

HARDWOOD FLOORING INSTALATION GUIDELINES

Please read carefully before the installation of your Hardwood Design Company product. Inspect all materials carefully before installation. Warranties do not cover materials with visible defects once they are installed. It is the responsibility of the installer/owner to determine if the job site conditions are environmentally acceptable and that the sub-floor system is acceptable for the installation of wood flooring. Hardwood Design Company declines any responsibility for wood floor failures or problems associated with or resulting from sub-floor/sub-surface structural or environmental deficiencies or job site damage after the hardwood flooring has been installed.

The following instructions comply with all recommendations as outlined in Installation Guidelines and Methods published by the National Wood Flooring Association (NWFA).

JOB SITE CONDITIONS

Wood is hygroscopic and will absorb or expel moisture based on environmental conditions. Gain and loss of moisture correspond with an increase or decrease in the size of the boards and occasional warping. Even though our engineered flooring is more dimensionally stable due to the multi-ply construction, it is not immune to these dimensional changes. For the best results, we recommend that our engineered wood flooring be stored in the controlled environment in which it will be installed for 5-7 days prior to installation. The site should have a consistent room temperature of 60-80°F (16-27°C) and humidity of 40-60% for 14 days prior, during and after installation.

- The building should be closed in with all outside doors and windows in place. All concrete, masonry, framing members, drywall, paint, and other “wet” work should be thoroughly dry. Basements and crawl spaces must be dry and well ventilated.
- Exterior grading should be complete. To direct flow away from the structure grading should offer a minimum drop of 3” in 10’. Do not obstruct the drainage with landscaping materials. All gutters and downspouts should be in place.
- Our engineered flooring may be installed below, on or above grade level. It is not recommended for applications in areas where excessive humidity is present such as full baths, hot tub enclosures or wine cellars.
- Permanent air conditioning and heating systems should be in place and operational. The installation site should have a consistent room temperature of 60-80°F (16-27°C) and humidity of 40-60% prior, during and after installation.

SUB FLOOR REQUIREMENTS

Before beginning the application of any Hardwood Design Company product, the subfloor must meet the following minimum requirements:

- The subfloor must be level and flat.
- The floor should not vary more than 3/16” in a 10’ section.
- If high or low points in the subfloor exceed the tolerance mentioned above, sand down high spots and/or fill low spots with leveling compound.
- The subfloor must be clean and free of debris, loose materials or materials that may release or become unattached with age, such as paint, oils and drywall materials.

- The subfloor must be dry. We recommend that you check and document moisture content of the slab.
 - Concrete sub-floors must be a minimum of 30 days old before testing begins.
 - Concrete must not exceed 4.5 using a Tramex Moisture Encounter Meter.
 - Calcium Chloride test results should not exceed 3 # 24hr/1000 ft².
 - Wood sub-floors must not exceed 12% and there must be no more than a 2% difference between wood flooring >3" in width and the subflooring material. If the sub-floor has excessive moisture apply a suitable moisture retardant that is compatible with the adhesive being used. Contact the adhesive supplier for their recommendation and warranty.

GLUE DOWN INSTALLATION

Wood sub-floors:

- Wood panels should have an adequate fastening pattern, glued and /screwed or nailed as the system requires using the acceptable fastener and pattern. Flatten any swollen or raised edges as necessary by sanding or scraping. Nail or screw any areas that are loose or squeak. Replace any water-damaged swollen or delaminated subflooring or underlayment. Best results occur when the sub-floor has a minimum thickness of 3/4".

Concrete sub-floors:

- Remove all loose or broken concrete and fill/flatten as necessary using cementations leveling materials of 3000 PSI or more. Wood floors cannot be mechanically fastened directly to concrete. Install a wood sub-floor if necessary over concrete of 3000-PSI minimum compressive strength or glue the wood directly to the concrete using a glue-down installation system.

NAIL DOWN INSTALLATION

- A 15 lb. felt paper moisture barrier should be applied to the plywood sub-floor with 6" overlaps before installing the new wood floor.
- Create a working line to the starting wall, in multiples of our solid plank width.
- Install the first row of wood with the groove side towards the wall using top nails as necessary to hold the first-row firm and in place. Adjust as necessary.
- Use adjustable pneumatic power hammer or nailing machine with 1 1/2"-2" nails as is required and make sure nailing foot is appropriate to the nails/staples used. To avoid damage to the tongue be sure to adjust for proper pressure on the compressor.
- Add and adjust each additional row of wood planks, offset or stagger the end joints at least 6" to prevent repeating the pattern.
- A 1/2" expansion space should be left around the perimeter.
- Finished areas should be covered with a protective paper immediately after installation to prevent damage from installation process.
- Our flooring should not be directly attached to screeds.

RESOURCES

National Wood Flooring Association (NWFA) - <https://www.NWFA.org>

Tramex Moisture Meters - <https://www.tramexmeters.com>