



MIKASA

INSTALLATION INSTRUCTIONS

INSTALLATION INSTRUCTIONS FOR MIKASA™ REAL WOOD FLOORS

These instructions are for all MIKASA™ real wood flooring products made using - a unique and proven glue - less mechanism that makes the installation of floors durable and convenient

- MIKASA™ ATMOS - 10mm
- MIKASA™ ARBOR - 13mm
- MIKASA™ PRISTINE -15mm

MIKASA™ real wood floors installs quickly and easily using the - a glue - less joining mechanism. This system allows individual planks to be clicked together without gluing them together and allows for a much quicker installation than traditional glued floating floors. Please read the complete installation instructions before beginning installation.

This flooring should be installed with floating, glue-less installation method. Typically, this flooring need NOT be installed using fasteners or adhesives of any kind. THE PRODUCT MAY BE GLUED DOWN OR FASTENED DOWN TO THE SUBFLOOR IN SOME SPECIAL CIRCUMSTANCES (LIKE STAIRCASES ETC.), PLEASE CHECK WITH MIKASA IN CASE YOU HAVE THE NEED TO GLUE DOWN THIS PRODUCT.

This product may be installed:

- in rooms, on, above or below ground level
- over plywood, OSB or concrete subfloors or directly over existing hard surfaces
- This product may be installed over a radiant heating system if:
 - The floor is NOT made with Jatoba or Maple hardwood. These wood types must not be used with radiant heating systems.
 - The installation conforms to MIKASA™ special instructions for installation over radiant Heat. Detailed installation procedures are described in our Installation Guide. Download it directly from www.mikasafloors.com

NOTE: SPECIAL INSTRUCTIONS FOR INSTALLATION OVER RADIANT HEAT ARE MENTIONED IN THIS BROCHURE. THESE INSTRUCTIONS APPLY ONLY TO THOSE PRODUCTS OF FLOORING THAT ARE SPECIFICALLY APPROVED FOR USE OVER RADIANT HEAT AND MEET THE CONDITIONS GIVEN ABOVE. INSTALLATION OF NON-APPROVED PRODUCTS OR INSTALLATION OF APPROVED PRODUCTS IN A NON-APPROVED MANNER, OVER RADIANT HEATING SYSTEMS WILL VOID THE PRODUCT WARRANTY.

This product should NOT be installed in bathrooms or laundry rooms.

INSTALLER'S / OWNER'S RESPONSIBILITY

Since wood is a natural product, it contains inherent variations in colour, grain, appearance and other visual imperfections. MIKASA™ floors are manufactured in accordance with industry standards which permit a defect tolerance not to exceed 5%. These defects may be the result of manufacturing or naturally occurring characteristics of the material. It is recommended that a 5% cutting or grading allowance be added to the total square footage when calculating the quantity of flooring required. It is the sole and joint responsibility of the installer and owner to conduct a quality inspection of all pieces of MIKASA™ flooring before installation. Any piece of flooring that appears to contain a manufacturing defect should not be installed. Flooring that has been installed will be deemed to have been inspected and accepted by the installer and owner, even if the owner is not present at the time of installation. If a defect is found, please contact your dealer.

It is the sole responsibility of the installer to ensure that the job site, subfloor and installation tools and materials meet or exceed all applicable industry standards.

MIKASA™ accepts no responsibility for problems arising from incorrect or improper site preparation or installation procedures.

Check local building codes and bylaws before commencing installation to ensure compliance with local requirements. In the event of a discrepancy between local codes and manufacturer's guidelines, local codes should be followed.

Very important: MIKASA™ floors are made from wood and wood-based products, and like any wood product they will react to changes in the environment. Please pay special attention to site conditions, Subfloor, expansion space, temperature and humidity levels.

