punch or notch openings for clamping ring bolts through sheet.

**6.4.d** Apply bead of Dal-Sealant 150 on the drain lip under the Dal-Seal CIS.

**6.4.e** Install sheet, see section 5.

**6.4.f** Reset clamping ring and firmly tighten bolts.

**6.4.g** Replace strainer and adjust to proper height for tile.

## 7. TILE INSTALLATION

**7.1 TILE SETTING:** Set tile in accordance with TCNA Handbook recommendations, ANSI A108 standards and bond coat manufacturer's directions. Complete coverage of fabric by the bond coat is required.

### NOTES:

a) For waterproofing applications, test area by flooding before installation of tile.

b) Refer to bond coat manufacturer's instructions for cure time.

c) Rapid-curing type of thin-set mortar may be used with approval of mortar manufacturer.

**7.2 ELASTOMERIC GROUT JOINT(S)/(SOFT JOINT(S):** Comply with TCNA Handbook recommendation EJ171 and construct a compressible joint at closest grout joint in tile work. Two joints are suggested (one on each side of crack or control joint – approximately parallel to crack). Fill with Type T joint sealant.

**NOTE:** Elastomeric grout joint(s) must be thoroughly cleaned and free of mortar or debris to function.

## 8. WARRANTY

Dal-Seal CIS brand CPE membrane is guaranteed for the life of the original installation by Dal-Tile Corporation against failure caused by rotting, cracking and microorganism deterioration when properly installed in tile systems for which its use is recommended by Dal-Tile Corporation. This warranty is limited to the replacement of defective material and freight charges to destination only. There are no other expressed or implied warranties, and this warranty is in lieu of any other warranty, including, but not limited to, implied warranties of merchantability and fitness for purpose. The Dal-Tile Corporation is not responsible for consequential damages. The remedy of the purchaser set forth herein is exclusive.

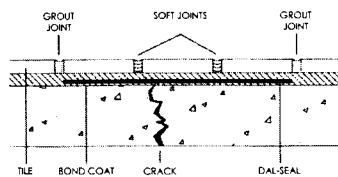
**NOTE: DAL-SEAL CIS MUST BE INSTALLED IN STRICT COMPLIANCE WITH THESE INSTRUCTIONS, APPLICABLE ANSI STANDARDS, TCNA RECOMMENDATIONS AND ALL APPLICABLE BUILDING CODES.**

These suggestions and data are based on information Dal-Tile Corporation believes to be reliable. Users should verify by tests that Dal-Seal CIS, as well as these installation methods, are suitable with the products being used in their application. Since specific use, materials and handling are not controlled by Dal-Tile Corporation, this warranty is limited to the replacement of defective Dal-Tile Corporation products. Dal-Tile Corporation disclaims any responsibility for (a) warranties of merchantability and fitness for purpose; (b) verbal recommendations of its representatives; and (c) consequential damages.

**LIMITATIONS:** Dal-Seal CIS is not designed for use as a wearing surface. CIS is not recommended for exterior applications. For applications not specifically detailed in the installation instructions, contact Dal-Tile Corporation. Wood subfloors must be clean, dry, and free of sealers, primers, and other substances that could affect bonding of the sheet to the subfloor. Dal-Seal CIS will not correct structural deficiencies. Deflection of the subfloor must not exceed industry standards. Installation must follow TCNA recommendations and appropriate industry standards.

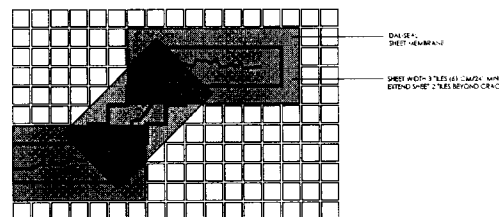
## 9. CAD DETAILS

FIGURE 2. CRACK ISOLATION - CROSS SECTION



**NOTE:** Sheet width - 3 tiles minimum (one full tile over crack plus one row adjacent to crack).

FIGURE 3. SHEET PLACEMENT AND SOFT JOINT PLAN FOR MULTIPLE OR WEBBED CRACKS



**NOTE:** Cracks may branch or change directions. Tile adjoining the tile bridging the crack or joint must be installed completely on the sheet.

FIGURE 4. SUBSTRATE CROSS SECTION

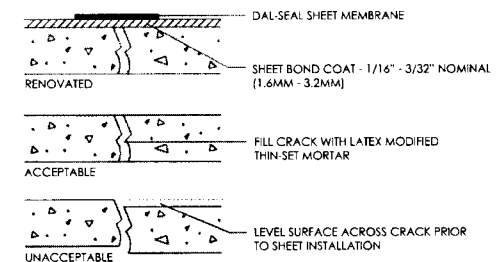


FIGURE 5. JOINT BRIDGING - CONCRETE/WOOD

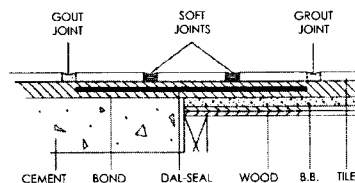
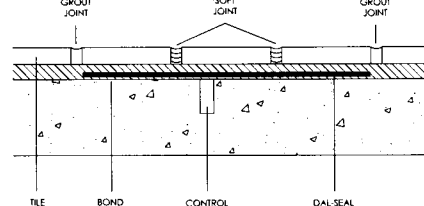


