

INSTALLATION GUIDELINES – POOLS, WATER FEATURES, AND EXTERIOR INSTALLATIONS

Only experienced and professional tile installers should install our products in pools. Please read carefully before beginning installation.

PREPARATION

Inspect

Prior to installation verify that material series, size, color, pattern, finish and coverage match the specification and are consistent and acceptable. Installation of a test sheet is strongly recommended. We recommend a minimum of 10% overage on all orders. **Installation constitutes acceptance.**

Protect

Pools or water features should be protected from direct sunlight, excessive heat, wind, precipitation and freezing during substrate preparation, installation and curing. *Follow guidelines set forth in TCNA P-602.*

Prepare

Preparing a pool substrate to receive our tile includes critical, industry-required steps, which are outlined in TCNA P-602.

All surfaces to receive tile shall be sound, smooth, flat, clean and free of dust, oil, grease, paint, tar, wax, curing agents, primers, sealers, adhesive residue, release agents or any other deleterious substance or debris which may prevent or reduce adhesion to the substrate.

The following cure times are industry recommended minimums, however, several materials manufacturers provide products that will impact (reduce) these requirements. Contact your setting materials manufacturer for comprehensive information.

- Shotcrete cure time: 28 days
- Mortar bed cure time: 7 days
- Post-grout (before filling pool with water): 21 days

Waterproofing/Anti-fracture Membranes

Waterproofing and/or anti-fracture provisions are critical to the success of glass tile installation in pools. The acceptable systems available are continuously revised as new technologies become available. Contact our technical support department or contact the department of your preferred materials manufacturer for current products and application procedures in submerged applications.



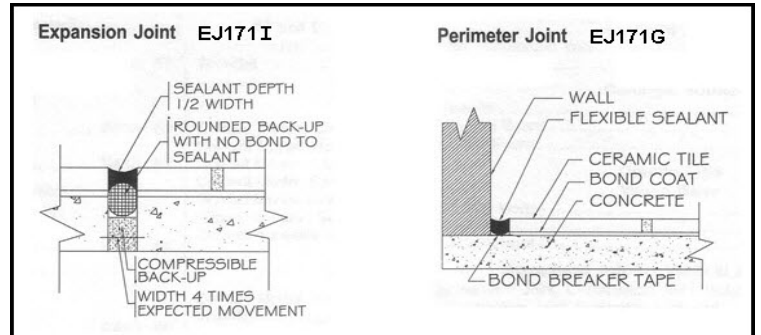
Movement/Expansion Joints: Refer to TCNA - EJ171

Compliance with TCNA EJ171 is essential to a successful glass tile installation.

A soft joint between tile installation and coping is CRITICAL for all glass tile installations in pools.

A soft joint is required between any change of material within the tile installation (tile to tile, tile to metal, tile to coping).

Additional movement provisions may be required based on the conditions of the project.



INSTALLATION

Setting Materials

Many of our glass tiles are transparent/translucent. We suggest using bright white thin-set.

Consult the setting materials product data sheets for instructions specific to submerged applications.

Mastics are unacceptable setting materials with glass tile in pools.

We recommend the following installation products for submerged installations. 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.

CUSTOM BUILDING PRODUCTS
www.custombuildingproducts.com

- Glass Tile Premium Thin-Set Mortar

LATICRETE
www.laticrete.com/home.aspx

- Glass Tile Adhesive Mortar

MAPEI
www.mapei.com/US-EN

- Adesilex™ P10 Bright White mixed with Keraply Mortar Additive

TEC Specialty Products
www.tecspecialty.com

- Super Flex™ Ultra-Premium Thin Set Mortar

Installation Tips

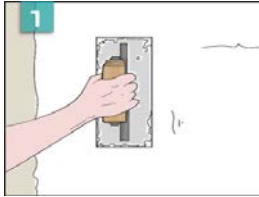
Minimum 95% bond coverage (100% for translucent tile) required when installing glass tile in submerged environments.

A 3/16" x 1/4" V-Notch trowel is recommended for installation. Check periodically during installation to verify proper coverage.

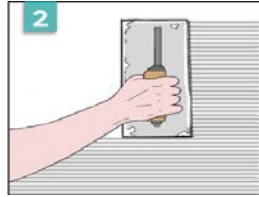
Our glass tiles are paper-face mounted with water-soluble glue. All sheets are printed with the words "Mount This Side Out," indicating that the paper must be facing out. DO NOT install the tile with paper embedded into the thin-set.

