

INSTALLATION INSTRUCTIONS

Engineered Flooring

IMPORTANT: PROCEED WITH A VISUAL INSPECTION OF THE STRIPS BEFORE INSTALLATION. ONCE INSTALLED, THE STRIPS ARE CONSIDERED ACCEPTED BY THE INSTALLER AND THE OWNER. PLEASE READ THE ENTIRE INSTALLATION INSTRUCTIONS BEFORE PROCEEDING WITH THE INSTALLATION.

OWNER / INSTALLER RESPONSIBILITY

Hardwood flooring is a beautiful and unique product of nature, which is characterized by distinctive variations in grain and colours. These natural variations in colour and grain are not flaws, but are a part of the natural beauty and uniqueness of hardwood flooring. These inherent variations should be expected and serve to enhance the natural beauty and enduring charm. Direct Flooring Centre flooring are manufactured in accordance with accepted industry standards, which permit a defect tolerance not to exceed 5%. The defects may be of a manufacturing or natural type.

- The installer assumes all responsibility for final inspection of product quality. This inspection of the whole flooring should be done before installation. Carefully examine the flooring for color, finish and quality before installing it. Use reasonable selectivity and hold out or cut off pieces with glaring defects whatever the cause. If the flooring is not acceptable, contact your dealer immediately.
- Before beginning installation of any hardwood flooring product, the installer must determine that the environment of the job site and the condition and type of the subfloor involved are acceptable, ensuring that it meets or exceeds all requirements which are stipulated in the installation instructions which follow. Direct Flooring Centre declines any responsibility for job failure resulting from or associated with inappropriate or improperly prepared subfloor or job site environment deficiencies.
- Prior to installation, the installer/owner has final inspection responsibility as to grade, manufacture and factory finish. The installer must use reasonable selectivity and hold out or cut off pieces with deficiencies.
- The use of stain, filler or putty stick for the correction of defects during installation should be accepted as normal procedure.
- Should an individual piece be doubtful as to grade, manufacture or factory finish, the installer should not use the piece.
- When Direct Flooring Centre hardwood flooring is ordered, a 5 % allowance factor, depending on layout, must be added to the actual square footage amount needed. (Diagonal installations and/or board width of 5" and over may require up to a 10 % allowance factor.)
- Please note that our engineered floors must be installed in environments of 40% to 55% relative humidity to prevent possible damage not covered by warranty. Installation of a humidifier or dehumidifier may be necessary. The floor is designed to perform in an environmentally controlled structure. Warranty exclusions are, but not limited to, surface checking resulting from low humidity, mildew or discoloration resulting from extreme sub-floor moisture.

JOB SITE INSPECTION & ACCLIMATION

- This type of flooring can be installed below, equal or above ground level. Do not install in a bathroom.
- In a new construction, hardwood flooring should be one of the last items installed. All work involving water or moisture (plumbing, acoustical ceilings, dry wall taping, etc.) should be completed prior to wood flooring being installed. Heating and air systems should be fully operating maintaining a consistent room temperature at 16°C to 27°C (60-80° F) and a constant relative humidity of 40% to 55%.
- Flooring should not be delivered until the building has been closed in and cement work, plastering, painting and other materials are completely dry. Concrete and plaster should be cured and at least 60

days old. Check basements and under-floor crawl space to be sure that they are dry and well ventilated to avoid damage caused by moisture.

- Handle with care. Do not stand on ends. Store our flooring in a dry place being sure to provide at least a four-inch air space under and around cartons.
- Do not store directly on concrete or near outside walls. Cartons should be placed in the installation area.
- The humidity level of the house must be maintained between 40 % and 55 % all year long. Wood is a living product which reacts to humidity level variations. During summer, where the humidity level is at its highest point, the wood has a natural expansion and absorbs the humidity, these variations must be dealt with adequate dehumidification. As for winter, when the heating system is working, the humidity level is lower. It is then recommended to use a humidifier to minimise the extreme effects of shrinkage.

