TENACITY® TILE Installation Manual

Thank you for choosing our flooring. When properly installed and cared for, your new flooring will be easy to maintain and will keep its great look for years. Please read all the instructions before you begin the installation. Improper installation will void the warranty.

I.   GENERAL PREPARATIONS

- Prior to installation, inspect material in daylight for visible faults/damage, including defects or discrepancies in color or gloss; check the edges of the flooring for straightness and any damage. No claims on surface defects will be accepted after installation.
- It is preferable to lay tiles perpendicular to the window, following the direction of the main source of light. For the best result, make sure to always work from 3 to 4 cartons at a time, mixing the tiles during the installation.
- Check if subfloor/site conditions comply with the specifications described in these instructions. If you are not satisfied, do not install, and contact your supplier.
- Flooring products can be damaged by rough handling before installation. Exercise care when handling and transporting these products. Store, transport and handle the cartons in a manner to prevent any damage. Store cartons flat, never on edge.
- Flooring products can be heavy and bulky. Always use proper lifting techniques when handling these products. Whenever possible, make use of material-handling equipment such as dollies or material carts. Never lift more than you can safely handle; get assistance.
- Calculate the room surface prior to installation and plan an extra 5-10% of flooring for cutting waste.
- The flooring is intended to be installed in interior locations only. It is not to be installed in areas that are exposed to the elements such as outdoor areas, semi-covered / "alfresco" outdoor areas, porches etc.
- This product does not require acclimation.
- Flooring should only be installed in temperature ranges between 50-90°F / 10-32°C, it is necessary to maintain a constant temperature before and during the installation. Portable heaters are not recommended as they may not heat the room and subfloor sufficiently. Kerosene heaters should never be used.
- After installation, make sure that the flooring is not be exposed to temperatures less than -40°F / -40°C or greater than 150°F / 65°C.
- For floor surfaces exceeding 10000 ft^2 / 1000 m^2 and/or lengths exceeding 100 ft / 32 m, use transition moldings leaving of 3/32" / 3 mm.

II.   SUBFLOOR INFORMATION

- The flooring can be installed over most existing hard surface floor coverings, provided that the existing floor surface is clean, flat, dry, securely fastened, structurally sound and level to 3/16" / 5 mm within 10 ft / 3 m.

- The substrate should not slope more than 1" / 25 mm per 6 ft / 2 m in any direction.
- The product can be installed on substrates with grouts or grooves if these are less than 3/16" / 5 mm in width and 3/16" / 4 mm in depth. Depressions, deep grooves, expansion joints and other subfloor imperfections that do not meet this requirement must be filled with patching & leveling compound prior to installation.
- Substrates must be free from excessive moisture or alkali. Remove dirt, paint, varnish, wax, oils, solvents, any foreign matter and contaminates.
- Do not use products containing petroleum, solvents or citrus oils to prepare substrates as they might impact bonding strength in case of glue down installation.
- Although this floor is waterproof, it is not to be used as a moisture barrier, excessive subfloor moisture can be a breeding ground for mold, mildew and fungus – all of which can contribute to an unhealthy indoor environment. The subfloor must be dry, concrete moisture vapor emissions should not exceed 8 lb / 3.63 kg MVER (moisture vapor emission rate) per 10000 ft^2 / 1000 m^2 per 24 hours as measured with the calcium chloride test (ASTM F1869) / 75 % RH (ASTM F2170) with a PH limit of 9 / max. 2.5 % moisture content (CM method / ASTM F2659).
  Note: It may not be the floor covering installer's responsibility to conduct these tests. It is, however, the floor covering installer's responsibility to make sure these tests have been conducted, and that the results are acceptable prior to installing the floor covering. When moisture tests are conducted, it indicates the conditions only at the time of the test. The floor should not be installed on subfloor with excessive moisture emission.
- Existing sheet vinyl floors should not be heavily cushioned and not exceed more than one layer in thickness. Soft underlayment and soft substrates will diminish the products inherent strength in resisting indentations.

