INSTALLATION GUIDE

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 warranty.

I. GENERAL PREPARATIONS

IMPORTANT NOTICE

After installation, make sure that FIRMFIT is not be exposed to temperatures less than 10°C or greater than 50°C. For temperatures below 10°C or above 50°C FIRMFIT flooring must be glued-down with a premium vinyl adhesive. For glue-down method follow adhesive manufacture installation instructions.

When employing the direct glue-down installation method, DO NOT include a 0.15mm poly-film vapor barrier in the assembly. Flooring material must be adhered directly to the subfloor. Flooring should NEVER be glued to a poly-film vapor barrier.

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

- Prior to installation, inspect material in daylight for visible faults/damage. No claims on surface defects will be accepted after installation.
- It is preferable to lay boards following the direction of the main source of light. For the best result, make sure to always work from 2 to 3 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% 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.
- Flooring should only be installed in temperature-controlled environments. It is necessary to maintain a constant temperature before, during and after the installation. Portable heaters are not recommended as they may not heat the room and subfloor sufficiently. Kerosene heaters should never be used.
- This product does not need acclimation.
- For floor surfaces exceeding 400m^2 and/or lengths exceeding 20m, use expansion moldings.

IMPORTANT NOTICE

Flooring may be installed with a direct glue-down method on approved wooden (or) concrete substrates that are on or above grade only. Use only premium vinyl flooring adhesive. Please consult with adhesive manufacturer to determine if suitable for use with this material. For glue down method follow adhesive manufacture installation instructions.

II. SUBFLOOR INFORMATION

- Inspect your subfloor before you begin, it must be clean, dry and level to 5mm within a 3-meters. 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 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 subfloor must be dry (max 2.5% moisture content - CM method).
- It is advised for the ground to be covered with a minimum 0.15mm vapor barrier.
- This product is also not to be installed in areas that have a risk of flooding such as saunas or outdoor areas.

IMPORTANT NOTICE

Due to the speed of sudden temperature changes, which has the potential to negatively affect this flooring, it is not recommended to install over any electrical radiant heating system. Installation over electrical radiant heating systems will not be covered by the manufacturer's warranty. Below instructions are for radiant heating systems using water.

- Ensure the radiant heat surface temperature never exceeds 27°C.
- 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.
- The maximum moisture content of the screed is 1.5% (CM method).
- Shut down the floor heating at least 48 hours prior to installation.
- Make sure that the temperature in the room is at least 15°C during installation.
- It is recommended that the radiant heat be applied in a gradual manner after installing the floor.
- Refer to the radiant heat system's manufacturer recommendations for additional guidance.

