

# Boyce & Bean Water & Light Glass Mosaics

## POOL AND SPA INSTALLATION INSTRUCTIONS

**STORE TILE IN A CLEAN, DRY LOCATION. DO NOT STORE IN DIRECT SUNLIGHT FOR EXTENDED PERIODS OF TIME.**

***Before beginning installation, inspect and approve all materials and carefully read these instructions.***

**1. SETTING MATERIAL and TROWEL:** Install *Water & Light Mosaics* using only a true-white thin-set recommended by its mfr. for glass tile. *Water & Light* is translucent; gray thin-set should be avoided because it will dull the appearance of the tile's color. Test your thin-set before you begin to ensure it cures white enough for your installation. We recommend a prof. grade **1/4" x 3/16" V-Notched Trowel**.

We strongly recommend the following **NON-SAG** white thin-set product, which is engineered for glass tile and heavier materials. It provides superior adhesion, eliminating slippage during installation. Follow the manufacturer's instructions.

**Custom Bldg. Products:** MegaLite Crack Prevention Mortar, white

To find a local distributor, contact Custom Building Products at 800-272-8786 or [www.custombuildingproducts.com](http://www.custombuildingproducts.com).

**UNACCEPTABLE SETTING MATERIALS: Epoxy thin-sets and grouts, and mastic adhesives.**

**2. SUBSURFACES and MOVEMENT JOINTS:** Proper installation of tile -- especially in a pool or spa -- is dependent on proper installation of substrates and movement joints. We recommend using the Tile Council of North America's specifications concerning substrates and movement joints. Flexible joint filler shall be used at several key locations which must be determined by an architect or design professional for your particular installation, but typically between the tile and decking, at all inside corners and every 12' – 16' on center in the grout joint. Due to the translucent nature of our product, we do not recommend installing tile directly on top of membrane, because shadowing may show through. Your subsurface should be white, flat, smooth, clean and ready to receive tile. **NOTE:** When using latex Portland cement as a bond coat over cement mortar beds, a 7 to 10 day cure-time is needed prior to the application in order to avoid bond loss or cracking in the finish veneer due to possible shrinkage in the substrate. The Tile Council of America Handbook provides technical information for fountain and swimming pool applications – see methods B417-03 and P601-03.

Tile Council of North America, [www.tileusa.com](http://www.tileusa.com)

**3. TILE CUTTING:** A standard wet-saw with a diamond blade meant for porcelain or glass tile will cleanly cut *Water & Light Mosaics* and may be used for trimming. Hand nippers may be used also when cutting in.

**4. INSTALLATION: Step 1:** Follow the mfr's instructions and remember that the consistency of the thin-set is key to a successful installation. In general, thin-set should be stiff enough to adhere to an upside down trowel but wet enough so that when touched it sticks to your finger. **Step 2:** Using the unnotched side of the trowel, key-in a skim coat of mortar over your substrate. This is similar to priming a wall before painting. **Step 3:** Apply additional thin-set with the notched side of the trowel held at a 45 degree angle. Comb lightly in one direction. **Step 4:** With a **very light touch**, use the UNNOTCHED side of the trowel to smooth out the trowel grooves in the thin-set. *Water & Light* is translucent so trowel grooves must be flattened or they will show through. Try not to remove any mortar. Apply additional thin-set if needed. The goal is to create a smooth, even bed approximately 3/32" thick (not less than 1/16"; not more than 1/8"). **Step 5:** Wipe the underside of each sheet, using a clean, dry cloth to remove residual dust. **With the tape facing up (or out)** set one sheet of *Water & Light Mosaic*. Check to ensure that you are using the correct amount of thin-set. The thin-set should squeeze up the side of the tile slightly. **Step 6:** Each sheet has an arrow on it. Install so that arrows point in the same direction. Set additional sheets. Set sheets in a square formation and work an area no larger than can be tiled while the thin set is moist and tacky (approx. 10 sheets). Take care not to leave visible sheet patterning. Properly aligned sheets will blend together. Hand press each sheet evenly into the thin-set, then use a flat beater board (e.g. a 12" piece of clean 2" x 4") and a hammer to **gently tap** the sheets for a final set. Overlap the beater board across joints to ensure a uniform, flat transition from sheet to sheet. **Step 7:** Always remove the tape from the previous days work before continuing. However, allow the thin-set to cure completely per the mfr's instructions before grouting. **Step 8:** Remove tape by grasping an edge and, keeping as low an angle as possible, pull it backward toward yourself. You can cut the tape along a grout line, creating narrower, easier-to-remove strips. Because the adhesive is water soluble, a dampened sponge may be used as an aid to facilitate tape removal.

**Final Notes:** Continue checking the installation as you proceed per instructions. If you have questions or concerns, call Boyce & Bean at **760-435-9396**. For additional installation instructions see our *Standard W&L Installation Sheet* as well as our *Glass Tile Installation Key Points Sheet*.

**5. GROUT:** We recommend Custom Building Products Polyblend Sanded Grout or polymer modified sanded grouts that are mixed according to the mfr's instructions and recommended for glass tile. Colored grout will impart color variation to the translucent glass. **Step 1:** Apply grout as is typical and as a final step, using a well-wrung sponge, **LIGHTLY** wipe the surface of the tile, moving diagonally across the grout lines. Remove as much residue and haze as possible. Leaving the tile clean at this stage will circumvent the need for heavy cleaning later. After each pass, rinse and wring the sponge -- a clean sponge is critical at each pass. **Step 2:** 48 hours after installation, polish the tile clean using cheese cloth and, if necessary, clean with a non-acidic grout cleaner (e.g. *Tile & Grout Cleaner* by Aquamix) available at most home improvement or tile stores applied with a standard kitchen Scotchbrite pad. Use according to the mfr's instructions. **Step 3:** You can use a sulfamic acid cleaner applied with a Scotchbrite pad (e.g. *Custom Clean* from Custom Bldg. Prod. or *C-Clean* from C-Cure) to remove any stubborn residue. Use according to the mfr's instructions.

**Note:** After grouting, cure the entire installation a minimum of 21 days before submersion.

Due to the handmade nature of our glass tile, there will be variations in color, shade, texture and size. Frequently you may notice bubbles, wrinkles and folds, which are characteristics of a cast glass product. **CLAIMS:** Our liability is limited solely to the replacement of our product and only after we have determined that the material is unsatisfactory and our investigation supports the claim as legally obligating. The Buyer is responsible for both inspection and acceptance of our materials prior to installation. The Buyer is also responsible for determining whether the product is appropriate for a particular installation. Use of the tile constitutes full acceptance. No adjustments will be made after the tile has been installed. We strongly recommend that the Buyer use the Tile Council of America's specifications pertaining to tile installation and preparation of sub surfaces (see TCA Handbook for Ceramic Tile Installation) V010108-3