



Crossville Glass Blox, Origins, Groove Glass, and Convergence Glass Installation and Maintenance Guide

These instructions are meant to be a general guide to most installations, under normal conditions. Please read and understand this information before installation. If you have no specific experience with the installation of glass products, or if you have any doubt about the installation, the use and/or care of glass tile products, obtain professional installation and advice.

When working with glass tile products it is strongly recommended that all components, tile, mortar, grout and substrate, be brought to a workable and consistent temperature (above 60degrees F) and maintained throughout the installation.

APPLICATIONS:

- **Origins Mosaics and Convergence Glass:** Interior walls in wet or dry locations.
- **Glass Blox, Groove Glass Mosaics and Loose tile pieces:** Interior walls in wet or dry locations **and** Exterior Covered Walls.
- **Glass Blox, Groove Glass Mosaics:** Swimming pool waterline only.

Acceptable substrates include cement backer units and/or concrete masonry block; gypsum wallboard can be used for dry interior walls only. Cement mortar beds are acceptable after a minimum 10-day cure time.

INSTALLATION INSTRUCTIONS

Verify products BEFORE installation for any visible defect and/or other aspects that may be questionable, such as, but not limited to: shade variations, chipped edges, scratched surfaces, correspondence between ordered and supplied products, etc. Installation of products claimed to be defective or not corresponding to customer's expectations constitutes acceptance of the product "as is" and no claims will be accepted after installation.

It is strongly recommended that you **not** use the following setting materials:

- Organic Adhesive (mastic) may become yellow and their bonding strength is generally weaker.
- Epoxy is not flexible enough, it may degrade and change color in sunlight.



As with all tile installations, expansion joints are necessary. Follow Tile Council of North America guidelines EJ 171. As stated in Crossville's Technical Services Bulletin 11-24-04:

*Be advised, Crossville believes it is necessary to emphasize and remind owners and installers that glass tile does expand and contract more than ceramic and porcelain tile. This movement needs to be accommodated in the installation, particularly where **high and low temperature changes may occur**. Be sure to use flexible sealant/caulk joints anywhere tile work abuts restraining surfaces such as perimeter walls, inside corners, dissimilar floors, curbs, counters, backsplashes, columns, pipes, ceilings, cabinets or any projection through the tiled surface and in compliance with Tile Council of America guidelines. This recommendation is standard installation procedure though frequently ignored with ceramic tile. **It is critical with glass tile installation.***

For setting the tiles and mosaic sheets, a consistently white thin-set mortar, modified with polymer or latex and compliant with ANSI 118.4 specifications.

First, use the flat edge of the trowel to “key”/ press the thin-set onto the substrate.

Second, a ¼” x ¼” square or round notched trowel should be used to gauge the proper depth of the setting bed.

Third, all trowel ridges in the thin-set must then be smoothed out using the flat edge of the trowel to achieve a smooth setting bed, before setting the tile.

Following steps 1-3, any Un-mounted individual tiles, additionally should be “back-buttered” with a **thin**, continuous layer of the mortar. An important note, when back-buttering individual glass tiles, do not OVERBUILD the mortar. As the mortar cures, shrinkage may occur that can crack the glass tile. Work small areas of 4 to 6 square feet that can be accomplished in 15 to 20 minutes. This will assure bonding mortar remains fresh.

Any thin-set mortar that has pushed up into the joints must be removed. Scraping the joint with a wooden shim (as wide as the grout joint is) will work best and won't damage the glass.

GROUTING

When selecting the grout color, consider that the glass tiles are made of transparent glass. The color of grouting materials will be visible from the edges of each tile. Make the grout color selection accordingly!

Use sanded or non-sanded grout, modified with polymer or latex, compliant with ANSI 118.6. After installation it is recommended the tile be cleaned with grout cleaners that are generally accepted, for example Aqua Mix Grout Haze Clean-Up. Wipe off the heavy grout residue with a clean, white nylon scrub pad or with clean cheese cloth. Finish with a clean grout sponge or damp terry cloth towel. Always use clean cloths white if possible, as some fabric

dyes may color the grout joint. **Some grout cleaners may change the grout color: if in doubt, test first in an inconspicuous area.**



DRILLING and CUTTING

Always wear eye protection when cutting, drilling or grinding glass tile.

Cutting: Use a glass cutter (score and snap) with a new scoring wheel, or a wet saw with a new diamond rimmed blade **designed to cut glass**. Blades designed for cutting ceramic tile are not to be used: they can make a coarse cut and that causes unwanted chips and irregularities along the cutting line.

To maintain consistent smooth cuts and before the cuts become coarse, re-dress the diamond blade with an abrasive dressing stone, to expose a fresh layer of diamonds on the blade rim, or replace the blade.

Cutting will leave sharp edges and corners. These edges should be smoothed and dulled with a diamond hand pad or similar abrasive tools.

Drilling holes: If possible, drill holes before installing the tile and drill from both sides. This will help reduce chips and cracks. A new diamond tipped core bit with a low speed drill (200 to 300 rpm) will give the best results. Continuously spray water on the drill bit and the glass surface that is being drilled.

If you drill holes for anchoring bolts, keep the hole at least 1/8" larger than needed to avoid stress transfer from the anchor and/or bolt to the tile; otherwise this stress may cause cracks and/or chips.

DRYING TIME

Glass tiles are non-absorbing; the moisture in the setting materials cannot migrate into the glass, it must evaporate slowly through the grout joints. This process requires a longer cure time. Allow the mortar to dry at least 36 to 48 hours before grouting.

CARE AND MAINTENANCE

Normally, it is sufficient to wipe the glass surface with a damp sponge or cloth. When stronger cleaning is needed, any standard, **non-abrasive** floor, wall or glass cleaner can be applied with a non-abrasive sponge or cloth. Residue from "hard water" can be removed with specific cleaners (such as vinegar-based products), however, these cleaners may affect colored grouts and a test should be made first in an inconspicuous area.



LIMITED WARRANTY

CROSSVILLE INC. expressly warrants for a period of 90 days from delivery or until installation, whichever occurs first that Crossville Glass Blox, Origins, Groove Glass, and Convergence Glass wall tiles, as delivered, will be reasonably free of defects in materials and workmanship, and that when properly handled and stored, will conform within accepted tolerances, to applicable manufacturing specifications. This limited warranty only applies to Crossville Glass Blox, Origins, Groove Glass, and Convergence Glass wall tiles which are stored and handled in the manner recommended by CROSSVILLE INC. Due to the variety of applications in which Crossville Glass Blox, Origins, Groove Glass, and Convergence Glass wall tiles may be used, and because specific installation details, structural design and environmental conditions are beyond the control of the Company, CROSSVILLE INC. cannot accept responsibility for the performance of these products after they are installed. Except for the express warranties set forth above, CROSSVILLE INC. makes no other warranties, expressed or implied, including, but not limited to any implied warranties of merchantability or fitness for a particular purpose.

Buyer's exclusive remedy for any loss or claim reported to CROSSVILLE INC. within the warranty period resulting from the use or inability to use these products shall be replacement of the defective Crossville Glass Blox, Origins, Groove Glass, and Convergence Glass item, or at the option of CROSSVILLE INC, return of the product and refund of the purchase price. In the event of a perceived defect, please contact the dealer or distributor for proper claim information. All Crossville Glass Blox, Origins, Groove Glass, and Convergence Glass wall tiles must be inspected upon receipt, before accepting merchandise, for claims made due to breakage during shipment.