



Engineered Hardwood Flooring Installation Guide

READ THIS GUIDE PRIOR TO INSTALLATION

Installation and maintenance guides may be revised periodically to apply to new products or reflect changes in industry standards. Please visit our website at www.lwflooring.com to review our most up-to-date documents.

In addition to these guidelines, LW Flooring recommended that LW Flooring products be installed in accordance with the National Wood Flooring Association (NWFA) Installation Guidelines. You can find the NWFA guidelines at www.nwfa.org.

INSTALLER/OWNER RESPONSIBILITY

Open the boxes and check the products to ensure the material meets the homeowner's expectations. If the material is not acceptable, contact your dealer immediately and arrange for a replacement.

Our warranties DO NOT cover materials that are installed with visible defects, variations from plank to plank, or variations from sample to plank. Accepting or rejecting the material must be done in full quantities only, not carton by carton or plank by plank. Requests for replacement, refund, or compensation made AFTER installation will NOT be honored. A defect/irregular tolerance of up to 5% is allowed according to industry standards.

It is the responsibility of the installer/owner to determine if the job site conditions are environmentally acceptable for wood floor installation. LW Flooring declines any responsibility for wood floor failure resulting from/connected to job site environmental /construction damage or due to subfloor deficiencies after hardwood flooring has been installed.

CAUTION: Wood Dust

Wood dust becomes a potential health problem when wood particles from sanding and cutting become airborne. Breathing these particles may cause allergic respiratory symptoms, mucosal and non-allergic respiratory symptoms, and cancer. The extent of these hazards and the associated wood types have not been clearly established.

Power tools should be equipped with a dust collector. If high dust levels are unavoidable, an appropriate NIOSH-approved dust mask should be used. Avoid eye and skin contact. First Aid- In case of irritation, flush eyes or skin with water for at least 15 minutes.

CAUTION: Proper Maintenance

Please ensure proper maintenance procedures and products are used. Some flooring lines require natural oil care, and some require urethane-friendly cleaners. Using inappropriate cleaners could damage the finish and void the manufacturer's warranty. **WARNING:** Not all floor cleaning products marketed as wood floor cleaners are appropriate for your specific floor finish. Please refer to www.lwflooring.com for additional maintenance guides and further information.

I. PROPER SITE CONDITIONS AND HANDLING

The building must be complete and enclosed. Permanent HVAC systems **must** be working and in operation 7 days before installation. It is essential that all masonry, drywall, paint, and all other "wet" work have been completed, given time to dry thoroughly, as this will affect the moisture content on the job site. Overly dry or wet conditions must be corrected before installation. Room temperature and humidity of installation areas should be consistent with normal, year-round living conditions for at least **ONE WEEK** before the installation of wood flooring. Room temperatures of 60°F to 80 °F and a humidity range of 35% to 60% should be maintained year-round. Supplemental humidification may be needed in dry environments and regions to meet the above-normal living conditions. Acclimate for 48 hours. For acclimation, unopened cartons of flooring need to be lying horizontally in the room when acclimating. They do not need to be opened or the plastic to be removed. They need to lay (can be stacked) horizontally for 48 hours in a controlled environment. Humidity is maintained at or near normal living conditions, generally between 60° to 80° Fahrenheit and at the average yearly relative humidity for the area. The exterior grading should be complete, with all gutters, downspouts, and drainage directed away from the building. The basement and crawlspace must have adequate cross ventilation. Crawl spaces must be a minimum of 18" from ground to underside of joists. Exposed earth should be fully covered by a minimum 6mm black polyethylene vapor barrier with joints overlapped and sealed with moisture-resistant tape. Refer to the National Wood Flooring Association Installation Guidelines.

Engineered wood flooring can be installed on, below, and above grade level but should not be installed in areas such as full bathrooms, pool areas, etc.

Take special care when transporting and unloading hardwood flooring at the job site. Flooring should be stored in small lots in the rooms where the installation will occur and in a job-controlled environment allowing for proper acclimation.

II. SUBFLOOR PREPARATION

The subfloor surface must be clean, free of any wax, dirt, paint, oil, grease, curing compounds, and other debris, and dry, flat, and structurally sound. The subfloor should be flat to within 3/16" in a 10- foot radius. Sand or grind high spots and fill low spots with an approved floor patch compound. The surface temperature of the subfloor, at the time of installation, should be at least 60F but never exceed 80F. LW FLOORING will not be responsible for replacing any product failure due to improper subfloor preparation or subfloor conditions.

CONCRETE SUBFLOOR: Test for excessive moisture. A reading of over 3 lbs. /1000 sq. ft. by Calcium Chloride test requires the application of a vapor retarder. **ALWAYS FOLLOW LOCAL CODES AND MANUFACTURER'S INSTRUCTIONS FOR ACCEPTABLE VAPOR RETARDERS.** Ensure concrete has a minimum of 3000 PSI Compression. For installation over lightweight concrete (less than 3000 PSI), use a floating subfloor or flooring installation method. New concrete should be completely cured for at least 60 days. Installers should refer to the ASTM F2170 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes.

