

INSTALLATION AND MAINTENANCE OF HARDWOOD STRIP FLOORING

HANDLING

Hardwood is a living substance which reacts to changes in relative humidity. Wood gains and loses moisture before and after installation, as surrounding conditions fluctuate. Wood expands in summer when the humidity level is high and contracts in winter when the humidity level is much lower. To minimize the expansion or contraction of your hardwood floor, it is recommended that the building be well ventilated and relative humidity level maintained at 45% all year long.

Before you begin, plastering, painting and cement work must be completely dry. Ensure the flooring is delivered to the job site only after all construction work is completely dry and relative humidity is 45%. It is strongly recommended that the wood be left to acclimatize at a normal house temperature for a period of at least 48 hours at the ideal relative humidity level which is 45%.

PREPARATION

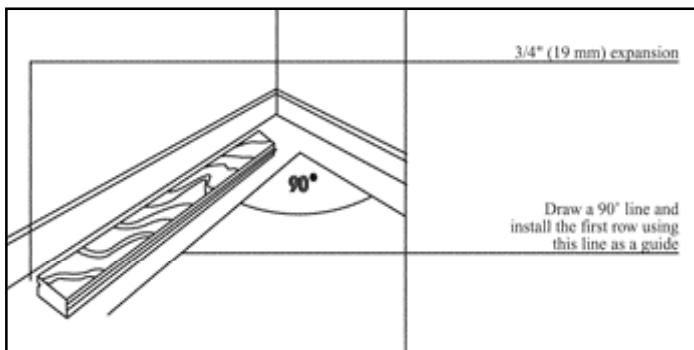
For new construction or renovations:

- Be sure to maintain occupancy-level temperature and humidity for at least five days. The house must be heated to 22° C.
- Using a hygrometer, verify the subfloor (plywood) humidity level; it must not exceed 12%. If the humidity level is too high, turn up the heat and open basement windows 1/2" (1 , 2 5 c m) .
- Remove baseboards and door sills.
- Screw the subfloor securely and install a double layer of 15 lb (6.8 kg) or a single layer of 30 lb (13.6kg) asphalt felt or building paper.
- Using a handsaw, slit the bottom of the door frames 3/4" (2cm) in order to slide a hardwood plank beneath the door frame.

TOOLS AND MATERIALS REQUIRED

- Hardwood floor nailer (with rubber mallet)
- 2" (5cm) 7d or 8d flooring nails
- Electric drill and bits
- Tenon-saw, circular saw or handsaw
- Claw hammer and nail punch
- Measuring tape
- Chalk line

Before you begin, it is important to verify the working condition of the hardwood nailer to prevent damage to the planks.



STEP BY STEP INSTALLATION

- Install only on or above grade. A basement installation will void the warranty.
- Using the chalk line, draw a parallel line, 3/4" (19mm) larger than the plank width, from the wall. Example: $2 \frac{1}{4} + \frac{3}{4} = 3"$. This chalk line should be at 90° from the adjacent wall. It is very important to start the planks square.
- Inspect the flooring for defects/flaws. Those with defects/flaws must be recut or discarded. Once the boards have been nailed down, they are deemed to have been accepted by the installer and/or the owner.
- Lay the planks out on the floor in the general pattern in which they will be installed. The straightest planks should be used for the first and second rows.
- Lay the tongue edge of the plank on the guide line, leaving a 3/4" (19mm) expansion space between the groove edge and the starting wall for movement.
- The first two rows must be secured to the floor using screw shank flooring nails, minimum two nails per strip/plank. For the first row, drill 2 holes on the top surface of the planks at 1" (2.5cm) from the edges, then continue at approximately 10" (25.4cm) to 12" (30.4cm) apart. Next, secure using a claw hammer and a punch.
- Lay out 7 or 8 rows of flooring end to end in a staggered pattern with end joints at least 6" (15cm) apart. Find or cut pieces to fit within 1/2" (12.5mm) of the end wall. Watch your pattern for even distribution of long and short pieces and avoid clusters of short boards.

- Start the second row with a plank at least 6" (15.2cm) shorter or longer than the plank used in the first row; this will avoid aligning the joints. For the second row, drill a hole on the tongue edge at a 45° angle, repeat every 8" (20.3cm) to 10" (25.4cm). Secure using screw shank flooring nails.
- The subsequent rows must be installed in the same manner, but using a hardwood floor nailer. Try a few hammering tests on a piece of scrap wood to determine the pressure needed to properly drive a nail. Never nail closer than 3" (7.5cm) from the end of the board/plank. Nail every 8" - 10" with a minimum of 2 nails per plank.
- For best appearance, leave enough distance between joints by alternating with planks of different lengths to avoid aligning joints.
- The last four or five rows must be installed in the same manner as the first two rows. The use of the hardwood nailer is impossible since the last rows are too close to the wall.
- Leave 3/4" (19mm) expansion space between the last row and the adjacent wall.
- Conceal the nail holes using a special wax.
- Finish trim is nailed only to the wall and never to the planks.

MAINTENANCE (PREVENTION TIPS)

Although your prefinished hardwood floor offers high durability and easy maintenance, it is not indestructible. In order to maintain and preserve the beauty of your floor, the following are tips which should save you time and worry:

- Regularly sweep or vacuum the floor to prevent sand or abrasive dust from accumulating and scratching the finish.
- Use manufacturer's specialized maintenance products for safe, quick and easy maintenance of your hardwood flooring.
- Place doormats outside and rugs inside at every entrance to prevent sand or abrasive dust from accumulating.
- Place a rug in front of the dishwasher and the kitchen sink to protect the floor from water, oily detergent spills and fallen objects.
- Use protectors under all narrow casters or replace them with wider rubber casters. Avoid plastic casters.
- Protect the floor when moving heavy pieces of furniture. Carry them or place them on a rug, wrong side up, and slide the rug. Refrigerators should never be moved without adequate floor protection.
- The relative humidity level in your home must be maintained at 45% (37%-45%) throughout the year. Problems related to humidity level variation can be minimized by proper ventilation, dehumidifying or heating.

THINGS TO AVOID

- Do not pour any floor cleaner directly on the floor.
- Never allow any liquid to remain on the floor.
- Avoid dripping mops which leave excess water on the floor. Some manufacturers recommend cleaning hardwood floors with a mop rinsed in a water and vinegar solution. This is acceptable so long as the mop is squeezed dry beforehand.
- Never use wax, oil-based detergent or any household cleaners. These may dull or damage the finish, leaving a greasy film, making the floor slippery and more difficult to clean.

Please refer to the warranty pamphlet available at your dealer for more information.

