NATURAL STONE/VESUVIO INSTALLATION GUIDELINES

Please read carefully and understand this information before beginning installation.

These instructions are provided as a general guide to most installations. We recommend the hiring of a qualified and licensed professional tile installer who is experienced with the installation of natural stone 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 that product is correct series, size/pattern and color. Inspect your natural stone before installation to ensure this product meets your requirements. Notify your tile dealer immediately of any damage, defect, or other issue. Damaged or scratched tiles should be replaced prior to installation. Variation in color, shade, shape, finish, and size are inherent in natural stone. 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. No claims for material defects will be accepted after installation.

ACCEPTABLE SUBSTRATES AND 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.

<u>Do not install natural stone tiles directly over particle board or plywood!</u>

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 current version of the "TCNA Handbook for Ceramic, Glass, and Stone Tile Installation" 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

All substrates must be structurally sound, solid, flat, dry, and thoroughly clean and free of oil, wax, grease, asphalt, latex, and gypsum compounds, curing compounds, sealers and any contaminant that might act as a bond breaker. Per the Tile Council of North America (TCNA) guidelines, all natural stone substrates must meet a deflection rating of L/720. A maximum variation in the sub slab cannot exceed 1/8" in 10' from the required plane per MIA Guidelines (MIA). Subfloor must also be level with the maximum variation of 1/16" IN 3'.

CRACK ISOLATION

Cracks, as well as any areas susceptible to future surface cracking, require the installation of a crack isolation membrane meeting ANSI 118.12 standards and recommendations.

CUTTING

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 Natural Stone and Glass	Drilling Holes
• Use **ONLY** a **WET** saw with a diamond blade for glass: *Montolit CPV Series; Alpha Vetro Series; MK Series* • Do **NOT** dry cut using power tools • To prevent rough edges, glass tiles must be cut slowly	• **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

PRIOR TO SETTING

You must inspect your material prior to installation for color variation, natural veining or overall visual characteristics, tile thickness, sizing, finish, and for possible damage. The industry standard that all material is to be uncrated and inspected prior to installation so that any required blending to meet the owner/buyer approval can be accomplished before any material is set. Absolutely no claims will be accepted for any reason after the material has been installed.

Before being "set" all tiles must be "Viewed and Shuffled" by way of a dry setting. There is a natural range of color, veins and/or fossils that is inherent in this material and to get the proper mix this viewing and shuffling process is imperative. Failure to follow this procedure could leave you with ranges of shades that do not properly flow together.

Stone is a natural material and can react differently with different setting materials, grouts, sealers, and sub- floors. Before setting any tiles, you must test your stone using the setting system and sub-flooring system you have selected for the project. It is highly recommended that a **mockup** is done prior to installation.

All installation methods used should be consistent with recommendations by the Marble Institute of America (MIA) and or the Tile Council of North America (TCNA). Natural Stone must be surface sealed prior to the grouting process, again upon completion of installation and **periodically thereafter** to enhance and maintain the beauty of the stone.

PROCESS

Key or apply adhesive into substrate evenly with the flat edge of the trowel. Work in sections of approximately 2 square feet at a time. Notch or gauge setting mortar using ¼" x ¼" square-notch trowel. Check periodically during installation to verify proper coverage.

Recommended spacing for grouted installations is 1.5mm to 2.0mm, prior to grouting, allow adhesives to cure for the timeframe recommended by the manufacturer. Typically cure times will vary from 24-48 hours.

Setting mortar should be recommended by a setting material manufacturer of choice and approved for use with moisture sensitive stones.

All installation methods used should be consistent with recommendations by the Marble Institute of America (MIA) and or the Tile Council of North America (TCNA). According to the Marble Institute of America (Dimension Stone Design Manual), all natural stone should be set to ensure there is a minimum coverage of 95% when the material is 5/8" or thinner.

RADIANT HEAT

Key After installation, do **NOT** turn on a radiant heated floor until the concrete setting material has completely cured.
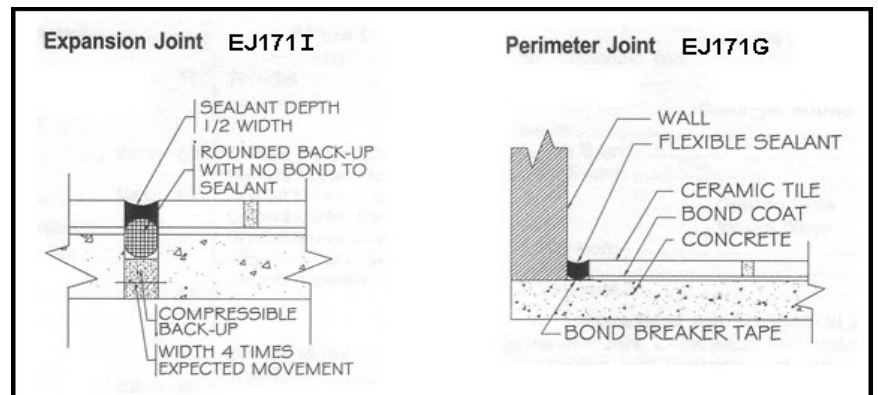
MOVEMENT JOINTS EJ-171

Movement joints are essential for the success of most tile installations. Follow recommendations on Movement Joints EJ171-15 in the current version of the **"TCNA Handbook for Ceramic, Glass, and Stone Tile Installation."** Movement joint requirements will vary based on substrate, 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

Important: Natural Stone must be surface sealed prior to the grouting process, again upon completion of installation and periodically thereafter.

We recommend using a premix or non-cementitious grout with our natural stone tile. Apply grout following the **material manufacturer's instructions**.

NOTE: 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 Color Selection: We recommend avoiding the 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, it is imperative that your qualified installer pre-seal to avoid staining. The sealer and grout should be tested on a sample tile before application on the entire installation.

ACCEPTABLE GROUTS

- Laticrete Spectralock 1 Premix Grout
- Mapei Flexcolor CQ
- Custom Building Fusion Pro
- Litokol Starlike Grout
- Bostik Dimension or Trucolor
- Other grouts of similar and equal quality

SEALING

Apply sealer following manufacturer's instructions. Using a soft, clean cloth, apply a penetrating natural stone sealer before grouting and again upon completion of the installation.

ACCEPTABLE SEALERS

- Fila MP90
- Fila FOB Extreme Sealer
- Miracle Sealant Porous Plus
- Miracle Sealant 511
- Other similar sealers of equal quality

CARE AND MAINTENANCE

For day-to-day cleaning, apply a close to pH neutral cleaner with a soft cloth. Remove the residue with a clean cloth and rinse thoroughly.

RECOMMENDED MAINTENANCE CLEANERS

- Fila Stoneclean
- Miracle Tile & Stone Cleaner

For complete installation instructions please refer to the **Tile Council of North America (TCNA) Handbook.**

RESOURCES & INDUSTRY GROUPS

(TCNA) Tile Council of North America   www.tcnatile.com

(MIA) Marble Institute of America   www.naturalstoneinstitute.com

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

www.LunadaBayTile.com