

TREND ORIGINA® TERRAZZO PANEL INSTALLATION



12/10/2018

CAUTION: Protect TREND Origina® Terrazzo Floors

Never allow heavy objects to travel across non-grouted or newly installed TREND Origina® Floors. Allow all post grouted installations 48 hours, or duration of time recommended by installation material manufactures, prior to traffic. If adhesive or grout manufactures recommend more than one cure time the longest duration of time shall prevail. After 48 hours cover floor with non-asphalt impregnated construction paper, or similar floor protection system, prior to traffic. Allow 7 days after grouting and protect the new floor from rolling loads by placing 1/2" exterior grade plywood over the protective paper, or similar material, in the path of light equipment, such as, small scissor lifts and pallet jacks. Even with plywood no extremely heavy equipment, such as, heavily loaded forklifts shall ever travel across TREND Origina® flooring. The environment, quantity and type of traffic a floor endures will determine how often and to what depth of cleaning process is required to maintain an Origina® Terrazzo floor. Steel wheels shall never be rolled over terrazzo flooring.

1 General Requirements

- 1.1** Contractor/installer shall inspect the installation surfaces and report any unsatisfactory conditions in writing to the general contractor, project architect or owner for corrections prior to beginning installation.
- 1.2** Not all membranes support heavy rolling or point loads. Consult membrane manufactures regarding the appropriate use of their products with TREND Origina® Terrazzo Panels.
- 1.3** The building's owner or owner's representatives are responsible to determine if TREND Terrazzo panels meet the requirements of each installation environment.
- 1.4** TREND Origina® Terrazzo Panels shall not be used in areas where heavy equipment or steel wheels will be rolled across the surface without appropriate protection.
- 1.5** Store TREND Origina® Terrazzo Panels and all associated installation materials, in protected, temperate environments out of direct sun, rain, water, high humidity, wind and dust. Terrazzo panels shall be acclimated in the installation environment of between 60 - 80°F (15.5 - 26.6°C) for a minimum of 24 hours prior to installation. All panels shall remain flat prior to installation.
- 1.6** If you receive terrazzo panels on the job site that appear warped don't worry, this can happen during transport. TREND Origina® Terrazzo Panels are flexible and easy to re-flatten. To re-flatten panels place a flat panel under a warped panel and stack 5 or more panels on top for 12 - 24 hours. Panels must be stored horizontally on a flat surface.
- 1.7** Generally two people can move panels, however, suction cup moving devices and 8' rolling tables are often useful to move panels from storage, prepare for installation, fabrication, adhesive application and to installation locations. Multiple people and suction cupped frames may be required to successfully move fabricated/altered panels.

2 Contractors / Installers

2.1 Due to the nature of thin dimensional panels the requirements for installation varies from conventional tile installation. To assure the highest quality of installation is achieved contractors/installers with thin-panel installation knowledge, tools and workforce should be employed. Make sure installers of TREND Origina® Terrazzo Panels read and understand these installation instructions prior to commencing work.

3 Substrate Preparations

3.1 TREND Origina® Terrazzo Panel installation over existing terrazzo, tile, natural stone, Formica and other finish products is both time saving and cost effective often due to avoiding demolition and expensive substrate preparation as long as the existing surfaces are structurally sound and free from any contaminants that may inhibit bond. Contaminants, such as, oils, grease, dust, paint, sealers, floor finishes, curing compounds, etc... must be removed or mechanically scarified. Mechanically scarified concrete surfaces must render a concrete surface profile of CSP 2-3 similar to a light broom finish as defined by International Concrete Repair Institute (ICRI) Guideline No. 03732. Substrates must support minimum adhesion strength of 150 psi (1 MPa) when tested per ASTM D-4541 tensile bond test. Substrate temperature shall be a minimum of 60°F (15.5°C) with ambient temperatures maintained between 60 - 80°F (15.5 - 26.6°C) and adequate ventilation.

3.2 Concrete Substrate Moisture Content

At the time of installing TREND Origina® Terrazzo Panels the moisture vapor emission rate (MVER) shall be 4 pounds or less per 1,000 Sq/Ft in 24 hours. The use of a moisture barrier sub-floor primer may be necessary. Contact the recommended adhesive manufactures for specific substrate moisture requirements for the use of their products.

