



This installation guide covers installation of all Hirsch Glass glass mosaics

This Installation Guide is for glass mosaics suitable for applications such as kitchen backsplash, shower wall, fountain, spa, swimming pool.

General Note about Installation Guide: The following general installation and grouting guidelines pertain to most applications. The technical service departments of major setting material companies should be consulted regarding specific installation questions.

INSPECTION: The end user is responsible for determining the acceptability of the product. **Installation constitutes acceptance of tile order.**

The handmade character of glass mosaic tile creates a degree of artistic variation in shade, color, tone, and size within each sheet of tile, some tiles might have minor chips on the edge of the tiles.

Open and inspect each carton of tile to confirm shading consistency. Randomly select 5 sheets from different cartons to establish color control during installation. Before installing tile, blend sheets from different cartons to assure random placement during installation. As sheets are being installed, check them against control samples prior to placing them in the setting material to assure acceptable shade variations and quality.

INSTALLATION

Installing glass tile involves some basic procedures that differ from installing ceramic tile or stone tile. Following these procedures will prevent simple mistakes that could result in the failure of the installation

Cutting Glass Tile: Small format glass tile are best cut with specialty glass mosaic tile cutters and larger sizes such as 2”x2” are best cut with a wet saw. Use a high quality wet saw with a diamond “cut-off” or carbide blade.

- To prevent rough edges, glass tiles must be cut in an extremely slow manner.
- Turn the tile upside down and cut half way through and flip tile over and continue to cut through tile. This is to minimize the chipping of both the colored backing as well as the face of the glass tile.
- Cut edges should be stoned or sanded smooth after cutting.

Substrate: Make sure that glass tile is installed over the proper substrate. This is one of the most important factors in ensuring a good installation.

It is important that you choose the correct backing to install your tile. Listed below are the different types of backings:

- Cement Board
- Concrete
- Green Board
- Drywall

Make sure that the surface you are tiling is a clean, sound surface and free of dirt, oils, including curing compounds, and sealers. Substrate should be free of cracks and in water are should be waterproof. If necessary, use the installation material manufacturers membrane for cracks and water protection.

Glass tile is a reflective product any inconsistencies in your substrate will show up after the tile is installed. As a reflective product it will scratch.

Do not install glass tile on:

- Particleboard
- Chipboard
- Masonite
- Press wood
- Plywood
- Asbestos boards

For pool and fountains, we recommend installing a mortar bed according to TCA P601-05.

Types of Setting Materials to Use: We recommend Use a white thin-set mortar or setting material to keep color consistent with the samples.

Glass tile is a very durable material but it is only as good as it is installed and should not be subjected to excessive mechanical or thermal shock. **All installation materials should be used according to the manufacturers instructions.**

Expansion and Control Joints per TCA EJ171-2K

Existing joints in subsurface must be carried through tile work. Expansion joints should be installed at all “changes of plane” in the tile work and where tile abuts restraining surfaces; therefore **silicone caulking sealant must be installed in all corner joints in the place of grout.**

Installation: Prior to installation, wipe back of the tile & substrate clean with a clean damp sponge. This will help achieve 100% mortar coverage.

IMPORTANT NOTE! – When installing clear film-face and paper-face mounted tile sheets, INSTALL FILM/PAPER SIDE OUT!!!

5/8" x 5/8" / 3/4" x 3/4"

Use enough setting material to assure 100% tile surface coverage but not so much that it will "ooze" above the top of the tile through the grout joints. Use a 3/16" X 5/32" V-notched trowel and do not flatten the "rows" created in the setting material. *Apply only as much setting material as can be covered with tile within 10 to 20 minutes or while surface is still wet and tacky.*

1" x 1" / 2" x 2"

Use the notched side of a 1/4" X 1/4" square-notched trowel to firmly apply a liberal amount of setting material to the substrate. Then use the flat side of the trowel to flatten the notches in the setting material, creating a smooth, consistent setting bed approximately 1/8" thick. *Apply only as much setting material as can be covered with tile within 10 to 20 minutes or while surface is still wet and tacky.*

With firm, even pressure apply sheets of tile – *mesh side down* – into the setting material, using a wooden beating block or rubber grouting float to create a flat surface. Carefully align each sheet as it is installed to create uniform grout joints from sheet to sheet. Allow tile to set until firm. Clean excess setting material from the surface of the tile with a damp cloth or sponge while the setting material is fresh

With firm, even pressure apply sheets of tile – *film/paper side out* – into the setting material, using a wooden beating block or rubber grouting float to create a flat surface. Carefully align each sheet as it is installed to create uniform grout joints from sheet to sheet. Allow tile to set until firm.

