



INSTALLATION GUIDELINES FOR FIRMFIT FLOORING

Thank you for choosing FIRMFIT 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

TOOLS REQUIRED: Spacers, rubber mallet, ruler, pencil, tape measure, utility knife.

- Prior to installation, inspect material in daylight for visible faults/damage, including defects or discrepancies in color or shine; 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 boards 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 planks 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 flooring planks 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 environment where FIRMFIT is to be installed is critically important with regard to successful installation and continued performance of the flooring products. FIRMFIT is intended to be installed in interior locations only. These interior locations must meet climatic and structural requirements as well.
- In most cases, this product does not need to be acclimated. However, if the boxes of flooring were exposed over 2 hours to extreme temperatures under 50°F / 10°C or over 104°F / 40°C within the 12 hours before the installation, acclimation is required. In this case, keep the boards in room temperature for at least 12 hours in unopened package before you start the installation. The room temperature must be maintained consistent between 70-80°F / 20-25°C before and during the installation.
- Flooring should only be installed in temperature-controlled environments. It is necessary to maintain a constant temperature of 70-80°F / 20-25°C 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 50°F / 10°C or greater than 120°F / 50°C.



- For floor surfaces exceeding 4356 ft² / 400 m² and/or lengths exceeding 66 ft / 20 m, use expansion moldings.

II. SUBFLOOR INFORMATION

- FIRMFIT 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.
- Depressions, deep grooves, expansion joints and other subfloor imperfections must be filled with patching & leveling compound.
- Substrates must be free from excessive moisture or alkali. Remove dirt, paint, varnish, wax, oils, solvents, any foreign matter and contaminants.
- Do not use products containing petroleum, solvents or citrus oils to prepare substrates as they can cause staining and expansion of the new flooring.
- Although this floor is waterproof, it is not aimed to be used as a moisture barrier. The concrete moisture vapor emissions should not exceed 8 lb / 3.63 kg (ASTM F1869) / 90 % RH (ASTM F2170) with a PH limit of 9 / max. 2.5 % moisture content (CM method).
- This product is also not to be installed in areas that have a risk of flooding such as saunas or outdoor areas.

WOOD SUBFLOORS

- If this flooring is intended to be installed over an existing wooden floor, it is recommended to repair any loose boards or squeaks before you begin the installation.
- Nail or screw every 6" / 15 cm along joists 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.
- We recommend laying the flooring crossways to the existing floorboards.
- 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

- Floors 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. Curing agents and hardeners could cause bonding failure and should not be used.
- We recommend using 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.
- Floating floor of any type, loose lay, and perimeter fastened sheet vinyl.
- 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 85°F / 30°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.
- Make sure that the temperature in the room is maintained consistent between 70-80°F / 20-25°C before and during the installation.
- Floor temperature must not exceed 85°F / 30°C.
- Use of an in-floor temperature sensor is recommended to avoid overheating.
- 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.

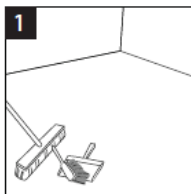
Warning: Electric heating mats that are not embedded into the subfloor are not recommended for use underneath the floors. Using electric heating mats that are not embedded and applied directly underneath the floors could void the warranty for your floor in case of failure. It is best to install the flooring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

III. INSTALLATION

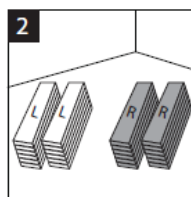
- Remove baseboard, quarter-round moldings, wall base, appliances and furniture from room. For best results, door trim should be under-cut to allow flooring to move freely without being pinched. After preparation work, sweep and vacuum the entire work area to remove all dust and debris.
- With a floating floor, you must always ensure you leave a 1/4" / 6 mm gap between walls and fixtures such as pillars, stairs, etc. These gaps will be covered with trim moldings after the floor is installed.
- Whenever possible, plan the layout so that the joints in the planks do not fall on top of joints or seams in the existing substrate.