INSTALLATION METHODS (Floating, nailed and Glued down) AND APPROVED SUBFLOORS

Type of subfloor	Floating	Nailed	Glue down
Exterior plywood , 5/8 minimum	YES	YES	YES (with suitable adhesive)
Strandboard (OSB) min. 23/32 "	YES	YES	YES (with suitable adhesive)
Concrete	YES	NA	YES (with suitable adhesive)
Ceramic tiled floor, terrazzo, slate and marble	YES	NA	YES (with suitable adhesive)
(Concrete) Radiant Subfloor heating	YES	NA	YES (with suitable adhesive)
Radiant heating (plywood)	YES	NA	YES (with suitable adhesive)

SUBFLOOR CONDITIONS

- **CLEAN** - Scraped or sanded, swept, free of wax, grease, paint, oil and other debris.
- **HORIZONTAL / FLAT** - Maximum tolerance of 5mm over 3 m (3/16 " over 10') or 3mm over 2 m (1/8" over 6').
- Sand high areas or joints. If the floor is glued, fill the fill low areas with a latex additive cement surfacing product with a minimum resistance to compression of 20 000 kPa.
- **Concrete Slabs** (regardless of existing floor covering): Use an approved calibrated concrete Moisture meter as a preliminary measurement for moisture. Concrete subfloors must be finished at least 30 days before performing a test. Acceptable verification methods: Perform a polyfilm test. Tape down 2' x 2' polyfilm squares (a clear garbage bag or plastic drop cloth will do) in several places on the floor. Wait 24-48 hours, and then check for the appearance of condensation on the inside of the bag or plastic for a darkening on the concrete subfloor. Either occurrence signals the likely presence of excess moisture, which needs other measures with the concrete moisture meter Tramex. The measure must not climb over 4,5 on the superior graduation. The floor can be glued directly on concrete with a compression resistance of at least 20 000 kPa (3 000 lb/in²).
- **Wood Substrates**: Test the moisture of the wood substrate using a calibrated moisture meter approved for testing wood moisture according to the meter manufacturer. The reading should not exceed 12%, or read more than a 4% difference than moisture content of products being installed.

RADIANT SUBFLOOR HEATING

NOTE: Always make sure that the selected product is recommended for this type of installation. Some species are not compatible and can not be installed on this type of subfloor; Jatoba, Maple, Kempas,

Ironwood, Ipé, Asian Mahogany are some species that are not suitable for Radiant heating. Please ensure that the species you have chosen is suitable.

- The heating system must be functional and working for at least 7 days prior to the floor installation.
- Stop the heating and let the floor cool down to ambient temperature for 3 or 4 hours before starting the floor installation.
- Immediately start the radiant heating system after the installation. The temperature of the finished surface cannot go over 27 °C (80 °F) at all times for the duration of the flooring's life span.
- Radiant heating systems usually procure a dry heat which can lower the ambient humidity level. It could be necessary to use a humidifier to maintain a recommended level of 40 % to 55 % and prevent any damage to the floor.
- Flooring installed on a radiant heating system must be glued at each end, in order to reduce the shrinkage in length. Apply a layer of recommended wood glue on the grooved side before inserting the strip.

REQUIRED TOOLS FOR PROPER INSTALLATION

Power Tools

- Table Saw, Electric Miter Saw, Band Saw, Chop Saw, Power Jamb Saw, or Jig Saw

Hand Tools

- Broom and dust pan or Vacuum, Tape Measure, Moisture meter (wood, concrete or both), Chalk line & chalk, 3M Blue Tape, Hand saw, Hammer, Rubber mallet, Tapping block, Pry bar, Filler stick and Touch-up marker, Hardwood Floor Cleaner

Additional Tools for Glue-Down

- Recommended Adhesive & Adhesive Remover, Trowel (Follow adhesive manufacturer's instruction)

Additional Tools for Nail-Down Installation

- Pneumatic or Power Nailer
- Nails/Flooring Cleats
- Drill

Additional Tools for Floating Installation

- 6 mil Polyethylene Vapor Barrier, Foam Underlayment, Floating Floor Glue

STEP BY STEP INSTALLATION INSTRUCTION

(Glued down application)

STEP #1 – Establish a starting line

- For best visual effect, it is recommended that flooring be installed parallel to the longest wall in the room.
- Using a chalk line the area between the wall and the chalk line becomes your working area for starting installation, and your last installation area for completing the installation.

STEP #2 – Spread the adhesive

- Apply the recommended adhesive with a trowel according to the manufacturer installation instructions (found on the adhesive pail) for the specific adhesive that is being used.

