SOLSTONE
A DIVISION OF PELICAN INT'L

THE SUMMIT COLLECTION

Installation Instructions - Uniclic (Angle/Angle)

These installation instructions are for the UNICLIC locking system only.

Attention! Read Before Installing!

FOR BEST VISUAL REPRESENTATION OF YOUR FLOOR
This flooring replicates the look of a natural product which has natural variations in color and texture. For best visual effect, shuffle planks from several cartons and do not install similar boards next to one another.

SUBFLOOR PREPARATION
Subfloor should be dry and level to 3/16" per 10 ft. radius for best installation results. Laminate flooring should only be used indoors.

FLOORING MATERIAL SHOULD BE INSPECTED PRIOR TO INSTALLATION
Responsibility for the suitability of Manufacturer flooring and accompanying products for each individual installation cannot be assumed by Manufacturer, since Manufacturer has no control over the installer's proper application. Should an individual plank or tile be doubtful as to appearance or dimension the installer should not use this piece. Once a plank is installed it is deemed acceptable by a Homeowner/Installer.
NOTE: Manufacturer flooring with attached underlayment CANNOT be installed with a glue-down method.

READ BEFORE INSTALLING

While flooring is waterproof, it's not a moisture barrier. It's still a good idea to make sure concrete is cured and tested for moisture and that a moisture barrier is installed in the crawl space and even under a floor over a concrete sub-floor. Please refer below for further guidance.

Please check for defects, squeaky noises, sub-floor issue or finish issues by installing 100 sq. ft. of flooring. Moisture won't damage flooring, but it can get in the walls and structure of the home. A couple of extra dollars and a few minutes is a small investment for the added protection and peace of mind. Because houses and buildings, as well as adjacent laminate floors, expand and contract, Manufacturer recommends leaving a ¼" expansion gap between the perimeter walls and any adjacent hardwood floor. Do not install floors where it will be exposed to temperatures greater than 140° F. Use good common-sense installation practices, and you'll have a successful installation that results in a beautiful floor. Check that all BATCH NUMBERS AND ITEM NUMBERS are the same and that you have purchased sufficient packs to complete the job.

KEYS TO SUCCESSFUL LOCKING INSTALLATION

**All planks should be checked before and during installation for faults which are clearly visible; this will reduce problems when assembling and identify any color differences. The inspection should be performed in daylight, or under good artificial lighting,
in the room in which the products are to be installed. If flooring is not acceptable, contact your supplier immediately and arrange for replacement. Manufacturer cannot accept responsibility for flooring installed with visible defects. Prior to installation of any flooring, the installer must ensure that the job-site and sub- floor meet the requirements of these instructions. Manufacturer is not responsible for flooring failure resulting from unsatisfactory job-site and/or sub-floor conditions.**

Flooring should be one of the last items installed in any new construction or remodel project.

CRAWL SPACES

Crawl spaces must be a minimum of 18" (46 cm) from the ground to the underside of the joists. A ground cover of 6–20 mil black polyethylene film is essential as a vapor barrier with joints lapped 6" (15 cm) and sealed with moisture resistant tape. The crawl space should have perimeter venting equal to a minimum of 1.5% of the crawl space square footage. These vents should be properly located to foster cross ventilation. Local regulations prevail where necessary.

WASTE

Most installations will need approximately a 10% cutting and waste allowance added to the square footage of the room.

TEMPERATURE & HUMIDITY

Room temperature and humidity of installation area should be consistent with normal, year-round living conditions for at
least one week before installation of flooring. Maintaining an optimum room temperature of 70° F and a humidity range of 30-50% is recommended.

STORING

Proper conditioning of the job site is necessary. Flooring planks should not be exposed to sudden changes in temperature. Store, transport and handle the flooring planks in a manner to prevent any distortions. Distortions will not disappear over
time. Store cartons flat, never on edge. Insure that the flooring planks are lying flat at time of installation.

TRANSITIONS

When installing next to other types of flooring use a transitions strip/molding. Installations of carpet, tiles, metal strips and other transition moldings should not push fully into the flooring and should allow for some slight movement wherever practical. Installations of carpet, tiles, metal strips and other transition moldings should not push fully into the flooring and should allow for some slight movement wherever practical.

