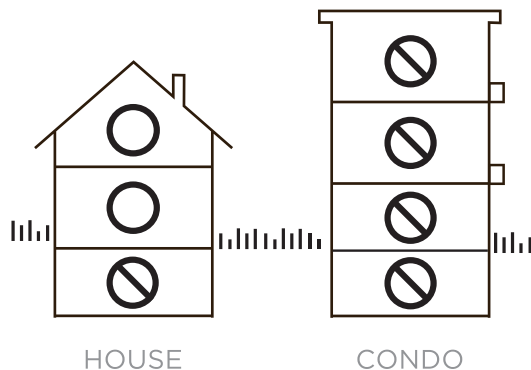


HANDLING AND STORING

Solid hardwood is a natural living material, which reacts to changes of relative humidity. It absorbs and releases moisture before and after it is installed, depending on the variations in the environment. Hardwood expands in summer and shrinks in winter. To prevent excessive expansion or shrinkage of your hardwood floor, it is recommended to maintain the relative humidity level in your home, office, chalet, cottage, etc. (location of wood installed), at the appropriate humidity level for your area (between 37% and 50% approximately) throughout the year.

Your authorized Dealer supplies you with specially designed cartons that have been stored in a heated and well-ventilated warehouse. It is important not to transport your wood under raining and/or damp conditions, nor should you store it in a non-heated or poorly ventilated area beyond values indicated above.

LOCATION



Woodland Reserve solid hardwood floors can not be installed in a basement or below grade.

* Never glue directly on concrete; a wood subfloor is required for a nailed down installation (see NWFA installation guide).

ABOUT INSTALLATION

To ensure that your solid hardwood floor is installed properly, Woodland Reserve recommends that you follow the installation instructions whether you install it yourself or hire an authorized professional installation company.

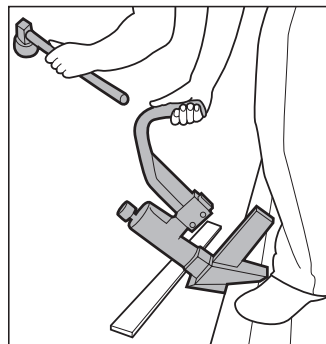
- Woodland Reserve cannot be held responsible for the poor quality of the installation.
- If you decide to hire an installer who will install your solid hardwood floor without your supervision, it is your responsibility

to ensure the practical judgment of the installer. The installer should use reasonable selectivity in assessing the quality of the wood, the appearance, and arranging the boards according to the natural color variations of the species selected. Woodland Reserve cannot be held responsible for any error due to the installer's bad judgment.

- It is the owner's responsibility to ensure that the wood delivered is the wood that has been ordered and chosen.
- The installer and/or the owner should select boards appropriately and, either discard, relocate in hidden places or cut out pieces with defects, if any, when required.
- **Installer:** please take the time to carefully read over our detailed installation instructions as they could be different from other solid products.
- A 5% material waste allowance should be included within your total square footage to allow for material defects. The use of wood putty, filler, or stain might be required during the installation process and is considered an industry standard.
- If at any time you feel that in any way our Woodland Reserve product is not to standard in reference to appearance, width, color, sheen, milling tongue or groove placement, **STOP installation and contact immediately the dealer where you purchased your floors for assistance.**

TOOLS AND MATERIAL REQUIRED

- Hardwood flooring nails or cleats (we strongly recommend the use of cleats vs staples to achieve maximum results when installing hardwood floors.
- Compound miter, chop saw, or jamb saw
- Wax paper, felt underlay
- Moisture meter
- Hardwood floor nailer (with rubber mallet) (manual or air-assisted)
- Chisel
- Electric drill and bits
- Claw hammer and nail punch
- Measuring tape
- Chalk line
- Finishing nails
- Wood putty



NOTE: The selection of mechanical fasteners such as nailers varies by manufacturer, offering the installer the choice of manual or air-assisted. Therefore, it is the installer's responsibility to ensure that the cleat is properly set as dimpling of the wood face is not considered a manufacturing defect. It is recommended to test a couple of pieces by nailing them down and examine the edge where the two (2) pieces meet. Particularly in installations of 90 degrees to outside walls, dimpling could be very apparent in direct sunlight.

PREPARATION

- Before you begin, make sure that plastering and concrete work is completely dry. The heating system must be fully operational and the house normally heated for at least five days at 72° F (22° C) and relative humidity set between 37% and 50%, prior to delivery of flooring. Please note that concrete must be cured for a minimum of 30 days, prior to installation and mandatorily meet the concrete relative humidity recommendations.
- It is strongly recommended that flooring climatize at house temperature for at least 48 hours at the recommended relative humidity level in the room it is to be installed in (between 37% and 50%).

SUB FLOOR REQUIREMENTS (INCLUDING O.S.B.)

- 3/4" (19 mm) solid strip and plank are for nail-down installation only. It requires a plywood or O.S.B. sub floor over joists. Do not nail over particleboard or products of a similar nature as you will void your warranty. If you already have a particleboard sub floor, you must install a minimum 16 mm (5/8") thick plywood or O.S.B. sub floor before installing your hardwood floor.