3.3 Direct Bond

For direct installation on concrete and cementitious sub-floors the maximum allowable variation in the substrate for tile with all edges shorter than 15" is 1/4" in 10 ft. from the required plane, with no more than 1/16" variation in 12" when measured from the high points in the surface. For tiles/panels that have at least one edge 15" in length or longer the maximum allowable variation of the surface to receive tiles/panel is 1/8" in 10 Ft from the required plane, with no more than 1/16" variation in 24" when measured from the high points in the surface per ANSI A 108.5 "Leveling the sub-floor".

3.4 Mortar Beds

Cement mortar beds shall be prepared according to ANSI A108.1 B cured 7 days or more, dry, clean and level to the tolerances stated in section 3.3 with no visible signs of shrinkage before starting installation. A bonded cement mortar bed must be at least 3/4" thick. All other mortar beds require the use of reinforcing mesh per ANSI A 108.1.

3.5 Leveling Sub-Floor

Sub-floors not level per sec. 3.3 use self-leveling primers and underlayments of the same manufactures as the selected adhesives and grouts.

- Custom Building Products, Level Quik Advanced Acrylic Primer with Level Quik RS-Self Leveling Underlayment.
 - Custom Building Products Custom Tech Tech Prime A with Tech Level 100, 150 & 125 Deep Pour.
 - Custom Tech Moisture Vapor & Alkalinity Barrier (MVC) may be used under all Custom Building Product Underlayments.
 - MAPEI, Ultraplan 1, or Novoplan 2 with Ultraprime Underlayemnt Primer.
 - Laticrete, 86 self-leveling, or Laticrete 86 Latilevel, with Laticrete admix and primer.
- If the sub-floor requires a moisture barrier; apply patching and leveling over the cured vapor barrier coating.

4 Adhesives

4.1 Recommended Adhesives

- Custom Building Products EBMLite™ Premium Epoxy Bonding Mortar 100% Solids
- Custom Building Products MegaLite® RS Ultimate Rapid Setting Crack Prevention Large Format Tile Mortar
- Custom Building Products Pro® RS Premium Large Format Tile Mortar
- Custom Bulding Products Porcelain Tile Professional Thin-Set Mortar
- Laticrete Latapoxy 300 Adhesive
- Laticrete 254R Platinum Rapid
- Litokol LitoElastic Epoxy
- MAPEI GraniRapid System
- MAPEI Kerapoxy 410
- Schluter Fast-Set (For use over Ditra and Kerdi Membranes)
- Tenax Fix Top or Deck Top A&B Epoxy

4.2 Mix all adhesives according to manufacture directions.

5 TREND Origina® Panel Installation

5.1 For cement based thin-set installations clean substrates and panel backs using a clean, lightly damp sponge prior to thin-set application to substrates and panels.

5.2 For epoxy adhesives use a soft, fine bristle broom to clean the substrate and panel back prior to adhesive application; if water used to prepare substrates and panels for epoxy installations take care to assure the substrate and panel backs are completely dry prior to applying epoxy adhesive.

5.3 Using multiple workers apply an initiation coat to the substrate and panel back using the flat side of a trowel and sufficient force to make complete contact.

5.4 Apply adhesive using multiple workers with the same size notch trowels; usually 1/2" x 1/2" notch trowels are sufficient, applying full notches of same depth in one direction to the substrate approximately 1"-2" beyond the panel placement area and to the panel back. Using several people and suction cup handling devices, taking care to not bend the panel, turn the panel over and place the panel precisely where it needs to be installed.

5.5 Take caution to avoid walking on the edges and step carefully to the center of the tile, place your feet flat on the surface and walk with small shuffling steps (no more than a half-length of your foot at a time) down the length of the tile staying in the center portion of the tile. Return to the center point and take small shuffling steps (no more than the width of your foot) across the widths of the tile, compressing the mortar ridges and forcing any entrapped air to escape along the edge. Continue this process until the entire tile has been compressed in the mortar achieving 100% coverage.