ROOMS LONGER THAN 50'

For rooms, wider or longer than 50', the use of T-moldings is required to account for the normal movement or seasonal expansion/contraction of the floor. If the homeowner does experience gapping then we would suggest the contractor tap the planks back together since they may come apart for longer run lengths.
Protect the floor from heavy-rolling loads, other trades, and movement of appliances by using sheets of plywood or similar.

SUITABLE SUBSTRATES

All substrates listed below must be properly prepared and meet certain requirements. There may be other exceptions and special conditions (as noted below) for these substrates to be suitable for the locking installation system.

- Concrete – dry and smooth on all grade levels
- Suspended wood sub-floors with approved wood underlayments – must have minimum of 18" well-ventilated crawl space underneath
- Suspended hardwood flooring that is fully adhered, smooth and square edge without texture
- Single-layer, fully-adhered, existing resilient floors – must not be foam-backed or cushion backed
- Ceramic tile, Terrazzo, Marble
- Polymeric Poured (seamless) Floors
- Use Ply-Wood/OSB - 3/4 "
- Particleboard 40lb. density or wafer board

DO NOT INSTALL OVER

- Existing resilient tile floors that are below grade
- Existing cushion-backed vinyl flooring
- Carpet
- Hardwood flooring that has been installed directly over concrete
- On stairs or in rooms with sloping floors or floor drains

SUCCESSFUL WAYS TO AVOID MOVEMENT OR NOISE

Squeaking and clicking noises can be a result of many causes putting stress on the locking system;

- Locking system not engaged completely on both short and long joints. (To avoid this make sure to use a rubber mallet to engage each plank together and test each row).
- Do NOT use improper underlayment. (Please contact manufacturer to confirm underlayment).
- Joist/sub-floors moving which cause squeaky noises.
- Do NOT use any end joint that are broken (during transit or installation).
- Provide a minimum .25" on each wall space for expansion. (Lack of proper expansion space can cause peaking/tenting on the end joints).
- Confirming that floor is flat before installation. (Sub-floor deflection is not within manufacturer tolerance and the floor is not flat).
- Do NOT install floors in an extreme environment.

PRE-INSTALLATION SUBFLOOR REQUIREMENTS

Sometimes, it is impossible to eliminate the noise completely. Minor squeaking or clicking noises are to be accepted as normal flooring phenomenon.

All Sub-floors must be:

- Dry
- Structurally sound
- Clean: Thoroughly swept and free of all debris
- Level: Flat to 4.7mm (3/16") per 3.3 meters (10-foot) radius

Wood Sub-Floor

Wood sub-floors must be dry and well secured. Nail or screw every 6" along joists to avoid squeaking. If not level, sand down high spots and fill low spots with a Portland Based leveling patch.

Concrete Sub-Floor

Concrete sub-floors must be fully cured, at least 60 days old, and should have minimum 6-mil poly-film between concrete and ground. Sub-floor should be flat and level within 3/16" per 10' radius. If necessary grind high spots down and level low spots with a Portland leveling compound.

Ceramic Tile, resilient tile and sheet vinyl must be well-bonded to sub-floor, in good condition, clean and level. Do not sand existing vinyl floors, as they may contain asbestos. Resilient flooring should only be installed in temperature-controlled environments. It is necessary to maintain a constant temperature before, during and after the installation. Therefore, the permanent or temporary HVAC system must be in operation before the installation of resilient flooring. Portable heaters are not recommended as they may not heat the room and sub-floor sufficiently. Kerosene heaters should never be used.

All substrates must be structurally sound, dry, clean, flat, and smooth with minimal deflection. Substrates must be free from

excessive moisture or alkali. Remove dirt, paint, varnish, wax, oils, solvents, other foreign matter and contaminates. High spots on the substrate should be leveled and low areas filled with appropriate underlayments. Do not use products containing petroleum, solvents or citrus oils to prepare substrates as they can cause staining and expansion of the new flooring.