- Do not install your kitchen cabinets directly over your FIRMFIT floor. FIRMFIT quality can be guaranteed as long as the floor can move freely.
- **UNDERLAY:** If the floor does not have a pre-attached underlayment, an additional underlayment is recommended in order to improve acoustic performance and absorb some irregularities on the substrate. Best results can be expected with an underlayment of 0.04" / 1 mm to max 0.06" / 1.5 mm thickness with a high density (>397 lb / ft³ / >180 kg / m³) and high compressive strength (>200kPa) that supports the click system during daily use. Underlayments with a low density and an inadequate compressive strength could damage the locking mechanism and will void warranty.
If the floor has a pre-attached underlayment, the use of an additional underlayment could damage the locking mechanism and will void warranty.
- **CUTTING TIPS:** To cut the plank, use a simple utility knife and ruler, and with the top side facing up, cut heavily and several times on the same axis. The knife will not go through the surface but make a deep cut. You can then lift one half of the plank using your other hand to hold down the second placing it very close to the cut. The plank will split naturally. For ease of installation, cuts may be made using a laminate or vinyl flooring cutter.

ATTENTION: The letter "L" or "R" marked on the back of each herringbone plank indicate two different profiling directions. There is the same number of L planks and R planks in each box. Please pay attention to the markings and always install them paired together. In below instructions, L planks are represented in white, R marked planks are represented in grey.

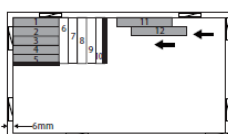


The subfloor should be even, dry, clean. Carpet staples or glue residues must be removed, and the floor must be clean to ensure proper installation.



Separating into distinctive piles will make it easier to find the correct plank should the L or R markings be cut off.

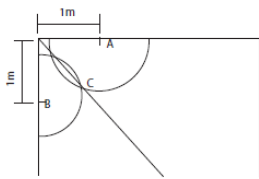
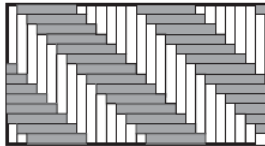
METHOD 1 – BLOCK PATTERN



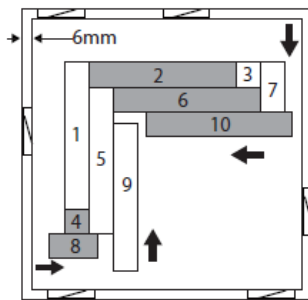
- This installation method consists in grouping 5 planks with the same profiling together. You can then start staggering your spacers across your wall, leaving a 1/4" / 6 mm expansion gap with the wall.
- Start in the left corner opposite from the main entrance with an R plank, put the tongue sides against the wall, and follow the sequence on the image (Refer to the clicking tips on the bottom of the page). Always leave a 1/4" / 6 mm expansion gap with the wall.

IMPORTANT: We recommend to apply any high grab adhesive or multi-purpose glue inside the locking system at the short side of the planks for additional engagement, avoid using adhesive excessively and be sure to immediately wipe away any excess that comes out to the floor's surface.

METHOD 2 – FISHBONE DIAGONAL

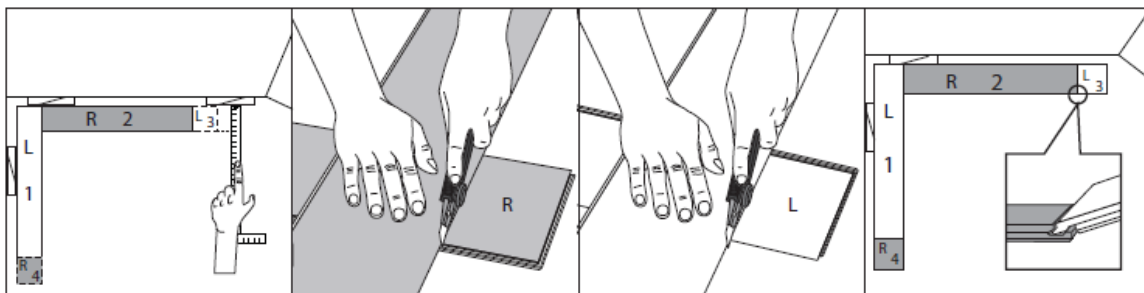


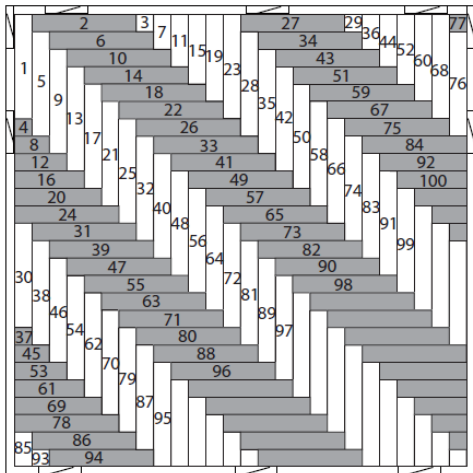
- Using a pencil, a string and a ruler, draw a line at 45° that will be used to align the pattern according to the image. You can then start staggering your spacers across your wall, leaving a 1/4" / 6 mm expansion gap with the wall.



