



INSTALLATION GUIDE

..... MATERIAL INSPECTION

The owner or owner's representative is responsible for determining the acceptability of the product prior to installation. This product is handmade and of artisan quality; variation in color, shade, tone and size is normal and should be expected. **The key to a successful installation is an experienced craftsman familiar with handmade mosaics.** Range and variation are natural and inherent qualities of stone and should be embraced as characteristics that add beauty to your project. In many cases, there will be folds, wrinkles and bubbles in jewel glass. These surface characteristics are inherent to the art of glass manufacturing processes and should be expected. Upon delivery, open and inspect each box of tile, no matter the material.

- **Mosaic Tile** - verify sheet-to-sheet color consistency by laying each sheet adjacent to one another as according to the numbered stickers and map
- **Unmounted Tile** - verify color acceptability prior to installation. Translucent tile should be inspected and compared to one another on a white background. Prior to or during installation, blend the entire order to promote a visually consistent arrangement.

Installation deems acceptance. Returns will be not be accepted once material is installed.

..... INSTALLATION MATERIALS

THINSET

Due to the natural properties of stone, and the translucent nature of glass, the color of the selected thinset will affect the appearance of the installed tile. We recommend the use of specific white thinsets, some mixed with a specific latex admix (see list below). However, these products will vary in their degree of whiteness and color consistency. Confirm the thinset color is acceptable prior to installation. For projects that require multiple units of thinset, dry batching (pre-mixing) the units of thinset powder may be necessary to avoid bag-to-bag color variation. All submerged applications (pools & water features) must be cured a minimum of 21 days prior to submersion or heavy water use, unless otherwise specified by the thinset and grout manufacturer.

When mixing thinset or grout:

1. Measure liquid and powder per the manufacturer's recommendations,
2. Machine mix at a maximum of 300rpm,
3. Allow the thinset or grout to slake (sit) 10-15 minutes,
4. Re-mix (repeat step 2) and do not add more liquid or powder.

ACCEPTABLE ADHESIVES

- CUSTOM BUILDING PRODUCTS: Glass Tile Thinset Mortar
- CUSTOM BUILDING PRODUCTS: MegaFlex Crack Prevention Mortar
- CUSTOM BUILDING PRODUCTS: MegaLite Crack Prevention Mortar
- DURABOND: D70 High Performance Extremely Flexible Mortar
- HYDROMENT: ReFlex Ultra-Premium Latex Modified Thinset Mortar
- LATICRETE: Glass Tile Adhesive
- MAPEI: Adesilex P10 Bright White Thinset Mortar mixed With Keraply Mortar Additive*
- TEC SPECIALTY PRODUCTS: Super Flex Premium Performance Universal Latex-Modified Thinset Mortar

* Color controlled for bag-to-bag consistency.

UNACCEPTABLE ADHESIVES

- Organic adhesive (mastic), due to yellowing and low bond strengths
- Epoxy, due to low flexibility

MOVEMENT JOINTS

Movement joints are essential for the success of most tile installations. Install movement provisions according to the Tile Council of North America (TCNA) Handbook For Ceramic, Glass and Stone Tile Installation, method EJ171-11. A flexible sealant, recommended for submerged applications, is required between the tile and all restraining abutments (i.e., the decking or coping), at all inside corners and directly over any joints in the concrete tank. In-field movement joints are required every 8' on center in exterior applications or 20' on center in interior applications. An architect or design professional should be consulted when specifying the exact number and location of each movement joint.

There are a wide variety of flexible sealants available for use in tile installations. Each sealant product will vary in type, application and performance; consult the sealant manufacturer for specific recommendations and limitations.

GROUTING

Grout is available in both sanded and non-sanded varieties. Refer to grout manufacturer's specifications for appropriate use. When installed in pools, we recommend grouting art glass with a cement-based sanded grout (will not scratch the tile). Blue, green, and red grouts may not be appropriate for submerged applications; consult the grout manufacturer for specific use recommendations and limitations.