FIGURE 6. JOINT BRIDGING - CROSS SECTION



**NOTE:** Sheet width - 3 tiles minimum (one full tile over crack plus one row adjacent to crack).

FIGURE 7. INTERIOR WOOD SUBFLOOR 19.2\"/>

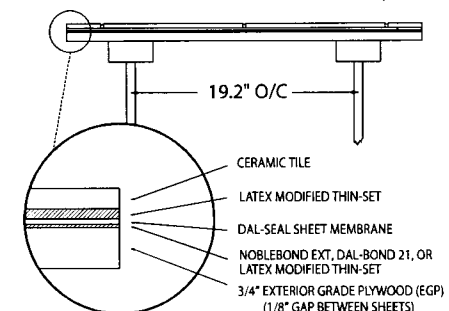


FIGURE 8. INTERIOR WOOD SUBFLOOR 24\"/>

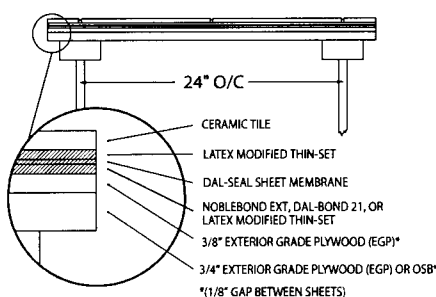
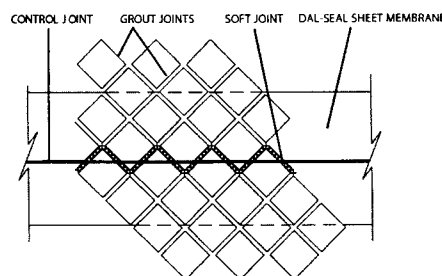


FIGURE 9. JOINT BRIDGING - PLAN VIEW (PATTERN)



**NOTE:** Minimum sheet width 2-1/2 x diagonal dimension of the tile plus grout joints. Estimate 3 times the tile.



Form DS CIS INST 04/11  
Supersedes 03/10





# Kerapoxy IEG CQ<sup>®</sup>

**100%-Solids, Industrial-Grade  
Epoxy Grout with Color-Coated  
Quartz**



## DESCRIPTION

*Kerapoxy IEG CQ* is a water-cleanable, 100%-solids epoxy grout with high chemical and stain resistance. It is a nonshrinking, nonsagging, fast-curing, efflorescence-free grout. Color-coated quartz dramatically improves its cleanability, so that *Kerapoxy IEG CQ* leaves very little film residue during cleanup of excess grout with a grout float. The color-coated quartz also prevents pigment bleed, so tiles are not stained during installation. This grout is perfectly suited for use in commercial kitchens, meat packing houses, and any commercial or institutional floors that require daily cleaning with enzymatic cleaners. *Kerapoxy IEG CQ* is ideal for applications where high-strength, mold- and mildew-resistant grout joints are required. In addition, it has high temperature resistance and can be steam-cleaned.

## FEATURES AND BENEFITS

- Resistant to chemicals, stains and high temperatures
- High-strength
- Water cleanup

## INDUSTRY STANDARDS AND APPROVALS

- ISO 13007: Classification RG
- ANSI: Exceeds ANSI A118.3 requirements; exceeds ANSI A118.5 physical testing requirements

### LEED Points Contribution

MR Credit 5, Regional Materials\* ..... Up to 2 points

### LEED 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 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

- For joints between 1/8" and 5/8" (3 and 16 mm) in width
- Interior floor, wall and countertop installations
- Industrial, commercial and institutional wall and floor installations requiring high strength and stain resistance
- Grouting ceramic floor, wall, quarry, pavers, porcelain and natural-stone tile
- Grouting heavy traffic areas, such as subway stations, shopping malls and airports
- Grouting installations requiring high acid and chemical resistance, such as commercial kitchens, dairies, bottling plants, meat processing plants, breweries, bakeries, supermarkets, restaurants, hospitals, schools, research laboratories and veterinary clinics
- High-use wet areas, such as public restrooms, gang showers, steam rooms, and health clubs
- Once cured, *Kerapoxy IEG CQ* will resist temperatures up to 212°F (100°C).

## LIMITATIONS

- Do not use as a mortar.
- Do not use in areas subject to excessive heat.
- Areas subject to ultraviolet exposure may exhibit color variations over time, due to exposure to UV rays. This occurrence will be more pronounced in lighter colors.
- Do not use for grouting white or translucent marble.

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.

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

## SURFACE PREPARATION

- 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 (mockup) 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 at least 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.

Note: Determine the suitability of all materials before proceeding with the installation. To ensure desired results, a mockup installation is required before the actual installation. See MAPEI's "Surface Preparation Requirements" document in the Product Information section of the Tile & Stone Installation Systems page on MAPEI's Website.

