



# Oceanscapes & Aquascapes Installation Guide

These instructions are provided as a general guideline for the installation of Oceanscapes & Aquascapes 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.

## ..... MATERIAL INSPECTION .....

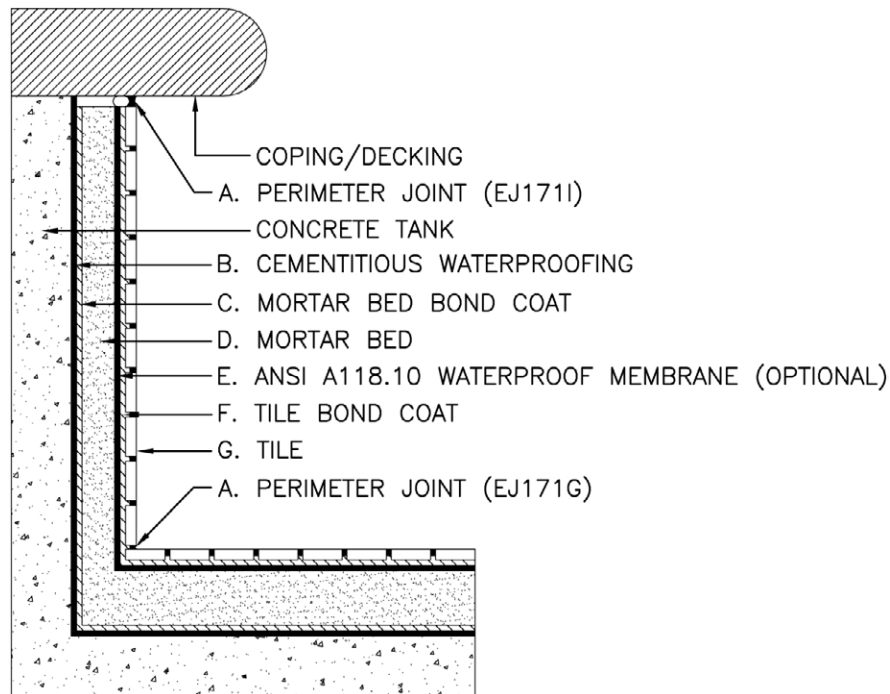
The owner or owner's representative is responsible for determining the acceptability of the product prior to installation. Oceanside Glasstile is a hand- made, artistic product; variation in color, shade, tone and size is normal. In many cases, there will be folds, wrinkles and bubbles in the glass. 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.

*No adjustments will be made after installation.*

## SUBSTRATE PREPARATION

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 Oceanscapes & Aquascapes and is general in nature. For additional recommendations, please contact Oceanside Glasstile Technical Services, 877-648-8222.



## 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  $\frac{3}{4}$ " nominal, Floors  $1 \frac{1}{4}$ " nominal
  - E. ANSI A118.10 Waterproof Membrane (Optional) - See "Waterproofing"
  - F. Tile Bond Coat - See "Acceptable Thin-Sets"
  - 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 thin-set 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.*
- *ANSI A118.10 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.*

## 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 -

- MERLEX: Super Blockade

### ANSI A118.10 Waterproof Membranes (*Optional*) -

- CUSTOM BUILDING PRODUCTS: RedGuard Waterproofing and Crack Prevention Membrane
- LATICRETE: Hydro Ban
- MIRACOAT: Membrane C
- TEC: HydraFlex Waterproofing Crack Isolation Membrane

## Thin-set

We recommend the use of specific white thin-sets (see list below), however, these products vary in their degree of whiteness and color consistency. Due to the translucent nature of many glass tiles, the color of the thin-set will affect the installed tile's appearance. Some of the thin-sets listed below are specifically manufactured for use with translucent glass tile and are marketed as "bright-white" and controlled for bag-to-bag color consistency. Confirm the thin-set color is acceptable prior to installation.

