GLASS TILE CHARACTERISTICS

Leaf's glass material is made of clear & transparent, low-iron glass. The back of the glass tile is coated with the desired pigment(s) and a white protective coating visible from the back of the tile. The multi-layered protective coating is fired with the tile and ensures that thinset mortars will not be visible after installation. Pigments & glass are made from natural minerals and as such the firing process will cause slight variations in shade & size. All material is sorted according to ANSI standard A137 size tolerances and packing is clearly marked with caliber and shade/tone/dye-lot. Mosaic formats are fiberglass mesh-mounted.

Due to the nature of the material and production process it may be possible to "see through" the 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 ad should be expected by the end costumer.

APPLICATIONS

Glass tile is applicable for interior or exterior applications, in dry or wet areas. Mesh-mounted mosaics are not recommended for submerged areas such as (but not limited to) pools, fountains or shower-bases.

INSTALLATION INSTRUCTIONS

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

Verify all products before installation for any damage or defects such as chipped edges, scratched surfaces. Confirm the caliber and dye-lot shade, all packing is clearly marked with shade (overall color tone) and caliber (allowable size variation). **It is not recommended to mix dye lots or calibers.**

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

Cutting:

Use a glass cutter (score & snap) with a new diamond wheel for best results when cutting our glass material. Wetting the diamond wheel with oil before cutting will produce the smoothest cuts. In some case it may be possible to use a wet-saw or angle grinder with a new, continuous rim diamond blade specifically designed for cutting glass but beware of chipping the back-painted finish with these tools. Do not use 'turbo' or other notched blades designed for use

with porcelain or ceramic as the teeth can cause a coarse cut, resulting in a heavily chipped edge.

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 & snap cutter and avoid small cracks that can happen at the angle.

Cut edges and corners will be sharp. Always be sure to smooth cut edges manually with a diamond hand pad or ceramic dressing stone.

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) 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" (3mm) clearance around the item is provided to avoid cracking due to disparate expansion & contraction rates or stress transfer.

Installation:
When setting glass tiles & mosaics we recommended the use of polymer or latex modified thin set or medium bed mortar compliant with ANSI standard A118.4 and is recommended for use with glass tile by the manufacturer. We recommend using white thinset for light colors and grey thinset for dark brown, grey and black glass. Always follow setting material manufacturer's instructions.

Strip mosaic formats should be planned with an offset pattern to ensure the integrity of the random look. Regular lines can appear if each sheet is not offset from the directly adjacent courses.

3/16 or ¼ inch square-notch trowel should be used when installing our glass material and ridges should be smoothed down with the flat side of the trowel prior to fixing the tiles in the mortar bed. Tiles larger than 3x3" (69x69mm) should be "back-buttered" with a thin continuous layer of the thin set applied with the flat side of the trowel.

Drying Time:
Glass tiles are non-porous: the moisture in the setting materials cannot migrate through the glass and must evaporate slowly through the joints. All setting materials, even rapid-set mortars need a longer time to cure. Allow thin-set mortar to **dry completely** for a minimum of 48 hours prior to grouting or otherwise interfering with the fresh installation.

GROUTING

Non-sanded grout that is latex or polymer modified and compliant with A118.4 should be used for our glass material. If sanded grout must be used for technical or aesthetic reasons, gently 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. Epoxy grouts or adhesives should not be used.

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 a minimal pressure at a 45-angle to joints and rinse sponge after wiping once with each side. Any remaining haze can be buffed off with a dry towel or cheese-cloth after grout surface has dried sufficiently.

Care should be taken to place requisite non-cementitious expansion joints in any glass installation to allow for normal expansion and contraction of the material and preserve the installation from stress fractures. Many grout manufacturers will make urethane or silicone based products to match cementitious grouts for this purpose.

Expansion joints should be placed in areas such as (but not limited to); glass meeting a dissimilar material; any change of plane (like counter to backsplash or floor to wall); and around perimeters of installation.

CARE & MAINTENANCE

For normal care and maintenance of glass tile, wiping the surface with a damp sponge or cloth with water or a light vinegar solution is sufficient. If stronger cleaning is needed, a nonabrasive, neutral pH cleaner can be used.

Glass tile may be damaged from impact with hard or heavy objects, which can lead to chipping or breakage causing sharp cutting edges that can lead to injuries. Always replace any damaged glass tiles immediately.