## MIXING

Note: Choose all appropriate safety equipment before use. Refer to Safety Data Sheet (SDS) for more information.

1. Always mix complete units. Partial mixing will result in uncured grout. Do not add other materials to this mixture.
2. In a clean container, mix all of Part A and all of Part B. Allow enough time for all the material in the Part

A and Part B containers to flow completely out. Mix using a low-speed mixer at about 300 rpm, until a homogenous, consistent color is obtained. Do not overmix.

3. Add Part C (powder) to the Part A and Part B mixture. Mix using a low-speed mixer at about 300 rpm.
4. Using a margin trowel, occasionally scrape the bottom and sides of the mixing container so that all parts are mixed evenly.
5. Mix thoroughly until a homogenous, consistent color is obtained.
6. Avoid prolonged mixing, which may cause air entrapment and shorten the pot life.
7. Do not place the lid on the container after material has been mixed.
8. Wash hands and all tools immediately with water before epoxy hardens. *Kerapoxy IEG CQ* is extremely difficult to remove once it has cured.

## PRODUCT APPLICATION

1. Read all installation instructions thoroughly before installation.
2. The temperature of the tile work must be maintained at between 35°F and 90°F (2°C and 32°C) while grouting and until *Kerapoxy IEG CQ* has hardened sufficiently (after 24 to 72 hours).
3. Application and cleanup procedures for an entire unit should be completed in about 45 minutes to 1 hour at 73°F (23°C).
4. Remove mixed product from the container and place in small piles on the tile surface. (If grouting a wall, place mixed product on kraft paper that is laid on the floor.) *Kerapoxy IEG CQ* is a thermosetting product, so it sets up faster in a container or in a large mass.
5. 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.
6. Be certain that all joints are well-compacted and are free of voids and gaps. Fill the joints with the maximum amount of grout possible.
7. Thoroughly remove excess *Kerapoxy IEG CQ* from the tile face before the epoxy loses its plasticity or begins to set. This is most easily accomplished by holding the rubber float at a 90° angle to the tile surface and dragging the excess grout across the tile surface diagonally to the joints, leaving as little epoxy grout on the tile surface as possible.
8. Clean tiles immediately after applying each unit of *Kerapoxy IEG CQ*. Grout and clean in small areas. Do not attempt to use more than one unit before cleaning tiles. Do not allow *Kerapoxy IEG CQ* to harden on the tile surface. On large projects, working in teams of 2 to 3 people will simplify the installation.

9. 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 (or use a more aggressive pad if the tile type is abrasive). Apply enough pressure on the pad to loosen any film without removing grout from the joints. Rinse the scouring pads frequently while cleaning. Note: Be careful not to get any water in the ungrouted joints.
10. Remove the epoxy residue and water by using a "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.
11. Within 15 to 20 minutes – for best results – perform a second wash with clean water, a clean white scrubpad and a neutral-pH liquid soap solution. This will help loosen any residue left on the tile from the first wash.
12. Drape a clean, damp towel over the newly grouted surface. Holding two corners of the towel, drag it diagonally across the grout joints. The weight of the damp towel will help to remove any grout residue still remaining. Rinse the towel often and keep changing water in the buckets to avoid residue buildup.
13. Dip the towel in a bucket of clean water, wring out the excess water from the towel and drag it again diagonally across the tile. This will help to soak up excess water, soap and residue from the tile surface.
14. Do not allow excess water to remain on the tile surface. Otherwise, a film could form on the surface, one that could be difficult to remove once hardened.
15. Do not step on freshly cleaned tiles, as this could permanently damage the grout.

16. 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 the residue with a neutral solution of liquid detergent and water.

## PROTECTION

- Because propane gas heaters will yellow the epoxy, refrain from using such heaters or properly vent all exhaust.
- Do not step on freshly cleaned tiles. Permanent damage to the grout could result.
- Keep installation free from heavy traffic for at least 12 hours after grouting.
- Keep steam cleaning wands 6" to 12" (15 to 30 cm) above tile surface.

## MAINTENANCE

- Grout must be fully cured before regular cleaning.
- MAPEI grout products are produced to the highest quality of standards. To maintain a clean tile surface, use a neutral-pH cleaner for maintaining the floor, followed by a clean-water rinse.
- Do not use harsh chemicals to maintain the tile surface. Before proceeding with cleaning, consult the cleaner's manufacturer for compatibility, use and application instructions. Remove or rinse fatty acid residue from the grout surface to avoid potential grout deterioration caused by prolonged exposure.

## CHEMICAL RESISTANCE

Chemical resistance data is in accordance with ASTM C267-1982. Chemical resistance refers to chemicals' potential to deteriorate product. This chart is a general guide for *Kerapoxy IEG CQ* applications. Resistance tests on chemicals other than those listed may be conducted, upon request, by MAPEI's Technical Services Department. It may take 90 to 120 days for test results.

