

Terra Rigid Core & Terra Lux Installation & maintenance guidelines

TERRA RIGID CORE & TERRA LUX INSTALLATION & MAINTENANCE GUIDELINES

These installation specifications are for TERRA RIGID CORE and TERRA LUX Flooring. All instructions and recommendations are based on the most recent information available. If you receive a printed copy of these instructions, please refer to www.terra-flooring.com

To ensure you have the most up to date version of our installation instructions please visit our website from time to time in the installation guidelines section.

By starting installation of this product, you are agreeing that you have read and understand all installers/owners' requirements and responsibilities and are aware that deviating from the instructions and recommendations in this installation guide may result in voiding the product warranty. If you need additional assistance, please contact Terra Flooring Team.

Handle cartons and flooring carefully to protect the locking edge profile. Always transport and store cartons in the original packaging, neatly stacked horizontally on a smooth, flat, solid surface. Never on their sides or ends.

The product is a floating floor suitable for indoor installations only, in a controlled environment (while occupied) within the required temperature range of 12.78°C to 38°C (55°F to 100°F). Do not install outdoors. Please note that extreme variances in temperature may increase expansion and contraction not only in the flooring itself but the structure as well.

Do not install fixed objects, such as cabinets, islands, wall units etc. on top of the flooring or fasten trim/molding/transition pieces directly to the floor.

It is the sole responsibility of the installer/owner, prior to installation, to assure that the planned installation area has proper lighting, is suitable for the flooring and meets local building codes. Confirm that all subflooring meets or exceeds all industry standards and local building codes; as well as the

recommendations listed herein. The manufacturer accepts no responsibility for product failure extending from or related to failure to meet job environment and subflooring requirements.

The installer/owner assumes full responsibility for the final inspection of this product. Inspection should be done prior to installation and should include print/color/texture/ factory finish /visible conditions (please note the installation site requires proper lighting). If the product is not acceptable, **DO NOT INSTALL IT**. Contact your retailer immediately for assistance. Flooring that has been installed will be deemed to have been inspected and quality accepted. Terra-Flooring will not accept any responsibility for any flooring installed with visible defects.

Your Luxury Vinyl Flooring is waterproof but is not a moisture barrier. Water traveling over or around the outer edges of the flooring can damage the subfloor. Elevated moisture levels below your flooring can migrate through the joints as vapor emissions possibly causing a milky white appearance known as "blushing". Blushing is a site related condition and will dissipate once the moisture levels have decreased to the specified level. Water damage and or associated conditions are not warranted. In addition, other contaminants could migrate up as well. These are not manufacturing related conditions.

When installing in a lavatory, bathroom, laundry room, or other area with frequent water usage, it is recommended that any perimeter gap be filled with a silicone caulking. This will lower the possibility of the water traveling under the floating floor and help to reduce bacterial growth and problems associated with it.

TOOLS REQUIRED:

Safety glasses, utility knife, straight edge / square, chalk-line, tape measure, vinyl seam roller, saw or tile cutter and 100 Lb. roller.

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General Guidelines

All areas where product will be installed must have a fully operational HVAC system prior to installation and remain in operation during and after installation. Conditions should be at the same temperature and humidity level expected during occupancy. Temperature within the space should never drop below 55° F (12.8 °C) after installation while the building is occupied.

Product should be acclimated in the climate-controlled location for 48 hours before starting installation.

The Flooring should only be installed after all the other trades have finished and the jobsite has been cleared of any/all debris that could damage a finished installation. Proper lighting is essential.

All sub-floors and substrates must be clean, flat (smooth) and dry prior to installation. Sweep or vacuum your subfloor prior to installation ensuring nothing will interfere with the installation. All subfloors must be flat. High or low areas exceeding 3/16" per 10' (4.8mm in 3 meter) or 1/8" per 6' (3.2mm in 1.8 meter) must be corrected.

Wood Subfloors: The subfloor material must meet the minimum thickness requirement of 3/4", and it should be either CDX plywood, OSB, or APA approved plywood. Additionally, the wood subfloor must be level, sturdy, and devoid of any deflection or upward and downward movement. To achieve a flat surface, high areas should be sanded down, and low areas should be filled with a Portland-based patching compound. To prevent subfloor squeaks, fasten the floor with nails or screws every 6 inches. Any damaged sheathing should be either repaired or replaced. The moisture content of wood subfloors should not exceed 12%, which can be determined by using a pin-type moisture meter.

Concrete Subfloors: The concrete subfloor must be fully cured, which means it should be at least 60 days old. To ensure proper installation, the flatness

of the concrete subfloor must meet or exceed the requirements of ACI FF25. However, most concrete subfloors are not flat or smooth, so proper preparation is crucial. It is essential to verify that the substrate is flat, (as mentioned in the above subfloor and substrate requirements). Fill all holes and cracks with a latex fortified Portland cement-based patching compound. Terra Flooring highly recommends using latex fortified Portland cement-based products for satisfactory patching or leveling. High areas should be ground down, and low areas should be filled with a Portland-based patching compound. Avoid using solvents or chemical adhesive removers to remove paint residue or adhesives.

