## 5G FOLD DOWN LOCK INSTALLATION GUIDE - Page 1

This product features a patented 5G fold down lock system with attached underlayment pad for easy installation and is installed as a glueless floating floor. The planks lock together to provide a tight water-resistant seam, can be installed over most floor surfaces, and are suitable for both residential and light commercial interior applications.

## General Information:

1. Flooring should be transported and stored in a neatly stacked fashion on a smooth, flat surface.
2. This product is recommended for seasonal homes and three season rooms. Installer must leave at least $3 / 8^{\prime \prime}(16 \mathrm{~mm})$ expansion.
3. This product is not recommended for installs that experience temperature extremes beyond $-40^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right)$ or greater than $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$.
4. Although acclimation is not generally required, best practice recommends the floor be installed close to intended occupied temperature. Rooms to be installed should be between $65^{\circ}$ and $85^{\circ} \mathrm{F}$ ( $18.33^{\circ}$ and $29.44^{\circ} \mathrm{C}$ ) for 48 hours before and during installation. Acclimation is required if the flooring has been exposed to extreme temperatures just prior to installation.
5. This product should only be installed after other trades have finished and the jobsite has been cleaned and cleared of debris that could potentially damage a finished installation.
6. Inspect flooring for damage, defects, or shading issues before installation; claims for visual defects will not be accepted after cutting and/or installation.
7. Mix and install pieces from several different cartons during installation to achieve desirable piece variation. Only use one run-number (production lot) on a particular job.
8. Leave $1 / 4$ inch $(6.35 \mathrm{~mm})$ for expansion around the entire perimeter of the flooring up to $50^{\prime} \times 50^{\prime}(15.2 \mathrm{~m} \times 15.2 \mathrm{~m})$, as well as around all vertical obstructions. For larger installations up to $100^{\prime} \times 100^{\prime}$ $(30.4 \mathrm{~m} \times 30.4 \mathrm{~m})$, its recommended to leave $3 / 8$ inch ( 10 mm ) spacing around the perimeter. Commercial installations with continuous spans larger than $100^{\prime}$ are not recommended.
9. Flooring should be protected from prolonged direct exposure to sunlight.

## PLEASE READ PRIOR TO INSTALLATION

This product is the newest generation of high-quality luxury vinyl flooring, with a rigid core, ensuring a strong click joint. It can be installed in a fraction of time compared to ceramic tiles, traditional luxury glue-down vinyl tiles, or wooden floors. Luxury vinyl flooring is warm-to-the-touch, and absorbs more sound than wood, laminate, and ceramic tile flooring.

## Tools and Materials Needed:

1. Utility Knife
2. Straight Edge Saw
3. Power Saw
4. Measuring Tape
5. $1 / 4$ or $3 / 8$ Inch Spacers
6. Transition moldings and baseboards

## Hints for Measuring

Measure the length and width to determine the square footage of the room. Alcoves or offsets should be measured separately. Purchase at least 10\% extra to cover waste, trimming, and for future replacement needs.

Caution: This product is not suitable for outdoor use or in rooms that may be exposed to flooding.

## Subfloors General:

Flooring can be installed over a variety of subfloor surfaces including concrete on all grade levels, wood, and many existing hard surface floors. The subfloors must be clean, smooth, flat, solid (no movement), and dry. Do not install planks over floors that are sloped for drainage. Any uneven areas greater than $3 / 16$ inch $(4.76 \mathrm{~mm})$ in a 10 foot $(3.05 \mathrm{~m})$ radius ( $1 / 8 \mathrm{inch}$ in a 6 foot radius) should be leveled with a Portland cement based patching compound. Vinyl planks/tiles are resistant to water damage but they do not prevent the transmission of moisture. Care should be taken to keep moisture from collecting on either side of the vinyl floor to prevent the growth of unhealthy mold and mildew.