Renovations or Remodel Work
For renovation or remodel work, remove any existing adhesive residue so that 100% of the overall area of the original substrate is exposed. Embossed existing resilient floors, ceramic tile floors, ceramic and marble grout joints, and irregularities in concrete should be filled. Maintain temperatures between 55°F (13°C) and 85°F (29°C).
For concrete substrates, conduct moisture testing (moisture vapor emission rate {MVER}) not to exceed 5lbs and/or percent relative humidity 85% (in-situ probe). Bond tests must also be conducted for compatibility with the substrate.

Please refer to Sub-floors and Underlayments

- Radiant heated substrates must not exceed a maximum surface temperature of 81°F (27 °C).
- The sub-floor panels must have a smooth, sanded face and show no swelling of edges or surface due to exposure to weather conditions or construction traffic.
- There are numerous products available for use as floor fills, patches, self-leveling underlayments, and trowelable underlayments. They include proprietary blends of compounds such as Portland cement, calcium aluminates, and gypsum based products. These are recommended for smoothing rough or uneven sub-floors, enhancing acoustical and fire characteristics of structures or as substrates to receive floor covering for otherwise unsuitable sub-floor conditions.

INSTALLATION TOOLS

For all installation methods:

- Tape measure
- Tapping block (trimmed piece of flooring)
- Pencil
- Leveler
- Rubber Mallet
- 1/4" Spacers
- Pry bar or pull bar
- Chalk line
- Crosscut power saw

Acceptable sub-floor types:

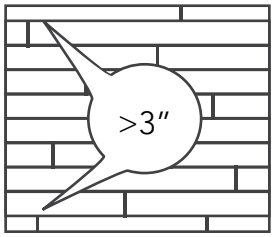
- CDX Underlayment Grade Plywood (at least ½" thick) Underlayment grade particleboard OSB (at least ¾" thick)
- Concrete slab
- Existing wood floor
- Ceramic tile, Resilient tile & sheet vinyl
- 3M Scotch-BlueTM 2080 Tape

STARTING YOUR INSTALLATION

Work from several open boxes of flooring and "dry lay" the floor before permanently laying the floor. This will allow you to select the varying grains & colors and to arrange them in a harmonious pattern. Remember, it is the installer's responsibility to determine the expectations of what the finished floor will look like with the end user first and then to cull out pieces that do not meet those expectations.

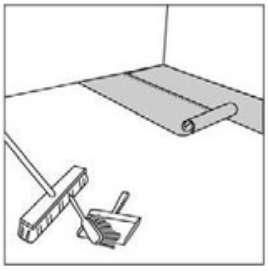
Begin installation next to an outside wall. This is usually the straightest and best reference for establishing a straight working line. Establish this line by measuring an equal distance from the wall at both ends and snapping a chalk line. The distance you measure from the wall should be the width of a plank. You may need to scribe cut the first row of planks to match the wall in order to make a straight working line if the wall is out of straight.

You may want to position a few rows before starting installation to confirm your layout decision and working line. When laying flooring, stagger end joints from row to row by at least 8". When cutting the last plank in a row to fit, you can use the cut-off end to begin the next row. If cut-off end is 8" in length or less, discard it and instead cut a new plank at a random length and use it to start the next row. Always begin each row from the same side of the room. When near a wall, you can use a pry bar to pry close the side and end joints.



Before starting, carefully measure the length and the width of the room to plan a precise layout to achieve a balanced appearance of the floor. This is very important when installing typical plank decors. This will also ensure that you won't end up with the last row being too narrow. If the last row will be less than 3" (8cm), the installation will be easier and better if you reduce the width of the planks of the first row.