WOOD SUBFLOORS

- If this flooring is intended to be installed over an existing wood floor, it is recommended to repair any loose boards or squeaks before you begin the installation.
- Nail or screw every 6" / 15 cm along joints to avoid squeaking.
- Basements and crawl spaces must be dry. Use of a 6 mil / 0.15 mm poly-film is required to cover 100% of the crawl space earth.
- Lay the flooring crossways to the existing tiles.
- All other subfloors - Plywood, OSB, particleboard, chipboard, wafer board, etc. must be structurally sound and must be installed following their manufacturer's recommendations.

CONCRETE SUBFLOORS

- Existing concrete subfloors must be fully cured, at least 60 days old, smooth, permanently dry, clean, and free of all foreign material such as dust, wax, solvents, paint, grease, oils, and old adhesive residue.
- It is recommended to use a minimum 6 mil / 0.15 mm poly-film as a moisture barrier between the concrete subfloor and the flooring.

DO NOT INSTALL OVER

- Any type of carpet.
- Existing cushion-backed vinyl flooring.
- Any type of floating floor.
- Hardwood flooring / wood subfloors that lay directly on concrete or over dimensional lumber or plywood used over concrete.

IMPORTANT NOTICE

In-floor Radiant Heat: Flooring can be installed over 1/2" / 12 mm embedded radiant heat using the floating method. Maximum operating temperature should never exceed 90°F / 32°C. Use of an in-floor temperature sensor is recommended to avoid overheating.

- Turn the heat off for 24 hours before, during and 24 hours after installation when installing over radiant heated subfloors.

- Before installing over newly constructed radiant heat systems, operate the system at maximum capacity to force any residual moisture from the cementitious topping of the radiant heat system.

- Floor temperature must not exceed 90°F / 32°C.

- Once the installation has been completed, the heating system should be turned on and increased gradually (5-degree increments) until returning to normal operating conditions.

- Refer to the radiant heat system's manufacturer recommendations for additional guidance.

Warning: Electric heating mats that are not embedded into the subfloor are not recommended for use underneath the floors. Using electric heating mats that are not embedded and applied directly underneath the floors could void the warranty for your floor in case of failure. It is best to install the flooring over embedded radiant floor heating systems and adhere to the guidelines listed above.

III.   INSTALLATION

TOOLS AND SUPPLIES REQUIRED: Spacers / Saw / Adhesive Tape / (6 mil / 0.15 mm) or thicker Poly-film Vapor Barrier/ Ruler / Pencil / Tape Measure / Utility Knife / Constructions Adhesive / Wedges / Tapping Block / Rubber Mallet
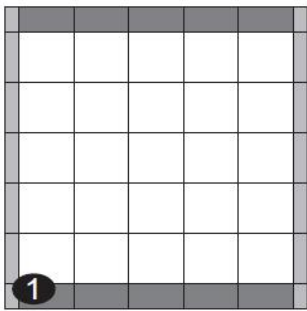
- **For straight cuts:** Electrical hand saw, circular saw, miter saw, or table saw with a carbide-tipped wood combination blade or a continuous or segmented diamond blade
- **For rounded cuts:** Bi-metal or tungsten carbide jigsaw.

Important: When cutting this product please use a dust mask or other safeguards for personal protection, it is advised to cut in a well-ventilated area.
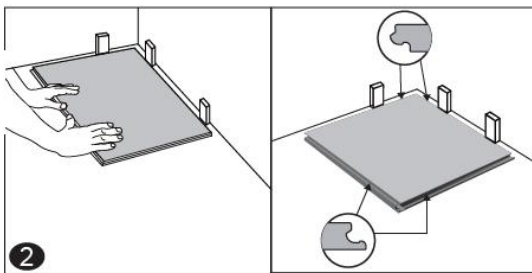
- Remove baseboard, quarter-round moldings, wall base, appliances and furniture from room. For best results, door trim should be under-cut to allow flooring to move freely without being pinched. After preparation work, sweep and vacuum the entire work area to remove all dust and debris.
- Whenever possible, plan the layout so that the joints in the tiles do not fall on top of joints or seams in the existing substrate. The end joints of the tiles should be staggered a minimum of 8" / 20 cm apart. Do not install over expansion joints. Avoid installing pieces shorter than 12" / 30 cm at beginning or end of rows.
- **Measure the area to be installed:** The board width of the last row shall not be less than 2" / 50 mm. If so, adjust the width of the first row to be installed. In narrow hallways, it is recommended to install the floor parallel to the length of the hall.
- **Cutting the tiles:** If cutting with a jigsaw, the floor surface should be turned down. Otherwise always cut with the tile facing up.
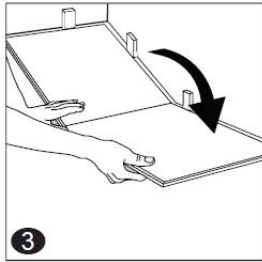
MONOLITHIC / LINEAR PATTERN
Recommended for square tiles