WATERPROOFING

There are a wide variety of anti-fracture and waterproofing products available for use in tile installations. Each membrane product will vary in type, application and performance; consult the product manufacturer for specific recommendations and limitations. The following is a brief list of common waterproofing materials:

Cementitious Waterproofing:

- AQUAFIN: 1K
- MAPEI: Planiseal 88
- MERLEX: Super Blockade

ANSI A118.10 Waterproof Membranes (optional):

- AQUAFIN: 2K/M
- CUSTOM BUILDING PRODUCTS: RedGard Waterproofing and Crack Prevention Membrane
- HYDROMENT: Black-Top 90210
- LATICRETE: Hydro Ban
- MAPEI: Mapelastic 315
- TEC: HydraFlex Waterproofing Crack Isolation Membrane

CUTTING

Glass or stone can be cut to meet job site dimensions with the use of a high-quality wet tile saw equipped with a continuous, smooth-rim, diamond glass tile blade. To facilitate wet cutting, face taped mosaics may need to be cut individually as excessive saw overspray may cause them to fall off the tape.

DRILLING

Glass or stone can be drilled using a wet core diamond bit, designed for drilling dense materials (i.e., glass or granite) and a water swivel (central water feed). Solid blocking for the anchoring of fixtures, such as shower doors and towel bars, must be installed prior to installing the tile substrate. The diameter of all drilled holes must be large enough to allow the fastener to pass through the tile and substrate without making contact.

3/8" SHELL

This mosaic may be made from two types of Shell material. The Shell material referenced in this section is "backed", i.e., adhered to a porcelain base, which makes the material 3/8" total thickness. This type of Shell can be paired with stone, Serenity glass, or most other materials that are 3/8" thick. Please review the following installation recommendations and notes of caution prior to beginning installation.

APPLICATION RECOMMENDATIONS

Interior floors: yes, in light traffic areas *only*

Interior walls: yes, except in moist areas and climates

Exterior floors: no

Exterior walls: no

Conventional shower walls: no

Conventional shower floors: no

Steam shower walls: no

Steam shower floors: no

Pools/fountains/water features: no

Submersion: no

1/8" SHELL

This mosaic may be made from two types of Shell material. The Shell referenced in this section is mostly used in our Studio Line/Ready to Ship products. This material is "unbacked", i.e., mounted to a thin mesh substrate with no base and is 1/8" total thickness. Please review the following installation recommendations and notes of caution prior to beginning installation.

APPLICATION RECOMMENDATIONS

Interior floors: no

Interior walls: yes

Exterior floors: no

Exterior walls: yes, if in a covered area

Conventional shower walls: yes

Conventional shower floors: no

Steam shower walls: yes

Steam shower floors: no

Pools/fountains/water features: yes

Submersion: yes

3/8" GOLD GLASS

Please review the following installation recommendations and notes of caution prior to installing a mosaic with 3/8" Gold glass.

APPLICATION RECOMMENDATIONS

Interior floors: yes, in light traffic residential areas *only*

Interior walls: yes

Exterior floors: no

Exterior walls: no

Conventional shower walls: yes, on non-impact walls *only*

Conventional shower floors: no

Steam shower walls: no

Steam shower floors: no

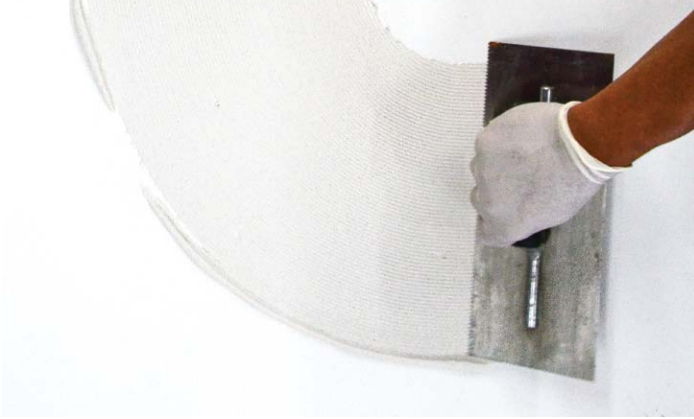
Pools/fountains/water features: no

Submersion: no

MESH-MOUNTED MATERIALS

Follow stone installation steps as shown on pages 5 & 6, skipping step 5. Remove paper backing prior to installation. When using a wet saw, adhesive may soften. Allow any cut materials to dry completely prior to installation.