While the product is a waterproof flooring it is not a moisture barrier. It is mandatory to test concrete slabs for moisture vapor emissions using either a Calcium Chloride or In Situ Relative Humidity test. If the level of moisture emission exceeds 8 lbs. Calcium Chloride or 85% Relative Humidity, corrective measures must be taken. The use of a vapor barrier under the Luxury Vinyl Flooring is optional and should not exceed 8 mills. Moisture in the substrate will not damage the panels, but excessive moisture may migrate to the walls and structure, causing bacterial growth issues if not dealt with promptly. If water travels over or around the outer edges of the flooring, it can harm the subfloor. Excess moisture underneath the flooring may also migrate through the joints and result in a milky white appearance, commonly referred to as Blushing. This condition is site-specific and will go away once the moisture levels decrease to the designated level. Please note that water damage and any associated issues are not covered under warranty. Moreover, other contaminants may also migrate upwards, which are not manufacturing-related problems.

Radiant Heated Systems: Before installation, the Hydronic or Embedded radiant heating system must be operational for at least one week to minimize residual moisture. If the heating system is running during installation, the temperature should be lowered to 18.3°C (65°F) for at least three days

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before and throughout the installation, and for 24 hours after completion. Gradually increase the temperature in 5° increments, but never exceed 29°C (85°F). The purchaser must ensure that the radiant heating system is suitable for use with this product. Please note that any damage caused by the heating system to the flooring will not be covered by the product warranty.

Existing Ceramic Tile, Quarry Tile, and Terrazzo

Flooring: To ensure proper installation, all existing tile must be securely bonded to the subfloor or substrate. Terrazzo flooring should be structurally sound and stable, with any weak areas filled in using a Portland-based patching compound. Prior to installation, the floor must be thoroughly cleaned and free of contaminants. To meet our recommendations, we suggest that any existing grout lines exceeding specifications be skim-coated with a latex-fortified Portland cement-based patching compound. Additionally, please grind any irregular surfaces to achieve a smooth finish.

Existing Resilient Floor Covering: Before installing new flooring, please ensure that any existing resilient floor covering is single-layered, non-cushioned backed, well-bonded, fully adhered, and smooth. The flooring should also show no signs of moisture or alkalinity, and all topical waxes, polishes, and airborne contaminants must be removed. Any irregularities should be repaired or replaced, and skim coating the surface is recommended to prevent telegraphing. Please note that installation over rubber-based substrates is not recommended.

Old Adhesive Residue: Please be advised that Terra Flooring does not recommend skim coating over existing adhesive. Due to the potential for the existing adhesive to break down and cause failure, any old adhesive residue should be removed using a scraper, such as a razor scraper specifically designed for flooring surfaces. The adhesive must be removed to the level of a film; do not use solvents or chemical adhesive removers, as these can leave a residue in the concrete that may affect the performance of your new flooring.

WARNING

For installation over, old resilient floor coverings or when considering removing existing resilient floors, please be advised that these products may possibly contain asbestos fibers or crystalline silica. Please follow all recommended Resilient Floor Covering Institute (RFCI) work practices as www.rfci.com

Your Luxury Vinyl Flooring comes with an attached backing. **Do not install additional backings or foam/cushioned underlays.**

ACCLIMATION: To ensure proper acclimation, all flooring materials must be acclimated in the area they will be installed in for a minimum of 48 hours before, during, and after installation. The temperature of the installation area should be maintained between 12.78°C to 38°C (55°F to 100°F) during this period. Protect the flooring from excessive heat or cold during storage to prevent damage. If the product is stored in an environment different from the installation site and the temperature ranges are controlled within the 12.78°C to 38°C (55°F to 100°F) range, offsite acclimation may be considered acceptable. However, please note that the material must be delivered directly to the installation site with no stops in between.

FLOATING FLOOR INSTALLATION INSTRUCTIONS: REQUIRED TOOLS AND ACCESSORIES:

- Tape measure
- Moisture meter (wood / concrete)
- Circular saw or hand saw
- Pull bar
- Safety equipment (goggles & mask)
- Utility knife
- 1/4" spacers
- Broom

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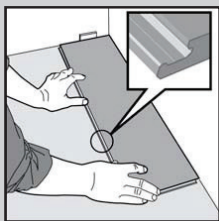
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TERRA RIGID CORE and TERRA LUX are designed to be installed with the floating method and can be installed below grade, on grade or above grade. However, the following instructions must be followed: Important: The flooring should be installed from several cartons at the same time to insure proper color and shade mix.