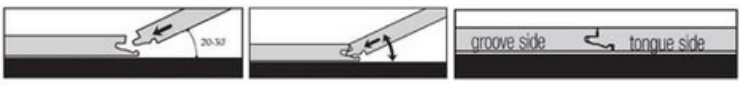
Cleaning and Underlay:

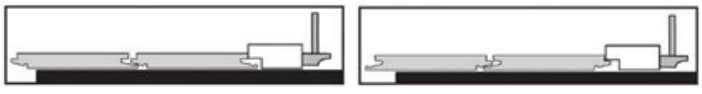


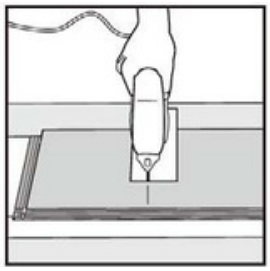
After thoroughly cleaning the subfloor, you should install a foam underlay (unless your product has a pre-attached pad). Run the foam underlay in the same direction as the flooring planks. The underlay should be butted side-by-side with no overlap. Tape seams together. If you are installing over a concrete suboor, a 6-mil poly (plastic sheeting) is to be installed under the foam underlay. (Many foam underlays already have this plastic sheeting pre-attached).

Method 1: Angle-In Installation Method
Position the panel to be installed at an angle of 20°-30° to the panel already installed. Move the panel gently up and down and at the same time exert forward pressure. The
panels will automatically click into place. You can either insert the tongue into the groove, or the groove onto the tongue. The tongue in groove method is the most common and the easiest way.

Method 2: Flat installation Method
You can also tap the panels into each other without lifting. For this method you must use the special tapping block. The planks should not be joined with a single tap and the tapping block should set flat on the floor. To avoid damaging the panels you must tap them together gradually. See diagram 2 a-b. Use this method only in cases where you are unable to use the Angle-In method (see below). The rest of your floor should be installed using the Angle In method.







Cutting the Plank

If cutting with a jig saw, the laminate surface should be turned down. If cutting with a hand saw, the laminate surface should be face up.

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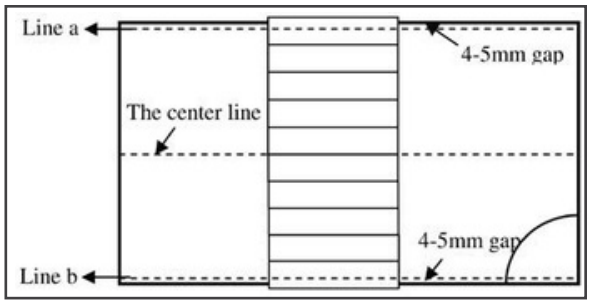
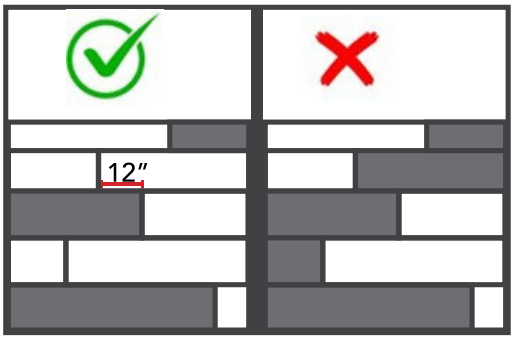
Planning Your Layout

It is very important to plan your layout to avoid an unbalanced installation with narrow plank widths at the walls. Lay the long dimension of the planks parallel to the long dimensions of the room. Draw a line with a chalk lengthwise along the middle of the room. Do a dry layout of planks from the center line to the wall running parallel to the long direction of the planks to determine the width of the last row of planks see the diagram to the right.

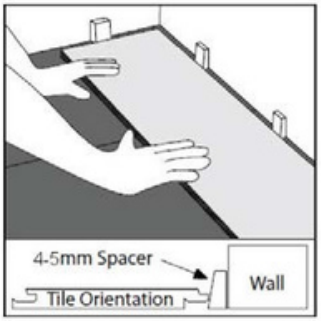


- **Reserve a 5 mm expansion gap between the line and / or line b to the walls. Avoid having less than a half plank width at the line and / or line.**
- **Measure the width of the room at the front, middle and back and divide the widths of each measurement by the width of a plank. If the remainder is less than half the plank width, then the planks on your starter row should be narrowed to make the last row approximately half the plank. The width of the last row of planks should be approximately the same width as the first row of planks.**