..... MOSAIC INSTALLATION GLASS



Step 1 To initiate the bond coat, use the flat side of a trowel and firmly apply thinset to the substrate.



Step 2 To establish the proper depth of the setting bed, use a $\frac{3}{16}$ " x $\frac{1}{4}$ " v-notch trowel to apply additional thinset and comb full notches in one direction.



Step 3 Use the flat side of the trowel to flatten the notches and achieve a smooth, consistent thinset setting bed.



Step 4 Apply mosaic sheets to the thinset setting bed, tape side towards you, with light, even pressure. When joining sheets, be certain to adjust sheets so that grout lines are uniform. Periodically, check thinset for skinning (slight drying). If skinning occurs, remove thinset and reapply.



Step 5 To achieve the flattest possible surface, lightly tap the sheets using light pressure with a grout float or a wooden beating block and a finish hammer. To unify sheet transitions, tap from one sheet to the next.



Step 6 After 24 hours of cure time, peel the tape from the tile starting from the corner. Use an angled downward movement.

NOTE: Grout application and cleaning process will vary based on the type and brand of grout. Refer to grout manufacturer's instructions for details.

MOSAIC INSTALLATION

GLASS



Step 7 Apply Oceancare penetrating sealer as grout releases, per manufacturer's instructions.



Step 8 Remove excess sealer with a clean white cloth. Allow cure time per manufacturer's instructions.



Step 9 Apply grout with a rubber grout float, forcing grout into joints until full. Remove excess grout with edge of float.



Step 10 Allow grout to set until firm and smooth finish with a damp sponge. After approximately 2 hours, remove grout haze with a lightly damp sponge.



Step 11 For final removal of grout haze, polish with a clean, soft, white cloth.

MOSAIC INSTALLATION

STONE



Step 1 To initiate the bond coat, use the flat side of a trowel and firmly apply thinset to the substrate.



Step 2 To establish the proper depth of the setting bed, use a $\frac{3}{16}$ " x $\frac{1}{4}$ " v-notch trowel to apply additional thinset and comb full notches in one direction.



Step 3 Apply mosaic sheets to the thinset setting bed, tape side toward you, with light, even pressure. Periodically, check thinset for skinning (slight drying). If skinning occurs, remove thinset and reapply.



Step 4 To achieve the flattest possible surface, lightly tap the sheets using light pressure with a grout float or a wooden beating block and a finish hammer. To unify sheet transitions, tap from one sheet to the next.



Step 5 After 24 hours of cure time, peel the tape from the tile, starting from the corner. Use an angled, downward movement.



Step 6 Apply Oceancare penetrating sealer as grout releases, per manufacturer's instructions.

NOTE: Grout application and cleaning process will vary based on the type and brand of grout. Refer to grout manufacturer's instructions for details.

MOSAIC INSTALLATION

STONE



Step 7 Remove excess with a clean white cloth. Allow cure time per manufacturer's instructions.



Step 8 Apply grout with a rubber grout float, forcing grout into joints until full. Remove excess grout with edge of float.



Step 9 Allow grout to set until firm and smooth finish with a damp sponge. After approximately 2 hours, remove grout haze with a lightly damp sponge.