Pre-Installation Guidelines for Terra Flooring:

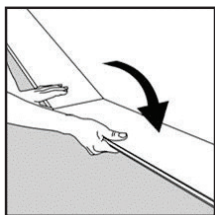
- Add 10% extra flooring material for cuts, waste, and defects. For diagonal or special pattern installations, allow 15-20% extra material.
 - Account for overages and keep attic stock for future repairs.
 - Inspect the material for debris or damage before installation. Discard or trim any affected sections.
 - For a uniform appearance, use panels from at least three different boxes. Dry rack the panels to confirm the layout.
 - Leave a ¼" expansion gap around the perimeter, transitions to other flooring materials, door frames, and heating vents.
- No additional transition strips are required for unlimited lengths and widths.
 - It is recommended to undercut doorjamb, so the material slides easily under them. A ¼" (6.35mm) expansion space is necessary here as well. If the door casings are metal the ¼" (6.35mm) expansion space can be filled using a silicone or acrylic silicone caulk. **Please note the expansion gap must be maintained past the edge of the doorjamb.**
 - Installation of the product must start from the left side to the right of the room. Begin the installation of the planks in the left hand corner of the room with the long direction parallel to the incoming sunlight source or to the longest wall of the room.
 - Use the moisture barrier/mitigator like 6 mil poly sheeting plastic to prevent the material from being damaged by moisture from the subfloor.

Be sure to install the first row of boards with the tongue side facing the wall. See diagram below.



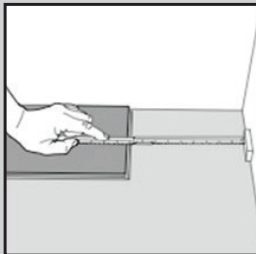
1. To start the first row of planks, place a ¼" (5mm) spacer along the left-hand side and position the first plank against the wall. After installing three rows, you can then adjust the positioning of the flooring against the front wall using ¼" spacers

To ensure a balanced and visually appealing installation, it is recommended to measure the width of the room prior to installation and determine if the first row should be cut lengthwise in order to achieve equal width for the first and last row of planks.

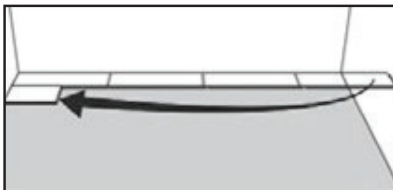


2. For the second plank in the first row, angle the short end towards the first plank and press them together before laying it down. Repeat this process to complete the first row.

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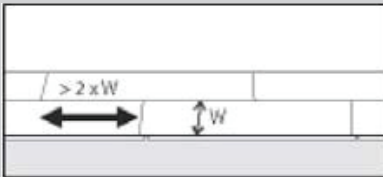


3. At the end of the first row, place a 1/4" spacer against the wall and measure the remaining space to determine the length of the last plank needed. Cut the last plank to the correct length, ensuring that it is at least twice the width of the plank for optimal installation.

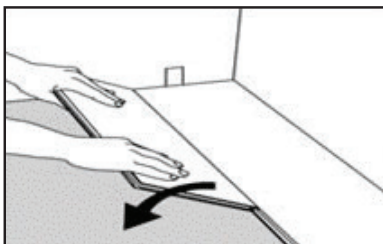


4. For the second row, use the remaining piece of the last plank from the first row as the first plank.

Make sure to maintain a minimum length of two times the width of the plank. Place a spacer against the wall.

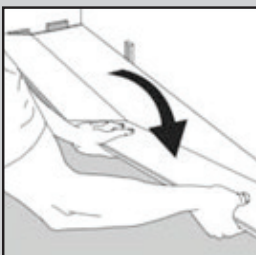


5. In general, the distance between the short ends of planks in parallel rows should not be less than twice the width of the plank.



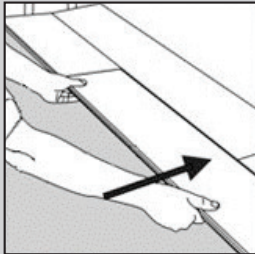
6. To install a floorboard, angle it against the previous row's floorboard, press forward, and fold it down simultaneously. Leave the panel in a slightly upward angled position where the panels start to lock.

For added ease, a wedge with the appropriate angle can be placed under the plank near the short side joint as a support.



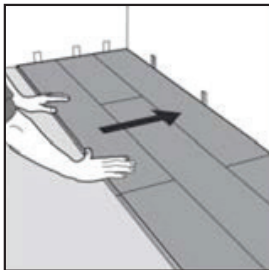
7. Position the short end of the floorboard at an angle against the previously installed floorboard in the second row and proceed to fold it down entirely as the second plank of the second row.