In order for your warranty to be valid, it requires the following guidelines:

- If floor joints are at 30 cm (12") or 40 cm (16") intervals use a minimum of 16 mm (5/8") sub floor - CDX plywood or a minimum 19 mm (3/4") stamped OSB underlayment.
- 16 mm (5/8") CDX plywood can be used for up to 40 cm (16") centers.
- If floors joints are at 48 cm (19") intervals, 19 mm (3/4") CDX plywood or approved / 19 mm (3/4") stamped O.S.B. should be used.

NOTE: O.S.B. and plywood subfloors can only be used at 90 degrees to the joists.

- Using an approved moisture meter, measure the moisture content (M.C.) in the sub floor (plywood); it should be between 6% and 12%. If the moisture content exceeds 12%, turn up the heat and open the basement windows 12 mm (1/2") to let dry air in or use a dehumidifier to reach the right humidity level. If the moisture content is higher than the recommended level, the use of a dehumidifier is standard procedure and works well. If the moisture content is below the recommended level, use a humidifier.
- Also, measure the moisture content (M.C.) of the hardwood to be installed. For hardwood under 75 mm (3") width, the sub floor and the hardwood must be under a 4% maximum difference. For hardwood over 75 mm (3") width, the sub floor and the hardwood must be under a 2% maximum difference.
- For a remodeling project, remove baseboards, quarter rounds, and doorjamb.

- Screw the sub floor securely to avoid squeaking and install a layer of felt floor paper. Wax floor paper is also approved.
- Using a jamb saw, cut the bottom of the doorframes 3/4" (19 mm) in order to slide a hardwood strip / plank beneath the doorframe.
- Before you begin, it is important to check the working condition of the hardwood nailer to prevent damage to the strips / planks. Follow the manufacturers' recommendations for the correct air pressure. Try a few hammering tests on a piece of scrap wood to determine the power required to properly drive / set the cleats.
- Use 50 mm (2") cleats or staples for 19 mm (3/4") thick hardwood. Refer to the Woodland Reserve Fastener Schedule for further details.
- It is highly recommended that your hardwood floor be installed at a 90° angle to your joists or diagonally for maximum support when using a plywood sub floor.
- It is recommended to install your hardwood flooring under natural light conditions. Natural light will enable you to see the nuances of the grain/color of your hardwood floor. As a result, you can arrange boards easily to create a harmonious decor.
- Determine your starting location. In most cases, you will start your installation from an outside wall. This is generally the longest and straightest wall within the room. However, if you must use finishing moldings (reducer or stair nosing), in most cases it is best to start installing your floor from the molding and work your way towards the facing wall. It is often easier and more elegant to rip a board along a wall than in the doorway and easier to arrange the first planks.
- When installing your prefinished hardwood floor, be careful not to let any heavy object fall on your floor (tools, boards, etc.) as this could damage the wood.
- Clean bottom of shoes / work boots.

NAILED DOWN INSTALLATION

FASTENER SCHEDULE FOR SOLID PLATFORM

See fastener schedule for details on nailed down installation.

Special Instructions

Glue assist is recommended on 5" width (See notes below)

NOTE: The pressure of the air compressor must be set at a level that brings the crown of the staples or the head of the cleats embedded at a maximum of 25% of its own diameter (staple) or thickness (cleat).

GLUE ASSIST TABLE FOR SOLID PLATFORM

Glue Assist Instructions

As per NWFA (National Wood Flooring Association) suggestions, it might be necessary to assist your fasten down installation with glue. Ensure that the subfloor is clean and free of any debris that could reduce the bond of the flooring adhesive. Use a urethane (Tubed) adhesive that is recommended for the installation of hardwood flooring.

See fastener schedule for details on glue assist instructions

STEP 1: Measure out from the wall (at both ends of the room) the width of the strip / plank, plus 19 mm (3/4") expansion space, plus 6 mm (1/4") size of the tongue. Mark the sub floor accordingly; place the chalk line into position, and snap a line. You will align the tongue of your starter strip / plank along this chalk line. Ex. $3\ 1/4" + 3/4" = 4"$

STEP 2: Select the strips / planks, and then lay them out on the floor in the general pattern in which they will be installed. The straightest strips / planks should be used for the first and second rows. Always select your strips / planks with care. Those with flaws must be re-cut and used as starter boards for the next row or discarded as waste.

STEP 3: Lay the tongue edge of the strip/plank on the guideline, leaving a 19 mm (3/4") space between the groove edge and the starting wall. This expansion space will allow the wood to expand if necessary.

STEP 4: The first row must be secured to the floor using shank flooring nails or brad nails of 37 mm (1 1/2") minimum using one of these 2 methods .:

A) Face nailing: Drill holes on the surface of the strips / planks 25 mm (1") in from the back edge (grooved side), and 25 mm (1") in from the ends. Space the holes 200 mm to 250 mm (8" to 10") apart. Secure nails using a claw hammer and nail punch. Fill with matching wood putty.

B) Blind nailing: Drill holes in the tongue of the strip / plank on a 45° angle. Once again, drill holes 25 mm (1") in from both ends, and space the holes every 200 mm to 250 mm (8" to 10"). Secure nails using a claw hammer and nail punch in the tongue.