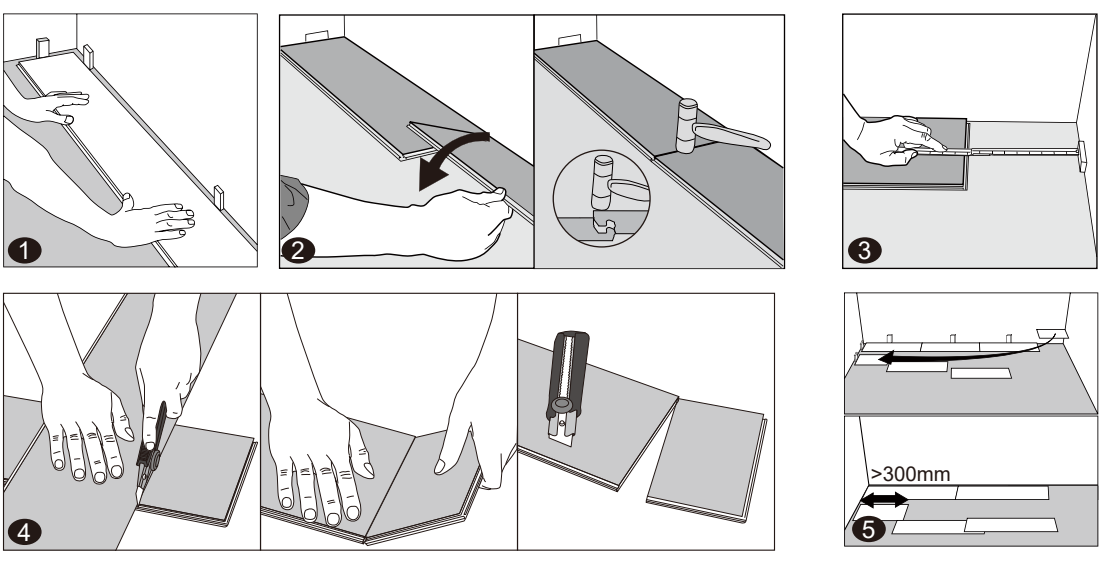
- FIRMFIT flooring can be installed over most existing hard surface floor coverings, provided that the existing floor surface is clean, flat, dry, securely fastened, and structurally sound.
- Inspect your subfloor before you begin. It must be clean and level to 5mm within a 3-meter span.
- Existing concrete 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. Curing agents and hardeners could cause bonding failure and should not be used. We recommend using a minimum 6-mil poly-film as a moisture barrier between the concrete subfloor and the flooring.
- Depressions, deep grooves, expansion joints and other subfloor imperfections must be filled with patching & leveling compound.
- 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.

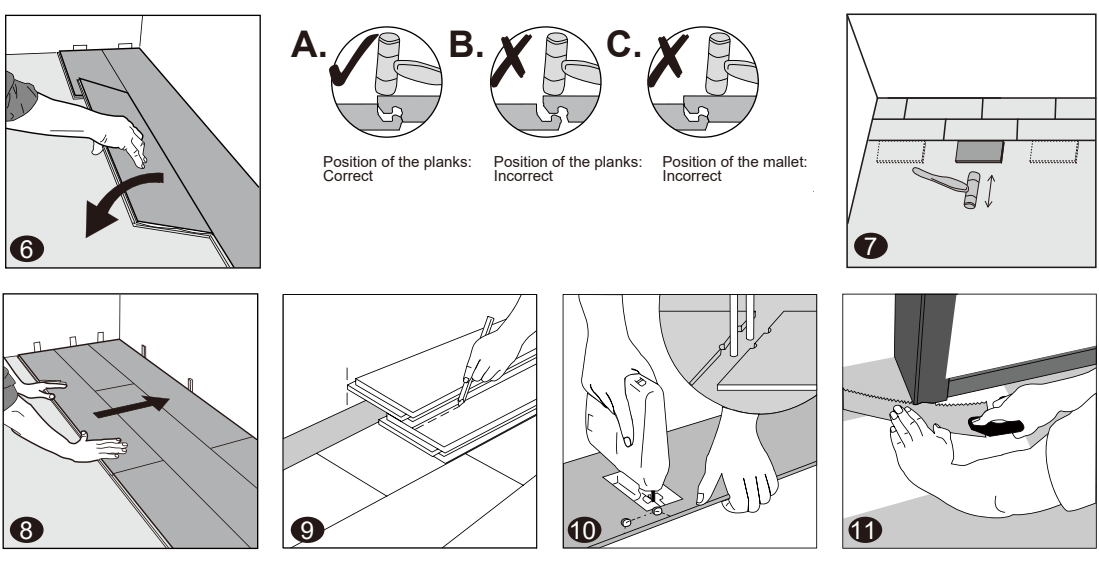
DO NOT INSTALL OVER

- Hardwood flooring / wood subfloors that lay directly on concrete or over dimensional lumber or plywood used over concrete.
- Any type of carpet.
- Existing cushion-backed vinyl flooring.
- Floating floor of any type, loose lay, and perimeter fastened sheet vinyl.