## Concrete Subfloors:

Flooring can be installed over concrete of all grade levels if a proper moisture barrier is used. A minimum 6 mil polyethylene moisture barrier must be used with below and on grade concrete subfloors. Moisture vapor emissions should not exceed 5 lbs . $/ 24$ hours per 1,000 sq. when tested with the Anhydrous Calcium Chloride Test in accordance with ASTM F 1869 or 80\% RH in accordance with ASTM F 2170 Standard Test Method for Determining Relative Humidity in Concrete Slabs using in situ Probes. Any uneven areas greater than $3 / 16$ inch $(4.76 \mathrm{~mm})$ in a 10 foot ( 3.05 m ) radius ( $1 / 8$ inch in a 6 foot radius) should be leveled with a Portland cement based patching compound. Large holes and cracks in the cement should be patched, and expansion joints should be filled with a latex patching compound. Newly poured concrete floors must cure for a minimum of 90 days. Please note it is the person installing the floor and/or the homeowner's responsibility to ensure any moisture or alkalinity issues are resolved prior to installation.

## Wood Subfloors:

Flooring can be installed over a smooth, flat, level, wood subfloor, underlayment grade plywood, and any other underlayment recommended by the manufacturer for use with a vinyl plank floor. Subfloor should be flat within $3 / 16$ inch $(4.76 \mathrm{~mm})$ in a 10 foot $(3.05 \mathrm{~m})$ radius ( $1 / 8$ inch in a 6 foot radius). Wood subfloors must be suspended at least $18^{\prime \prime}$ above the ground. Adequate cross-ventilation must be provided, and the ground surface of the crawl space should be covered with a vapor barrier.
NOTE: Avoid subfloors with excessive vertical movement or deflection because subfloor movement will telegraph through to the finished installation. Indications of excessive deflection are: subfloor fastener release, squeaking, compromised or sectional contours such as bowing or dipping in floors and uneven flooring material. Nail or screw subfloor panels to secure boards with excessive vertical movement or deflection prior to installation of the flooring material. Our warranties DO NOT cover any problems caused by inadequate substructures or improper installation of substructures.

## Heated Subfloors:

Underfloor heating is possible with warm water heating systems. Newly installed systems should be turned on at its maximum temperature for several weeks prior to eliminate residual moisture prior to installation of any flooring. During installation, reduce the radiant heated floor temperature to $65^{\circ} \mathrm{F}\left(18.3^{\circ} \mathrm{C}\right)$. This temperature should be maintained for at least 24 hours before and during the installation, and for at least 48 hours after completion of the installation. Gradually increase the temperature in increments of $5^{\circ} \mathrm{F}$ $\left(2.8^{\circ} \mathrm{C}\right)$ every 24 hours but do not exceed $85^{\circ} \mathrm{F}\left(29.4^{\circ} \mathrm{C}\right)$. The temperature of the subfloor surface must not exceed $85^{\circ} \mathrm{F}$ at any point in time.

## Existing Flooring:

Luxury vinyl floor planks/tiles can be installed over a variety of finished floors including single layer resilient sheet flooring/tile, ceramic, marble and terrazzo, Thesurface must be in good condition and show no signs of excessive moisture conditions. Grout joints should be leveled so they are flush with the flooring surface. Carpet, heavily cushioned vinyl floors, or vinyl floors consisting of multiple layers are NOT a suitable subfloor for installation.

## Underpad / Cushion:

DO NOT install this product over an additional underpad or cushion as this may cause excessive deflection and movement in the floor and damage the locking system and will void the product's warranties.

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## Planning the job:

- First, determine how you want the flooring to run. Typically for plank and tile products, the flooring runs the length of the room. There may be exceptions since it is a matter of preference.
- To avoid narrow widths or short lengths near the walls/doors, it is important to do some pre-planning. Using the width of the room, calculate how many full pieces will fit into the area and how much space remains that will need to be covered by partial pieces.
- Lay the first row along a chalk line and trim to fit the wall allowing $1 / 4$ inch expansion space. If you start the first row with a full width piece, it will be necessary to trim the tongues next to the wall and then place the cut edge next to the wall. Use a utility knife and a straight edge to score the top surface of the plank and then bend it downward to separate. If the starting wall is out of square, it will be necessary to scribe the first row to match the


## REPAIRS

 grooves. adjacent pieces. edges. Carefully remove the edges from the adjacent pieces making sure the tongues and grooves of the adjacent pieces are not damaged.wall, allowing the opposite side of the row to present a true square base for the rest of the floor.

