

# INSTALLATION BULLETIN #9

## INSTALLATION OF LARGE FORMAT GLASS TILE



### PREPARATION OF SUBSTRATE

All supporting surfaces shall be structurally sound, solid, stable, level, plumb and true to a tolerance in plane of 3 mm in 2,4 m (1/8" in 8") for walls and 6,3 mm in 3 m (1/4" in 10') for horizontal surfaces. They shall be dry, clean and free of dust, oil, grease, paint, tar, wax, curing agent, primer, sealer, form release agent or any deleterious substance and debris which may prevent or reduce adhesion.

Mechanically sand and scarify the substrate to completely remove all paint, loosely bonded topping, loose particles and construction debris.

Level uneven concrete surfaces to above tolerances using Flextile 57 levelling mortar mixed with Flextile 43 Acrylic Mortar Additive. Apply levelling mortar to dampened concrete using a flat trowel. Allow to cure for a minimum of 24 hours at room temperature. Extended curing may be required at temperatures below 20°C (70°F). All substrates shall be dry. Refer to Flextile Bulletin # 7 Surface Preparation – Concrete Slabs and current edition of TTMAC 09300 Tile Installation Manual or TCA Handbook for Ceramic Tile Installation for all other substrate preparation details.

Acceptable substrates:

Well cured mortar beds—ANSI A108.1B (cured a minimum of 7 days).

Concrete slabs (on grade) cured for 28 days minimum

Cementitious backer units (CBU)—ANSI A118.9.

Gypsum board (dry areas only)—ASTM C1396: **The maximum loading recommended for Gypsum Board is 5lbs/ sf including setting and grouting materials.**

### Crack Isolation and Waterproofing

Where a waterproof barrier is required and crack isolation is recommended apply Flextile WP 980 Crack Isolation and Waterproof Membrane on the substrate prior to large format glass tile installation following WP980 Technical Data Sheet installation procedures.

### Movement Joints

Follow detail 301MJ in TTMAC 09 30 00 Tile Installation Manual and EJ171 in TCNA Handbook for Ceramic Tile Installation for expansion and control joints recommendations.

### Cutting of Large Format Glass Tile

Glass Tiles should be cut in a slow, cautious manner. Use a water saw blade, such as the Glass Cutting Blades shown here, in 8" and 10" (stock codes FLO.GLASS.BLADE-GB8, FLO.GLASS.BLADE-GB10, DOM.TARGET.GLASS-8, DOM.TARGET.GLASS-10).



**To properly cut large format glass tile two cuts should be made, the first halfway through on the face, and then the material should be turned over and the cut completed from the back side. PROTECTIVE EYEWEAR SHOULD ALWAYS BE WORN!**

*For job specific installation systems, recommendations, project warranty information, or for assistance with installation specifications, please contact Flextile's technical department.*

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## INSTALLATION

Install using Flextile 51 White Thin-Set Mortar mixed with Flextile 44 High Solids Acrylic Mortar Additive (ANSI A118.4), or Flextile White 58XT Fast Setting Two Component Mortar System.

Spread an even coat of mortar to substrate using a minimum 6 mm x 6 mm (1/4" x 1/4") notched trowel and in all cases "back-butter" simultaneously each piece with the flat edge of the trowel to provide a void-free installation with no unsupported areas and 100% contact with the mortar-bed. Lay the tiles while both mortar surfaces are fresh.

Spread only enough mortar that can be covered with tile before mortar starts to skin. On walls, start installing at the lowest portion of the wall. Support the tiles with wedges to prevent sagging.

Beat tiles in thoroughly and sufficiently to cause mortar ribs or notches to come together into a continuous void free bed and to allow the mortar to flow up partially into the joint space to approximately 1/3 the thickness of the tile. Remove any excess setting material from the joint area so that 2/3 of the depth of the tile is available for grouting.

Remove smudges or smears of setting material from the surface with a damp sponge or cloth immediately after final adjustment and beat-in while the mortar is fresh.

Allow installation to cure for a minimum of 24 hours prior to grouting.

## GROUTING

Follow grouting instructions in Flextile grout product technical data sheets.

Always do a small application in an inconspicuous test area to confirm, before proceeding with the grouting of the entire work.

Where joint widths are 1.5 mm (1/16") to a maximum of 3 mm (1/8"), grout using Flextile 500 series non-sanded polymer-modified grout.

Where joints widths are 3 mm (1/8" ) and wider, grout using Flextile 600 series sanded polymer-modified grout.

Where chemical and stain resistance is required grout using Flextile ColourMax Urethane Grout.

**IMPORTANT NOTE:** Some glass tile may be prone to abrasion using sanded grout. This should be verified prior to grouting by doing a small test application on the loose tile. Use Flextile 500 series non-sanded polymer-modified grout.

Using a rubber float, spread the grout diagonally across the tile surface, applying enough pressure to fully pack the joints. Remove excess grout from the tiles with the rubber float held at 90° to the surface, working diagonally across the joints to produce flush, even grout joints. Once grout is firm in the joints, remove any grout haze or glue residue with a clean, damp sponge or cheesecloth. Note: dampening tile surfaces lightly with a clean sponge and water prior to grouting facilitates easier removal of excess grout. Once grout has dried, polish tile surface with a clean cloth or towel.

Allow installation to cure for a minimum of 24 hours before opening to traffic.

## CAUTION

- Do not install when temperature is below 10°C (50°F)
- Maintain temperature in tiled areas at not less than 10°C (50°F) or more than 35°C (95°F) during installation and for 7 days after completion.
- Use WHITE thin-set mortars only

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