1. **IMPORTANT:** Measure the area to be installed, perimeter rows of opposing walls should be the same width. Adjust the width and the length of the first tile to be installed accordingly.
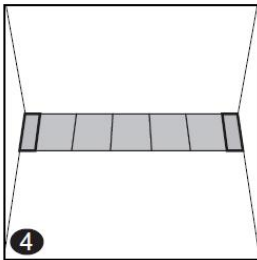

2. **First row, first tile:** After adjusting the measurements of the first tile as described above, begin laying at the left-hand corner of the longest wall and proceed from the wall with the tongue sides facing walls and the grooves facing outward (groove sides are marked with arrows on the back of each tile), away from the walls. Use spacers between the wall and the tile to create 1/8" / 3 mm expansion gap and to keep a straight line parallel to the abutting wall.
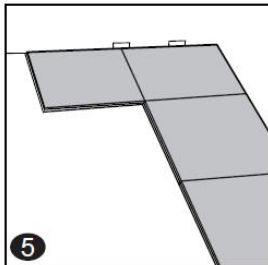
3. **First row, second tile:** Insert the end section of the next tile at an angle. Make sure both tiles are perfectly aligned.
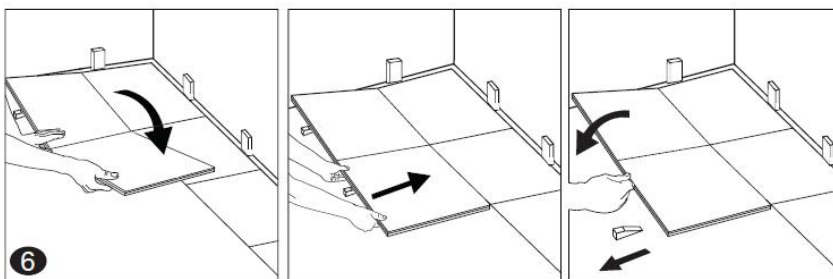**NOTE:** If you notice both tiles aren't at the same height or are not well locked together, please follow the disassembling instructions at the bottom of the page, disassemble and check if any debris stuck inside the lock is obstructing.
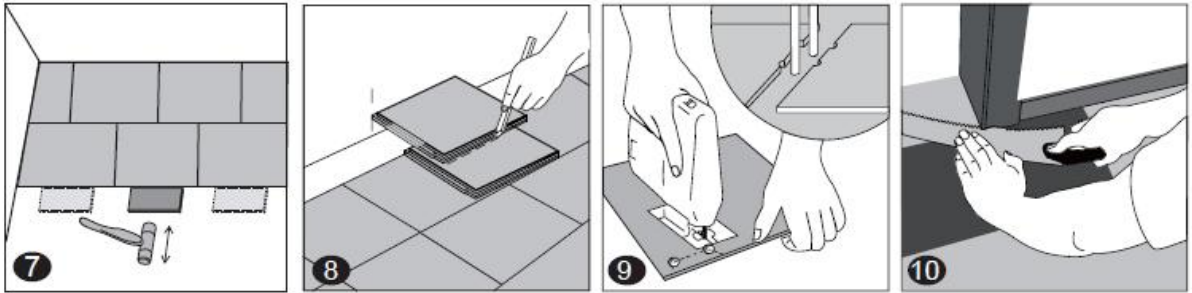

