OCEANSIDE
GLASSTILE®

Pool & Water Feature Installation

These instructions are provided as a general guideline for the installation of Oceanside Glasstile 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 and understand these instructions before beginning any work.

For detailed product use information including ASTM test results and recommended applications, please refer to the Installation section of our website www.glasstile.com.
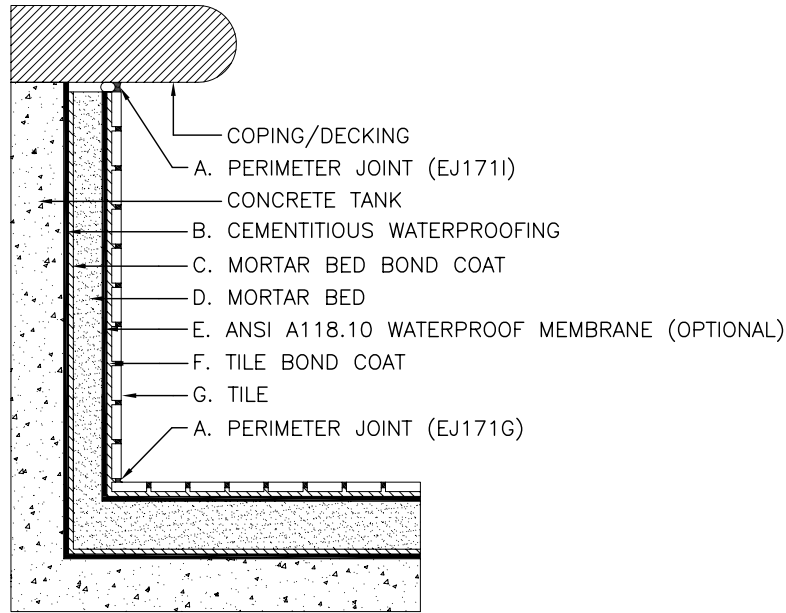
······································· **MATERIAL INSPECTION** ·······································

The owner or owner's representative is responsible for determining the acceptability of the product prior to installation. Oceanside Glasstile is a hand-made, artistic product; variation in color, shade, tone and size is normal. In many cases, there will be folds, wrinkles and bubbles in the glass. These surface characteristics are inherent to the cast glass manufacturing process and should be expected. Upon delivery open and inspect each box of tile.

- **Mosaic tile** - verify sheet-to-sheet color consistency by first comparing each sheet, from the backside, to one another. Next, compare the face of the sheets by laying them adjacent to one another and comparing the visible portion (edge) of the mosaic tiles.
- **Un-mounted 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 installation.

No adjustments will be made after installation.

The performance of a properly installed thin-set 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 Oceanside Glasstile and is general in nature. For additional recommendations, please contact Oceanside Glasstile Technical Services, 877-648-8222.


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COPING/DECKING
A. PERIMETER JOINT (EJ171I)
CONCRETE TANK
B. CEMENTITIOUS WATERPROOFING
C. MORTAR BED BOND COAT
D. MORTAR BED
E. ANSI A118.10 WATERPROOF MEMBRANE (OPTIONAL)
F. TILE BOND COAT
G. TILE
A. PERIMETER JOINT (EJ171G)
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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 Thin-Sets"
  - 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 ¾" nominal, Floors 1 ¼" nominal
  - E. ANSI A118.10 Waterproof Membrane (Optional) - See "Waterproofing"
  - F. Tile Bond Coat - See "Acceptable Thin-Sets"
  - G. Oceanside Glasstile
- Cement mortar beds must be cured a minimum of 7 days prior to glass tile installation.

NOTES:
- *The ideal working temperature for most thin-set and grout products is between 50° and 90°F. Exterior installations must be protected during instal-lation 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 thin-set and grout manufacturer.*

INSTALLATION MATERIALS

Thin-set

Due to the translucent nature of glass tile, the color of the thin-set will affect the appearance of the installed tile. We recommend the use of specific white thin-sets, 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 thin-set color is acceptable prior to installation. For projects that require multiple units of thin-set, dry batching (pre-mixing) the units of thin-set 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 thin-set and grout manufacturer.

When mixing thin-set or grout:

1. measure liquid and powder per the manufacturer's recommendations,
2. machine mix at a maximum of 300rpm,
3. allow the thin-set or grout to slake (sit) 10-15 minutes,
4. re-mix (repeat step 2) and do not add more liquid or powder.

Acceptable Thin-Sets

- CUSTOM BUILDING PRODUCTS: Glass Tile Thin-Set 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 Thin-Set Mortar
- LATICRETE: Glass Tile Adhesive
- MAPEI: Adesilex P10 Bright White Thin-Set Mortar mixed With Keraply Mortar Additive*
- TEC SPECIALTY PRODUCTS: Super Flex Premium Performance Universal Latex-Modified Thin-Set 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 "2011 TCA 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.

