

## CERAMIC INSTALLATION GUIDELINES: SHINJU, SHINJU MIRAI & WATERCOLORS

**Please read carefully before beginning installation.**

**We recommend the hiring of a licensed professional tile installer who is experienced with the installation of ceramic tile.**

**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/pattern, color and finish. Notify your tile dealer immediately of any damage, defect or other issue. Variation in surface, color, shade, shape and size are inherent in artistic hand-crafted tile. Lunada Bay Tile recommends a random sampling be taken from multiple boxes, inspected and blended prior to and throughout the installation process. Installation constitutes acceptance.**

### SUBSTRATE PREPARATION

Concrete slabs (on grade) cured a minimum of 28 days, free of cracks, curing agents and any signs of laitance.

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.

**Do not install ceramic tile directly over Particle Board or Plywood!**

The tile installation's substructure, location and substrate type (e.g. CBU or concrete) will influence the details of how the substrate should be prepared. Appropriate substrate preparation methods are detailed in the Tile Council of North America's "2015 TCNA Handbook for Ceramic, Glass, and Stone Tile Installation" (or current version) and are organized by alphanumeric designation (e.g. W243-15). Refer to the TCNA Handbook for details. The TCNA Handbook is available for purchase at [www.tcnatile.com](http://www.tcnatile.com).

### ACCEPTABLE ADHESIVES

Use Mastic (dry areas only) or Thin-set to install ceramic tiles. Follow the adhesive manufacturer's recommendation for ceramic tile installations and usage requirements.

### PROCESS

Key or apply adhesive into substrate evenly with a v-notch trowel. Work in sections of approximately 2 square feet at a time. A 3/16"x 1/4" V-Notch trowel is recommended for installation. Check periodically during installation to verify proper coverage. Clean back of tile prior to installation.

Before grouting, allow adhesives to cure for the timeframe recommended by the manufacturer. Typically cure times will vary from 24-48 hours.

## MEMBRANES

There are a wide variety of anti-fracture and waterproofing membranes available for use in tile installations. Membranes will vary in type, installation method and performance. Depending on the application, installing Ceramic tile over an anti-fracture membrane may be beneficial. Consult the membrane manufacturer for specific recommendations and limitations.

### 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 dust

#### Cutting Ceramic Tile

- Use **ONLY** a **WET** saw with a diamond blade designed for porcelain and ceramic material
- Do **NOT** dry cut using power tools
- To prevent rough edges, tile must be cut slowly with a liberal water flow
- To minimize chipping, tile must be fully supported during cutting
- Cut edges should be smoothed with a diamond hand pad or similar tool as needed

#### Drilling Holes

- **WET** drill tile *before* 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

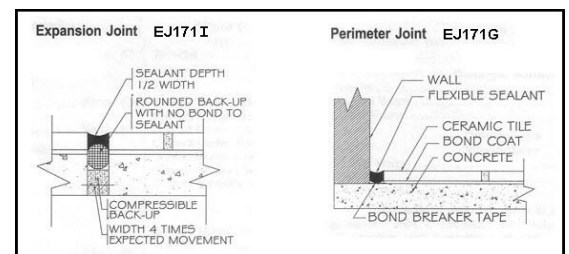
## MOVEMENT JOINTS EJ-171

Movement joints are essential for the success of most tile installations. Follow recommendations on Movement Joints EJ171-15 in the "2015 TCNA Handbook for Ceramic, Glass and Stone Tile Installation (or current version)." Movement joint requirements will vary based on substrata, climate and size of installation. An architect or design professional should be consulted when specifying the exact number and location of each movement joint.

### 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).

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



## GROUTING

We recommend using standard sanded grout with our ceramic 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.

\*Note on Grout Color: Since many of our Shinju patterns have a textured or ribbed surface, we recommend using a similar/complementary grout color to the tile color and to avoid use of a high contrast grout color to minimize the effect of any grout that may remain on the surface after cleaning. If you do choose a contrasting grout color, we recommend that your professional installer pre-seal or use grout release on the tiles to avoid staining. The sealer and grout release should be tested on a sample tile before application on the entire installation.

## 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.

## RESOURCES & INDUSTRY GROUPS

**(NTCA)** National Tile Contractors Association

[www.tile-assn.com](http://www.tile-assn.com)

**(TCNA)** Tile Council of North America

[www.tcnatile.com](http://www.tcnatile.com)

**(TTMAC)** Terrazzo Tile and Marble Assoc. of Canada

[www.ttmac.com](http://www.ttmac.com)

**(CTIOA)** Ceramic Tile Institute of America, Glass Field Reports

[www.ctioa.org](http://www.ctioa.org)

**Questions?** Please contact our Technical Services Department at [TechnicalServices@LunadaBayTile.com](mailto:TechnicalServices@LunadaBayTile.com)

[www.LunadaBayTile.com](http://www.LunadaBayTile.com)

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