SITE PREPARATION:

Installation in newly-constructed home:

Installation of flooring is one of the last jobs when constructing a home. Before you install your MIKASA™ real wood floor, ensure that:

- The building is completely enclosed with all doors and windows in place, including a door from an attached garage to the interior of the house
- All concrete, masonry, plastering, drywall, texturing, painting and other wet work is complete and dry
- Basements and crawlspaces are dry; Crawlspaces must have no standing water; crawlspaces must also have a vapour barrier and adequate ventilation in accordance with local building codes
- Gutters and downspouts are in place, directing water away from the building
- HVAC systems are fully operational, enabling heat and humidity levels to be controlled and maintained throughout the structure
- Subfloor is properly prepared for installation

- While installing over radiant heat, ensure that the system is in full working order and has been fully tested and running for a minimum of two weeks prior to installation. The system should be turned off for 24 hours prior to installation in the install zone.

Installation in existing home (Renovation):

Installation in an existing home must meet the same conditions as in a new home. If part of a larger remodeling project, ensure that all wet work (painting, wallpapering, texturing, etc.) is complete and thoroughly dry before commencing installation of the floor. In addition:

- Remove all furniture, artwork and other valuables from installation area
- Remove skirting and profiles
- Undercut door casings (use a piece of flooring as a depth gauge)
- Remove existing flooring, if necessary (carpets and underlay must be removed, but most of the MIKASA™ floors with PlankLoc™ glue free locking joint systems can be installed directly over most other flooring types, including sheet or tile vinyl, ceramic, parquet, etc. Ask your dealer in case of any doubt.)
- If installing over radiant heat, it is strongly recommended that a radiant heat technician be consulted prior to installation. All to ensure that the heating system can be operated effectively at temperatures acceptable to MIKASA™ flooring. The system should be turned off in the install zone for 24 hours prior to installation. (Installation instructions for underfloor heating and thermal conductivity can be downloaded from www.mikasafloors.com)

Climate Control:

- Conditions at the job site must be maintained between 65° - 75°F (18° - 24°C) and humidity at 35 - 55% before, during and after the installation. Flooring material should not be delivered to the job site until these conditions have been met and maintained for one week prior to installation if installing over a wood subfloor and two weeks if installing over concrete. Following installation, these conditions should be maintained at all times to ensure proper performance of the floor.
- When temperature and humidity have met the conditions detailed above, material may be delivered to the job site. While stacking the boxes, cross-stack to ensure good air flow between layers. Do not lay boxes directly on concrete subfloors; elevate them on blocks. Do not open the boxes; leave them closed until conditions are perfect for installation, then open as and when needed.

Subfloor Preparation:

- *Like many home improvement projects, one of the most critical parts of installing MIKASA™ flooring is to make sure the surface is properly prepared before installing the product. So, take the time to do this step completely and thoroughly.*
- The installer and customer are jointly and solely responsible for ensuring that the subfloor is suitable for flooring and properly prepared for installation.

- All subfloors must be clean, dry, structurally sound and flat by 1/8" in 8' (or 3mm in 1m). Plywood subfloors must meet local building code requirements (US: minimum 3/4"(19mm) T&G plywood or 23/32" (18mm) T&G OSB. Canada: minimum 5/8" (16mm) T&G plywood or 3/4"(19mm) T&G OSB). They must be secure to the joints, free of squeaks and protruding fasteners.

Moisture Content:

- All subfloors must be tested for moisture content according to NWFA guidelines, and the moisture content of both subfloor and flooring must be within allowable limits before commencing installation. The moisture content of plywood or OSB subfloor must not exceed 12%. The moisture content of the flooring must be within 4 percentage points of the subfloor.
- Concrete subfloors must be fully cured (60 days) prior to installation. Moisture content of the slab should not exceed 3 lb./1000 sq./ft./24 hours.
- If the flooring is being installed over a radiant heating system, moisture content of the slab should not exceed 2 lb./1000 sq./ft./24 hours. The system should be turned off in the installation zone for 24 hours before installation begins and left off for the duration of the installation period.

