

# Installation Guide - 1

## glass mosaics and pebble-style glass tile mesh-backed and dot mounted sheets

### **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.

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**

#### **Expansion Joints**

Expansion joints are essential for the success of most tile installations. Follow instructions on expansion joints in the *Handbook for Ceramic Tile Installation* published by the Tile Council of America. Expansion joint requirements will vary depending on substrate climate and size of installation. An architect should be consulted when specifying the exact number of expansion joints and the location of each.

#### **Cutting Glass Tile**

Small format glass tile are best cut with specialty glass mosaic tile cutters and larger sizes such as pebble-style tile are best cut with a wet saw. Cut edges are very sharp and should be smoothed with carbide paper or a "white stone" available at tile dealers.

#### **Types of Setting Materials to Use**

*Setting material products are available through tile dealers, home centers, and major setting material companies.*

*Custom Building Products: Custom Blend Standard Thin-Set Mortar. [www.custombuildingproducts.com](http://www.custombuildingproducts.com)*

*Custom Building Products: MegaFlex Ultimate Thin-Set Mortar (white). No admixture is necessary. [www.custombuildingproducts.com](http://www.custombuildingproducts.com)*

*Hydroment: ReFlex Ultra-Premium Latex-Modified Thin-Set Mortar. No admixture is necessary. [www.bostik.com](http://www.bostik.com)*

*Laticrete: 254 Platinum Multipurpose Thin-Set Mortar. No admixture is necessary. [www.laticrete.com](http://www.laticrete.com)*

*Mapei: Adesilex P10 (bright white) nonsag mortar for glass tile. Mix with water or Keraply. **Specifically designed for glass tile.** [www.mapei.com](http://www.mapei.com)*

*Mapei: Kerabond Premium Dry-Set Mortar (Ker 102) mixed with Keralistic Mortar Admix (Ker 310). [www.mapei.com](http://www.mapei.com)*

*TEC (H.B. Fuller): Super Flex Premium Performance Universal Latex-Modified Thin-Set Mortar. No admixture is necessary. [www.tecspecialty.com](http://www.tecspecialty.com)*

**CAUTION:** When mixing setting and grouting materials with electrical mixing devices, do not exceed 300 rpm or the manufacturer's recommendations. All adhesives need to slake (i.e. sit) 10-15 minutes after mixing and then be remixed before using.

#### **Installation**

##### **5/8" x 5/8" and 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" and pebble-style

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.

**Special installation information for pebble-style glass tile:** *To achieve a seamless fit from sheet to sheet, individual tiles may need to be adjusted at time of installation.*

### 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 trowelled 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 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 for achieving 100% coverage.

### Water Immersion Applications

Mesh backed, paper faced, film faced and dot mounted glass mosaic tile have been successfully installed in pools for years. There are many variables that affect the outcome of glass tile installations in water immersed applications: Skill of installer, type of setting material used, amount of setting material applied, weather conditions at time of installation, amount of curing time allowed before water immersion takes place. Regarding tile work in swimming pools, fountains, and other continuous water immersion applications, minimum cure time after grouting is 21 days before flood testing or filling with water. Follow setting materials manufacturer's recommended cure times.

## GROUTING

### Grout Color

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

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.

**Special grouting information for pebble-style glass tile:** *Once grout joints are filled with grout and the surface is cleaned with a sponge, the grout joints become considerably wider due to the remaining amount of visible grout in the joint. The amount of grout in the joint can be reduced to achieve the desired width by running a piece of damp cheesecloth rolled into a "cigar" shape through the joint while the grout is still fresh.*

## CLEANING & MAINTENANCE

Normal cleaning of glass mosaic tile can be done with room temperature water and a rag. 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 its website, [www.tileusa.com](http://www.tileusa.com) (under "Technical Services" scroll text down to "Tile Technical Reference Library", click "frequently asked questions and answers", click "Cleaning Grout").