Testing conditions: 73°F (23°C), 7-day cure, 28-day immersion, no change of chemical agent

Results:

**R** = Resistant **NR** = Nonresistant

Types	Concentration	Result
<b>Acid (food &amp; mineral)</b>		
Acetic acid	10%	NR
Citric acid	50%	R
Formic acid	5%	NR
Hydrochloric acid	36.5%	R
Lactic acid	10%	NR
Nitric acid	30%	R
Oleic acid	100%	R
Phosphoric acid	80%	R
Sulfuric acid	50%	R
Tartaric acid	50%	R
Tannic acid	50%	R
<b>Cleaners</b>		
Sodium hydroxide	Saturated	R
Sodium hypochlorite	3%	R
<b>Solvents</b>		
Ethyl alcohol		NR
Gasoline		R
Methylene chloride		NR
Mineral spirits		R
Toluene		NR
Xylene		R

**ISO 13007 Classification**

Classification Code	Classification Requirement	Test Characteristic
RG (resin grout)	Abrasion resistance*	Less than or equal to 0.015 cu. in. (250 mm <sup>3</sup> )
	Flexural strength*	Greater than 4,350 psi (30 MPa)
	Compressive strength*	Greater than 6,525 psi (45 MPa)
	Shrinkage*	Less than 0.06 in./3.28 ft. (1.5 mm/m)
	Water absorption*	Less than 0.0002 lb. (0.1 g)

\* 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
ANSI A118.5 compressive strength (ASTM C579)	3,000 psi (20,7 MPa)	Pass
ANSI A118.5 tensile strength (ASTM C307)	400 psi (2,76 MPa)	Pass
ANSI A118.5 absorption (ASTM C413)	1% maximum	Pass
ANSI A118.5 modulus of rupture (ASTM C580)	600 psi (4,13 MPa)	Pass
ANSI A118.5 initial set, in hours (ASTM C308)	5 maximum	Pass
ANSI A118.5 final set, in days (ASTM C308)	7 maximum	Pass
ANSI A118.5 linear shrinkage (ASTM C531)	1% maximum	Pass
ANSI A118.5 working time (ASTM C308)	10 minutes	Pass
ANSI A118.5 bond strength (ASTM C321)	150 psi (1,03 MPa)	Pass

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

Shelf life	2 years
Protect from traffic	5 to 12 hours†
Full cure	4 days†
Colors	Gray #09, Black #10, Terra Cotta #37, Mocha #42, Charcoal #47

† Protection and cure times will vary depending on ambient temperature, substrate temperature and humidity.

## Packaging

Product Code	Size
49936	Large kit*
41010 44710 40910 44210 43710	Part C powder Black Charcoal Gray Mocha Terra Cotta

\* Large kit contains:

- 4 pouches of Part A liquid
- 2 white scrubpads
- 4 pouches of Part B liquid
- Instruction sheet
- 2 pairs of gloves

Requires mixing with 2 cases of Part C powder (sold separately) – a total of four bags.

## Approximate Coverage\*\*

For large kit (yield of 3.6 U.S. gals. [13,6 L] when mixed with Part C). Coverage in sq. ft. (m²).					
Tile Size	Joint Width				
	1/8" (3 mm)	1/4" (6 mm)	3/8" (10 mm)	1/2" (12 mm)	5/8" (16 mm)
4" x 4" x 3/8" (100 x 100 x 10 mm)	258 (24,0)	135 (12,5)	94 (8,73)	73 (6,78)	61 (5,67)
4" x 8" x 1/2" (100 x 200 x 12 mm)	255 (23,7)	132 (12,3)	91 (8,45)	71 (6,60)	58 (5,39)
4" x 8" x 3/4" (100 x 200 x 19 mm)	170 (15,8)	88 (8,18)	61 (5,67)	47 (4,37)	39 (3,62)
4" x 8" x 1-1/8" (100 x 200 x 29 mm)	114 (10,6)	59 (5,48)	41 (3,81)	31 (2,88)	26 (2,42)
4" x 8" x 1-3/8" (100 x 200 x 35 mm)	93 (8,64)	48 (4,46)	33 (3,07)	26 (2,42)	21 (1,95)
6" x 6" x 1/2" (150 x 150 x 12 mm)	286 (26,6)	147 (13,7)	101 (9,38)	78 (7,25)	64 (5,95)
8" x 8" x 3/8" (200 x 200 x 10 mm)	504 (46,8)	258 (24,0)	176 (16,3)	135 (12,5)	110 (10,2)
10" x 10" x 3/8" (250 x 250 x 10 mm)	628 (58,3)	320 (29,7)	217 (20,2)	166 (15,4)	135 (12,5)
12" x 12" x 1/2" (300 x 300 x 12 mm)	563 (52,3)	286 (26,6)	194 (18,0)	147 (13,7)	120 (11,1)

\*\* 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. Consult MAPEI's Technical Service Department for approximate coverage not shown in the above table.

**Kerapoxy**  
**IEG CO**



**Kerapoxy<sup>®</sup>**  
**IEG CQ**

## RELATED DOCUMENTS

Reference Guide: Surface  
Preparation Requirements for tile and  
stone installation systems

RGTO309\*

\* At [www.mapei.com](http://www.mapei.com).

