

# PARAMOUNT

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F L O O R I N G

## 3/4" SOLID HARDWOOD STRIP AND PLANK FLOORING

# INSTALLATION INSTRUCTIONS

## FOR MECHANICALLY FASTENED, STAPLE, NAIL OR CLEAT APPLICATIONS

### I. GENERAL INFORMATION

#### **Owner/Installer Responsibility:**

Beautiful hardwood floors are a product of nature and therefore are inherently imperfect. No two pieces will be exactly the same in terms of graining and color, and will vary from samples and pictures. Paramount Flooring is manufactured in accordance with accepted industry standards, which permit grading discrepancies not to exceed five percent. These grading discrepancies may be of a manufacturing or natural wood characteristic type. When ordering material for a particular installation, always order 5% more than the actual amount needed to allow for cuts and grade waste. For diagonal installations, allow for an additional 10%

- The owner/installer has the responsibility for final inspection for product quality in terms of grade, manufacture and factory applied finish. All flooring should be inspected for any defects before installing. The installer must use reasonable selectivity in determining which pieces should not be installed or those pieces which defects can be cut off and used; whatever the cause. Should any piece be questionable as to grade, manufacture or finish quality, it should not be installed. **WARRANTIES DO NOT COVER VISIBLE DEFECTS ONCE THE FLOORING IS INSTALLED.**
- Prior to installation of any flooring material, the installer must determine that the job-site conditions are favorable for a satisfactory installation. These include, but are not limited to complete evaluation of job-site conditions, including moisture testing of the entire job-site and flooring, acclimation of flooring to proper job-site conditions, job-site preparation, flooring layout, proper installation methods and clean up. **DO NOT INSTALL ANY FLOORING IF THERE IS ANY QUESTION AS TO ACCEPTABILITY – INSTALLATION CONSTITUTES ACCEPTANCE.**
- The use of wood putty, wood filler and wood stain for enhancement of the flooring should be accepted as normal.
- Generally accepted industry procedures and methods can be obtained from the National Wood Flooring Association (NWFA) at [www.nwfa.org](http://www.nwfa.org)

#### **CAUTION: WOOD DUST**

Sawing, sanding and machining wood products can produce wood dust. Airborne wood dust can cause respiratory, eye and skin irritation. The international Agency on Cancer (IARC) has classified wood dust as nasal carcinogen in humans.

**Precautionary Measures:** If power tools are used, they should be equipped with a dust collector. If high dust levels develop, use an appropriate NIOSH-designed dust mask. Avoid dust contact with eyes and skin.

**First Aid Measures:** In case of irritation, flush eyes and skin with water for at least 15 minutes. If irritation persists, contact a physician.

## II. PREPARATION

### Handling and Storage:

Solid hardwood flooring should be protected from moisture at all times during transportation, storage and installation. The flooring must be stored in a dry place prior to installation. Be sure to provide a 4" air space between the flooring cartons and the on-grade concrete subfloor to ensure proper airflow and to prevent flooring from absorbing moisture from the concrete subfloor.

The wood subfloor should not exceed 13% moisture content. Use a reliable wood moisture meter to measure and document the moisture content of both the wood subfloor and the wood flooring. The difference between the moisture content of the wood subfloor and the wood flooring must not exceed 4% for strip (2 ¼") and 3% for plank (3"+).

Hardwood flooring should be acclimated to the environment in which it is expected to perform. Open cartons without removing the flooring and allow the flooring to acclimate to live-in, jobsite conditions prior to installation.

### Job-Site Conditions:

The building should be closed in with all windows and doors in place. All concrete, masonry, framing, drywall, paint and other "wet" work should be completely dry prior to installation. Basements and crawl spaces must be dry and well ventilated.

Exterior grading should be complete with proper surface drainage around perimeter of the building. Gutters and downspouts should be in place and operational.

Solid hardwood flooring may be installed on or above grade level. Never install solid hardwood flooring below grade or in areas where excessive moisture is present, such as full bathrooms. Installation of a suitable wood subfloor is required over concrete.

Permanent HVAC must be in place and operational before, during and after installation. Temperatures between 60 and 75 degrees F and relative humidity between 35% and 55% are recommended at all times.

### Subfloor Types and Conditions:

**Plywood:** Plywood subfloors must be CDX grade. Minimum single layer subfloor thickness is 5/8" on 16" on center joists. The flooring must be installed perpendicular to the floor joists, or an additional subfloor layer is required. (Refer to NWFA for more details)

**OSB:** OSB subfloors must be subfloor/underlayment grade. Minimum single layer subfloor thickness is 23/32" on 19.2" on center joists. The flooring must be installed perpendicular to the floor joists, or an additional subfloor layer is required. (Refer to NWFA for more details)

**Concrete:** ¾" solid wood flooring can be installed on concrete subfloors on-grade with the addition of a wood subfloor or screed system for the flooring to be fastened to. (Refer to NWFA for more details). Concrete subfloors must be tested for moisture. Visual checks may not be reliable. Test several areas, especially near exterior and plumbing walls. The accepted test is the Calcium Chloride Test (ASTMF8691). The maximum moisture transfer is 3-lb./1000 sq. ft. in 24 hours with this test.