For projects that require multiple units of thin-set, either use a color controlled thin-set or dry-batch (pre-mix) the units of thin-set powder 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 exposure, unless otherwise noted by the thin-set and grout manufacturer.

### Acceptable Thin-Sets

- CUSTOM BUILDING PRODUCTS: Glass Tile Thin-Set Mortar \*†
- CUSTOM BUILDING PRODUCTS: MegaLite Crack Prevention Mortar
- LATICRETE: Glass Tile Adhesive\*
- SGM: Floor & Wall Thin-Set Mortar 727 mixed with Southcrete 28 Flexible Mortar Additive
- TEC SPECIALTY PRODUCTS: Super Flex Premium Performance Universal Latex-Modified Thin-Set Mortar

\* *Bright-white*

† *Color controlled for bag-to-bag consistency*

### Unacceptable Adhesives

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

### Acceptable Grout

We recommend grouting Oceanscapes and Aquascapes glass tile with a high performance cement grout (ANSI A118.7). The finish grout joint size of approximately 1/8" allows the use of either sanded or non-sanded grout. When installed with standard grouting technique, 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 recommendation and limitations.

### Unacceptable Grout

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

## 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.

## MOSAIC INSTALLATION



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



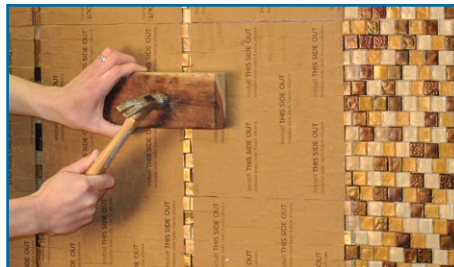
**Step 2** To establish the proper depth of the setting bed, use a 3/16"x1/4" v-notch trowel to apply additional thin-set and comb full notches in one direction.



**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.



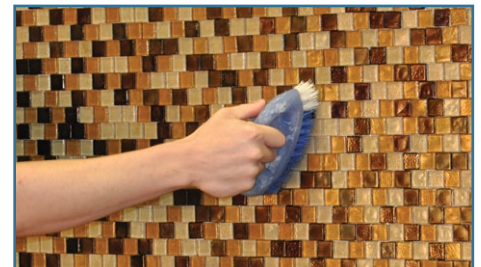
**Step 6** After 15-30 minutes, (floors can be removed sooner) lightly wet the paper. Keep the paper wet by wiping with a damp sponge several times over a 5-10 minute period. After the paper has absorbed the water, the glue will release.



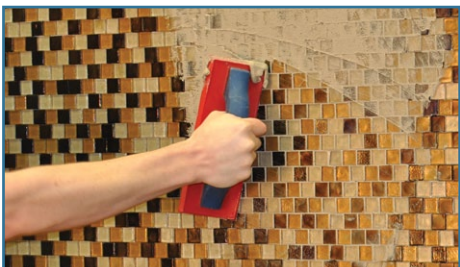
**Step 7** Peel the paper from the tile starting at the corner. Removing the paper while the setting material is still fresh allows for individual tile adjustment and re-inspection of color consistency.



**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.

## 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 such as:

- Alpha Professional Tools - Vetro
- Daltile - Daltool Glass Tile Blade
- Husqvarna - Superlok Glass+
- MK Diamond - MK 215GL or MK 215GL-XL
- Rodia - Glass Tile Blade
- Saw Master – Cheetah Series Glass Blade (Fine)
- World Diamond Source – Glass Tile Blade

## WET CUTTING PAPER-FACED MOSAICS

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. The following photos document a process, which can be used to facilitate wet cutting while minimizing water contact with the mounting paper.



**Step 1** Cover the saw tray with a piece of 1/4" cement board. This will provide a continuous surface that supports the sheet during cutting and prevents mosaic pieces from falling into the tray's cutting channel.