Colour Racking:

- MIKASA™ flooring being a natural product contains natural variations in colour and has grainy patterns. In order to prevent colour "grouping" or repetitive grain patterns in the finished floor, it is recommended that boards be racked (visually sorted) before installation to create a satisfactory and pleasing colour arrangement. Immediately prior to installation, unpack 1 or 2 cartons to get a sense of the range of colour variation and arrange the planks to achieve a satisfactory appearance.
- While racking, inspect all boards for visible manufacturing defects. Boards with manufacturing defects in excess of industry standards (5% of total quantity) may be replaced by the dealer under the terms of the product warranty. Once installed, boards will be considered to have been accepted by the customer and will not be eligible for replacement. (See Warranty for details.)

Colour Racking:

- MIKASA™ real wood floors will expand and contract with changes in ambient temperature and humidity. To allow for this, during installation, leave a 3/8" (10mm) expansion space around the entire perimeter of the floor between the flooring and walls. Also, leave some space between the flooring and any vertical obstacle, such as stairs, pipes, door sills, tiles, cabinets, etc.

NOTE: In climates with extreme variations in humidity (beyond the range of 35 to 55%), or in large installations 75+ sqm (800+ feet), a larger expansion space may be required.

- If installing the floor in a room measuring more than 30 ft. (10m) by floorboard width, or more than 30 ft. (10m) measured by board length, leave an expansion gap in the center of the space and cover it with an expansion profile (T-cap). The gap should be wide enough to allow 3/8" (10mm) expansion space on each side of the T-cap base. An expansion gap and T-cap should be used in any door threshold where the flooring is being carried through into an adjoining room.

The floor must be able to move free – do not connect or install close to any construction part.

Rooms with off square areas like for example L-, F-, T-, U- shapes, separate the areas with an expansion joint and especially always in door openings.

Special Instructions for Installation Over Radiant Heat

- If installing over radiant heat, place approved heat sensors on the subfloor in accordance with MIKASA™ Special Instructions for Installation over Radiant Heat. A minimum of 5 sensors must be placed for every 1000 square feet of flooring installed. Installation instructions for radiant heating and thermal conductivity can be downloaded from www.mikasafloors.com.

Vapour Barrier and Underlay:

- If the flooring is being installed on a concrete sub-floor, or over a crawlspace, or below ground level, a vapor barrier must be installed. An underlay that reduces impact sound & vapor must be laid under the planks. For example, use MIKASA™ VaProtect™ or moisture barrier and Underlay / felt paper as an intermediate layer. Seal the seams with duct tape along their entire length. Leave an excess of 4" (100mm) of sheeting extending up the wall at all outer edges and hold in place with blue or painter's masking tape. (This excess will be trimmed away later.)

Starting Wall:

- For best results, MIKASA™ real wood floors should be installed with the boards running parallel to incoming sunlight. When you have determined which direction the flooring will run, decide where you want to start – usually the longest wall adjacent to the wall with windows. It is important that the flooring be installed in perfectly straight rows parallel to the starting wall. To verify that the starting wall itself is straight, measure out 12 inches (300mm) from each end of the wall and snap a chalk line parallel to it. Measure the distance from the line to the wall every 2 or 3 feet (600-900mm). If it is consistent, the wall is straight.

- If there is a variance anywhere of more than a quarter inch (7 mm), you may need to trim the edge of the first row of floor boards to match the shape of the wall.

INSTALLATION

NOTE: MIKASA™ real wood floors comes with a unique locking system – PlankLOC™. These systems lock the planks closely together so that they fit perfectly without gaps or uneven edges. They are also very quick and easy to use. PlankLOC™ - a unique and proven glue-less mechanism that makes the installation of floors durable and convenient.

REMEMBER: YOU DO NOT NEED TO USE GLUE OR FASTENERS OF ANY KIND WHEN INSTALLING THIS PRODUCT. THE PRODUCT MAY BE GLUED DOWN OR FASTENED DOWN TO THE SUBFLOOR IN SOME SPECIAL CIRCUMSTANCES (LIKE STAIRCASES ETC), PLEASE CHECK WITH MIKASA IN CASE YOU HAVE THE NEED TO GLUE DOWN THIS PRODUCT.