STEP #3 – Install the strips

- Always select your strips with care. The more deeply colored strips should be installed where they are less visible. Pieces with flaws should be recut.
- Using the working area to install your flooring, line up the first strip with the tongue facing the wall, then press the strip into the adhesive and against the holding block.
- Leave 1/4-inch (6 mm) between the wall and the end of each strip in each row.
- Start the second row with a strip of at least 6-inches (15 cm) shorter or longer than the strip used in the first row. This will avoid aligning or clustering the end joints.
- Continue with the subsequent rows in the same manner.
- To avoid shifting or gapping of the strips during installation, use 3M blue tape to hold them together. Remove the tape within 24 hours. Avoid use of masking tape, which leaves an adhesive residue and may damage the finish.
- When you get to the final row you will likely find it necessary to rip-saw the strips to fit against the wall. Install using the pry bar and leave 1/4 -inch (6 mm) minimum expansion spaces.

STEP #4 – Install the transition pieces

- Install any transition piece that may be needed, such as stair nosing, and reducers. These products are available prefinished to blend with your flooring. Please install these first so that you can match the next board easier, color match on mouldings cannot be guaranteed due to the natural characteristics of wood flooring.
- Reinstall your baseboards and/or quarter round mouldings. Be certain to nail the mouldings into the wall, not the floor.
- Always keep a few spare strips from your initial installation for possible repairs in a sealed carton and properly stored
- Wait 24 hours before moving furniture and appliances back into the area where flooring was installed.

STEP-BY-STEP INSTALLATION INSTRUCTION

(Nailed/stapled down application)

Set-up and Use of Pneumatic Staplers and Nailers

- Read and follow the manufacturer's instructions for complete set-up and operation of equipment.
- Make sure the adapter size for the pneumatic stapler or nailer matches the thickness of the flooring being installed and that the tool's adapter seats properly in the tongue of the flooring.
- Pneumatic nailer: Air pressure should be adjusted adequately for each species of hardwood floor installed and checked regularly (always try it before using).

STEP #1 – Establish a starting line

- Using a chalk line, draw a guideline.
- It is very important to start straight and square.

STEP #2 – Install the floor

- Always select your strips with care. The more deeply colored strips should be installed where they are less visible (i.e. in a closet or under the refrigerator). Pieces with flaws should be recut.
- Use the longest, straightest strips available for the first row.
- Install the first row of flooring with groove facing starter wall.
- The first few rows must be nailed down by hand rather than with the nailing machine because of the vertical wall obstruction. Nailing interval should be at 6 inches. Leave 1/4-inch (6 mm) between the wall and the end of each strip in each row.
- Start the second row with a strip of a least 6-inch (15 cm) shorter or longer than the strip used in the first row. This will avoid aligning or clustering the end joints.
- When the area is free from wall obstruction, you can repeat the installation using a pneumatic stapler.
- It is also likely that you may have to rip saw the strips to fit the final row against the wall. Leave 1/4 - inch (6 mm) minimum expansion spaces.
- Finally, install the transition pieces, baseboards and/or, quarter round mouldings.

STEP-BY-STEP INSTALLATION INSTRUCTION

(Floating application)

STEP #1 – Install underlayments

Install 6 mil Polyethylene vapor barrier over entire flooring surface. Overlap sheets of Polyethylene 16 inches and tape together creating airtight seal. Run the vapor barrier 1 to 1.5 inches up the walls and secure in place with tape. Using underlayment, roll out one roll at a time over the vapor barrier. There are many types of underlayments available today. The use of acoustical underlayment will improve the feel and sound transmission of your flooring.

STEP #2 – Preparing the starter rows

It is very important that enough expansion gaps are kept between the flooring and all the walls. This is done by placing ¼ inch (6 mm) spacers every 8 inches apart around all vertical walls. Measure the width of the room – perpendicular to the direction you intend to install the flooring. The last row of flooring should be no less than 1 ½ inch wide. If it is less, you should rip-saw the starter row narrower. Leave 1/4-inch (6 mm) between the wall and the end of each strip in each row. Start the second row with a strip of at least 6-inches (15 cm) shorter or longer than the strip used in the first row. This will avoid aligning or clustering the end joints.

STEP #3 – Gluing the floor

In a floating floor installation, the flooring is not glued or nailed to the underlayment, but is glued in the board's side and end grooves only. This is achieved by applying a bead of glue on the upper side of the groove along the entire length and on the end of each plank with silicone-based T & G glue. Turn the board upside down when applying the adhesive to achieve proper application, when the board is turned again for installation with the finish side up, this will allow the adhesive to flow down and give better coverage. Do not apply adhesive on the top of the tongue.