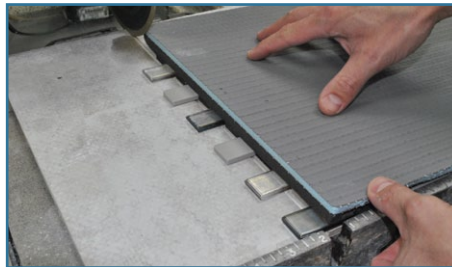
**Step 2** Adjust the blade height so the blade cuts through 1/2 of the cement board thickness.



**Step 3** Cut another piece of 1/4" cement board to a square size that is larger than a sheet of mosaics. Apply a strip of self-adhesive, compressible, foam weather-strip to one edge of the cement board.



**Step 4** With the saw turned off, place the mosaic sheet, paper side up, on the cement board covered saw tray and align the cut.



**Step 5** Place the second piece of cement board on top of the mosaic sheet. Cover the portion of sheet that is to be installed (keeper) with the weather-strip side down and against the blade. The board will protect the mounting paper from saw over-spray.



**Step 6** Place downward pressure on the top layer of cement board, turn the saw on and slowly proceed with cutting. The downward pressure should be sufficient to compress the weather-strip, preventing water from flowing under the board, and stabilize the mosaic tiles during cutting.



**Step 7** Once cutting is complete, turn the saw off, carefully remove the top layer of cement board and quickly towel dry the mounting paper.



**Step 8** Towel dry the back of the tile and install the sheet as normal.

### NOTES:

- Always use safety/personal protection equipment when cutting or drilling glass tile.
- The above process should keep the mounting paper relatively dry during cutting. However, if a sheet becomes saturated, quickly lay it on a flat surface and allow it to completely dry before handling.
- For best results, towel dry the weather-strip between cuts.
- Replace the weather-strip when it no longer recovers its original shape after compression.
- To maintain cut quality, periodically dress the diamond blade with a dressing stone.
- To smooth cut tile edges, use a #120 lapidary stone (tile rub stone), PVA polishing pads or 220 silicon carbide sandpaper.
- Glass mosaics may also be removed from the sheet and wet cut individually or cut by hand using glass mosaic nippers.

## OCEANCARE POOL MAINTENANCE PRODUCTS

National Pool Tile & Oceanside Glasstile are proud to introduce Oceancare, an innovative line of sealing and maintenance products for pool tile. Developed by Oceanside Glasstile 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 pool tile maintenance and provide a complete pool tile maintenance solution without the damaging effects of acidic or abrasive cleaners. Oceancare is designed for use with most pool tiles, including porcelain, ceramic, glass and iridescent glass tile.

For product availability and pricing, please contact your local National Pool Tile, Superior Pool Products or SCP Distributors.

### **Oceancare High Performance Penetrating Sealer – Hybrid Carrier Technology™**

Traditionally, penetrating sealers have been available in either a water or solvent-based formula. Each had its benefits, but the consumer was forced to choose... until now. Through the discovery of a revolutionary water/solvent blending process, High Performance Penetrating Sealer offers the convenience and safety of a water-based formula combined with the ease of use and performance of a solvent-based formula. Superior stain protection\*, low residue, low odor, low VOC's and the ability to seal damp or uncured grout; Hybrid Carrier Technology™ is an evolutionary leap in sealer development and brings you the best of both worlds.

*\* Based on CTI-T72 stain testing.*

Penetrates and protects grout, natural stone and other porous masonry materials. Forms an invisible, no-sheen barrier that is resistant to water and oil and provides superior stain protection. Low residue formula is specially designed to be easier and faster to apply than traditional penetrating sealers. Will not alter the natural look of tile or grout and may be applied to dry, damp, cured or uncured grout or natural stone (seriously... immediately after grouting!).

- Low residue - Low odor - Low VOC
- Protects grout, stone and porous masonry materials
- Seal the same day you grout
- Maintains natural look with no sheen

### **Oceancare Waterline Tile Cleaner**

A 100% natural, non-toxic, citrus-based formula that effectively cuts through body oil, sunscreen and makeup, which accumulate on pool waterlines. Designed for use with all types of pool tile and vinyl pool liners.