**Subfloor Conditions:**

Subfloors should be clean and free of any dirt, wax, sealers, paint, drywall compound, oil, old adhesive residue or other debris.

Subfloors should be flat and level within 3/16" in 10'. Correct any joints or areas that are not flat. Securely fasten any loose boards or panels.

Subfloors should be dry. Check subfloor for moisture content. Install moisture retarding materials if needed or desired such as asphalt saturated papers including 15lb. Felt and Grade D Kraft paper.

Subfloors should be structurally sound. Nail or screw any areas that are loose or squeak. Replace any water-damaged, swollen or delaminated wood subflooring.

### Suggested Tools and Accessories

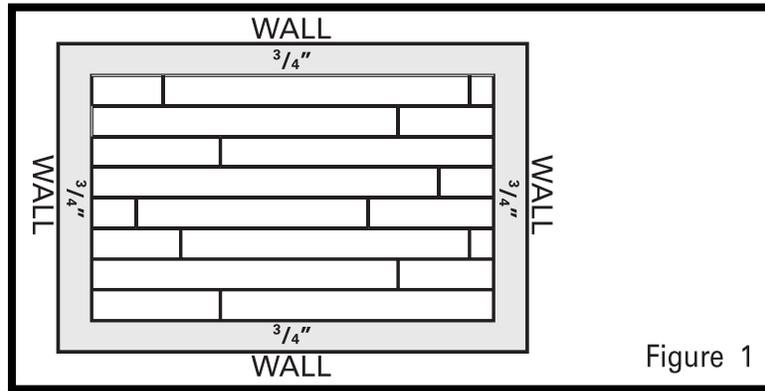
- Chalk line and chalk
- Hardwood floor cleaner
- Nail set
- Tape measure
- Hammer
- Electric power saw
- Pry bar
- Mallet
- NIOSH-designed dust mask
- Electric drill and bits
- Mechanical nailer/stapler
- Compressor and hose with in-line regulator for pneumatic tools
- "Blind" fastening machine for 3/4" flooring (\*see note below) with 1-1/2" or 2" fasteners
- Pneumatic finish nailer with 1 1/2" or 2" 7d/8d finish nails or cleats
- Moisture meter for wood and concrete
- Handsaw and jamb saw
- Eye protection
- 15 lb. Felt paper

\*Use a "blind" nailing machine designed for installing 3/4" hardwood flooring using staples or cleats. This nailing machine must have a protective foot attachment to prevent edge bruising and finish damage. NOTE: Very dense wood species require the proper adjustments using an 18 gauge cleat.

### III. INSTALLATION OF FLOORING

#### Preparation:

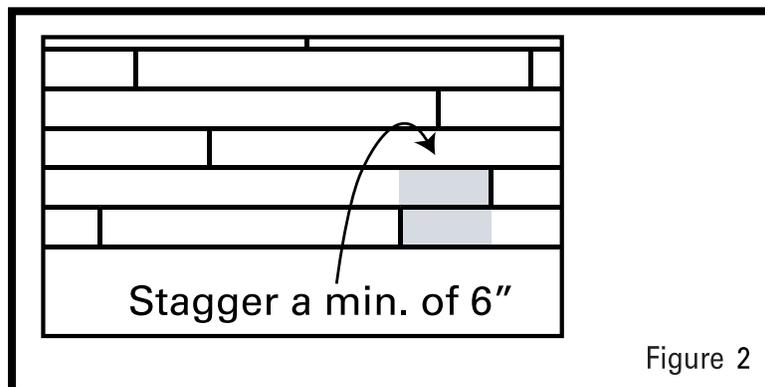
Allow for a minimum of  $\frac{3}{4}$ " expansion between the flooring and all walls, vertical objects and other obstructions (see Fig. 1). Undercut doorjamb, casings, drywall etc. A clearance of  $\frac{1}{16}$ " above the floor is recommended so the floor fits underneath and allows for proper expansion.



Install layer of 15lb. Builder's felt, overlapped 4" at the seams on top of the wood subfloor. After applying the felt, chalk joists locations for reference when nailing.