4. **First row, last tile:** At the end of the first row, leave a gap of 1/8" / 3 mm to the wall. The last tile should be the same length and width as the first tile.
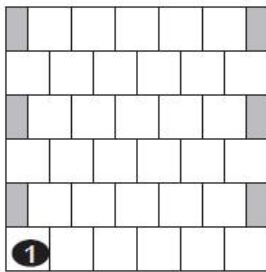

5. **Second row, first tile:** Click the side with the tongue of the tile into the previous row and place an installation wedge under the board (respect the 1/8" / 3 mm expansion gap next to the wall).
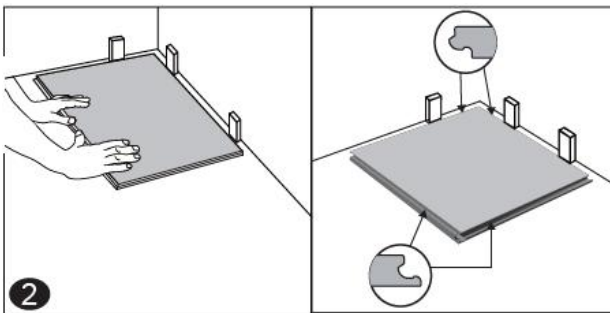

6. **Second row, second tile:** Place the tongue of the second tile at an angle against the grove side of the previously installed tile and fold down. Slide down tongue side of the board into the locking groove of the adjacent tile in the previous row. When the whole row is complete, remove the wedges and fold the row down.
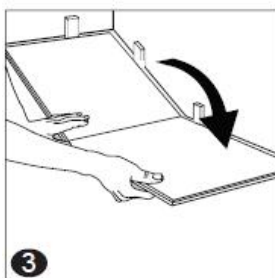
BRICK PATTERN
Recommended for rectangular tiles

1. **IMPORTANT:** Measure the area to be installed, perimeter rows of opposing walls should be the same width. Adjust the width and the length of the first tile to be installed accordingly.

2. **First row, first tile:** After adjusting the measurements of the first tile as described above, begin laying at the left-hand corner of the longest wall and proceed from the wall with the tongue sides facing walls and the grooves facing outward (groove sides are marked with arrows on the back of each tile), away from the walls. Use spacers between the wall and the tile to create 1/8" / 3 mm expansion gap and to keep a straight line parallel to the abutting wall.
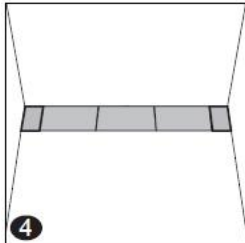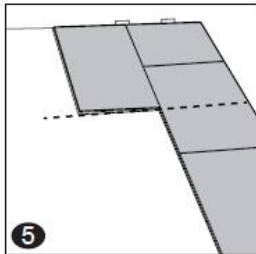
3. **First row, second tile:** Insert the end section of the next tile at an angle. Make sure both tiles are perfectly aligned.
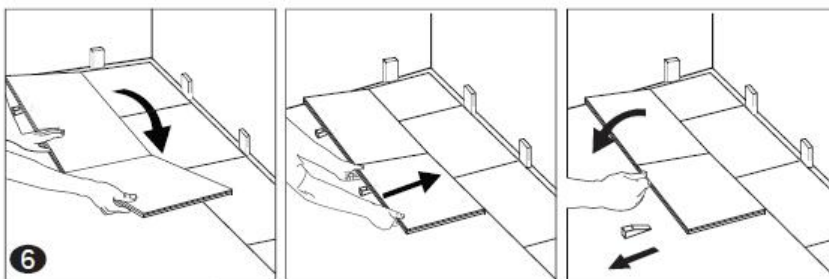**NOTE:** If you notice both tiles aren't at the same height or are not well locked together, please follow the disassembling instructions at the bottom of the page, disassemble and check if any debris stuck inside the lock is obstructing.
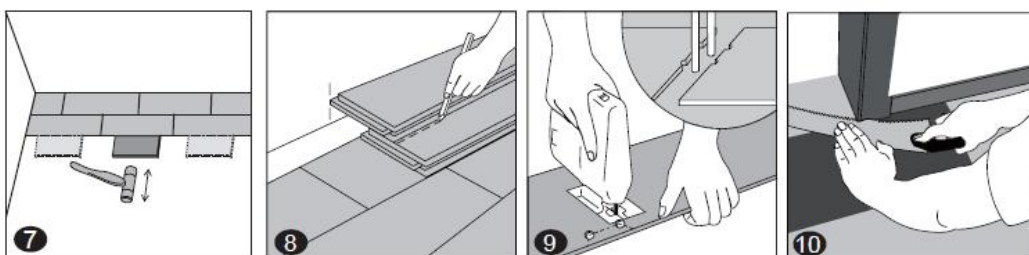