- 100% Natural - Biodegradable - Non-toxic
- Soap-free formula is 99.9% phosphate free
- Quickly dissolves waterline grease and grime
- Will not promote algae growth or affect pool pH
- Effective pretreatment for Calcium Releaser

### **Oceancare Calcium Releaser**

A non-toxic, acid-free cleaner that effectively removes calcium deposits and efflorescence from pool tile. Calcium deposits are removed in layers through the use of advanced acid-mimic technology, which specifically targets mineral build-up without damage to the tile surface or metal finishes. When applied prior to media-blasting, Calcium Releaser softens and loosens deposits, which allows for the use of less aggressive media, reduced blasting time and reduced media consumption. Designed for use with porcelain, ceramic, glass and iridescent glass tile.

- Environmentally friendly - Acid free - Non-toxic
- Removes heavy calcium deposits and efflorescence
- Designed for porcelain, ceramic, glass and iridescent glass tile
- Does not affect pool pH

## CLEANING & MAINTENANCE

Proper care and maintenance is crucial to the long-term appearance and performance of any tile installation. The following information outlines the products and techniques recommended for the cleaning and sealing of Oceanside Glasstile pool/water features and is general in nature. For heavy soil and stains that are not removed by the processes in this document, please consult a tile cleaning and restoration specialist.

Maintaining proper water balance and chemistry is critical for the prevention of mineral scale build-up in pools and water features. Water balance is calculated via the Langelier Saturation Index (LSI). The water's LSI is a numeric expression of the water's balance and takes into consideration several factors (i.e. total alkalinity, calcium hardness, etc...). When water is balanced the LSI equals zero and variation between 0.0 and 0.5 is considered acceptable. LSI readings greater than 0.5 may lead to water cloudiness and accelerated scaling (mineral deposits). Negative LSI readings may lead to corrosion of cement-based materials (i.e. concrete, plaster & grout) and metal surfaces. Pool water chemistry should be measured and maintained by a pool-maintenance professional.

Sealer is beneficial for cement-based grout; however it will not penetrate the impervious glass tile. To ease maintenance and protect grout, seal the installation with Oceancare High Performance Penetrating Sealer.

To remove waterline scum and grime, scrub the installation with a nylon bristle scrub brush or a 3M White nylon scrub pad and Oceancare Waterline Tile Cleaner. Scrubbing should be part of a regular, weekly, pool maintenance program.

To remove mineral scale, the installation may also be cleaned with Oceancare Calcium Releaser. Do not use abrasive or acidic cleaners.

If the mineral scale is not removed through the above methods, media blasting may be necessary. Media blasting is generally performed by pool tile cleaning specialists through the use of portable media-blasting equipment. An array of blasting media is available, ranging from sand (aggressive) to baking soda (mild). Generally, baking soda blasting media is aggressive enough to remove scale but will cause minimal damage to the tile. As with all cleaning procedures, this process should be tested in an inconspicuous area to ensure the results will meet your expectations and not damage the tile surface.



Gallon: OCG-50-0005  
Quart: OCG-50-0004

Quart: #OCG-50-1002

Gallon: OCG-50-1005  
Quart: OCG-50-1004

*NOTE: Always wear personal protection equipment, follow instructions for product use and protect surrounding surfaces when using cleaning or sealing products. Test all cleaning/sealing products in an inconspicuous area for desired effect.*

### WARNING

*Certain acids will damage the iridized surface of Oceanside Glasstile. Care should be taken to protect the surface of the glass tile when using acids in the pool finishing process or when adding acid to the pool water. Do not allow products that contain hydrofluoric, hydrochloric, muriatic or phosphoric acid to come in direct contact with the glass tile. In the case of accidental contact, neutralize immediately with baking soda and water (1lb: 3 gallons).*



OCEANSIDE  
GLASSTILE



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Item #0000  
Edition 9/12