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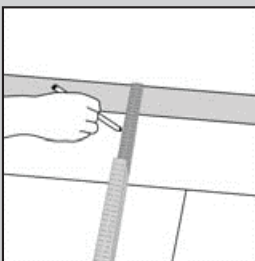


8. Slide the plank forward by applying pressure, so that it aligns with the first plank in the row.

Once positioned tightly together, lower it down in the same manner as the first plank. With the previous plank now in place, it can be folded down entirely to a horizontal position, and if necessary, a wedge can be used to adjust the joint at the short end before moving on to the next plank.

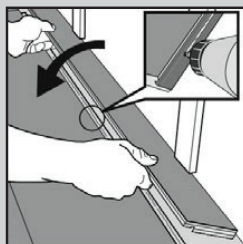
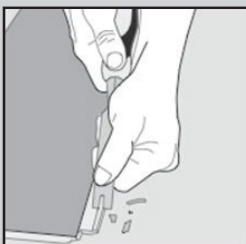


9. Once you have installed 2-3 rows, make adjustments to the distance between the floorboards and the front wall by placing 1/4" spacers. Keep the spacers in place throughout the installation process and remove them only after the installation is complete.



10. In case the wall is uneven, the floorboards need to be adjusted to fit its contours. To achieve this, mark the floorboards with the contour of the wall, ensuring to leave a 1/4" space between the floorboards and the wall. This process should also be followed for the first row if required.

HORIZONTAL INSTALLATION:

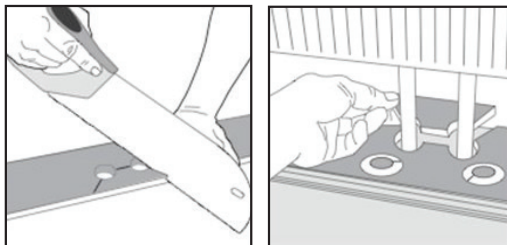


11. Using a chisel, remove the locking element from the adjusted strip, and apply the appropriate glue to it.

Then, push the planks horizontally together until they are tightly aligned. If needed, place some spacers between the last board and the wall during the glue's hardening time. This method can also be used for the short ends of the floorboards.

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12. To create holes for the pipes, mark the center of the hole and drill it with a diameter approximately 16mm larger than the pipe's diameter, leaving a 1/4" gap around the pipe. Cut the plank as indicated using either a saw or a sharp utility knife and proceed to install it. If required, apply glue to the cut piece and replace it in its original position.

GLUE DOWN INSTALLATION:

Before installation, ensure that all other trades have completed their work and that the job site is clear of debris that could potentially damage the flooring. This product is suitable for indoor use only, within a controlled environment, and is not recommended for glue-down applications in three-season environments or outdoor areas.

Terra Flooring advises against installing their product in areas that are prone to rapid temperature changes such as solariums, sunrooms, and saunas, as such conditions may damage the product and void the warranty. It is recommended to check the temperature fluctuations before installation to determine if the area is suitable for glue-down application. Please note that extreme temperature variations may cause expansion and contraction, not just in the flooring, but also in the structure.

For glue-down applications, Terra Flooring recommends using WAKOL MS550 or D3320 adhesive, following the manufacturer's guidelines concerning moisture limitations and application. For areas with rolling loads such as wheelchairs, hospital beds, carts, racks, and tables, a "firm set" LVP adhesive is recommended.

PROTECTION AND MAINTENANCE:

- a. To prevent potential damage to your newly installed flooring, it is recommended to sweep and vacuum the area immediately after installation. If the flooring is not glued down, it can be used right away.
- b. For cleaning, Terra Flooring recommends using a pH neutral vinyl floor cleaner as needed but does not warrant any cleaning agents or conditions associated with them as they are beyond their control.

- c. In commercial installations, a low-speed floor cleaning machine with 3M red or white pad is approved but damages associated with such machines will not be covered by Terra Flooring.
- d. After cleaning, rinse the floor thoroughly with clean water and allow it to dry, as the floor can be slippery when wet.
- e. Do not saturate the flooring or use cleaning products that contain surfactants.
- f. Never steam clean or use a steam mop.
- g. When moving heavy furniture or appliances, use a hard surface between the item and the floor and avoid rolling or sliding them across the floor without protection.
- h. Felt pads should be installed and periodically replaced on chair legs to avoid abrasions from accumulated abrasive materials.
- i. Hard surface mats are required under office chairs to prevent damage to the flooring.
- j. Non-staining walk-off mats should be used at all entryways, and non-staining area rugs and mats are recommended to reduce the risk of permanent staining caused by latex or rubber-backed rugs.
- k. Finally, high heels and spiked shoes may damage the surface and finish of your flooring, which is not a warranted condition. The installation, maintenance, and warranty are subject to ongoing review.

For information regarding our products, and warranties please visit our website:

www.terra-flooring.com