





Installing terracotta tile

Before getting started, inspect all installation materials—including tile, substrate, Thinset, and grout—and be sure they are compatible with one another. Taking tiles out of the box and mixing them up before installation is critical.

Substrate preparation

An installation is only as good as the structure it rests on. While the preparation for installation will depend on whether the substrate is gypsum board (dry wall), cement board, concrete masonry units, or plywood, all substrates must be structurally sound and free from any sealers or contaminants—for both vertical and horizontal installations. Please note that the load-deflection standard is L/360 for terracotta tiles.

TileBar Tech Tips:

- ***Try the drip test.*** Drip water on your substrate. If water is absorbed, your mortar adhesive has a mechanical and chemical bond. If the water beads up, there is a bond breaker, possibly wax or sealer, on your substrate, which must be removed.
- ***Use a straight edge and level.*** According to ANSI A108.02, deviations of flatness on the substrate should not exceed 1/4 inch of change in 10 feet, 1/8 inch for terracotta, with no bump greater than 1/16 inch.
- ***Always check your adhesive instructions,*** noting the suitable substrates and limitations.

Layout

Take careful measurements of your space and develop a layout plan. To ensure the final look will meet your expectations, dry-lay your tile or create a mockup to confirm your layout and grout joint size. Locate all cuts and adjust the layout as necessary. Confirm the final layout, cut locations, joints, and overall look, prior to installation. Use proper equipment—wet saw, drill bits, snap cutter, or grinder—to cut your tiles. Be sure to follow all safety precautions and protections recommended by manufacturers.

TileBar Tech Tips:

- **Grout may discolor terracotta tiles.** To minimize discoloration, set tiles with a 3/8-inch grout joint and use a grout bag.
- **Lay out your mosaic sheets in a brick pattern, if possible.** This should help conceal the sheets' perimeters and make the installation appear more seamless.
- **Terracotta tiles are naturally shaded,** so mixing and shuffling the tiles between boxes will create a more uniform-looking installation.
- **The amount of adhesive needed will depend on tile size.**
- **Terracotta tiles are very porous, and when mortar is added, they can quickly absorb the water from the mix.** Soaking terracotta tiles can help mortar set correctly.

Adhesives and mortar

Make sure to use the proper directional troweling techniques and proper trowel size. To achieve the appropriate coverage, see the trowel chart below:

Longest Edge Measurements	Suggested
Tile Size	Trowel Size
Mosaic Tile	1/8" x 1/8"
2" through 3"	1/8" x 1/8"
3" through 6"	1/4" x 1/4"
6" through 12"	1/4" x 3/8"
12" through 24"	1/2" x 1/2"

If you are installing a tile with any edge over 15 inches, be sure to use a large-format mortar specifically made for large and heavy materials.

Install overview

The instructions below are based on traditional standard mortar and are for reference only. Please refer to the packaging instructions.

1. Mix the mortar according to instructions.
2. Clean the substrate with a damp sponge.
3. With the flat side of the trowel, "burn" the mortar into the substrate.
4. Trowel material onto the floor or wall with the appropriately sized trowel in a consistent direction, leaving a ridged setting bed.
5. Lay the tile in the mortar and flatten the mortar ridges by pushing the tile perpendicular to the trowel direction.
6. Install spacers or wedges as needed. Terracotta tile often has a handmade look and may require larger than normal grout joint sizes.
7. Make sure grout joints are clear of extra mortar materials.
8. Pre-seal the tiles. This step will help your tile avoid the absorption of grout pigment. We recommend the Laticrete BulletProof Sealer.
9. Let the system cure fully before grouting, usually 24 hours.

Grout

Grout can make or break a new tile project. A great grout job can aesthetically enhance a project, while a poor one can undermine even the best work.

Install overview

The instructions below are for reference only. Please follow manufacturer's instructions when working with grout. We suggest using a grout release, which will make your grout easier to clean

1. Mix the grout according to instructions.
2. Remove spacers as needed.
3. Grout with a grout float positioned at a 45-degree angle to press in and fill all the grout joints. Be careful to keep grout in the joints and off the tile.
4. Drag the grout float across the top of the tile at a 90-degree angle as you would with a squeegee.
5. Once the joints are full, clean up with a sponge or scrub pad.
6. After 15 to 20 minutes, clean once again with clean water and sponge, before allowing to cure.
7. After the grout has dried, there will be a haze that can be buffed out with a dry cloth.
8. Limit use until fully cured, usually 24 hours.

TileBar Tech Tips:

- **Don't work too far ahead.** Make sure that the mortar stays fresh and has not skimmed over.
- **Some terracotta tiles require the entire tile to be immersed in sealer before installation.** Refer to product-specific information for more details. Pre-sealed terracotta tiles are protected against all kinds of stains, except oil. If tiles will be exposed to oil, it will be necessary to apply another sealer.
- **Mosaic tile sheets can be offset to hide some sheet joints.**
- **Use a beating block or grout float to set your mosaic tile.**
- **Take a step back and make sure the size of the perimeter joints between sheets is the same as the joints within each sheet.** If you can make out the individual sheets, you may need to adjust them by removing tiles from the edge to bridge the gap.
- **Minimum mortar coverage should be evenly distributed and cover 80 percent of tiles in a dry area and 95 percent in wet areas.** Once you set tiles, pull up a couple to check for proper coverage.
- **Choose the appropriate grout joint size; remember, smaller is not always better.** Grout joint size depends on how consistent the edges of your tile are.
- See for proper directional troweling.

TileBar Tech Tips:

- **Clean what you just grouted in a timely manner.**
- **Clean sponge often.** Swipe once, flip the sponge over, and swipe again before rinsing the sponge clean and repeating the process until the area is completely clean.
- **Any Thinset that has squeezed up will need to be removed.**
- **All installations must have movement joints.** Use a color-matched acrylic or silicone sealant to provide movement protection. Movement joints are for all

transitions: the base as well as inside and outside corners.

- **Keep the project area clean.** Even the lightest dust could permanently stain any uncured grout joints.
- **Use the right grout for your specific installation:**
 - Standard polymer-modified grout
 - High-performance cement grout
 - Premixed grout
 - Epoxy Grout

Cleaning and sealing

Keeping an installation looking new is not as difficult as you may think. Terracotta tiles are naturally porous, so a quality sealer should keep your installation protected. How often you need to reapply will depend on the amount of traffic in the area. Regular cleaning of the area with a neutral pH non-acidic cleaner should do the job. There are more harsh cleaners available if needed. Follow all manufacturer's instructions carefully and always test in a non-visible area before applying to the entire area.