



Mosaic Tile Installation Tutorial

Paper face-mounted glass mosaic tiles, 4mm thick

Since 1985, the thin-bed method combined with back-buttering has been the preferred method for the installation of face-mounted glass mosaic tiles less than 4.9mm (3/16"e;) thick. The following instructions apply to the installation of all Mosaic Tile Supplies™ 4mm thick glass mosaic tiles. The described techniques of back-buttering and setting in color should be employed in order to achieve the best results. See CTIOA Field Reports #81-1-4 and #66-2-9.

Our Prism® Squared™ Glass Tile, which are 8mm thick, should be installed as shown on our Glass Tile Installation Tutorial or the CTIOA Field Report #2002-4-25., titled Direct Bond Thin Set Method Glass Mosaic Tile Over Exterior and Interior Portland Cement Mortar Beds and Cementitious Board Units.

Step 1: Applying Adhesive

Apply a good quality latex-modified thinset approved for use with glass mosaic tile. Be sure to use a thinset that is compatible with your substrate and environment (i.e. wet areas or exterior areas).

Using a 3/16"e; v-notched trowel, apply the thinset to the substrate in straight lines. Cover only as much area as you can work within 10 - 15 minutes, so that the applied thinset remains tacky. Flatten the ridges to achieve a smooth flat setting bed and prevent trowel lines from showing through transparent tiles.

Recommended brands include Custom Building Products' Flex-Bond, Tec's Superflex, TA-393(white)or TA-392(gray), and Mapei's Kerabond/Keralastic system.

NOTE: Ceramic Tile Mastic WILL NOT WORK with glass tile.

Step 1: Back-Buttering

Next, spread a thin layer of thinset on the exposed (patterned) side of the glass mosaic tile sheet with the straight edge of your trowel. This back-buttering step is best used for all glass mosaic tile, but is essential in the use of transparent tile, to hide the trowel lines on the substrate, which might otherwise show through. Back buttering also assures near-complete (95%)surface adhesion between tile and substrate.

NOTE: During back-buttering, it is common for thinset to push through the grout joint and rise above the surface of the tile once the sheet is applied to the wall. For this reason, professional installers "set in color" or use the same installation product as both mortar and grout. Check with the manufacturer of the thinset you choose in order to verify its suitability. If you choose not to set in color, you can remove excess grout as described below.

NOTICE: This information is offered as a guideline only. No warranty is implied. For best results, hire a professional tile installer experienced in the application of face-mounted glass mosaic tile.



- **SETTING** - Set your sheets with the PAPER FACING OUT. Sheets should be placed onto the newly trowelled thinset on your surface immediately. DO NOT delay this step, or your thinset will dry and the tiles will not fully adhere to the surface.
- **LEVELING** - Square the sheet and apply to your surface, then "beat in" gently with a block of wood and hammer or a grouting float to assure 100% adhesion and a level surface. Beating in across the sheet joints as you install will better assure a level field across the entire area. Properly beating in and leveling will prevent air bubbles from being trapped between thinset and tile.
- **ALIGNMENT** - Align each sheet carefully as it is installed to create uniform grout joints from sheet to sheet.

Step 3: Lightly Wipe Down Paper

REMOVING PAPER: Wait 15-20 minutes for the thinset to bond. Begin wiping down the paper with a damp sponge and warm water. Rub lightly to avoid disturbing the tile placement. The paper facing will begin to darken as the water is absorbed.

Once completely damp, pull the paper off of the tile surface at a 45-degree angle, not straight out.

Step 4: Removing Paper

After 2-3 minutes, test a corner of the paper sheet. Pull lightly downward at an angle instead of straight out. If the sheet does not pull away cleanly, sponge again until the paper releases easily. Remove the paper facing as you install the sheets one group at a time. Once the paper has been removed, examine and straighten any joints that are not aligned. This **MUST** be done while the thinset is still pliable. Do not wait until all of the sheets are installed to begin straightening joints. Repeat these steps until all sheets have been installed.

Evenly spread grout into joints at a 45-degree angle to the tile using a hard rubber float.

Step 5: Grout Preparation

After 24-48 hours, the thinset will be cured, and the tile will be ready for grouting.

Use a nylon bristle brush, a sponge, and warm water to clean any glue or paper residue from the tile surface. If necessary, use a utility knife to carefully remove any excess thinset from the joints.



Step 6: Grout Application

With a hard rubber float, spread your prepared grout at a 45-degree angle (on a diagonal) across the tile field. After grouting the area, wait 20 minutes before you start to clean the excess.

Wipe off excess grout first with a dry cloth, then with a damp sponge.

Step 7: Grout Clean-Up

Wipe excess grout off, first with a dry cloth, such as cheesecloth or any other lint-free cloth to remove excess grout on the tile surface. Follow up with a sponge and warm water. The less water you use, the better, as too much water can weaken the grout before it sets. Once the tile looks clean, go back over it with fresh water and a damp sponge to reduce surface film. Allow tile surfaces to dry for 15 minutes, then buff with a soft cloth until shiny. If you wait longer to clean and buff the tile, the resulting grout haze will become difficult to remove.

Step 8: Cleaning & Sealing

Once the installation is completely dry (1-2 days) you can safely clean any remaining grout haze or residue with a tile cleaner and scrubbing pad. Once the tile is cleaned and dry, seal grout with a good quality sealant to prevent mildew and staining.