Film-Face Mounted Sheets

Once all film-mounted sheets are installed into setting material, creating small pinholes or slits in the film improves the breathing and setting up process. Once setting material has set up, (24-72 hrs) remove the film by pulling it from the tile, starting at the corners and pulling downward. If tile comes up during this process, allow setting material to set up longer. Once film is removed make any tile alignment adjustments while the setting material is fresh.

Paper-Face Mounted Sheets

To remove the paper, apply a moderately wet sponge to the paper, allowing the water to soak through and dissolve the glue. (Warm water dissolves quicker than cold). *Paper should be wet for removal only at time that it will actually be removed. If paper is wet for removal, but then dries again without having been removed from the tile it is VERY difficult to remove upon wetting it again.* Starting at the corners, peel the paper from the tile. If tile comes up during this process, allow setting material to set up longer. Once paper is removed make any tile alignment adjustments while the setting material is fresh.

Further Installation Notes

Some setting materials manufacturers recommend applying setting material to the back side of the sheet of glass mosaic tile ("back buttering") with the flat side of the trowel immediately before placement of the sheet into the freshly troweled setting material on the surface receiving the tile. This extra amount of setting material is recommended to help assure 100% coverage of the tile. It does, however, increase the amount of setting material available to "ooze" up through the grout joints. If too much is applied, the setting material will, particularly on the thinner 3/4" X 3/4" and 5/8" X 5/8" tile, completely fill the grout joints leaving very little or no space for grout.

If 100% tile surface coverage (no voids or air pockets between the tile and the surface receiving the tile) can be achieved by applying sufficient setting material only to the surface receiving the tile, this "back buttering" step might be *unnecessary*. We suggest experimenting with a sheet or partial sheet of tile before starting the job to determine the best approach to achieving 100% coverage.

Grout Color: plays a major role in the final appearance of any glass mosaic tile job and should be selected carefully. *Grout color that contrasts with the tile color* tends to create a "frame" around each tile.

Grouting: Grout joints should be packed full and free of all voids and pits. Excess grout should be cleaned from the surface as the work progresses, while grout is fresh and before it hardens. Prior to grouting, test an area to make sure the surface does not scratch during grouting. Glass mosaic tile has varying degrees of surface texture that will collect grout during the grouting process. While thorough cleaning after grouting will remove most of the grout, there will always be some grout remaining in the pinholes or surface creases. The amount of grout visible after installation will depend primarily on the color contrast between grout color and tile color, how well the tiles were cleaned during grouting, and viewing distance.

- Grouting may be done after tile is firmly set – approximately 24 hours after installation. Apply grout, sanded or unsanded, with a rubber float, making sure that grout joints are completely full and free of voids and pits. Clean the surface with a clean, damp sponge.
- Allow grout to set firm or until haze forms on the tile and the grout in the joints sets firm. Use a soft, clean, dry cloth to polish off haze and remaining grout residue. Final cleaning of grout haze and tile polishing is done with clean, dry cheesecloth within 24 hours of grouting.

PROTECTION

The contractor shall take precautions to protect the finished work from damage by other trades. Do not allow construction traffic on fresh tile or grout joints. Allow the grout to cure for a minimum of 7 days before aggressive use or steam cleaning.

CLEANING & MAINTENANCE

Normal cleaning of glass mosaic tile can be done with room temperature water or cleaner and a soft lint free cloth. For a more thorough cleaning and to remove stubborn dirt and stains, use any of the many tile and grout cleaners available through tile dealers or home centers.

The Tile Council of America offers detailed grout cleaning information on their website, www.tileusa.com (under "Technical Services" scroll text down to "Tile Technical Reference Library", click "frequently asked questions and answers", click "Cleaning Grout").

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