Angle-In Installation:

Hold the new board at an angle of 20° to 30° to the previously installed board, and engage the tongue and groove joint at the butt end of the boards. Move the new board gently up and down while applying a little pressure along the long side of the board. The long side joint will click into place, locking the joint. This is the easiest method for installation and should be used for most boards. Refer Figure 1

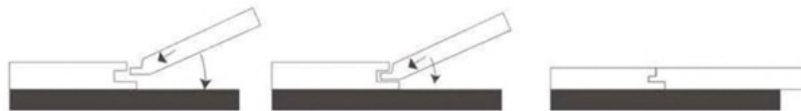


Fig. 1 – Angle-In Installation

Angle-In Installation:

Lay the new board flat on the floor and align it to the previously installed board. Using a specially designed Unilin tapping block (available from your dealer), gently tap the boards together until the joint locks. Do not try to close the joint with a single hit on the block. Use a series of light taps until the joint closes completely. This method should only be used in situations where the Angle-In method is not feasible, or for tapping closed joints that have not locked completely. Refer Figure 2

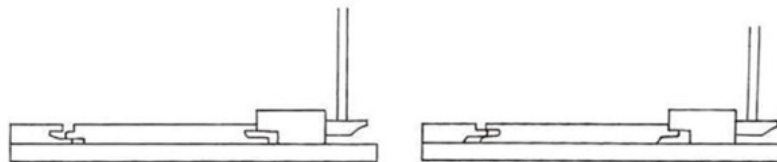


Fig. 2 – Flat Installation

Open 1 or 2 packages of flooring and inspect boards to ensure there are no manufacturing defects. Remember, boards that have been installed will be deemed to have been inspected and accepted by the customer. Select your starting wall and check for straightness as described above. Decide in which direction you want to install (the flooring can be installed left to right, or right to left). This manual will describe a left to right installation.

Starting wall

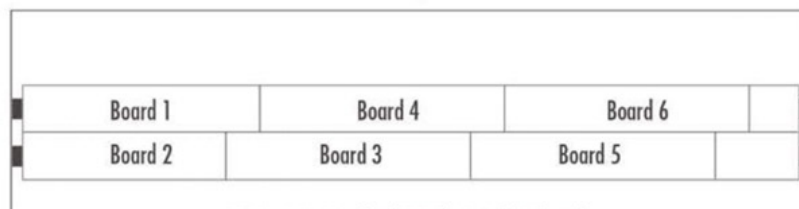


Fig. 3 – Correct order for installation of first boards

- Begin at the left end of the starting wall. Have a quantity of 3/8" (10mm) spacers handy.
- Begin with a full board. Saw off the tongue on both the long and short sides of the board, and place the board with the sawn butt-end against the wall on the left, and the sawn long side facing the starting wall, but set out about two feet from the starting wall. Insert a spacer at the left end of the board and nudge the board against the wall.
- Take a shorter board to begin the second row, and angle in to position against board 1, fitting together the long side joint. Place a spacer on the left end of the second board.

NOTE: Lay a heavy object like a full box of flooring on the end of the first two boards to help keep them in position while you continue the installation.

- Install board 3. Hold it at an angle and fit the butt - end joint into the end of board 2. Drop board 3 slightly to engage the butt joint, then lift board 2 & 3 together and move gently up and down while pressing forward until the long side joint of board 3 locks into board 1.

NOTE: Ensure that all butt joints are staggered by a minimum of 6".

- Take board 4 and saw off the tongue joint on the long side only. Hold it at angle and fit the butt - end joint into the end of board 1. Drop board 4 slightly to engage the butt joint with board 1, then lift board 1 & 4 together and move gently up and down while pressing forward until the long side joint of board 4 locks into board 3. (Kneeling on board 3 while you do this will help hold everything in place.)

- Install board 5 in the same fashion as board 3. Install board 6 in the same fashion as board 4. Continue until you have completed two full rows. At the end of the row, cut boards to fit, but remember to leave expansion space at the end of the row as well.

NOTE: Start rows with a variety of different lengths of boards. You can also use cuts from previous row ends to begin new rows, as long as they are a minimum of 6" (15cm) in length. Remember to stagger butt joints by a minimum of 6" (15cm).

