

TREND ORIGINA™

INSTALLATION GUIDELINES



For the perfect finish working with TREND Origina surfaces, follow these guidelines.

Preparation

All substrates must be structurally sound and free from any contaminants that may inhibit bond, including oil, grease, dust, paint, sealers, floor finishes, curing compounds, etc. Contaminated surfaces must be mechanical scarified. Mechanically prepared surfaces must have a concrete surface profile of CSP 2-3 similar to a light broom finish (as defined by ICRI International Concrete Repair Institute, Guideline No. 03732). Concrete must support a minimum adhesion strength of 150 psi (1 MPa) when tested per ASTM D-4541 (tensile bond test). Substrate temperature shall be a minimum of 50°F (10°C) during application and air maintained between 50-90°F (10-32°C). Adequate ventilation should be provided.

Mortar Bed

If a mortar bed is required, the cement mortar bed has to be completely dry and clean, level, and with no visible signs of shrinking before you can start an installation. A bonded cement mortar bed must be at least 3/4" thick. An Unbonded mortar bed requires the use of reinforcing mesh per ANSI A 108.1A, B, or C.

Thinset

For direct installation on a concrete sub-floor without the use of a mortar bed, except for a self-leveling product, the maximum allowable variation in the substrate for tile with all its edges shorter than 15", the maximum allowable variation 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 tile that has at least one edge 15" in length, maximum allowable variation of the surface to receive TREND Origina 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. See "Leveling the sub-floor"

Concrete Substrate Moisture Content

Before installing TREND Origina Moisture Vapor Emission Rate (MVER) in Pounds per 1,000 Sq/Ft in 24 hours should be 4 pounds or less. The use of a moisture barrier primer on the sub-floor may be necessary if the sub-floor has too much moisture content. Contact TREND USA or your TREND distributor to review conditions. For concrete with moisture vapor above 4 and below 25 pounds per 1,000 Sq/Ft, it is suggested to apply TEC LiquiDam-EZ Vapor Barrier or equivalent product, per manufacturer's instructions.

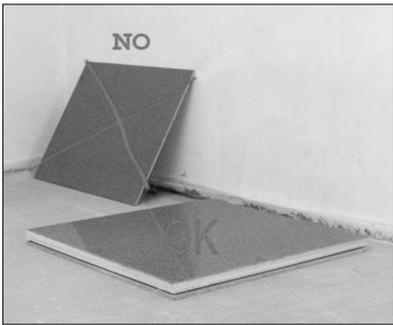
Leveling the sub-floor

If the sub-floor is not level per above requirement, the use of a self-leveling product may be necessary before installation. The work of the installers will be faster and more accurate using self-leveling product like: Mapei, Ultraplan 1, or Novoplan 2 (for improved adhesion of the underlayment you can use Ultraprime L), or from Laticrete, Laticrete 86 self-leveling, or Laticrete 86 Latilevel, with Laticrete admix and primer, or TEC Specialty Fast Set Deep Patch.

If the sub-floor requires a moisture barrier, then apply patching and leveling over the cured vapor barrier coating.

Material Handling - When you receive the tiles on the job site

If you receive tiles on the job site that appear warped this can happen during transport. Do not worry, TREND Origina is flexible and it is very easy to rectify this problem.



Tiles and slabs must be stored horizontally on a flat surface.

VERY IMPORTANT

With their reduced thickness (6.6 mm) storing tile or slabs vertically may cause slight “warping” over time. Always make sure tile or slabs are positioned on a completely flat surface.

If slabs become “warped” due to incorrect positioning, take 5/7 slabs and place them on top of one another on a flat surface. After 12 hours they will become flat and ready to install.

Open the boxes and place 20 tiles one on top of the other with the polished surface facing down place a few boxes on top of each other and let them sit like this undisturbed for 12 hours. Once this process is complete they are ready to be installed. If, when you open the box, all the tiles appear flat, just flip all the boxes upside down (face down) and store then on a flat surface until needed.

Installing TREND Origina

During installation, cuts made with a wet-saw should be allowed to dry or dried with compressed air before installing to remove excess moisture. CUT ONLY USING A DIAMOND BLADE WITH GLASS FORMULA.

Tile Movement Joints and Crack Isolation Membrane

IT IS MANDATORY TO PLACE TILE MOVEMENT JOINTS OVER STRUCTURAL JOINTS AND WHERE THE TILE INSTALLATION ABUTS COLUMNS, WALLS AND PENETRATIONS THROUGH THE TILEWORK. INSTALL TILE MOVEMENT JOINTS ACCORDING TO TCNA EJ171-2015 or current version. Tile Movement joints – Mandatory according to TCNA EJ171.

Control, construction, cold, saw-cut, isolation, contraction joints in the structure, and /or including TREND Origina strips should continue through the tilework, including such joints at vertical surfaces, unless an approved proprietary crack isolation membrane is used that passes ANSI A118.12 “High Performance.”

If required, use NobleSeal-CIS Crack Isolation Membrane or equivalent product.

We recommend installing TREND Origina in rooms which have been kept at a constant temperature between 50 and 80 degrees F for at least 12 hours. The adhesive must also be kept at the temperature recommended by the manufacturer for at least a few days prior to use.

