



# CANTERA INSTALLATION GUIDE

----- Read this guide, **IN FULL**, prior to beginning any installation of cantera -----

To ensure proper installation based on unique project and/or site conditions, clients are responsible for hiring a skilled installer that has experience in installing and sealing cantera. Zia Tile is not responsible for installation, ongoing care, or issues arising after receipt and installation of product. If client's installer deviates from the instructions or recommendations below, this may result in costly and undesirable outcomes.

## REVIEWING YOUR ORDER

- Please inspect your order thoroughly, upon receipt. Zia Tile cannot be held responsible for tiles that have already been installed.
- Cantera is a naturally formed volcanic stone; therefore, significant variations in color, and subtle variations in shape and size are natural and should be expected in your tiles. You may see minor imperfections on edges or in the corners, which are a natural part of the look and feel of this volcanic stone. Please see grouting instructions below for recommendations for your installation.
- To account for cuts, pattern, inherent variation, and potential breakage in transit, it is strongly recommended that all orders include a minimum of 15-20% overage to avoid costly add-on shipping and schedule delays. If a more uniform look is desired, we suggest increasing the order size by 20-25% to reduce the amount of variation during installation. It is also important to note that the matching grout color will fill these pits and chips to blend the overall aesthetic.

## BEFORE BEGINNING YOUR INSTALLATION

- Due to the inherent color variation of natural tile, it is very important to **blend** the tiles from **all** boxes in your order. You should then lay out all tiles in the installation area and ensure any variation is distributed evenly **before** beginning your installation.
- There is a face and an underside to cantera tiles, they are not reversible. Prior to installation, ensure you are installing the tile face side up. You may see cut marks or lines from the finishing process which could be present on the underside of the tile.
- Grout color is an important design decision - almost as important as the tile color itself. We recommend exploring Mapei Flexcolor CQ grouts and either selecting a lighter neutral color or matching the grout color as closely as possible to the color of the tile. Visit our website or Instagram to view installation examples to decide what grout color is preferred.

## INSTALLATION

### REQUIRED MATERIAL

#### For placing the tiles:

- Sponge
- Bucket
- 1/8" tile spacers
- High quality medium-bed thin set mortar
- Trowel with 1/2" semi-circular notches
- Mapei Flexcolor CQ grout
- Grout float
- Grout bag (if using a contrasting color grout)
- Water-cooled tile saw with diamond edge blade

#### For cleaning and sealing cantera tiles:

- pH neutral cleaner such as Miracle Sealants Heavy Duty Cleaner (Acid Substitute)
- Paint roller, paint tray, sponge and water bucket
- Lint-free cotton cloth
- Penetrating Sealer - 511 Porous Plus Sealer from Miracle Sealants
- For interior applications - Fila Matte Protective Wax

### LAYING TILES

- If cuts are required for your installation, all saw cuts must be made with a water-cooled tile saw.

## FOR FLOOR INSTALLATIONS

- If the subfloor is even and in good condition, a high quality medium-bed thin set is sufficient to set the tiles. Please make sure the subfloor has completely cured (usually a minimum of 30 days) to prevent efflorescence spots from depositing on the surface of the tiles as moisture evaporates through them. Uncured or unsettled sub-surfaces can cause cracks to form in the tile as the sub-surface deforms, so always ensure the sub-surface has cured properly before installing cantera tile. Use of an uncoupling membrane (such as DITRA) may also be advised.

## FOR WALL INSTALLATIONS

- Only install cantera tile on stable, even surfaces. In dry areas (i.e. kitchen backsplash), cantera tile may be installed directly to drywall. Never apply tile directly to a painted surface.
- Evenly apply the thin set mixture to the install surface using a trowel. Wet the back of each tile with a sponge before applying the adhesive to the back of each tile, making sure to apply the mixture in the same direction in order to prevent air pockets from forming.
- Lay cantera tile in accordance with the drying time required for the thin set used. Press the tiles into place. Using a rubber mallet, compact the cantera tiles evenly on the adhesive to ensure consistent contact.
- Ensure the tiles are perfectly flat during installation.
- Place in small sections, no larger than 2'x2', at a time, using 1/8" tile spacers to separate the tiles.
- Immediately wipe off any residual thin set from the surface of the tiles. **Thin set can be incredibly difficult to remove without damaging the tiles if left too long.**
- After the tiles have been laid, allow the thin set at least 48 hours to cure before sealing and grouting.

## PRE-GROUT SEALING

- Cantera tiles must be sealed on-site. Use a pH neutral cleaner before sealing; products made to clean natural stone are usually suitable. Use of acidic cleaners will damage the tiles and should be avoided.
- After your thin set has cured, your tiles have been cleaned and prior to grouting, apply 511 Porous Plus sealer in thin layers until the tiles become fully saturated, wiping off any excess sealer before it dries. Do not over-seal as thick or excessive application of sealant can dry unevenly and result in an undesirable waxy film on the surface of the tiles. Allow sealer to cure, typically 1-2 days; always follow the sealant manufacturer's application instructions.
- **Do not proceed to grouting unless your sealer is fully cured!**

## GROUTING

- Using **MAPEI FLEXCOLOR CO GROUT**, fill in the gaps between the tiles with a rubber grout float. Grout in small areas, no larger than 2'x2', at a time. **DO NOT grout the entire surface at once, as the tiles can stain from excess grout that is extremely difficult to remove later. Instead, grout small areas and immediately wipe away the excess grout as you go.** Contrasting grout can stain or leave a grout haze and should be avoided unless hand grouting or using a grout bag.
- Allow the grout to fully cure, usually 48 hours.