- Use expansion gap spacers to keep the flooring a minimum of $1 / 4$ inch away from the walls. You need to maintain a $1 / 4$ " gap around all vertical obstructions including cabinetry, stone fireplaces, and around doorways. Largerinstallations require $3 / 8^{\prime \prime}$ expansion gaps.
- Remove wall base and undercut door jambs. Do not secure individual planks and tiles to the subfloor as it is designed to be a floating floor. Do not install cabinets or other permanent fixtures on top of the flooring. Transition moldings and baseboards cannot be tight to the floor but must allow the floor to move beneath them. Do not nail, screw or glue transitions or baseboards through floating floor to the subfloor.


First piece, second row.
You can often use the leftover piece from the end of the first row to begin the second row. The piece must be at least $1 / 4$ of a full piece length and no more than $3 / 4$ of a full piece length. Visually, the installation will look more natural if the starting planks are a variety of length. Place a spacer against the left wall.

The staggered (overlap) distance between the short ends of pieces in parallel rows must never be less than $1 / 4$ of the length of a full piece. This ensures a strong fit.

Second piece, second row.
Place the piece gently and close to the short end of the previous piece and fold it down as per the procedures outlined in steps 3 and 4.

After 2 or 3 rows
Check and confirm that all of the spacers placed along the outside length of the first row and row ends are still properly and appropriately in place.

Last row
The minimum width of the last row should be $1 / 4$ of width of a full piece. Remember to allow for the proper amount of expansion space when measuring the remaining width. Measure the width required along the entire length of the last row before beginning to cut pieces as rooms are very rarely perfectly square.

In the unlikely event that a piece is damaged for whatever reason, the simplest method is to disconnect the pieces carefully (lift up entire row to separate long sides, and slide pieces side to side to separate short sides) until the damaged piece can be removed. Then replace the damaged piece with a new one and re-assemble the disconnected pieces. This typically works for pieces that are close to the two long perimeters of a room. For damaged pieces that are not close to the perimeter, you may have to remove the damaged planks and insert new pieces without the short and long end

1. Using a sharp utility knife and a straight edge, cut out the center of the damaged piece by leaving approximately 1 inch strip attached to the
2. Carefully cut back from the four corners of the piece to the inside

First piece, first row.
Starting from the left with the tongue facing the wall, carefully place the first piece in place. Use spacers along the wall to allow the required expansion gap ( $1 / 4^{\prime \prime}$ for spans < 50'; 3/8" for spans > 50'). Refer to Planning the Job above and step 10 below to determine if less than a full width piece is required for the first row.

Second piece, first row.
Place this piece gently close to short end of the first piece. Place spacers against the wall to restrain movement and maintain the expansion gap.

When folding down it is important to start from the corner closet to the wall (or to the previous row in subsequent rows), folding down toward the center, and continue towards the opposite long side. During the fold down, make sure the pieces are close to each other.

Afterwards press slightly along the short end just installed.

At the end of the first row, put a spacer to the wall and measure the length of the last piece to fit.
. Using a sharp utility knife, remove the tongue strip on both the long and short ends of the replacement piece. In addition, remove the groove strip of the short end of the replacement piece.
4. Place two-sided carpet tape with one half under the sides of the adjacent pieces where the tongues and the groove of the replacement piece have been removed. Only the top side release paper of the carpet tape should be removed. Leave the bottom side of the release paper in place - NOT taped to the subfloor.
5. Position the replacement piece by engaging the groove of the long side into the tongue of the adjoining piece and pushing down on the other three sides. The carpet tape will hold the replacement piece in place with its adjacent pieces. Use a hand roller to further secure the tape.