Refer to the SDS 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:



### MAPEI Headquarters of the Americas

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Deerfield Beach, Florida 33442  
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### Customer Service

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### Services in Mexico

0-1-800-MX-MAPEI (0-1-800-696-2734)

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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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# Kerabond T / Keralastic<sup>TM</sup> System

Premium, Flexible  
Medium-Bed and  
Thin-Set Tile Mortar



## DESCRIPTION

*Kerabond T / Keralastic* is a high-performance, two-part system: *Keralastic*, a second-generation "flexible" acrylic latex additive, is used to enhance the performance of *Kerabond T*, which is a premium-grade, medium-bed and thin-set mortar. This system has exceptional bond strength, flexural strength, elongation and freeze/thaw durability.

## FEATURES AND BENEFITS

- High-performance bond
- Best for most difficult tiles, substrates and conditions

## INDUSTRY STANDARDS AND APPROVALS

- ISO 13007: Classification G2ES2P2
  - ANSI: Meets or exceeds A118.4, A118.11 and A118.15E requirements
- | LEED Points Contribution  | LEED Points    |
|---|----------------|
| 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 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, walls and ceilings

- Installation of ceramic and porcelain tile, glass 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 or resin-backed tiles. Instead, use suitable epoxy or urethane adhesives (see respective Technical Data Sheets for more information).
- Some glass tile backings may not be suitable for use with *Kerabond T / Keralastic*. Consult the recommendations of the Tile Council of North America (TCNA) and the glass tile manufacturer. All tiles should conform to ANSI 137.1 or ANSI 137.2 Glass Tile Standard; otherwise, see tile manufacturers for additional information and recommendation.
- For translucent or transparent glass tile, use white *Granirapid*® or *Adesilex*™ P10.
- Use a white mortar when installing light-colored stones and translucent marble.
- 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 010313-TB, "Gypsum-Based Floors and Walls: Which MAPEI Products Can Be Applied?"

- Consult local building code requirements for use on exterior commercial facades.
- Installations of tile over nonporous surfaces, such as waterproofing membranes and existing tile, may require extended setting/curing times.

### 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
- Gypsum wallboard and primed plaster – interior walls in dry areas only (see MAPEI's Technical Bulletin 010313-TB for priming instructions)
- APA and CANPLY Group 1 exterior-grade plywood (interior, residential and light commercial floors and countertops in dry conditions only)
- Properly prepared vinyl composition tile (VCT), plastic laminate countertops, non-cushioned sheet 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

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

### SURFACE 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 in the Product Information section of the Tile & Stone Installation Systems page on MAPEI's Website.

### MIXING

Note: Choose all appropriate safety equipment before use. See the Safety Data Sheet for details.

1. Into a clean mixing container, pour about 2 U.S. gals. (7,57 L) of *Keralastic*.
2. Gradually add 50 lbs. (22,7 kg) of *Kerabond T* powder while slowly mixing.
3. 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.
4. Let mixture stand ("slake") for 10 minutes.

5. Remix.
6. If mixture becomes heavy or stiff, remix for up to 2 hours without adding more liquid or powder for up to 2 hours.

### PRODUCT APPLICATION

1. Choose a typical notched trowel (see "Approximate Coverage") with sufficient depth to achieve greater than 80% mortar contact with both the tile and substrate for all interior applications, and greater than 95% for exterior installations, commercial floor and wet applications. It may be necessary to back-butter tiles in order to achieve these requirements. (Refer to ANSI A108.5 specifications and TCNA Handbook guidelines.)
2. With pressure, apply a coat by using the trowel's flat side to key the mortar into the substrate.
3. Apply additional mortar, combing it in a single direction parallel to the tile's shortest dimension, 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 the trowel lines, to collapse the mortar ridges and to help achieve maximum coverage. Ensure proper contact between the 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 recommended 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 with water while mortar is fresh.

### PROTECTION

- Protect from traffic for 24 to 48 hours, so that the mortar is sufficiently set. Protect from heavy traffic for 7 days.
- Protect from rain or frost for 7 days.
- Protect from water immersion for 21 days.

## ISO 13007 Classification

Classification Code	Classification Requirement
C2 (cementitious, improved adhesive)	≥ 145 psi (1 MPa) after standard aging, heat aging, water immersion and freeze/thaw cycles
E (extended open time)	≥ 72.5 psi (0.5 MPa) after 20 to 30 minutes
S2 (improved deformation of mortar)	≥ 0.2" (5 mm)
P2 (improved adhesion to plywood)	≥ 145 psi (1 MPa)

## ANSI Specification\*

Test Method	Specification Standard	Test Results
ANSI A118.15E – (extended open time)	≥ 75 psi (0.52 MPa) at 30 minutes	Pass
ANSI A118.15 – shear strength, impervious ceramic (porcelain) mosaics	> 400 psi (2.76 MPa) at 28 days	400 to 600 psi (2.76 to 4.14 MPa)
ANSI A118.15 – shear strength, impervious ceramic (porcelain) mosaics, heat aging	> 400 psi (2.76 MPa) at 28 days	400 to 600 psi (2.76 to 4.14 MPa)
ANSI A118.15 – shear strength, glazed wall tile	> 450 psi (3.10 MPa) at 7 days	450 to 600 psi (3.10 to 4.14 MPa)
ANSI A118.15 – shear strength, quarry tile to quarry tile	> 150 psi (1.03 MPa) at 28 days	500 to 700 psi (3.45 to 4.83 MPa)
ANSI A118.11 – shear strength, quarry tile to plywood	> 150 psi (1.03 MPa) at 28 days	250 to 400 psi (1.72 to 2.76 MPa)

\* Anything that meets A118.15 by definition exceeds A118.14.