- Start from the left corner opposite from the door. Use an "L" marked plank first and put the tongue sides against the wall. Then take your 2nd plank (marked "R") and place it perpendicularly to the 1st (Refer to the clicking tips on the bottom of the page). For the 3rd and 4th plank, refer to the cutting tips below. Continue the installation according to the sequence.

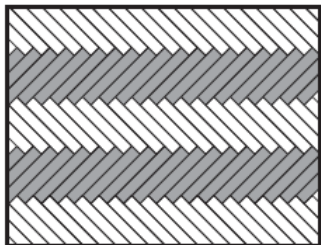
CUTTING TIPS: To install the 3rd (L), 4th (R) and any other plank that will have the short side against the wall, measure the length of the plank to fit and cut accordingly. Make sure you use the correct side of the plank (see images below).





This sequence is given as an example, it will depend on the shape of the room. The important is to always start with the planks placed against the walls.

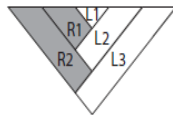
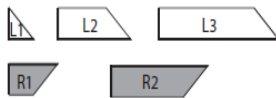
METHOD 3 – FISHBONE PATTERN



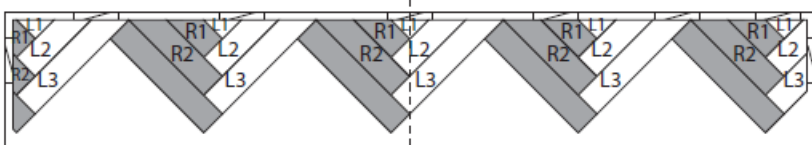
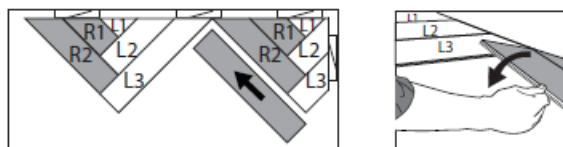
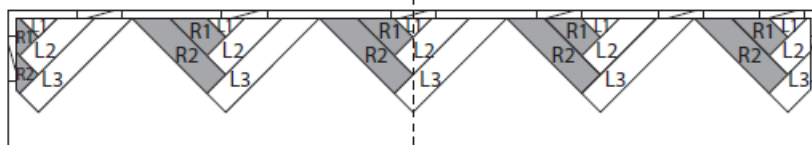
- At first, follow the cutting template on the inside of your box to cut the 5 pieces (L1, L2, L3, R1, R2) needed for one starting set. You can only cut out one piece out of one separate plank, this means you will need a total of 5 planks in order to make the required 5 starting set pieces (L1, L2, L3, R1, R2). Align the first starting set with the center line (to align the planks, make sure the line goes through the tip of the pattern). Always leave a 1/4"

/ 6 mm expansion gap with the wall.

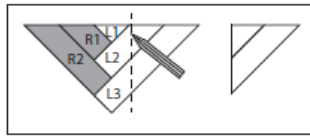
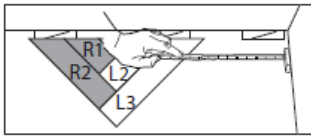
STARTING SET



- Measure how many starting sets you will need based on the width of the room. Prepare additional starting sets. You can connect the starting sets with one full plank.

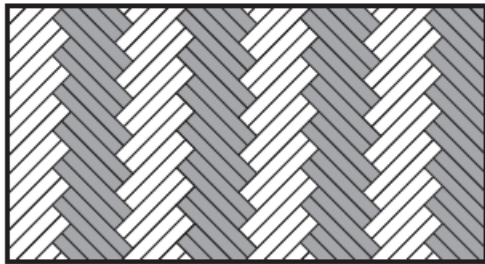


- When you reach the walls on both sides, measure the distance between the wall and the closest starting set. Assemble a new set, mark the measured distance on it, cut the planks (the set can be disassembled for this) and install the planks in the gap.