Install the first row of flooring with groove facing starter wall. Use a tapping block and a mallet to gently push or tap the glued strips together until no gaps are seen and making sure that end joints are square.

At the end wall use a pry bar, if needed, to pull the ends of the boards tight. Continue laying the floor on top of the underlayment, working left to right, tapping the strips tight together. Make sure to continue using ¼ inch spacers along the wall throughout the installation.

To avoid shifting or gapping of the flooring during installation, lay perpendicular strips of 3M blue tape to hold the strips together. Remove the tape within 24 hours. Avoid use of masking tape, which leaves an adhesive residue and may cause damage to the finish.

The last row will most likely require cutting to width but it should be no less than 1 ½ inch wide. To do this, place a full row of strips on top of the last row installed. Insert a ¼ inch spacer against the wall, and using a full width strip, trace distance from wall onto final row. Cut strips for final row to designated width. Apply glue and pull into place with a pry bar.

Allow floor to dry for a minimum of 12 hours before removing all the spacers and allowing foot traffic.

Finally, install the transition pieces, baseboards and/or, quarter round mouldings.

COMPLETING THE JOB – ALL INSTALLATION

Clean the floor with Hardwood Floor Cleaner. Please ensure that any adhesive on the finish is cleaned before leaving. Dried or cured adhesive cannot be removed.

Install transition pieces. Inspect final floor for nicks or minor gaps and fill with appropriate color wood putty. Use plywood or hardboard when moving heavy appliances or furniture across floor.

CARE GUIDE

Your Floor will add warmth and beauty to your home for many years to come. Following a few simple maintenance steps, will help protect your investment and keep your floor like new.

CLEANING

Use a damp cloth to blot up spills and spots as soon as they happen. For tough spots such as oil, paint, markers, lipstick, ink, tar or cigarette marks, use acetone/nail polish remover then wipe with a damp cloth. Always avoid allowing liquids to stand on your floor. Regularly vacuum, (using the hard floor attachment not the beater bar), dust mop or sweep the floor to prevent sand or abrasive dust from accumulating and scratching the finish. Periodically clean the floor with us or approved hardwood floor cleaner, which are specially formulated for the finish.

Do not use oil based, wax, polish, or strong ammoniated or abrasive cleaners, steel wool or scouring powder to clean the floor. Do not wash or wet-mop the floor with soap, water, oil soap detergent or any other liquid cleaning material. This could cause swelling warping, delaminating and joint-line separation, and void the warranty.

DO NOT use any type of polisher.

PROTECTING

Use quality area rugs and doormats by outdoor entrance areas to prevent dirt, sand, grit and other substances such as oil, asphalt or driveway sealer from being tracked onto your floor. Sweep, dust or vacuum the floor regularly to prevent accumulation of dirt or grit that can scratch or dull the floor finish. Use floor protectors and wide bearing leg bases/rollers to minimize indentations and scratches from heavy objects. As a rule of thumb, the heavier the object, the wider the floor protector should be.

Do not use rubber or foam backed plastic mats as they may discolour the floor. To prevent slippage use an approved vinyl rug underlayment. Maintain a normal indoor relative humidity level between 40% and 55% throughout the year, to minimize the natural expansion and contraction of wood. Failure to provide adequate relative humidity in the home by the use of a humidifier or a dehumidifier will void the warranty. Avoid gouges or cuts in your floor from sharp objects. While your floor is one of the most wear resistant floors on the market, sharp or pointed objects can nevertheless damage it. Don't walk on your floor with stiletto-style heels, spiked golf shoes or cleats; they may cause indentations in your floor.

Rearrange area rugs and furniture periodically so the floor ages evenly. UV sunlight will soften or darken the tone of different species of hardwood to varying degrees. Use a dolly when moving heavy furniture or appliances. But first, put down a sheet of quarter inch plywood or Masonite to protect the floor. Never try to slide or roll heavy objects across the floor.

Keep pet's nails trimmed, or consider "booties" available at pet stores.

DIRECT FLOORING CENTRE (DFC) LTD WARRANTY

This Hardwood Floor comes with a:

- Lifetime Structural Integrity Warranty
- 25 Year Finish and Wear Warranty

These warranties, which begin from the date of purchase, apply to products used in dry residential applications. Lifetime warranties apply for as long as the original purchaser owns and resides in the home where the product was installed.

What the Hardwood Flooring Limited Warranty covers:

Finish and Wear Warranty - warrants to the original purchaser that its finish surface will not peel off or wear through for the indicated period of time, from the date of purchase.