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

Shelf life	1 year ( <i>Kerabond T</i> ); 2 years ( <i>Keralastic</i> )
Open time**	20 to 30 minutes
Pot life**	> 2 hours
Time before grouting**	24 to 48 hours
VOCs (Rule #1168 of California's SCAQMD)	0 g per L

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

## Packaging

Product Code	Size and Color
U.S. 10152	<i>Kerabond T</i> bag, powder: 50 lbs. (22.7 kg), gray
U.S. 10252	<i>Kerabond T</i> bag, powder: 50 lbs. (22.7 kg), white
Canada 1015221	<i>Kerabond T</i> bag, powder: 50 lbs. (22.7 kg), gray
Canada 1025221	<i>Kerabond T</i> bag, powder: 50 lbs. (22.7 kg), white
7022007	<i>Keralastic</i> jug, liquid: 2 U.S. gals. (7.57 L)
7020020	<i>Keralastic</i> pail, liquid: 5 U.S. gals. (18.9 L)
7020200	<i>Keralastic</i> drum, liquid: 55 U.S. gals. (208 L)

## Approximate Coverage\*\*\* per 50 lbs. (22.7 kg)

Typical Trowel	Coverage
1/4" x 1/4" x 1/4" (6 x 6 x 6 mm)	85 to 95 sq. ft. (7.90 to 8.83 m <sup>2</sup> )
1/4" x 3/8" x 1/4" (6 x 10 x 6 mm)	65 to 75 sq. ft. (6.04 to 6.97 m <sup>2</sup> )
1/2" x 1/2" x 1/2" (12 x 12 x 12 mm)	40 to 50 sq. ft. (3.72 to 4.65 m <sup>2</sup> )
3/4" x 9/16" x 3/8" (19 x 14 x 10 mm)	35 to 40 sq. ft. (3.25 to 3.72 m <sup>2</sup> )

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

**Kerabond T/  
Keralastic  
System**

**MAPEI**

# Kerabond-T/ Keralastic System



## RELATED DOCUMENTS

Reference Guide: "Surface Preparation Requirements" for tile and stone installation systems	RGTO309*
Technical Bulletin: "Gypsum-Based Floors and Walls: Which MAPEI Products can be Applied?"	010313-TB*

\* At [www.mapei.com](http://www.mapei.com)

Refer to the SDS 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:



### MAPEI Headquarters of the Americas

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Deerfield Beach, Florida 33442  
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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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# Kerapoxy®

## Premium Epoxy Mortar and Grout



### DESCRIPTION

*Kerapoxy* is a premium-grade, water-cleanable, 100%-solids, high-strength epoxy mortar and chemical-resistant nonsagging grout. Available in all MAPEI colors for grouting, *Kerapoxy* is excellent for countertops, high-traffic areas, and areas needing stain and chemical resistance.

### FEATURES AND BENEFITS

- Stain-free†
- No sealer required
- Water-cleanable

### INDUSTRY STANDARDS AND APPROVALS

- **ISO 13007:** Classification R2/RG
- **ANSI:** Meets A118.3 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 product may help contribute to LEED certification of projects in the categories shown above. Points are awarded based on contributions of all project materials.

† With immediate cleaning and proper maintenance, *Kerapoxy* stain-free grout is 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.

### WHERE TO USE (see "Limitations" section)

#### As a mortar

- For setting interior floors and walls
- For exterior installations (contact MAPEI's Technical Services Department)
- 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.\*\*
- For residential 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 with high mortar requirements, see Chemical Resistance chart in this document.

#### 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.



# Kerapoxy®

- For heavy traffic areas such as subway stations, shopping malls and airport terminal buildings
- For areas requiring stain-resistant grout such as countertops, vanities and laboratory tabletops.

Note: Contact MAPEI's Technical Services Department for additional information regarding applications.

**\*\* 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 and process 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 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, Luaun, gypsum floor patching compounds or similar dimensionally unstable substrates.

### 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.

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.

- Do not use in areas subject to excessive heat. Once cured, *Kerapoxy* will resist temperatures up to 212°F (100°C). Keep steam-cleaning wands 6" to 12" (15 to 30 cm) above the tile surface.
- 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.

## SUITABLE SUBSTRATES (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)
- Properly prepared existing ceramic tile
- Properly prepared 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. Maintain that temperature until *Kerapoxy* has hardened sufficiently (in 24 to 72 hours).