NOTE : To finish off the first row, select a strip/plank that is at least 150 mm (6") longer than required, as you will use this remainder piece to start your second row. Also make sure that the end joint of the remaining piece does not line up with the end joint of the adjacent strip / plank in the first row. Cut this piece, position the two pieces into place, and secure. Position the strips / planks in the second row, making sure that the end joints are at least 150 mm (6") apart from those of the first row. Fasten these strips / planks into place as described in section 4b (avoid clustering of ends).

STEP 5: Install the balance of the floor with a hardwood flooring nailer, always keeping in mind to space the strips / planks so as to avoid unsightly clusters of end joints (see figure 1.1 and figure 1.2). If possible, a minimum distance of 150 mm (6") should be left between the planks and adjacent rows to avoid aligning the joints.

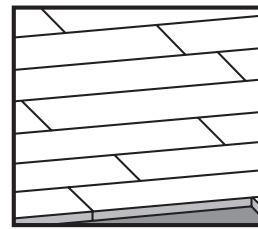


FIGURE 1.1 (CORRECT)

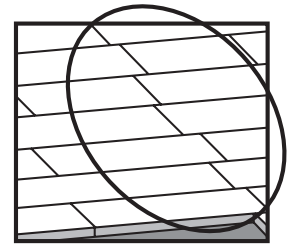


FIGURE 1.2 (INCORRECT)

NOTE : For the best visual effect, it is good practice to stagger end joints apart from the next row, if possible. For material of 81 mm (3 1/4") joints need to be distanced of 162 mm (6 1/2"), for material of 106 mm (4 1/4") joint need to be distanced of 212 mm (8 1/2"), etc.

STEP 6: Depending on the width of the boards selected, usually the fourth or fifth rows must be installed as described in section 4b (do not allow your hardwood floor nailer to hit the wall). The last two rows will be face nailed as described in section 4a. Fill all nail holes with matching wood filler, which best blends with the color of the floor.

NOTE : Always fill nail holes to prevent moisture penetration, and drill into the darker grain of the wood.

STEP 7: Baseboards, quarter round, and shoe mould should be nailed to the wall only, not the sub floor.

STEP 8: Clean your floor with the specially designed Woodland Reserve Wood Floor Cleaner. Carefully move your furniture back in place using felt pads on all legs and enjoy the beauty of your new Woodland Reserve hardwood floor.

REGULAR AND PREVENTIVE MAINTENANCE

Floor & Decor offers a complete selection of maintenance products specially designed to preserve the original appearance of your solid hardwood floor. Quick and easy to use, they will make cleaning as easy as ABC and protect your investment for a lifetime.

- Maintain proper humidity conditions within your home. It is recommended that the humidity level stay in the recommended range between 37% and 50% throughout the year. Problems related to humidity level variations can be minimized by proper ventilation, humidifying, dehumidifying or heating.
- Regularly vacuum the floor to prevent sand or abrasive dust from accumulating and scratching the finish.
- Entrance doormats help reduce dirt, stones, gravel, and sand from damaging your new hardwood floor.
- Remember that wood and water do not mix! Never wash your Woodland Reserve floor with water and do not leave water or any other liquid to dry on your hardwood floor. Wipe up spots and spills immediately.

NOTE: Avoid vinegar.

- Be sure to keep pets' nails cleaned and trimmed as they could damage the finish of your hardwood floor.
- Although the Woodland Reserve finish is very durable and resistant, sharp and pointed objects can cause damage to your floor.
- Never use wax, household detergents, or soap, as they will leave a greasy film on your floor. Avoid all oily products and all products designated for the maintenance of hardwood furniture. These types of products are not designed for the maintenance of your hardwood floor. Use Woodland Reserve maintenance products specially designed for the care of your hardwood floor. Always clean your hardwood floor lengthwise following wood grain.

- Avoid wearing high heels on your hardwood floor. Do not wear shoes that are covered with dirt, gravel, or abrasive dust.
- Use adequate floor protection (felt pads) under all furniture and chair legs, in order to ease their movement and to prevent scratching the floor. Use protective mats at doorways.
- Protect the floor while moving heavy pieces of furniture and appliances i.e. stove, fridge, etc. Carry them or place them on a rug, wrong side up, and slide the rug. The use of one or more piece(s) of clean plywood 16 mm (5/8") thick could also be used to move objects.

REPAIRS

If an incident should damage your Woodland Reserve prefinished hardwood floor, replacing the affected board(s) is easy. Your Woodland Reserve Authorized Dealer can assist you regarding any repairs. We suggest that you keep a few boards of your floor for further use if repairs are needed.

MOULDINGS

Prior to the start of installation, select the boards that will be adjacent to the mouldings to match the colours as much as possible.

MANUFACTURER COMMITMENT

If the proper maintenance and conditions indicated in this document are respected and the quality of the product or the finish does not comply with the established quality standards, Woodland Reserve will repair your floor with the superior quality products available in the market. For more information, please consult the warranty documents.

**WOODLAND
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