



Mosaic Tile Installation Tutorial

Mesh mounted glass & porcelain mosaic tiles

Step 1: Applying Adhesive

APPLYING ADHESIVE: Apply a good quality latex-modified thinset approved for use with glass or vitreous/porcelain 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" 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 thin-set remains tacky. Using the straight edge of the trowel, flatten the ridges to achieve a smooth, flat setting bed and to prevent trowel lines from showing through transparent tiles.

Recommended brands of latex-modified thinset 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 SHOULD NEVER BE USED for the installation of glass or porcelain tile.

NOTE: For the installation of unglazed porcelain mosaic tile, we do not suggest using tinted or colored grout, as the colored grout haze can be very difficult to remove. However, if you choose to use a tinted or colored grout, please seal your unglazed porcelain with a good quality tile sealant, letting it dry completely prior to installation.

Step 2: Back-Buttering

BACK-BUTTERING: Next, spread a thin layer of thinset on the back 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 when using fully transparent tile, to keep any remaining trowel lines on the substrate from showing through. Back-buttering also ensures near-complete (95%) surface adhesion between tile and substrate.

NOTE: During back-buttering, it is not uncommon for thinset to push through the mesh, which may partially fill the grout joints and rise above the surface of the tile once the sheet is applied to the wall. This is normal. For this reason, professional installers often prefer "setting in color," or using the same installation material as both mortar and grout. This is the method we suggest that you use as well. Check with the manufacturer of the thinset you choose to verify its suitability for setting in color. If you choose not to set in color, you can remove excess thinset from the joints as described later in this tutorial.

- **SETTING** - Set your sheets into the thinset layer spread on your substrate, taking care to square the sheets as you go. Sheets should be placed onto the newly trowelled thinset

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.



on your surface immediately. DO NOT delay this step, or your thinset will begin to 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.
- **STRAIGHTENING JOINTS** - Continue to align each sheet carefully as it is installed to create uniform grout joints from sheet to sheet. A joint between adjacent sheets should measure the same distance as the joint between the rows of tiles within a single sheet. If the joint between the sheets is wider, you will see a series of individual sheets outline on your surface, instead of a smooth, continuous field of tiles that covers the entire area.
- **TIMING/WORKFLOW**: Within 15-20 minutes of applying each section of your area, examine and straighten any joints that are not aligned. Stepping back from the installation will help you to get a better perspective. These straightening and aligning steps **MUST** be done while the thinset is still pliable. Do not wait until all of the sheets are installed to begin straightening the joints, or the thin-set will be too dry to allow any realigning.

Repeat these installation steps until all sheets have been installed.

Step 3: 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 4: 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.

Step 5: 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 6: 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. For stubborn haze, use a grout haze remover or tile cleaner that contains sulfamic or phosphoric acid. NOTE: Sulfamic acid and Phosphoric acid are toxic substances, and like any chemicals, should be used ONLY with the proper protective gear, and in a well-ventilated area. Once the tiles are cleaned and dry, seal grout with a good quality sealant to prevent mildew and staining, or for the best protection use one of the new grout products on the market that rejects stains and/or contains a formula that inhibits the growth of mold and mildew, such as Flex-Bond by Custom Building Products.