VERY IMPORTANT - Back Butter - Full Bond Mortar Coverage Required

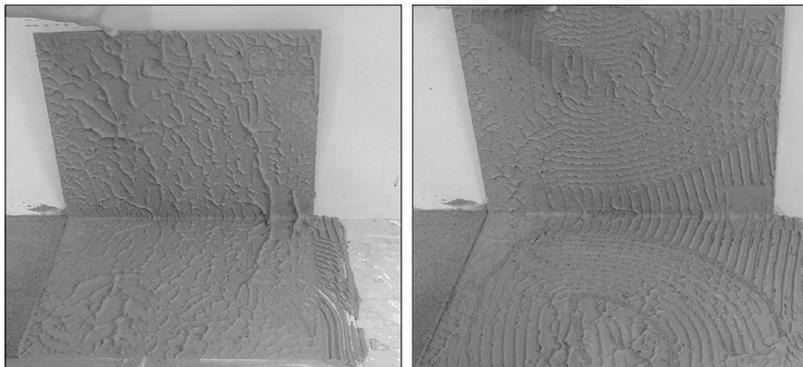
All the tiles have to be back-buttered and the adhesive spread on the sub-floor using two different methods. This type of installation system is called "FULLY SUPPORTED" and assures better adhesion and support of each tile.

FLOOR (SUBSTRATE) 1/2" x 1/2" Trowel - First, Key the bond mortar into the substrate with the flat side of a 1/2" x 1/2" or proper size trowel. Comb with the notched side of the trowel in One direction only.

TILE (BACKBUTTER) Key the mortar into the backside of each tile with the flat side of the trowel and remove the excess, leave a skim coat the thickness of the sand in the thinset.

Mortar Coverage for TREND Origina: Bond Mortar coverage must be sufficient to prevent cracks in the tile resulting from voids in the thinset bond coat. In dry and wet areas, coverage of 100% is the goal with no voids exceeding 2 square inches and no voids within 2" of tile edges or corners. All corners and edges of the tiles must be fully supported, and back-buttering or back coating, is recommended in all areas. Coating the back of the tile, however, does not constitute proper bond coat coverage, which is the area where the mortar makes contact with the tile and the substrate. It is required to periodically remove and check a tile to assure proper coverage per the images below.

Directional Troweling: Apply mortar using flat side of trowel to promote better substrate contact. Comb in one direction with the notched side of the trowel. Spread only an area that can be tiled before the bond mortar skins over (typically 10 minutes). Press tiles into setting bed, then push in a direction perpendicular to the notched trowel ridges to achieve optimum coverage. Apply mortar in a heavy enough layer so that complete contact (no voids) between mortar and tile is accomplished when tile is positioned. It is required to "back-butter" to achieve complete coverage and firm support. It is required to periodically remove and check a tile to assure proper coverage per the images below. Keep a minimum of two thirds of the joint depth between tiles to allow room for grouting.



REQUIRED BOND ADHESIVE - RAPID SET BOND MORTAR

FOLLOW ARE THE SUGGESTED SETTING MATERIALS MANUFACTURERS:

- Mapei Granirapid – fast set – bi-component;
- TEC-Fast Set 3N1® Performance Mortar;
- Laticrete 254 Rapid – fast set.

According to the type of installation, we recommend that you consult with your adhesive manufacturer's specialist who can guide you to the best solution.

SURFACE PROTECTION, MAINTENANCE AND CARE

TREND Origina is an extremely durable building material. Once installed, the exposed TREND Origina surface will require only simple maintenance and care to preserve its beauty.

Proper surface care is the key ingredient in maintaining the tile's appearance. Proactive treatment to resist staining coupled with regular surface cleaning is the best defense against any potential surface issue. A regular cleaning routine is necessary to keep a floor looking its best. A good cleaning routine takes into account daily maintenance as well as monthly and semi-annual tile surface services.

Surface Protection for Honed and Matt finishings

Proper tile floor care begins with protection. For honed/matt TREND Origina surface, STONETECH® BULLETPROOF® Sealer is a preferred protector to provide high quality resistance to water or oil borne stain. Spills picked up in a timely manner will be prevented from absorbing into the tile surface and creating a difficult to remove stain.

Allow new installations to cure for a minimum of 72 hours prior to application of sealer.

For better results sealer should be applied before grouting.

STONETECH BULLETPROOF Sealer Application

1. The TREND Origina tile surface must be clean and free of previous sealers, waxes and coatings. Sealer maybe applied to damp surfaces however a dry surface is always preferable. Surface temperature should be between 50-80°F. Ensure that area is well-ventilated during application and until the surface is dry. Prevent foot traffic in area until treated surface is dry.
2. Mask off any surfaces not intended to be treated.
3. Working in manageable sections, liberally apply an even coat using a paint pad, roller, brush or low pressure sprayer.
4. Allow sealer to penetrate the surface for 10-15 minutes. During this time, keep the surface wet with sealer, adding more sealer as needed. **DO NOT ALLOW STONETECH BULLETPROOF SEALER TO COMPLETELY DRY ON THE SURFACE.**
5. At the end of the dwell time, thoroughly wipe the entire surface dry with clean absorbent towels, a floor machine fitted with cotton bonnet or any similar absorbing technique that removes all remaining sealer from the stone surface.
6. A second coat of sealer may be applied if desired and it should be applied, as directed in steps 4-6, 30-40 minutes after the first application.
7. Should a sealer residue appear, rewet the impacted section of the surface with sealer. Scrub the surface with a white nylon scrubbing pad to loosen residue and wipe completely dry with a clean, absorbent towel.