Note: The use of edge leveling devices, such as, Alpha's "Easy Wedge", Miracle Sealants Levolution, or MLT work well to minimize lippage and fine tune tile to tile edge transitions. Do not over tighten leveling devices as this can cause damage to TREND Origina® Terrazzo Tiles and Panels. Consult edge leveling device manufactures for specific use.

5.6 Install panel to panel leveling/spacing devices into the field as the panels are being installed. Use a 6" orbital polishing machine, with a firm foam or micro-fiber pad, to vibrate panel edges within 6" of each side moving around the panel while adhesive is still fresh. Tightening leveling devices occasionally while vibrating panel edges while adhesive is still fresh increases adhesive coverage at edges and achieves a more consistent transition height (lippage) from panel to panel. Note: DO NOT USE SANDING DEVICES TO VIBRATE PANEL EDGES

5.7 Remove excess adhesive making sure to clean grout joints and surrounding areas as you go along. Thin-sets and epoxy adhesives may not be removed if left on the panel's surface for more than a few minutes.

5.8 Allow installation to cure 24 hours or more prior to grouting.

6 Sealing

6.1 Sealing terrazzo polished panels with Slip Doctor Polish Grip or Stone Grip prior to installation can be beneficial to protect the terrazzo panels against damage from installation processes, oils and other harmful contaminants. Sealing polished terrazzo panels with these Slip Doctor products can also elevate the anti-slip properties, DCOF and SCOF values.

6.2 Honed and matte finish TREND Origina® Terrazzo tile must be sealed prior to installation using Stone-Tech Bullet Proof Sealer or Miracle Sealants 511 Impregnator.

6.3 For a deeper, pearl like luster and slightly darker color of our honed and matte finish TREND Origina® Terrazzo tile use Miracle Sealants 511 Enhancer. Always test sealers on a small inconspicuous area to make sure sealers do not negatively effect the terrazzo.

6.4 To assure specified floor performance, ongoing maintenance and sealer conditions may be monitored using a certified Bott 3000 operator for onsite evaluations. These services may be acquired online.

7 Grout

7.1 Grouting can be accomplished using non-sanded cement grouts for grout joints 1/8" or smaller and standard grade sanded grout for grout joints from 1/8" to 1/2". There are single component grouts spanning these dimensions. Epoxy and urethane grouts are available for just about every grout joint dimension; please consult recommended adhesive manufactures listed in **4.1** for grouts compatible with TREND Origina® Terrazzo Tile, selected adhesive and use.

7.2 Mix all grouts according to manufacture directions making sure to pack grout joints full during installation; do not remove excess grout from grout joint during initial cleaning. No grout or grout haze shall be left on the surface of the panels after initial grouting process.

8 Movement Provisions

8.1 Movement provisions must be placed according to current version of the Tile Council Of North America (TCNA) Handbook For Ceramic Tile Installation method EJ 171.TCNA and ANSI A108 reference manuals. These documents may be purchased from Tile Council Of North America at tileusa.com.

9 Protection & Care

9.1 CAUTION: Protect New TREND Origina® Terrazzo Floors

Never allow heavy objects to travel across non-grouted or newly installed TREND Origina® Floors. Allow all installations 24 to 48 hours to cure after grouting or duration of time recommended by installation material manufactures, prior to traffic. If the grout manufacturer sights more than one duration of cure time, prior to a use, the longest duration of time shall prevail.

9.2 After 24 to 48 hours cover the floor with non-asphalt impregnated construction paper, or similar floor protection system, prior to traffic.

9.3 Allow 7 days after grouting and protect the new floor from rolling loads by placing 1/2" exterior grade CDX plywood over protective paper, or similar material, in the path of light equipment, such as, small scissor lifts and pallet jacks. Even with plywood no extremely heavy equipment, such as, heavily loaded forklifts shall ever roll across TREND Origina® flooring.

CAUTION: Never use visqueen (poly-ethylene) or other loose plastic film to cover flooring.

Note: The environment, quantity and type of traffic a floor endures will determine how often and to what depth of cleaning and sealing processes are required to maintain Origina® Terrazzo floors.

For more information regarding TREND Origina® Terrazzo cleaning and maintenance please see our cleaning and maintenance document at:

<http://www.trend-group-usa-technical-cleaning & maintenance>