### 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.

### 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 depth of the tile 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.

Note: See MAPEI's "Surface Preparation Requirements" document for tile and stone system installations at [www.mapei.com](http://www.mapei.com) for additional information.

## MIXING

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 (paste). To improve flowability and texture, allow enough time for the material to flow completely out of the 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 air entrapment from prolonged mixing, which will shorten the pot life.
5. Mix thoroughly until a homogenous, consistent color is obtained.
6. Wash tools immediately with water before epoxy hardens. *Kerapoxy* is extremely difficult to remove once cured.
7. Do not place the lid on the container after the material has been mixed.

Note: Use all appropriate safety equipment. Refer to Material Safety Data Sheet (MSDS) for more information.

## PRODUCT APPLICATION

### As a mortar

1. Remove the mixed product from the container and place in piles on the floor. *Kerapoxy* is a thermosetting product, so it sets faster in a container or a large mass.
2. Choose a notched trowel (see chart below) 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 installations and wet applications. All edges of the tile or stone must be supported by the mortar. It may be necessary to back-butter tiles in order to reach these requirements. (Refer to ANSI A108.5 specifications and TCNA guidelines.)

3. With pressure, apply a coat by using the trowel's flat side to key mortar into substrate.
4. Apply additional mortar, combing it in a single direction with the trowel's notched side.
5. Spread only as much mortar as can be tiled before product skins over. Open time can vary with jobsite conditions.
6. 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 (see TCNA adhesive placement guidelines).
7. 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).
8. Provide for expansion and control joints as specified per TCNA Detail EJ171 or TTMAC Specification Guide 09 30 00, Detail 301MJ.
9. Clean tools and tile while mortar is fresh.

#### As a grout

1. Remove mixed product from the container and place in small piles. (If grouting a wall, place on kraft paper laid on the floor.) *Kerapoxy* is a thermosetting product, so 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 are free of voids and gaps. Fill the joints with the maximum amount of grout possible.
4. Thoroughly remove excess *Kerapoxy* from the face of the tile before it loses its plasticity or begins to set. Hold the rubber float at a 90° angle to the tile surface and drag 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*. Grout and clean in small areas. Do not attempt to use more than one unit before cleaning tiles. Do not allow *Kerapoxy* to harden on the tile surface. On large projects, working in teams of 2 to 3 people will simplify the installation.

#### 6A. On 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 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. Note: Be careful not to get any water in the ungrouted joints.
- Remove the epoxy residue and water by using a "towel drag" method. Hold a damp 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.

#### 6B. On vertical surfaces:

- Mist the surface using a spray bottle in small workable areas. Use MAPEI's nonabrasive nylon pad and apply enough pressure on the pad to loosen any film without removing grout from the joints. Rinse pads frequently while cleaning. Note: Be careful not to get any water in the ungrouted joints. If slumping of the grout occurs during initial rinsing, dress up the grout joint by smoothing the joint with a sharp-edged cellulose sponge.

7. Remove the soap, epoxy residue and water by again using a "towel drag" method (for horizontal surfaces) or the misting method (for vertical surfaces). 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.
8. Within 15 to 20 minutes – for best results – perform a second wash with clean water, a clean white scrubpad and a neutral-pH liquid soap solution. This will help loosen any residue left on the tile from the first wash.
9. Do not step on freshly cleaned tiles, as this could permanently damage the grout.
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 a neutral solution of liquid detergent and water.
11. Protect surfaces for at least 7 days after grouting. Wait at least 3 days before checking hardness.

### **PROTECTION**

- Because propane gas heaters will yellow epoxy, refrain from using such heaters or properly vent all exhaust.
- Do not disturb, grout or walk over tiles for at least 24 hours after setting.
- Grout should be cured for at least 72 hours before routine cleaning.
- *Kerapoxy* should be cured for at least 10 to 14 days at 73°F (23°C) before water immersion or exposure to chemicals. Longer times will be needed for colder temperatures.

### **MAINTENANCE**

- Grout must be fully cured before regular cleaning.
- MAPEI grout products are produced to the highest quality of standards. To maintain a clean tile surface, use a neutral-pH cleaner for maintaining the floor, followed by a clean-water rinse.
- Do not use harsh chemicals to maintain the tile surface. Before proceeding with cleaning, consult the cleaner's manufacturer for compatibility, use and application instructions. Remove or rinse fatty acid residue from the grout surface to avoid potential grout deterioration caused by prolonged exposure.