4. **First row, last tile:** At the end of the first row, leave a gap of 1/8" / 3 mm to the wall. The last tile should be the same length and width as the first tile.

5. **Second row, first tile:** Before starting the second row, mark the center of the second tile in the first row and draw a chalk line / place a string at a 90° angle to the first row following the central line to the opposite wall. Click the side with the tongue of the tile into the previous row and place an installation wedge under the board (respect the 1/8" / 3 mm expansion gap next to the wall).

6. **Second row, second tile:** Place the tongue of the second tile at an angle against the grove side of the previously installed tile and fold down. Slide down tongue side of the board into the locking groove of the adjacent tile in the previous row. When the whole row is complete, remove the wedges and fold the row down.

7. **Helpful hint:** After finishing the installation of every row. Use a tapping block and a rubber mallet to gently tap the tiles into the click of the previous row to make sure they are tightly clicked together and make sure there is no gap between the long side of the tiles installed. Any gapping can compromise the whole installation.

8. **To lay the last row:** Position a loose board exactly on top of the last row laid. Place another board on top, with the tongue side touching the wall. Draw a line along the edge of this tiles, to mark the first board. Cut along the edge of this board to mark the first board. Cut along this line to obtain of the required width. the last row should be at least 2"/ 50 mm wide. The spacers can then be removed.

9. **Holes for pipes:** Measure the diameter of the pipe and drill a hole that is 1/4" / 6 mm larger. Saw off a piece as shown in the figure and lay the board in place on the floor. Then lay the sawed-off piece in place.

10. **Door molding and skirtings:** Lay a board (with the decorative side down) next to the door molding and saw as shown in the figure. then slide the tile under the molding.

BATHROOM INSTALLATIONS

Apply a flexible 100% silicone sealant to the entire perimeter of the installation. Do not use an acrylic sealant.

- Prior to installing moldings, apply silicone sealant to the portion of the molding or transition that will contact directly with the flooring surface.
- Install moldings and immediately wipe away any excess silicone sealant.
- Apply silicone sealant at connections to doorframes or any other fixed objects.
- Branded and generic silicone tubes are available at any local home center or hardware location.
- If a watertight installation is required, apply a silicone bead across the bottom of the tongue on both long and short side prior to installing the floor board. Wipe off any excess silicone immediately.

IV.   FINISHING THE INSTALLATION

Replace molding or wall base. Nail the molding to the wall surface, not through the flooring. In areas where the flooring tiles may meet other flooring surfaces, the use of a transition molding is required to cover the exposed edge but do not pinch the tiles. Leave a 1/8" / 3 mm gap between the tiles and the adjoining surface.

V.   MAINTENANCE

- Sweep or vacuum daily using soft bristle attachments.
- Clean up spills and excessive liquids immediately.
- Damp mop as needed and use cleaners recommended for laminate flooring.
- The use of residential steam mops on this product is allowed. Use at lowest power with a suitable soft pad, and do not hold a steam mop on one spot for an extended period of time (longer than 5 minutes). Refer to the steam mop's manufacturer instructions for proper usage.
- Use proper floor protection devices such as felt protectors under furniture.
- Place a walk-off mat at outside entrances to reduce the amount of dirt brought into your home. Do not use mats with a latex or rubber backing since these backings can cause permanent discoloration.
- Do not use abrasive cleaners, bleach or wax to maintain the floor.
- Do not drag or slide heavy objects across the floor.

VI.   DISASSEMBLY

- To disassemble, simply lift the tiles one by one following the opposite sequence as the installation.