Acceptable Grout

When installed in pools, we recommend grouting Oceanside Glasstile 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.

Muse & Blue mosaics may be grouted with cement-based sanded or non-sanded grout. Detailed grout selection information is available in the Installation section of our website (www.glasstile.com).

Unacceptable Grout

- Epoxy Grout - due to low flexibility and degradation from ultraviolet light (sunlight)

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

MOSAIC INSTALLATION
Blue, Facets, Muse, Tessera

Step 1 To initiate the bond coat, use the flat side of a trowel and firmly apply thin-set to the substrate.
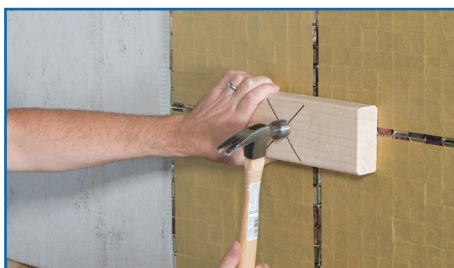
Step 2 To establish the proper depth of the setting bed, use a 3/16"x1/4" v-notch trowel to apply additional thin-set and comb full notches in one direction.

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

Step 4 Apply mosaic sheets to the thin-set setting bed, paper side towards you, with light, even pressure. Periodically, check thin-set for skinning (slight drying). If skinning occurs, remove thin-set and reapply.

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

Step 6 After 15-30 minutes, (floors can be removed sooner) lightly wet the paper. Keep the paper wet by wiping with a damp sponge several times over a 5-10 minute period. After the paper has absorbed the water, the glue will release.
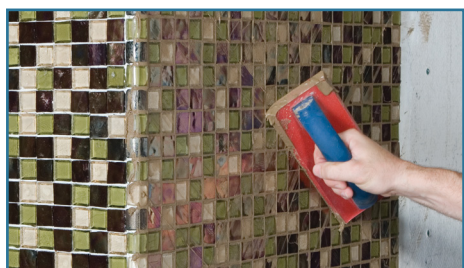
Step 7 Peel the paper from the tile starting at the corner. Removing the paper while the setting material is still fresh allows for individual tile adjustment and re-inspection of color consistency.
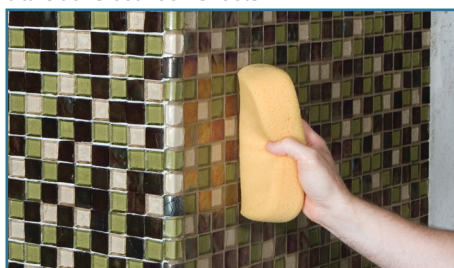
Step 8 Straighten individual mosaic tiles prior to final set with the goal of creating a consistent overall field of mosaics. To eliminate the sheet pattern, pay particular attention to the transitions between sheets.

Step 9 After a full 24 hours (some installations may require extended cure times) use water and a nylon scrub-brush to remove residual glue from the tile. Clean rinse and towel dry.

Step 10 Apply grout with a rubber grout float, forcing grout into joints until full.

Step 11 Allow grout to set-up (firm) and smooth finish with a damp sponge. After approximately 2 hours remove grout haze with a lightly damp sponge.

Step 12 For final removal of grout haze, polish with a clean, soft cloth.

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

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

Step 2 To establish the proper depth of the setting bed, use a 1/4"x1/4" square-notch trowel to apply additional thin-set 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 thin-set setting bed.

Step 4 Thoroughly clean the back of each tile using a clean, dry cloth. Never wet the tile prior to setting.

Step 5 Back-butter each tile using additional thin-set. Prior to setting translucent tile, check the face to verify 100% coverage has been achieved.

Step 6 Press the tile into the fresh setting bed using, firm even pressure. Remove excess setting material from the edges and space a minimum of 1/8" between tiles and all abutting surfaces.

Step 7 After a full 24 hours (some installations may require extended cure times) apply grout with a rubber grout float, forcing grout into joints until full.

Step 8 Allow grout to set-up (firm) and smooth finish with a damp sponge. After approximately 2 hours remove grout haze with a lightly damp sponge.

Step 9 For final removal of grout haze, polish with a clean, soft cloth.

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

CUTTING

Oceanside Glasstile can be cut to meet jobsite 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, paper-faced mosaics must be removed from the paper and cut individually or the mounting paper must be protected from saw overspray. Detailed information regarding cutting, including wet cutting paper-faced mosaics and recommended blades, is available in the Installation section of our website *www.glasstile.com*.

DRILLING

Oceanside Glasstile 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. Detailed information regarding drilling is available in the Installation section of our website *www.glasstile.com*.