- Continue installing in this manner until you have completed three or four full rows. Insert a series of expansion spacers along the starting wall and slide the assembled flooring against the starting wall. If a board cannot be angled into place – if it is under a door jamb or other obstacles for example - use the flat installation method.

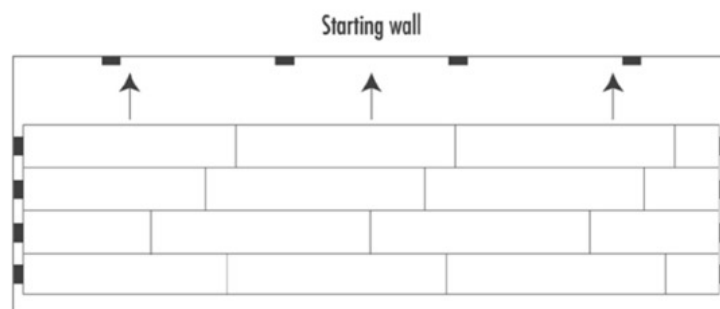


Fig 4 – After 3 or 4 rows are complete, slide the entire assembly against the starting wall.

- Lay the board flat on the floor and, using a special Unilin tapping block and hammer, gently tap along the PlankLOC™ until the joint is closed. Tap gently and repeatedly; do not use excessive force. To close a butt joint, use a series of light taps. To close a long side joint, tap gently and repeatedly along the entire length of the joint.

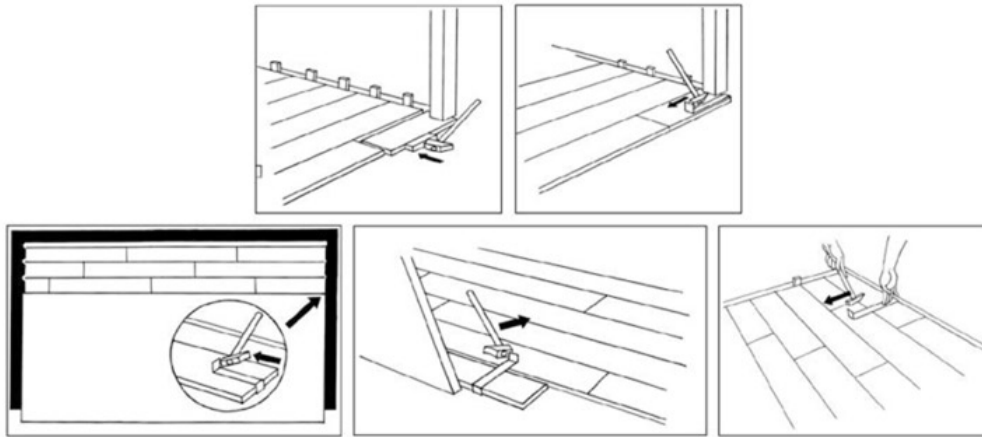


Fig 5 – Use tapping block and pull bar to work under door frames and other obstacles.

- Continue with installation throughout the rest of the room. When you get to the final row, measure the distance to the far wall and 'rip' a row of boards to fit the gap – remember to leave 3/8" (10mm) expansion space against the far wall.
- To finish the job, trim away the excess vapor barrier around the perimeter of the floor and remove the expansion spacers. Install profiles, trim and transitions. Profiles and transitions must be affixed either to the subfloor or to the wall – never to the flooring itself.
- Before you move furniture onto the floor, take a moment to protect your new floor by putting felt pads on all furniture and accessories. For complete care and maintenance instructions, consult the product warranty or download the Maintenance & Repair Guide. Download it from our website www.mikasafloors.com. Please read thoroughly before you begin using your MIKASA™ real wood flooring.
- If the flooring was installed over a radiant heating system, when you turn the system back on bring the temperature of the system up gradually, in 5° increments. Never allow the surface temperature of the floor to exceed 82°F (28°C) and avoid dramatic temperature changes; always adjust the system gradually in 5° increments. It is recommended that a dedicated quick recovery thermostat be installed to allow the temperature of the radiant heating system to be accurately controlled.