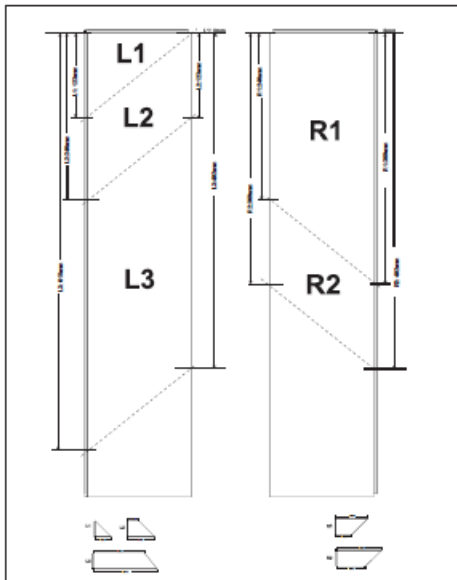


- Continue this pattern until the room is entirely covered.

METHOD 4 – DOUBLE HERRINGBONE



STARTING SET

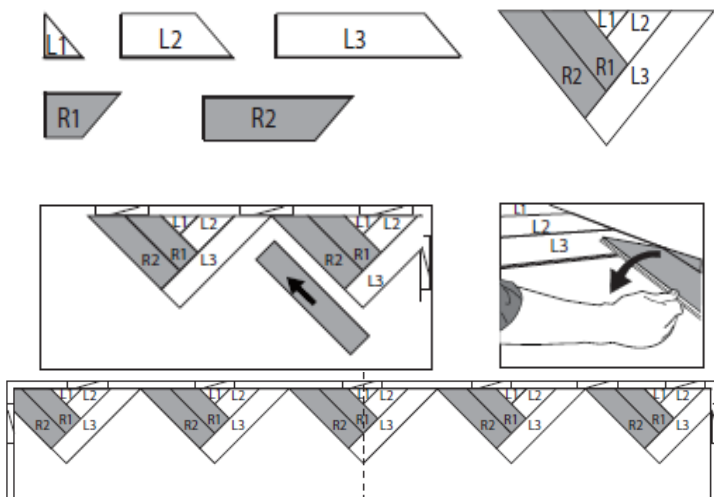


- Use the template on the inside of your box to draw Double Herringbone starting set of 5 pieces (L1, L2, L3, R1, R2). Suggest to use red pencil to draw the template according to the below table:

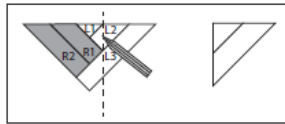
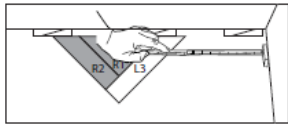
Long side of the plank	Short side of the plank	L and R markings
123 mm	0	L1
246 mm	123 mm	L2
369 mm	246 mm	R1
492 mm	369 mm	R2
615 mm	492 mm	L3

You can only cut out one piece out of one separate plank, this means you will need a total of 5 planks in order to make the required 5 starting set pieces (L1, L2, L3, R1, R2). Align the first starting set with the center line (to align the planks, make sure the line goes through the tip of the pattern). Always leave a

1/4" / 6 mm expansion gap with the wall.



- Measure how many starting sets you will need based on the width of the room. Prepare additional starting sets. You can connect the starting sets with one full plank.
- When you reach the walls on both sides, measure the distance between the wall and the closest starting set. Assemble a new set, mark the measured distance on it, cut the planks (the set can be disassembled for this) and install the planks in the gap.



- Continue this pattern until the room is entirely covered.

CLICKING TIPS

Place the short end tight to perpendicular plank. Click it into the long end of the parallel panel at a 45° angle. Fold down in a single movement. It is recommended to slightly tap the planks on the edge after clicking them together to make sure they are clicked tightly.

NOTE: If you notice both planks 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.

WARNING

Failure to properly line up the end joint and attempting to force it in while out of alignment could result in permanent damage to the end joint.

HOLES FOR PIPES

Measure the diameter of the pipe and drill a hole that is 13/16" / 20 mm larger. Saw off a piece and lay the board in place on the floor. Then lay the sawed-off piece in place.

DOOR MOLDING AND SKIRTING

Lay a board (with the decorative side down) next to the door molding and as shown in the figure. Then slide the floorboard under molding.

DISASSEMBLING

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

IV. FINISHING THE INSTALLATION

- Replace molding or wall base, allowing slight clearance between the molding and the planks.
- Nail the molding to the wall surface, not through the flooring.
- At doorways and at other areas where the flooring planks may meet other flooring surfaces, it is preferable to use a "T" molding, or similar, to cover the exposed edge but not pinch the planks. Leave a small gap between the planks 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 vinyl 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.