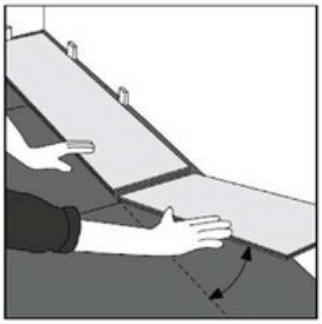
Note: *This may also be figured out by laying down loose planks across the width of the room without securing them to each other and making the necessary adjustments.*



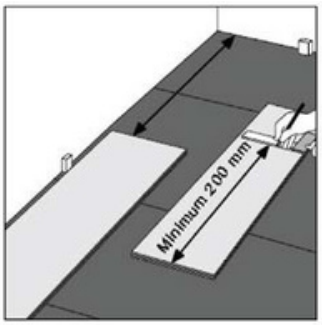
During installation, make sure that you mix the floor panels (and floor boxes) sufficiently so that there are not too many identical, lighter or darker planks next to each other. To obtain the best visual effect, it is best to install the panels in the direction of the longest wall and/or parallel to the incidence of light. Ensure that the end joints of the panels in 2 successive rows are never in line, they should be staggered by at least 12 inches. For a natural look and better mechanical strength, we do not recommend an installation of the planks in a pattern but rather at random formation.



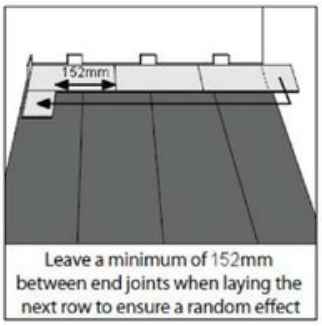
Step 1
Laying first plank in corner of room with tongue side facing wall using 5mm spaces



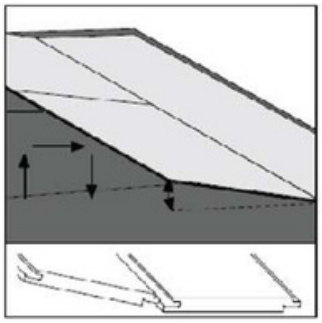
Step 2
Fitting of second plank



Step 3
Cutting and fitting of final plank in first row

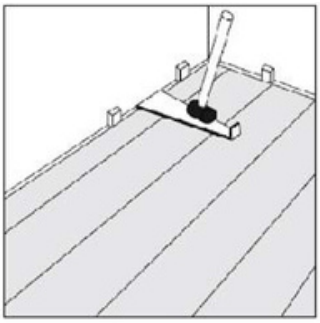


Step 4
Use of offcut from previous row (optimal)

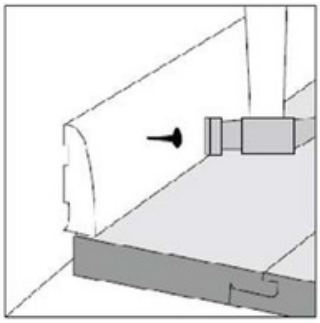


Step 5
Fitting of additional planks in second row

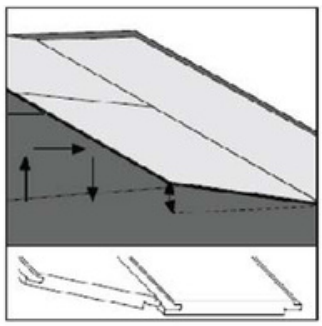
Step 6
Measure and cut final row of planks allowing for 5 mm expansion gap



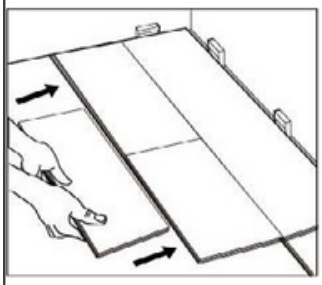
Step 7
Pull bar and rubber mallet can be used for final row of planks, ensuring a 5mm expansion gap



Step 8
Refitting of skirting board with hidden 5mm expansion gap



Step 9
Fixing edge trim to wall



HELPFUL HINT

When installing each new row, take a full loose plank and use the long side to tap against the prior row to ensure no gapping.

DISASSEMBLING

Separate the whole row by lifting it up delicately at an angle. To separate the planks, leave them flat on the ground and slide them apart.