## CHEMICAL RESISTANCE

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* 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
<b>Acids</b>				
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		-	-	-
<b>Base and Salt Solutions</b>				
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		++	++	++
<b>Oils and Combustible Products</b>				
Gasoline		++	++	++
Turpentine		++	++	++
Diesel fuel		++	++	++
Peanut oil		++	++	++
Tar		++	+	+
Olive oil		++	++	++
Heating oil		++	++	++
<b>Solvents</b>				
Acetone		-	-	-
Ethylene glycol		++	++	++
Glycerol		++	++	++
Methylcellosolve		-	-	-
Perchloroethylene		-	-	+
Carbon tetrachloride		+	-	+
Chloroform		-	-	-
Methylene chloride		-	-	-
Toluene		-	-	+
Carbon disulfide		+	-	+
Mineral spirits		++	++	++
Benzene		-	-	+
Trichloroethane		-	-	-
Xylene		-	-	-

## Product Performance Properties

### ISO 13007 Classification

Classification Code	Test Characteristics	Classification Requirement
RG (reaction resin grout)	Abrasion resistance <sup>†</sup>	Less than or equal to 0.015 cu. in. (250 mm <sup>3</sup> )
	Flexural strength <sup>†</sup>	Greater than 4,350 psi (30 MPa)
	Compressive strength <sup>†</sup>	Greater than 6,525 psi (45 MPa)
	Shrinkage <sup>†</sup>	Less than 0.06 in./3.28 ft. (1.5 mm/m)
	Water absorption <sup>†</sup>	Less than 0.0002 lb. (0.1 g)
R2 (reaction resin adhesive, improved)	Shear adhesion strength	≥ 2 N/mm <sup>2</sup>
	Shear adhesion strength after water immersion	≥ 2 N/mm <sup>2</sup>
	Open time: tensile adhesion strength	≥ 0.5 N/mm <sup>2</sup> after not less than 20 minutes
	Shear adhesion strength after thermal shock	≥ 2 N/mm <sup>2</sup>

<sup>†</sup> 28-day cure

### Approximate Product Coverage\*

#### • For use as a mortar

Trowel Size	1 U.S. qt. (946 mL)	1 U.S. gal. (3.79 L)	2 U.S. gals. (7.57 L)
1/4" x 1/4" x 1/4" (6 x 6 x 6 mm) square-notched trowel	4.5 sq. ft. (0.42 m <sup>2</sup> )	18 sq. ft. (1.67 m <sup>2</sup> )	36 sq. ft. (3.34 m <sup>2</sup> )
5/32" x 5/32" (4 x 4 mm) V-notched trowel	10 sq. ft. (0.93 m <sup>2</sup> )	40 sq. ft. (3.72 m <sup>2</sup> )	80 sq. ft. (7.43 m <sup>2</sup> )

#### • For use as a grout

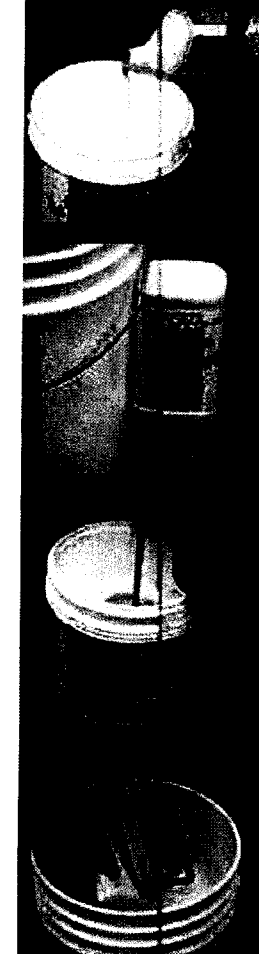
Approximate Coverages** – per 1 U.S. qt. (946 mL)				
Tile Size	Grout Joint Width			
	1/16" (1,5 mm)	1/8" (3 mm)	1/4" (6 mm)	3/8" (10 mm)
1" x 1" x 1/4" (25 x 25 x 6 mm)	14 (1,30)	8 (0,74)	4 (0,37)	3 (0,28)
2" x 2" x 1/4" (50 x 50 x 6 mm)	27 (2,51)	14 (1,30)	8 (0,74)	6 (0,56)
3" x 3" x 1/4" (75 x 75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

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

\* Coverages shown are for estimating purposes only. Actual jobsite coverages 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 coverages not shown in the above table or use the grout calculator at [www.mapei.com](http://www.mapei.com).

**Kerapoxy®**



**MAPEI**

# Kerapoxy®

## ANSI Specification

Test Method	ANSI Specification	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 Application Properties\* at 73°F(23°C) and 50% relative humidity

Shelf life	2 years
Protect from:	
light traffic†	24 hours
heavy traffic†	48 hours
Full cure†	10 to 14 days

† Protection and cure times will vary depending on ambient temperature, substrate temperature and humidity.

## Packaging

Product Code††	Size
35XX018	Kit: 1 U.S. qt. (946 mL)
34XX018	Kit: 1 U.S. gal. (3,79 L)
39XX901	Kit: 2 U.S. gals. (7,57 L)

†† "XX" is reserved for the two-digit color code.

## Colors

Available in MAPEI's pallet of 36 designer colors. Refer to MAPEI's grout color chart. Sample grout color chips are available upon request.

## RELATED DOCUMENTS

Reference Guide: Surface Preparation Requirements for tile and stone installation systems	RGT0309*
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\* At [www.mapei.com](http://www.mapei.com).

Refer to MAPEI's 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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Phone: 1-888-US-MAPEI  
(1-888-876-2734)

**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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