

INSTALLATION INSTRUCTIONS

These instructions are meant to be a guide for most installations, under normal conditions. Please follow best practice instructions found in the Tile Council of North America (TCNA) 09300 Handbook for specific installation types.

MATERIAL INSPECTION

 Natural stones are products of nature; therefore, variations in color, pattern, texture, and veining will occur. Verify all products before installation for any damage or defects such as chipped edges, broken pieces. No adjustment will be made after installation.

We always recommend dry-fitting your pattern first to think about your cuts in advance and to make sure you like the pattern. This will also help you choose which pieces go where, which is especially helpful with tiles that have a lot of variation. Due to the nature of the material and production process it may be possible to see through clear glass on certain angles which can appear as a lighter line along the edges of the glass. This is not a factory defect or deficiency of any kind in the material and should be expected by the end consumer.

*Always use appropriate personal protective safety equipment when handling, drilling, cutting or grinding tile such as (but not limited to) eye, ear and hand protection.

SUBSTRATE

Tile must be installed over a suitable substrate to insure a proper installation. Tile should be installed over a clean, sound, and flat surface, free of contaminates including curing compounds. Substrate should be free of cracks. Cement board, concrete or drywall is best, as these surfaces can handle the moisture of the tiling process. Plywood should be avoided, since the wood will warp with the added moisture and it will also be less waterproof, even after tiling.

If used in a wet area you must waterproof. See manufacturer's recommendation on a membrane for crack and water protection that is compatible with the setting material you are using.



Expansion joints should be installed at all changes in plane in the tile work and where tile abuts restraining surfaces, therefore silicone caulking sealant must be installed in all corner joints in place of grout.

INSTALLATION MATERIALS

Thin-Set

- To avoid affecting the color of the tile, white thinset is strongly recommended for all installations.
- Apply as much adhesive as can be covered within 10-15 minutes.

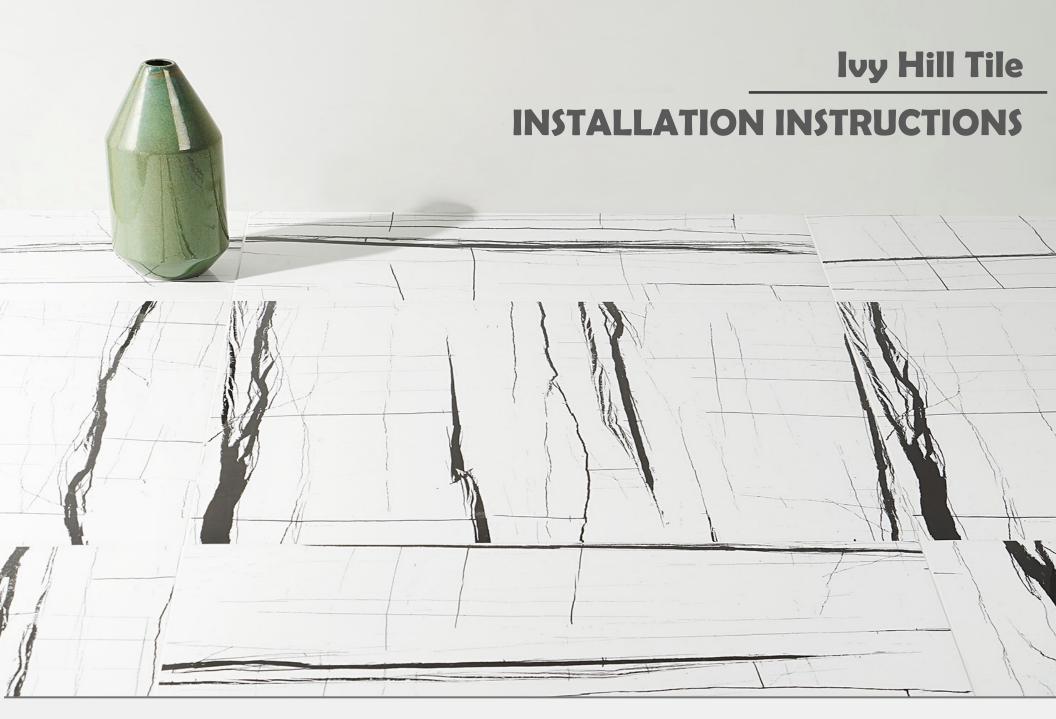
Tiles larger than 3x3 should be back-buttered with a thin continuous layer of the thin set applied with the flat side of the trowel

Drying Time

All setting material, even rapidest mortars need a longer time to cure. Allow thin-set mortar to dry completely prior to grouting or otherwise interfering with the fresh installation.

CUTTING

• Use a glasscutter (score and snap) with a new diamond wheel for best results when cutting our glass tiles. Wetting the diamond wheel with oil before cutting will produce the smoothest cuts. In some cases it may be possible to use a wet-saw with a new, continuous rim diamond blade specifically designed for cutting glass. To cut angles without a wet saw or grinder, drill a small hole at the apex of the angle prior to cutting. In most cases, this will allow the use of a score and snap cutter and avoid small cracks that can happen at the angle. Cut edges and corners will be sharp. Edges can be sanded smooth after cutting.



DRILLING

If possible, drill holes before installing tile. Drilling from both sides can ensure a cleaner finish if the hole will be visible after installation. Using a new diamond coring bit (for large holes) or spade bit (for small holes) with a diamond tip made for glass drilling will give the best results. Lubricating the bit and tile surface with a continuous spray of oil/water mix will prolong the life of bits and provide a better-finished edge. When possible, the use of a jig will ensure precise placement of holes to be drilled.

When drilling holes for anchoring bolts, plumbing or any other dissimilar material always ensure a minimum of 1/8" clearance around the item is provided to avoid cracking due to disparate expansion and contraction rates or stress transfer.

GROUTING

It is recommended to use grout release, then grout the tile, then use an approprate sealant to the tile.

Both Sanded and Non-Sanded grouts are acceptable for use in most cases. We recommend Sanded grout for joints larger than 1/8 inch and Non-Sanded for 1/8 inch or smaller. Non-sanded grout that is latex or polymer modified and compliant with A118.4 should be used for our glass and marble material. If sanded grout must be used for technical or aesthetic reasons (such as with mosaics with larger grout joints), gentle application of grout with a soft rubber float is recommended to minimize the possibility of surface scratching. A mock up or testing installation should be executed to ensure results are acceptable.



Grout joints should be packed full and free of voids and pits. Clean excess grout as the work progresses before it has hardens completely. After grouting, wipe of excess surface grout with a slightly damp sponge - **do not over wash**. After initial wash has been allowed to haze, wipe once with minimal pressure at a 45-degree angle to joints and rinse sponge after wiping once with each side. Any remaining haze can be buffed off with a dry towel or cheesecloth after grout surface has dried sufficiently. Grout joints should be a minimum of 1/16" and not butt set. Clean excess grout as the work progresses before it has hardened completely. In the event that a grout haze forms, you can use an acid-free remover such as <u>Deterdek</u> to remove it. Acids should never be used for cleaning grout haze.

SEAL

 After the stone tile is installed, and grouted, seal the stone with an appropriate high quality breathable stone sealer, to minimize water absorption, efflorescence, and potential staining.
We recommend a <u>polished sealer</u> for polished stone. If necessary, a color enhancer may be

applied to bring out the true color of the stone at any time after grouting. Follow sealer manufacturer's installation instructions. Reseal tile when the stone gets darker or as needed.