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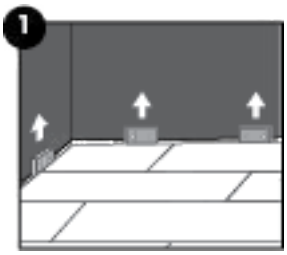
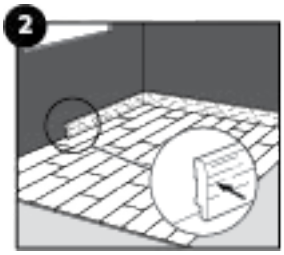
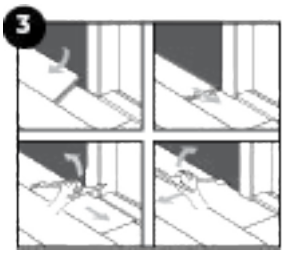
FINISHING



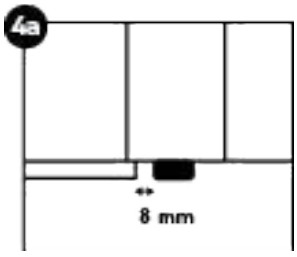
Remove all spacers.

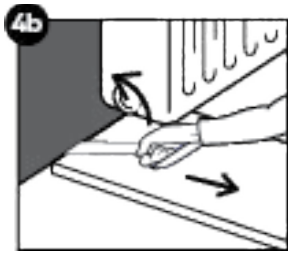


Inspect the final surface of the installed floor. Install vinyl skirtings against the wall but never attach the skirting to the floor itself. This method allows the floor to expand and/or contract under the skirting-board.

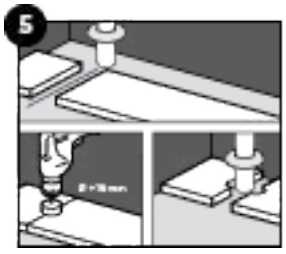


Do not fill or cover the expansion joints with silicone or other kit.

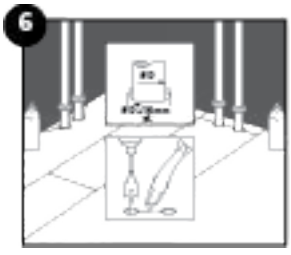




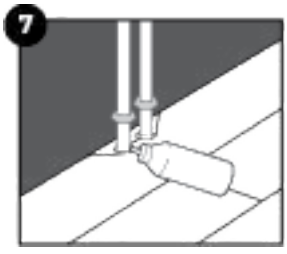
When the new flooring meets a threshold or a doorway, we recommend undercutting the door frames or moldings. To secure the correct cut, turn a plank upside down with the underlay below, and place it on the floor up to the door frame. This ensures that the cut will be made at the correct height. Then place a hand saw flat against the plank and simply cut through the frame. Remove the cut out piece and vacuum away any debris. Install the plank on the long side, keeping the short side close to the undercut molding. Then slide the plank underneath the undercut towards the already installed plank in order to close the short end joint. Use the pull bar and/or tapping block to secure absolute tightness in the long and short joint.



When sawing the panels make sure that the expansion gap under the door is 8mm. If you cannot lift the panel (e.g. under radiators), use the tapping block or pull-bar to tap the planks together.



In rows where there is a pipe, make sure the pipe falls exactly in line with the short side of two planks. Take a drill bit with the same diameter as the pipe plus 16mm (0.63inch). Click the planks together on the short side and drill a hole centered on the joint between the two planks. Now you can install the planks.



In case of a double pipe, drill a hole at each of the marked points that is equivalent to the diameter of the pipes plus 16mm. If located on the long side of the plank, make a 45 degree cut from each hole to the edge of the plank. Then, using an appropriate PVC glue along the cut edges of the piece you cut out, glue the piece in place. Be sure no glue comes between the cut out piece and the subfloor. For a perfect finish around pipes, use pipe covers.

