

TOMEI MODULES: INSTALLATION GUIDELINES

Please read carefully before beginning installation.

Installing large format glass tile involves some basic procedures that differ from installing glass mosaic, ceramic or stone tile. Following these procedures will ensure a successful installation. This guide covers installation of Tomei Modules glass tile on interior and shower walls. This product should NOT be installed on floors, in steam showers, exterior applications, or submerged water environments.

The owner or owner's representative is responsible for determining the acceptability of the product. Prior to installation OPEN AND INSPECT ALL BOXES to verify tile series, size, color and finish. Notify your tile dealer immediately of any damage, defect or other issue. Installation constitutes acceptance.

PREPARATION

Glass tile must be installed over a properly prepared substrate – a clean, sound, flat surface that is free of cracks, contaminants, sealers, paint, adhesives, and should be free of deflection. This is one of the most important factors in ensuring a good installation. Due to the larger size of our Modules Series, extra steps should be taken to ensure that the substrate is sound and free from flex or movement.

Approved Surfaces for Setting

All substructures to receive glass tile should designed in accordance with the "International Residential Code" (IRC) for residential installations, and the "International Building Code" (IBC) for commercial applications.

All surfaces to be tiled must be flat. The maximum allowance for variations to be no more than $1/8^{th}$ "in 10', or no more than $1/16^{th}$ "in 2'.

Preferred Substrate:

Well cured mortar beds (ANSI A108.1B Standards-cured a minimum 7 days).

Cement Board/backer units (CBU) to ANSI A118.9 Standards

(Note: An ANSI A108A-2.1.8 membrane is required behind all CBU installations in wet areas).

Gypsum board (dry areas only) installed to ASTM C1396 or ASTM C1396M-04 Standards.

Fiber-Cement Board Installed to ASTM C-1396

Do not install glass tile directly over particle board, plywood or painted surfaces.

INSTALLATION PROCESS

Installation Tips

With flat side of trowel firmly key in setting material to substrate. Work in areas no greater than can be covered with the tile before the adhesive mortar is skinned over.

Using a 3/16" V-Notch trowel apply additional adhesive and comb full notches in a singular direction.

Please remember to *flatten* all trowel marks prior to installation. Voids or comb marks behind the tile may become highly visible after grouting is completed.



Important: It is critical to the success of the installation to first clean and wipe the back of all tiles prior to installation. We recommend using a 90% or above Isopropyl Alcohol applied to a clean micro fiber cloth. Please ensure that all dirt, dust and debris are removed prior to installation.

With the flat side of the trowel, firmly apply adhesive to the back of the tile (back-butter), achieving 100% coverage.

While the adhesive on both the substrate and the back of the tile is still wet and tacky (not skinned over), press the back-buttered tile into the bed using firm and even pressure to establish contact and eliminate voids behind the tile.

The setting bed behind each tile after embedded should no less than 3/32" and no greater 3/16".

Glass spacing should be no less than $1/8^{".}$

TIP: Grout selection should be made prior to installation. It is critical that the setting material closely match the chosen grout color to avoid any visible irregularities between and under the tile. Some manufacturers allow for their thin set to be tinted, when working with fused back tile it is a good idea to match them as closely as possible. Please check with chosen setting material manufacturer for recommendation prior to starting installation.

CUTTING TOMEI MODULES

Always use a high-quality blade specifically designed to cut glass tile. Always keep your cutting surface clean and free of debris. Use a dressing stone to keep the diamonds clean and to reduce chipping. Cut at steady speed, not too slow, using plenty of water. Tip: The back can always be cut first making sure depth is slightly more than ceramically fused backing. Turn the tile over and then cut at normal depth through the tile.

Cutting Guidelines

- We recommend WET cutting and/or score and snap method ONLY
- Do NOT dry cut using power tools
- · Improper cutting techniques could expose installer to harmful silica dust

California Residents Only - Prop 65

• WARNING: This product can expose you to silica dust that is known to the State of California as harmful. Airborne particles of respirable size are created when product is dry cut or ground. Please strictly adhere to the cutting guidelines. For more information, please visit www.P65Warnings.ca.gov.