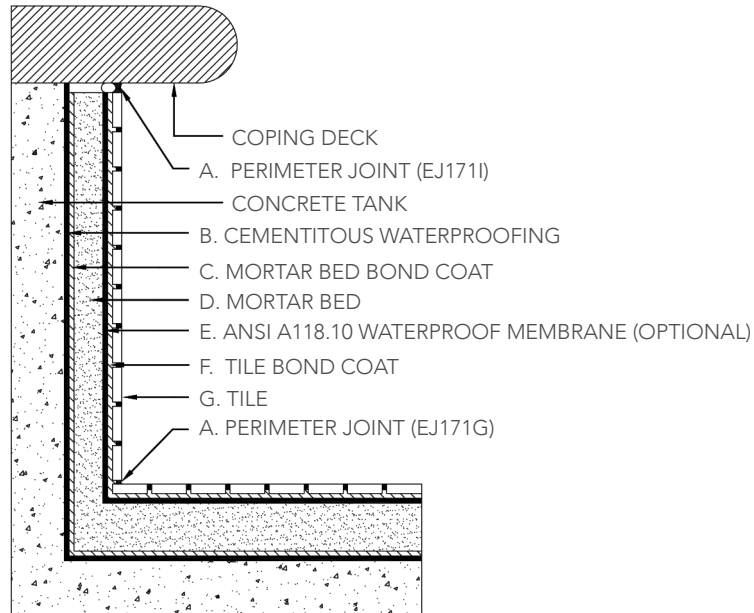


Step 10 For final removal of grout haze, polish with a clean, soft, white cloth.

POOL & WATER FEATURE INSTALLATION

These instructions are provided as a general guideline for the installation of mosaics in pools and water features; some installations require a more detailed specification. An experienced, professional tile installer who is familiar with the following procedures should perform the work. Please read these instructions before beginning any work

The performance of a properly installed thinset tile application is dependent upon the durability and dimensional stability of the substrate to which it is bonded. The following information details the recommended pool and water feature substrate preparation method for glass and stone.



SUBSTRATE REQUIREMENTS

- Based on the soil report, pool tanks must be engineered and constructed to support a glass tile installation
- Pool tank construction must be reinforced concrete
- Defects in the concrete tank must be repaired prior to the commencement of tile work
- Concrete tank surface must be free of grease, oil, wax or other coatings; pressure wash if necessary
- Concrete tank must be made watertight through the use of a cementitious waterproofing
- Materials:
 - A. Perimeter Joints - See "Movement Joints"
 - B. Cementitious Waterproofing - See "Waterproofing"
 - C. Mortar Bed Bond Coat - See "Acceptable Thinsets"
 - D. Mortar bed - Mix at a ratio of 1 part portland cement (ASTM C-150) to 4 parts damp sand (ASTM C-144) by volume.
Walls $\frac{3}{4}$ " nominal, Floors $1\frac{1}{4}$ " nominal
 - E. ANSI A118.10 Waterproof Membrane (Optional) - See "Waterproofing"
 - F. Tile Bond Coat - See "Acceptable Thinsets"
 - G. Tile
- Cement mortar beds must be cured a minimum of 7 days prior to glass tile installation

NOTES:

- The ideal working temperature for most thinset and grout products is between 50° and 90°F. Exterior installations must be protected during installation and curing from direct sunlight, excessive heat, wind, rain and freezing temperatures.
- Elastomeric waterproof membranes applied to the cement mortar bed may be beneficial in freeze-thaw climates.
- All submerged applications must be cured a minimum of 21 days prior to submersion or heavy water use, unless otherwise specified by the thinset and grout manufacturer.



Oceancare is an innovative line of sealing and maintenance products for tile and natural stone. Developed using cutting-edge chemical technology, Oceancare products are highly effective, easy to use and environmentally friendly.

Oceancare products address the most common concerns associated with tile and natural stone maintenance and, when used in conjunction with one another, provide a complete maintenance solution without the damaging effects of bleach, acid, ammonia or abrasive cleaners. While Oceancare is specifically designed to work with glass tile products, it is also an excellent choice for most tile types, including porcelain, ceramic, and natural stone.

For product availability and pricing, please contact an Oceancare dealer or visit www.oceancareproducts.com.

APPLICATION CHART

APPLICATION	High Performance Penetrating Sealer	pH Neutral Tile & Stone Cleaner	Glass Tile Shower Cleaner	All Natural Degreaser	Calcium Releaser
Wall - Interior					
Wall - Exterior					
Floor					
Shower Walls & Floor					
Tub Surround					
Shower Door					
Bathroom Countertop					
Kitchen Countertop					
Kitchen Backsplash					
Cooktop/Appliance					
Pool/Spa					
Fountain/Water Feature					