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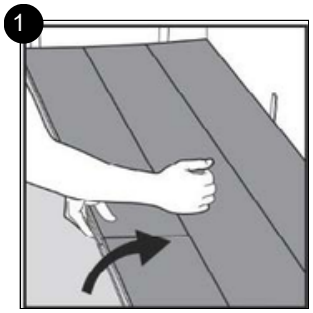
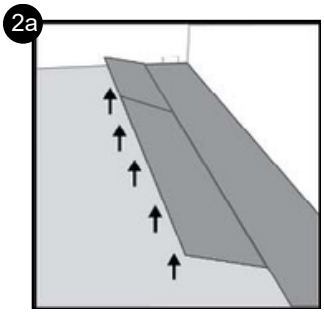
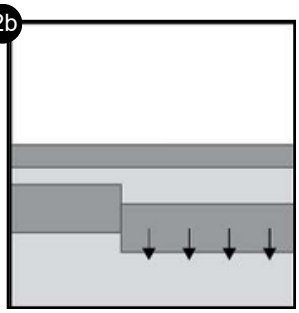
Disassembling Panels Near Walls



Separate the whole row by carefully lifting up and release the whole row.



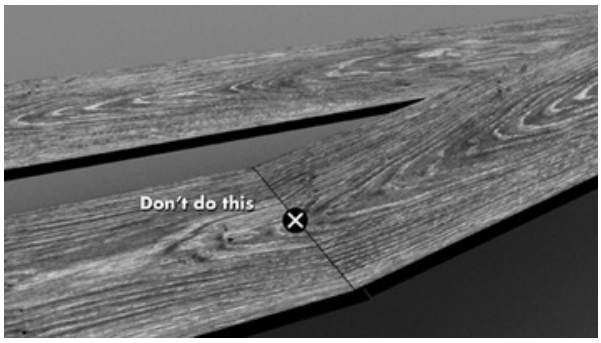
Disassemble the panels by lifting the short ends upward and disengage from the rest.



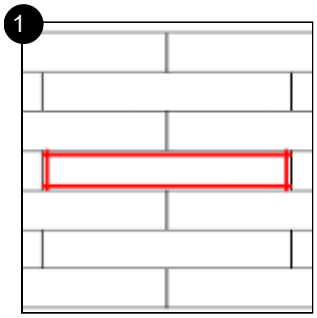
Slide one panel forward. Never fold up a panel, as this damage the profile.

How NOT to Disassemble a Panel

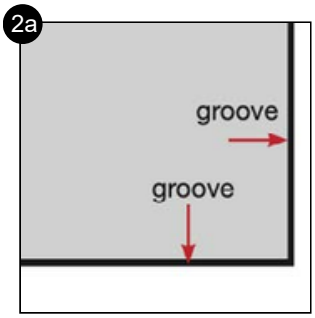
DO NOT lift planks from the center. This will cause damage the groove. Please use the slide method or lift planks from the end joint as shown on the step above.

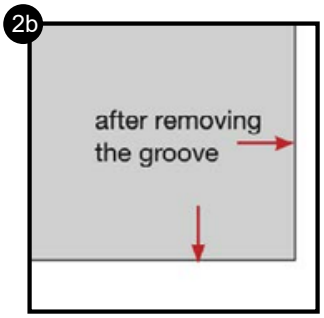


Replacement of a Panel in the Middle of the Room

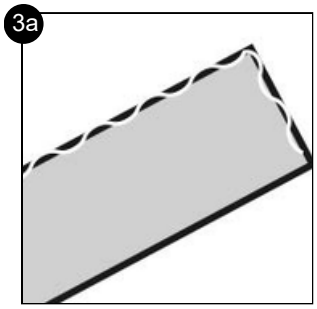


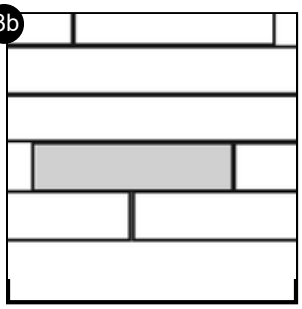
Please cut the panel along the red lines as indicated.





Remove the groove on both sides as indicated in the above pictures.





Apply glue on the cut groove side to adhere to the adjacent planks.