Directional sheets must be installed with  in the same orientation for proper alignment of directional blends.

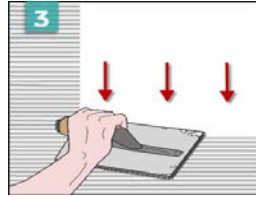
Step-By-Step Mosaic Installation



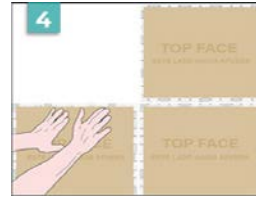
1 Work in areas of 6 – 10 SF. Key in thin-set with flat edge of trowel.



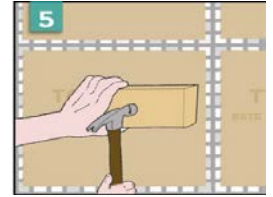
2 Use 3/16" x 1/4" V-Notch trowel to achieve uniform thickness.



3 Lightly knock down the tops of combed thin-set with flat edge of trowel until smooth.



4 Sheets must be installed with PAPER FACING OUT. Gently seat tile into the thin-set, paying attention to sheet lines and directional arrows, if included.



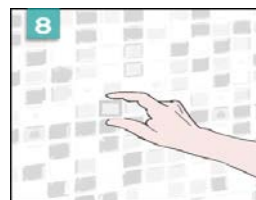
5 Use a beating block to achieve uniform flatness and full bond.



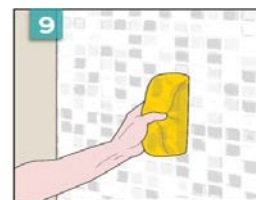
6 Wait 15-30 minutes before lightly wetting the paper with water and a sponge. It may take several passes to properly saturate. Do not use excessive water.



7 Begin peeling paper off 5-10 minutes after wetting. Begin in one corner and pull at an angle towards the opposite corner until paper is free from tile.



8 Adjust tiles as needed.



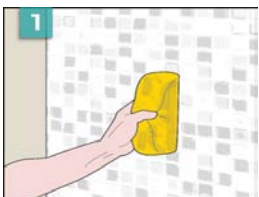
9 Promptly clean excess setting materials from tile surface with a damp sponge.



10 Follow manufacturer's recommended cure times prior to grouting.

Step-By-Step Grouting

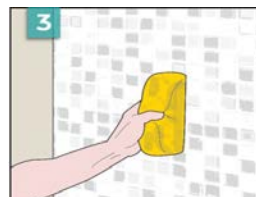
Our artistic glass may contain noticeable surface variations as a result of the manufacturing process. During the grouting process these may become more noticeable if grout residue is left to cure on the surface. A soft bristle brush may be used to remove the excess grout from the surface during the initial cleaning phase. It is critical to remove all excess grout from the surface of the tile before the grout is allowed to fully cure.



1 Pre-wash tile with damp sponge to remove 100% of glue residue before grouting.



2 Apply grout with a rubber float, as normal, making sure joints are free of voids.



3 Use a damp sponge to remove excess grout, leaving only a slight haze residue.



4 Wait 30-40 minutes before polishing off haze residue with a dry terry cloth. Perform as work progresses while grout is fresh.



5 Wait 12 hours before performing a 'final polish' to remove any residual haze with a dry terry cloth.



This document contains supplemental guidelines for installing our products in pools & water features. Recognized industry associations, our technical support team, and technical support teams of material manufacturers should be consulted regarding current standards and proper use of their products in pools. **These instructions are not intended to replace existing industry standards. Only experienced and professional tile installers should install our products in pools.**

Cutting Glass Tile

Use glass tile nippers with carbide cutting wheels.

Use a wet saw with diamond blade for glass. Montolit CPV Series; Alpha Vetro Series; MK Series.

To prevent rough edges, glass tiles must be cut slowly.

POOL START-UP

After final grout, allow installation to cure for 7 days before aggressive cleaning and 21 days prior to filling the pool (unless materials manufacturers approve otherwise).

Protect the installation during the cure time.

Test water chemistry at fill source (tap or hose bib), and once the tank is full to verify water is balanced. Properly balance the water as defined in ANSI/APSP-5 or National Plasterer's Council's startup procedure.

Always protect the installation from adverse environmental conditions during final curing phase.

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

www.MurrineMosaics.com

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