## TOP-COAT SEALER

- Completely clean and dry the tiles with pH neutral detergent, removing any residual mortar or debris. Never leave spills, drips, footprints, or any other marks on the tiles prior to sealing.

## FOR INTERIOR INSTALLATIONS

- Apply Fila Matte Finish Protective Wax in thin layers until the tiles are fully coated, wiping off any excess sealer before it dries. Do not over-seal as thick or excessive application of sealant can dry unevenly and result in an undesirable waxy film on the surface of the tiles. Allow sealer to cure, typically 1-2 days before using the space. Always follow the sealant manufacturer's application instructions.

## FOR OUTDOOR INSTALLATIONS

- Apply 511 Porous Plus sealer in thin layers until the tiles are fully coated, wiping off any excess sealer before it dries. Do not over-seal as thick or excessive application of sealant can dry unevenly and result in an undesirable waxy film on the surface of the tiles. Allow sealer to cure, typically 1-2 days before using the space. Always follow the sealant manufacturer's application instructions. **DO NOT use Fila Matte Finish Protective Wax in outdoor applications as UV rays can cause discoloration over time.**
- ALWAYS cover the tiles with durable paperboard during and after installation to prevent damage and/or staining of the tiles until construction is complete.

## TRIM

- We recommend installing cantera from floor to ceiling or bringing drywall flush with the finished surface of your tile to eliminate the need for trim.
- If you have an exposed edge with your design, we recommend mitering your tile. Your experienced installer should be familiar with cutting the edges at a 45-degree angle to create a corner out of two tiles. This will mimic a finished trim piece and can easily be done on site to get the finished look without ordering custom trim.
- If you do require trim, we recommend Schluter strips, which can be found at [www.schluter.com](http://www.schluter.com).

## ONGOING MAINTENANCE

**Cantera tile is a natural stone product. As such, clients should expect natural wear and patina to occur to the finish over time.**

### CLEANING

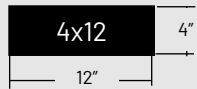
- Vacuum or sweep tile regularly to remove abrasive material that can scratch the surface.
- Promptly clean up any spills, especially oil and grease. Un-cleaned spills can cause stains.
- Floors and walls can be wiped or mopped with warm, clean water and a pH neutral cleaner.
- Cantera tiles should be cleaned using pH neutral cleaners ONLY. Use of acidic cleaners will damage the tiles. For regular cleaning, we recommend Miracle Sealants pH Neutral Tile and Stone Cleaner. For heavier stains, we recommend Miracle Sealants Heavy Duty Cleaner.

### RE-SEALING

- Cantera tile should be re-sealed as often as needed, depending on traffic and wear and in accordance with sealant manufacturer's instructions.



# CANTERA TILE SPECIFICATIONS



4x12



12x12



24x12



24x24

not to scale

	nominal dimension*	actual dimension*	qty / box	sq ft / box	box dimensions	box weight
4x12	4 x 12 x .75 in	4 x 12 x .75 in	15	4.84	12 x 12 x 4 in	36 lbs
12x12	12 x 12 x .75 in	12 x 12 x .75 in	5	4.84	12 x 12 x 4 in	36 lbs
24x12	24 x 12 x .75 in	24 x 12 x .75 in	5	9.70	12 x 24 x 4 in	72 lbs
24x24	24 x 24 x .75 in	24 x 24 x .75 in	5	19.4	12 x 24 x 4 in	144 lbs

<b>finish</b>	matte
<b>material</b>	lava rock
<b>country of origin</b>	Mexico

<b>suggested grout line size</b>	1/8"
<b>installation type</b>	grout & mortar
<b>placement</b>	indoor / outdoor* *with the exception of freeze/thaw
<b>installation options</b>	residential & commercial

## Tile Performance

**Moh's Hardness** | ASTM C1895 - 5

	Acacia	Badlands	Black Rock	Mesa	Sierra	Volcan	Yuma
<b>Dynamic Coefficient Of Friction (DCOF)</b> ANSI A326.3	0.54	0.54	0.55	0.63	0.57	0.58	0.53
<b>Breaking Strength</b> ASTM C648 results in lb <sub>f</sub> , average	723	811	542	963	790	1170	953
<b>Absorption</b> ASTM C373 all specs considered vitreous	2.3%	2%	2%	1.9%	2%	2%	2.2%

Third party testing conducted and results provided by SGS TEC Services in accordance with ASTM and ANSI standards

Clients are responsible for hiring a skilled installer that has experience in installing stone tiles. Based on the product specifications and ratings provided above, consult with a licensed contractor or installer regarding the application of these tiles in your specific project and site conditions prior to installation.

Subtle color variation and imperfections are inherent in natural stone and should be expected in cantera tiles.