#### General Installation Tips

- Flooring should be installed from several cartons at the same time to ensure good color and shade mixture.
- End joints should be staggered a minimum of 6" to achieve the best appearance. (See Fig 2).
- Avoid staggering rows uniformly to prevent stair stepping appearance.
- Pre-select and set aside flooring that blends best with the flooring moldings to assure a more uniform appearance.
- Follow all safety precautions for the tools utilized to install the flooring.



## Layout:

The best appearance is usually achieved by installing flooring parallel to the length of the room. When possible, always begin layout or installation from the straightest wall, generally an outside wall. Always install flooring perpendicular to the floor joists unless an additional subfloor layer is installed to minimize subfloor sag as described in the wood subfloor recommendations.

Always dry-rack out the flooring before installing to avoid clustered end joints and repeating patterns. Visually inspect flooring, setting aside boards that need to have natural character flaws cut out. Use these boards for starters and finish boards once the flaws have been cut out.

## General Information for “Blind” Fastening Machines

Avoid striking the edges of pre-finished hardwood flooring with the fastener’s mallet. Edge crushing can occur causing unsightly cracks and splinters. Use a protective foot attachment to prevent damage to the wood flooring.

Improper adapter plates and air pressure settings can cause damage to the wood flooring. Always use an in-line regulator to control air pressure to the nail gun. Set pressure at 70-75 PSI to begin and adjust to achieve proper fastener setting.

## Fastening

Use backer boards of ½” plywood ripped to an appropriate width to establish straight lines. Backer boards should be secured to the subfloor and carefully aligned with starter lines (see Fig 3).

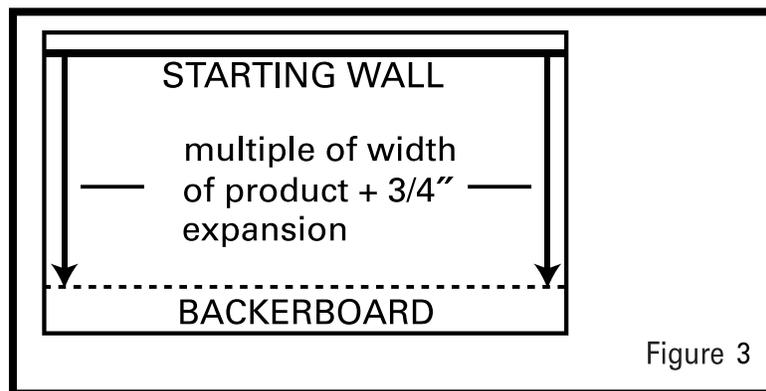
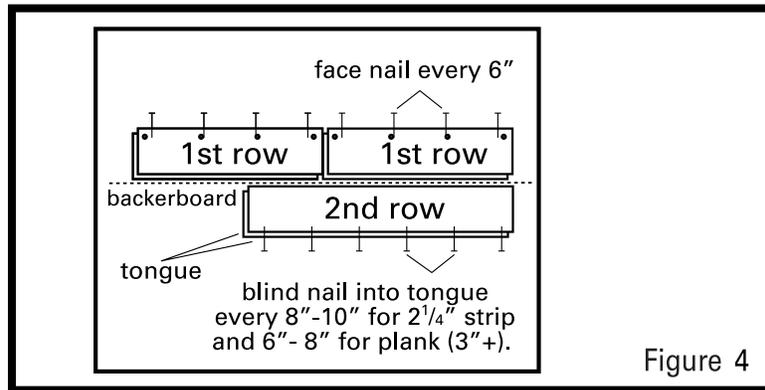


Figure 3

Use flooring fasteners with a minimum length of 1 ½” to 2”. Air pressure should be regulated so the fastener seats fully in the groove, but does not split the tongue or wood below it.

Fastening schedule for 2 ¼" strip is nailed or stapled every 8" to 10". Plank (3' +) should be nailed every 6 to 8 inches. All flooring should be fastened within 2" of the end joints. (See Fig 4).



Face nail boards only as required with 7d or 8d finish nails or cleats, ½" from groove, pre-drilling the nail holes to prevent splitting. Countersink nails and fill holes with appropriate wood putty. Nailing schedule is the same as with blind fasteners.

#### IV. FINISHING TOUCHES

- After all flooring has been fastened:
- Clean the floor with a suitable wood flooring cleaner.
- Remove all debris from the floor and job-site.
- Install all transition and well moldings as needed.
- Cover flooring with a breathable material such as cardboard to protect the finish.  
**\*\*\*Do not cover the flooring with plastic or any other non-breathable material.\*\*\***
- Leave warranty and maintenance information with the owner.

**NOTE: DO NOT APPLY ANOTHER FINISH OVER THE FACTORY APPLIED FINISH. DOING SO WILL CAUSE PROBLEMS TO OCCUR AND WILL VOID THE MANUFACTURER'S WARRANTY.**

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