WOOD SUBFLOOR: When using the floating application, cover wall to wall with an underlayment overlapped at seams (follow underlayment manufacturing instructions). It is recommended to tape overlapped edges with cellophane tape. Re-secure any loose

areas to prevent subfloor squeaking. The moisture content (MC) of a wood subfloor should not exceed 11%. In general, the moisture content of hardwood flooring is between 6% and 9%, and the MC difference between the subfloor and flooring should not exceed 2% on a 3/4" or wider flooring.

INSTALLATION OVER RADIANT HEATED FLOOR: Before installation over radiant heat systems, it is important to refer to the NWFA Installation Guidelines Section IV. Appendix H. Failure to follow these guidelines can void your LW Flooring warranty and may produce unsatisfactory results.

III. GENERAL INSTALLATION REQUIREMENTS

1. See individual product specifications for approved installation methods. 3/8" thick products can be installed glue down or nail/staple methods only.
2. Cleats are preferred for high-density wood species. Minor occasional noise (such as squeaking) within the flooring is inherent to all staple and nail-down applications and can occur as environmental conditions change. For products greater than 5" in width, it is recommended to use a combination glue down assist when using mechanical fasteners. Mechanically fastened **products are not warranted against squeaking or popping sounds.**
3. Blind nail along the length of the strip/plank and near the ends (1"-3"). Minimum of 2 nails per strip/plank.

IMPORTANT NOTE:

- For 3/8" thick products 1-3/4" (18-20 gage), 4d bright wire casing nail- 3-4" apart
- For 1/2" thick products 1-3/4" to 1-1/2" (18-20 gage), 5d bright wire casing nail-3-4" apart
- For 9/16" thick products 1-1/2"(18-20 gage), 5d bright wire casing nail- 4-6" apart
- For 5/8 " thick products 1-1/2"(18-20 gage), 5d bright wire casing nail- 6-8" apart



4. Flooring should be installed from several cartons at the same time to ensure the best blend of color and shade mix. If a piece of flooring is debatable due to manufacturing, color, finishing, grade, or showing a visual defect, **do not install.** Cut it for the wall line or place it in a closet.
5. End joints should never be closer than 6" from each other.
6. Tongue and groove should be engaged by tapping block or a soft-head mallet.
7. Allow 1/2" expansion space around all vertical obstructions.
8. **Always follow the adhesive manufacturer's recommendation for the correct trowel notch, open time, and spread rate.**
9. Lift planks periodically to ensure proper adhesive transfer. Clean adhesive off the surface with adhesive manufacturer-approved cleaner and soft cloth before it dries.
10. If the adhesive manufacturer recommends, roll the floor with the proper roller.
11. Use approved tongue and groove flooring adhesive for floating installation. The adhesive must be used on all side/end joints. Apply a 1/8" continuous bead of glue on the bottom edge of the groove and the top of the tongue. If you see glue come up between the planks, you're using too much glue. After 4-5 rows, check the floor for square as you will still

have time to adjust it before the glue sets. Ensure the floor is aligned properly and continue as necessary using flooring straps to hold the flooring temporarily in place. Remove excess glue as you go. **Float-installed products are not warranted against squeaking or popping sounds.**

12. Do not install floating floors in excess of 30 feet in either length or width of the room without using transition moldings.

IV. COMPLETING THE JOB

- Glue Down Installation: roll with 100 to 150 lb roller every 2 to 3 hours, and on completion, ensure all planks are flat and in contact with the adhesive. Please refer to the adhesive manufacturer's installation guidelines.
- For all installation methods: remove the spacing wedges, and install the base moldings. Always nail moldings to the adjacent wall, not the flooring.
- For glue-down and float applications, restrict any foot traffic for 12 hours following installation.
- Inspect the completed floor for any scratches, nicks, and minor gaps. Use a touch-up kit, filler, or wood putty as needed. Hint: Test filler on a spare piece of plank. Note: Using fillers/putty and stain is recommended and acceptable industry practice. Full plank replacements are also acceptable forms of repair and do not affect the integrity of the floor when completed correctly.
- Clean, sweep, and vacuum installed flooring before use.
- **Do NOT adhere any tape to the face of the floor, as it will damage the finish. No claims will be processed for tape damage.**

V. GENERAL MAINTENANCE

- ✓ Maintain room temperatures of 60°F - 80°F and a humidity range of 35% - 60% year-round.
- ✓ NEVER use wax or oil-based cleaning products on a urethane finish. All-purpose cleaners are not recommended; they can dull your floor finish or leave a hazy residue.
- ✓ LW Flooring recommends Bona cleaning products, which are widely regarded as the best cleaning solution for urethane-finished flooring.
- ✓ LW Flooring recommends Woca brand products for the maintenance of oil-finished floors.
- ✓ Sweep, vacuum, or dust mop regularly.
- ✓ Use walk-off mats at entrance doors and in high-traffic areas.
- ✓ Install proper felt protectors under the chair and furniture legs to prevent scratching.
- ✓ Close curtains or blinds to limit direct sun exposure and protect from possible fading.
- ✓ Wipe up spills immediately. Never let water stand on the wood floor for any length of time.
- ✓ **Do not use steam cleaners or a wet mop to clean wood floors.** "wet mop" is defined as "well submersed with fluid."

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