

Finn Wood Flooring

Installation Guidelines

lease read carefully before installing your Finn Wood Flooring product. Examine all materials carefully prior to installation. Our warranties do not cover materials with visible defects once they are installed. It is the purchaser, installer or owners responsibility to determine if the job site conditions are adequate and that the sub-floor system is acceptable for the installation of wood flooring. Finn Wood Flooring declines any responsibility for wood floor failures or problems associated with or resulting from sub-floor/sub-surface structural, 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).

Conditions of the Job Site

Evaluate the job site for potential problems before wood flooring is delivered to job site and prior to installation. Wood flooring is a home finish and should be one of the last jobs completed on the construction project. Limit foot traffic during construction on finished wood flooring. For best results, make sure the job site has met these minimum requirements.

Minimum Job Site Requirements

- 1. The building should be enclosed with all outside doors and windows in place.
- 2. All concrete, masonry, framing members, drywall, paint and other "wet" work should be thoroughly dry.
- 3. Heating and Air Conditioning need to be fully operating. Appropriate air temperature and humidity conditions need to be achieved before wood flooring is delivered to the job site or installed. (See Acclimation and Conditioning of Wood Flooring Page 4)
- 4. Basements and crawl spaces should be dry and well ventilated. If basement needs power washing, do so prior to wood flooring installation. Crawl spaces should be 18" from ground to underside of joists. Crawl space earth (or thin concrete slab) should be covered 100% by a vapor retarder. For crawl spaces without ventilation openings, vapor retarder joints must overlap a minimum of 6 inches and be taped or sealed. The vapor retarder should also extend at least 6 inches up the stem wall and be attached and sealed to the stem wall.
- 5. Engineered wood flooring is appropriate for above-grade and on grade installations but not for below grade installations. If the soil surrounding a structure is 3" or more above the floor of any level, consider the level below grade.
- 6. Where the minimum joist conditions are present, the flooring can be delivered and stored in the rooms in which it will be installed. (See Acclimation and Conditioning of Wood Flooring- Page 4)
- 7. Base and shoe mold may be installed after the flooring installation.

Sub-Floor Requirements

Wood flooring by design is not to be used to strengthen or stiffen a sub-floor and will not do so. The quality of the sub-floor will affect the wood flooring once installed. If movement of the sub-floor occurs prior to installation and is not corrected, that same movement will occur after installation is complete. Prior to installation of any Finn Wood Flooring product, the sub-floor must meet the following minimum requirements:

- 1. The sub-floor must be flat and level.
- 2. The floor should not vary more than 3/16" in a 10' section.
- 3. If high or low points in the sub-floor exceed the tolerance mentioned above, sand down high spots and/or fill low spots with leveling compound.
- 4. The sub-floor 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.
- 5. The sub-floor must be dry. It's recommended that you check and document moisture content of the slab.
- a. Concrete sub-floors must be a minimum of 30 days old before testing begins.
- b. Concrete must not exceed 4.5 using a Tramex Moisture Encounter Meter.
- c. Calcium Chloride test results should not exceed 3 # 24hr/1000 ft2.
- d. Wood sub-floors must not exceed 12% and there must be no more than a 2% difference between wood flooring greater than 3" in width and the sub-flooring material.
- e. If the sub-floor has excessive moisture, apply a suitable vapor retardant that is compatible with the adhesive being used.

Acclimation and Condition of Wood Flooring

Wood is a hygroscopic material, which means it will absorb or expel moisture in its environmental conditions. Increase, decrease and occasional warping of the boards is caused by the amount of water, or lack there of, where the wood is placed. Even though our engineered wood flooring is more stable than traditional wood flooring in these circumstances, it isn't completely immune to these dimensional changes.

Wood flooring simply needs to reach moisture content level in equilibrium with the surrounding environment (EMC) in which it will be installed, at or near normal living conditions. The process of reaching this equilibrium is known as acclimation, which allows the wood to properly adjust itself to the normal living conditions with the structure; that is, the temperature, humidity conditions and moisture content that will typically be experienced once the structure is occupied. For the best results, follow these guidelines.

- 1. 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.
- 2. The site should have a consistent room temperature of 60-80°F (16-27°C) and humidity of 30-50% for 14 days prior, during and after installation.
- 3. Do not store wood flooring at the job site under uncontrolled environmental conditions. Garages and exterior patios, are NOT acceptable areas to store wood flooring.

Failure to comply with these requirements may result in irreversible structural damage and void related warranties.

Installation

Glue Down Installation

Wood Sub-Floor: Wood panels should have an appropriate fastening patterned, glued and screwed or nailed as the system requires the acceptable fastener and pattern. Sand or scrape down any swollen or raised edges as necessary. Nail or screw any areas that are loose or squeak. Replace any water-damaged, swollen, or delaminated sub-flooring or underlayment. For best results, aim for a sub-floor with minimum thickness of 3/4". DO NOT TAPE TO FINISHED FLOORING.

Concrete Sub-Floor: Sub-floor 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. Remove all loose or broken concrete and fill or flatten as necessary using cementation leveling materials of 3,000 PSI or more. Glue the wood directly to the concrete using a glue down installation method. DO NOT TAPE TO FINISHED FLOORING.

Nail Down Installation

- 1. A 15 pound felt paper moisture barrier should be applied to the plywood subfloor with 6" overlaps before installing the new wood floor.
- 2. Create a working line to the starting wall, in multiples of our solid plank width.
- 3. 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.
- 4. Use am 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.
- 5. Add and adjust each additional row of wood planks, offset or stagger the end joints at least 6" to prevent repeating the pattern,
- 6. A 1/2" expansion space should be left around the perimeter.
- 7. Finished Areas should be covered with a protective paper immediately after installation to prevent damage from installation process. TIP: Cover the floor entirely. Some species are light-sensitive and uncovered areas may change color. However, covering a glue-down application may not allow some adhesives to properly cure. Use a covering material with a vapor permeance (perm rating of 1 or more) to avoid trapping moisture or vapor on or within the floor. Any covering should be taped, using a low-adhesive tape, to base or shoe moldings. DO NOT TAPE TO FINISHED FLOORING. When taping paper or sheets together, tape them to each other, NOT to the floor.
- 8. 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

Finn Wood Flooring- https://www.finnwoodflooring.com