Cutting Glass Tile	Drilling Holes
 Use ONLY a WET saw with a diamond blade for glass: <i>Montolit CPV Series; Alpha Vetro Series; MK Series</i> Do NOT dry cut using power tools To prevent rough edges, cut at a steady speed. Cutting glass tile slowly increases the risk of vibration and chipped edges. 	 WET drill tile <i>before</i> installation. Drilling from both sides will minimize chipping and cracking Use a diamond core bit at low speed (250 to 300rpm) Constantly wet the tile and drill bit with water during drilling to prevent tile from cracking Openings should be 1/8" larger than fixture fittings to avoid stress transfer to the tile

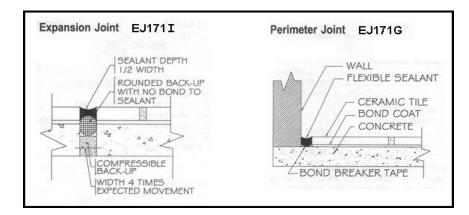


EXPANSION OR SOFT JOINTS

Movement/Expansion Joints: Refer to TCNA -EJ171

A soft joint is required between any change in direction or 90-degree angle and any dissimilar material within the tile installation (tile to tile, tile to metal, tile to wood).

The following recommendations do not consider the frequency and width for substrates subject to deflection, shrinkage, and expansion.



All example calculations only consider thermal lineal expansion of the tile. All other considerations are specifically excluded and must be estimated by the design professional or engineer.

Interior perimeter wall joints, changes in plane and 90-degree angles preferred not less than $\frac{1}{4}$ " but never less than $\frac{1}{8}$ ".

GROUTING

We recommend using non or un-sanded grout with our Tomei Modules tile. Apply grout following the material manufacturer's instructions and let dry 10-20 minutes. Using a slightly damp sponge, wipe diagonally across the tile to remove grout film and haze from the surface. Let dry, then wipe with a lint free cloth as a final step, buffing away all residual grout from the surface of the tile.

GROUT HAZE

Do not allow grout to fully dry on the surface!

Grout haze is a very thin layer of grout which results from allowing the grout to fully dry on the surface of the tile. **During installation** the grout must be completely wiped from the tile surface followed by buffing with a soft cloth to remove any residual grout film. Once the grout dries overnight there is little that can be done to remove grout haze, aside from washing the tile with one of the commercial acid grout haze removers.



SETTING MATERIALS

ARDEX www.ardexamericas.com	•S 48 [™] Rapid-Set Mortar (Wet/Dry Areas)
BOSTIK www.bostik-us.com	$ullet$ ReFlex ${ m I}$ Ultra-Premium Latex-Modified Thin Set Mortar (Dry Areas Only)
LATICRETE www.laticrete.com/home.aspx	 Glass Tile Adhesive Mortar (Wet/Dry Areas) 254 Platinum (Wet/Dry Areas)
MAPEI www.mapei.com/US-EN	 Adesilex[™] P10 Bright White mixed with Keraply Mortar Additive (Wet/Dry Areas)
TEC Specialty Products www.tecspecialty.com	• Super Flex [™] Ultra-Premium Thin Set Mortar (Wet/Dry Areas)

Acceptable systems for glass tile installation are continuously revised, as new technologies become available. While we are providing this basic list, this list should not be considered exclusive or complete. There may be other manufacturers who produce suitable installation products, including products we may not be aware of. It is the installer's responsibility to be knowledgeable about the most current recommended systems.

RESOURCES & INDUSTRY GROUPS

(NTCA) National Tile Contractors Association	www.tile-assn.com
(TCNA) Tile Council of North America	www.tcnatile.com
(TTMAC) Terrazzo Tile and Marble Assoc. of Canada	www.ttmac.com
(CTIOA) Ceramic Tile Institute of America, Glass Field Reports	www.ctioa.org

Questions? Please contact our Technical Services Department at TechnicalServices@LunadaBayTile.com

www.LunadaBayTile.com

Lunada Bay Tile provides product information and information concerning installation procedures and maintenance practices to assist each of its customers in making selection, usage, installation and maintenance decisions. Customer's selection and usage of Lunada Bay Tile products and the installation procedure and maintenance practice employed by each customer are outside the direction and control of Lunada Bay Tile and are strictly and completely the choice and responsibility of each customer and their installer. Lunada Bay Tile does not warrant any product for any specific use, nor any installation procedure or maintenance practice, and expressly disclaims all asserted claims after installation of Lunada Bay Tile products. See website for specific warranty.