Polished finish and DCOF

With the new DCOF requirements, a polish surface while close to 0.42 falls short of reaching the set threshold. Nonetheless a polish surface, aside from its own aesthetic, maintains some characteristics that may be worth preserving, while finding a different solution to the DCOF's requirements.

A TREND Origina polished surface has an absorption rate that is inferior to the one of porcelain. As such, cost of cleaning and the overall cost of maintenance are very low and easy of maintenance is sky high. There are many different topical treatments that can add Grip to a surface, like Slip Doctors. Application and maintenance of these treatments is simple. In considering a surface for your project, think at the overall costs associated with the different finishings. A Polished surface requires an anti slip treatment, a Honed or Matte surface a sealer.

Maintenance & Care for all finishings

Routine, daily maintenance will involve keeping dirt, dust and other soiling from building up. Spills, food and other potential staining materials need to be cleaned up in a reasonable period of time. Regular sweeping and light damp mopping is advisable.

Monthly cleanings are often a simple scrubbing wash and rinse using a neutral pH stone & tile cleaner. This type of cleaning can be accomplished using a bucket and mop while a wet/dry vacuum is helpful for cleaning big floors. For commercial applications a swing machine fitted with a brush or pad or an auto-scrubber will help maintain larger installations.

Regular Maintenance Cleaning

Highly alkaline, acidic, ammonia based, and/or abrasive cleaners, or bleach may damage the TREND Origina tile and may also degrade the sealer, adversely affecting stain repellency. The use of a pH neutral cleaner specifically formulated for stone & tile is the best assurance of not harming the TREND Origina or degrading any applied sealers.

For routine cleaning of this TREND Origina tile STONETECH® Stone & Tile Cleaner is the preferred cleaner. Prepare a solution of STONETECH Stone & Tile Cleaner concentrate mixed with water based on these ratios:

USE	STONETECH® Stone & Tile Cleaner	Warm Water
Heavy Duty	1 part	32 parts
Light Duty	1 part	64 parts

1. For damp mopping or spray and wipe cleaning:

- Apply mixed solution with a damp mop or trigger sprayer.
- Work surface with wrung out mop or clean towel. Wipe dry or allow to air dry.
- When damp mopping, change mop water often to ensure that soil is not re-deposited.

TREND ORIGINA™ INSTALLATION GUIDELINES

2. For hand or floor machine cleaning:

- Apply mixed solution with a mop, sponge or pump type sprayer. Thoroughly wet surface and allow to soak for a few minutes.
- Agitate/scrub surface with mop, deck brush, or standard 175rpm floor machine fitted with an appropriate scrub pad or brush.
- Remove cleaning liquid with mop, bucket and wringer or wet/dry vacuum. Scrubbed areas can be allowed to air dry or rinsed thoroughly with fresh water and vacuumed or air dried.

3. Let area dry completely before allowing foot traffic to resume.

Heavy Duty Maintenance Cleaning

Heavy cleaning is sometimes needed to maintain a tile surface in high traffic areas or after being exposed to materials which may require more aggressive cleaning. A method for this type of cleaning is outlined below. Please note that existing sealers are often degraded or stripped out of the tile when using stronger cleaning chemicals or techniques are employed. Resealing is often necessary after this type of cleaning to maintain a stain resistant surface.

Use the STONETECH® DEEPKLENZ™ for this heavy duty cleaning.

1. Spray a sufficient amount of cleaner on tile surface to thoroughly wet the soiled traffic area.
2. Allow STONETECH DEEPKLENZ to work on the surface for 5-10 minutes (do not allow STONETECH DEEPKLENZ to dry on the surface).
3. During this dwell time, lightly scrub the tile surface with a stiff bristle brush or nylon scrub pad to loosen the surface contaminants. Apply additional cleaner as needed to keep surface wet.
4. Remove cleaning liquid with mop, bucket and wringer or wet/dry vacuum.
5. Rinse area well with clean water. Vacuum or mop to remove rinse water.
6. Repeat steps 1-5 if needed for more heavily soiled areas. Increase dwell and scrub times as appropriate to help with more heavily soiled areas.
7. Once the surface is dry, reseal with STONETECH® BULLETPROOF® Sealer as needed.

Protect New TREND Origina Floors

With the setting materials less than 7 days old, protect the new floor from heavy rolling loads by placing plywood on the floor in the path of heavy equipment like: scissors/man lift, pallet jack and similar. Even with plywood, it is recommended that NO extremely heavy loads like forklifts move across the new floor until after 7 days. During the first 7 day period protect the new floor from point loading.