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 6mm gap between walls and fixtures such as pipes and pillars, stairs, etc. These gaps will be covered with trim moldings after the floor is
installed. Tip: When installing around pipes, drill the holes 12mm larger than the diameter of the pipes.
- 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. The end joints of the planks should be staggered a minimum of 20cm apart. Do not install over expansion joints. Avoid installing pieces shorter than 30cm at beginning or end of rows.
- Do not install your kitchen cabinets directly over your FIRMFIT floor. FIRMFIT quality can be guaranteed as long as the floor can move freely.
- Decide the installation direction. It is recommended to install the length direction of the planks parallel to the main light direction.
- Measure the area to be installed: The board width of the last row shall not be less than 50mm. 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.





① **First row, first plank:** After thoroughly cleaning the subfloor, you should begin laying from left to right. Position the first plank so that grooved edge is facing you. Place the floorboard 6mm from the left wall. Use spacers between the wall and the floorboard.

② **First row, second plank:** Drop the plank and gently tap down the end with a rubber mallet so it firmly locks into the previous plank until both are at the same height. Make sure both planks are perfectly aligned. Continue installing the first row until you reach the wall on the right.

IMPORTANT: It is crucial that after the short edges of two connecting planks are correctly aligned, the rubber mallet contacts the plank in the area directly above the short edge, allowing for a correct locking. Tapping the area close to the short edge, but not directly above it, may result in permanent damage to the joint.

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. 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.

③ **First row, last plank:** At the end of the first row, leave an expansion gap of 6mm to the wall and measure the length of the last plank to fit.

④ **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.

⑤ **Second row, first plank:** Start the second row with the leftover cut part of the last plank of the previous row. This small plank should measure at least 30cm. Otherwise, cut a new plank in half and use it to begin the second row. The end joints of each adjoining row should not be closer than 20cm to each other. Whenever practical, use the piece cut from the preceding row to start the next row.

⑥ **Second row, second plank:** Click the long side of the plank into the previous row and place it tight to the short end of the previous plank with an angle of 25-30 degrees. Drop the plank and gently tap on the end with a rubber mallet so it firmly locks into the previous plank until both are at the same height. Make sure both planks are perfectly aligned.

⑦ **After finishing the installation of every row:** Use scrap pieces and a small hammer or rubber mallet to gently tap the planks 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 planks installed. Any gapping can compromise the whole installation.the same height. **Make sure both planks are perfectly aligned.**

⑧ **After the first 2-3 rows** of planks are installed, they should be checked with a string line to ensure that rows are still running straight. If they are not, it could be that the starting wall has some irregularities that caused bowing in the installation. If so, the starting row of planks may have to be scribed and re-trimmed to account for any unevenness in the wall. This can be done without having to disassemble the beginning rows.

⑨ **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 boards, to mark the first board. Cut along the edge of this board to mark the first board. Cut along this line to obtain the required width. Insert this cut board against the wall. The last row should be at least 50mm wide. The spacers can then be removed.

⑩ **Holes for pipes:** Measure the diameter of the pipe and drill a hole that is 12mm 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.

⑪ **Door molding and skirting:** Lay a board (with the decorative side down) next to the door molding and saw as shown in the figure. Then slide the floorboard under molding.

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.
- 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.

PREVENTIVE CARE

- When moving appliances or heavy furniture it is always wise to lay a plywood panel, or similar, on your floor and "walk" the item across it. This protects your floor from scuffing, gouging and tears.
- Frequently moved furniture should be equipped with felt pads to avoid scratching the floor.
- Heavy furniture and appliances should be equipped with non-staining large surface floor protectors.
- Furniture with castors or wheels must be easy swiveling, large surface non-staining and suitable for resilient floors. Do NOT use ball type castors as they can damage the floor.
- Caster wheeled chairs should have wide, rubber casters. Place protective mats under of office chairs.
- Use floor protectors under furniture to reduce indentation. As a general rule of thumb, the heavier the item, the wider the floor protector needed.

VI. 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. If planks do not separate easy, you can slightly lift up the planks (5°) when sliding them apart.