Lifetime Structural Integrity Warranty – DFC warrants these engineered hardwood products in their original manufactured conditions to be free from defect in material and workmanship including assembly dimension and grading.

Note: Hardwood flooring is a natural product that will continue to expand and contract during seasonal and temperature changes. Products may experience separation between boards when properly acclimated and installed. If separations do occur, they are not covered by this warranty.

What you should do if any of the above listed problems occur and you need warranty service:

You (the original retail customer) should notify the authorized Hardwood Flooring dealer from which the original purchase was made of any defect no later than 30 days after discovering the defect but within the time period of the applicable limited warranty. You (the original retail customer) must present to that authorized Hardwood Flooring dealer the following items for a warranty claim to be considered:

- A valid proof of purchase in the form of a sales receipt or other documents which establish proof of purchase
 - A description of the problem and/or a photograph/sample that clearly shows the warranty problem
- What DFC will do should you need warranty service:

If DFC accepts a claim under this limited warranty, DFC will authorize your dealer to replace, free of charge, the amount of strips presenting a manufacturing defect or pay compensation equal to the cost of the defective strips. DFC will not reimburse any installation fees or labour costs. If the claim is related to the finishing of the floor, DFC will assume the material and labour costs necessary to refinish the flooring of a room or rooms for which the claim was approved. This procedure constitutes the one and only way to make a claim in regards to this limited warranty.

Each DFC Warranty is subject to the following conditions:

- This limited warranty is valid only in North America and United Kingdom. The warranty is not transferable. It extends only to the original retail consumer. This limited warranty applies only where the affected area of the DFC is visible and covers an area greater than 10% of the room. The flooring must be installed in accordance with DFC flooring recommended installation instructions using DFC installation materials.
- Natural wood characteristics such as mineral streaks, small knots, grain variations etc. are normal characteristics and are not considered as defects. No two pieces of wood are the same and colour or other variations will occur. We do not guarantee against natural variations, or the normal difference between colour samples or photographs and colours of installed floors.

- Indentation, scratches or damage caused by negligence, water moisture, insects, animals, and high heeled or spiked shoes, or failure to use pads under rolling chairs or other furniture.
- Any product deformity that is not measurable or that is visible only in a certain angle is not considered a defect. Defects are evaluated by their visibility from a reasonable vertical distance (standing height) from the floor.
- Failure to follow manufacturers written installation instructions including protecting the floor from subfloor moisture.
- Excessive or inadequate humidity in the area of use. Relative humidity in the area of use must be within a normal range of 40%-55%.
- Improper or insufficient protection, care and maintenance.
- Accidents abuse or misuse. Warranty will be made void if man-made or natural disasters including leaking or broken plumbing, fire, flood, earthquake, or standing water occur during or after installation.
- Improper alteration of original manufactured product. Alterations or repairs to the manufacturer's original product will void any and all warranties
- Changes in colour due to full or partial exposure to sunlight and weather.
- Maple, Merbau, Kempas, Tamarindo, Pine, Brazilian Cherry and other species may darken due to light exposure. This is a natural occurrence and is not covered by this warranty.
- Failure due to structural changes in the subfloor, settling of the building or uneven subfloor that has not been adequately levelled.
- This warranty does not cover removal or replacement of cabinets, appliances, furniture or other fixtures.
- Gloss reduction is not considered wear.
- Faces checking, cracking, are not covered by this warranty.
- Please note that Masters Choice engineered floors must be installed in environments of 40% to 55% relative humidity to prevent possible damage not covered by warranty. Installation of a humidifier or dehumidifier may be necessary. The floor is designed to perform in an environmentally controlled structure. Warranty exclusions are, but not limited to, surface checking resulting from low humidity, mildew or discoloration resulting from extreme sub-floor moisture.

Please Note:

DFC does not grant to any person or entity the authority to create for it any obligation or liability in connection with DFC Flooring.

DFC shall not be liable to the consumer or any other person for any incidental, special or consequential damages, arising out of breach of this limited warranty or any implied limited warranty (excluding merchantability). Some states or provinces do not allow the excluding of limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to the purchaser. This warranty gives the customer specific legal rights, such rights may vary from state to state.

"INSTALLATION IMPLIES ACCEPTANCE."

NO WARRANTY WILL BE OFFERED FOR APPEARANCE RELATED CLAIMS ONCE THE PRODUCTS ARE INSTALLED.