



**HILLSIDE**

PREFINISHED ENGINEERED  
HARDWOOD FLOORING

## **INSTALLATION INSTRUCTIONS FOR ENGINEERED TONGUE & GROOVE HARDWOOD FLOORING**

### **ATTENTION! READ BEFORE INSTALLING!**

#### **COLOR VARIATION**

This flooring is a natural product and as such, color variations are to be expected. For the best overall visual appearance, it is recommended to pull planks from several cartons. Do not install boards varying greatly in color next to one another.

Dry rack the flooring with 3-4 cartons and make sure that the homeowner and/or end user approves the material before installing the floor. Once a floor is installed, it is deemed acceptable and will not be warranted for any color variation, texture, gloss, and/or finish claims. Always install the floor when the homeowner and/or end user is present.

#### **ACCLIMATION**

As relative humidity varies regionally, acclimation of the flooring prior to installation is the most important precaution to take in order to ensure a successful end result. Proper acclimation is necessary to adapt the moisture content of the flooring to the conditions of your environment. Improper acclimation can cause the floor to buckle and/or the planks to shrink or cup post-installation.

#### **SUBFLOOR PREPARATION**

Subfloor must be level, dry, and free of imperfections. An uneven subfloor will make the floor feel unstable and cause premature damage.

#### **NOTE**

Read these instructions thoroughly BEFORE beginning installation. In addition to these instructions, we recommend the installer follow all installation guidelines as established by the National Wood Flooring Association. Flooring material should be inspected by an experienced professional prior to installation. The ultimate responsibility for the suitability of flooring and accompanying products for each individual installation rests solely on the installer. The manufacturer has no control over the installer's proper application and installation. Should an individual plank be undesirable in appearance, or otherwise compromised in dimension, the installer should not use this plank.

#### **PRE-INSTALLATION JOBSITE REQUIREMENTS**

Manufacturer cannot be held responsible for site conditions.

Carefully examine the flooring prior to installation for grade, color, finish, and quality. Ensure adequate lighting for proper inspection. If flooring is not acceptable, contact your supplier immediately.

Manufacturer cannot accept responsibility for flooring installed with visible defects. Prior to installation

of any flooring, the installer must ensure that the jobsite and subfloor meet the requirements of these instructions. Manufacturer is not responsible for flooring failure resulting from unsatisfactory jobsite and/or subfloor conditions.

As a general rule of best practice, flooring should be one of the last items installed in any new construction or remodel project. All work involving water and/or moisture should be completed before flooring installation. **WATER AND WOOD DO NOT MIX.** Installing flooring onto a wet subfloor is highly likely to cause cupping, tip & edge raising, and subsequent gapping.

Room temperature as well as humidity of the installation area should be consistent with normal, year round living conditions for at least one week before installation of flooring. Optimum room temperature of 70° F coupled with a humidity range of 35-55% is recommended during installation. Humidity levels outside of this 35-55% range will most likely cause movement in the flooring, including gapping between planks and possible cupping.

Store the flooring in the installation area for 72 hours before installation to allow flooring to adjust to room temperature. These floors need adequate acclimation for moisture equalization prior to installation.

### **PRE-INSTALLATION SUBFLOOR REQUIREMENTS**

All subfloors must be:

- **Dry, and will remain dry:** Subfloor must remain dry year-round. Moisture content of wood subfloors must not exceed 12%. Concrete must be tested for moisture content using the Anhydrous Calcium Chloride test method, a non-invasive moisture meter, or a pin/probe moisture meter.
- **Structurally sound**
- **Clean:** Thoroughly swept and free of all debris (if being glued down, subfloor must be free of wax, grease, paint, sealers, old adhesives, etc. which can be removed by sanding)
- **Level:** Flat to 3/16" per 10-foot radius

Wood subfloors must be dry and well secured. Screw every 6" along joists to avoid squeaking. If not level, sand down high spots and fill low spots with a leveling compound.

Concrete subfloors must be fully cured, or at least 60 days old, and should have a minimum 6-mil poly film between concrete and ground. A moisture test must be performed to ensure that the concrete slab is within industry standards. Remember, a concrete slab on or below grade that measures dry today may become moist in the future due to rising groundwater. Installing a moisture barrier now may be viewed as an insurance policy against concrete becoming wet in the future. Manufacturer is not responsible for site related moisture issues.

For additional protection, you may want to consider applying a moisture barrier compound system.

### **STARTING YOUR INSTALLATION**

Make sure subfloor is tested for moisture first and is properly prepared.

Because natural flooring expands with any increase in moisture content, always leave at least a 3/8" expansion space between flooring and all walls, and any other permanent vertical obstructions (such as pipes and cabinets). This expansion space will be covered upon the application of base moldings around the room. Use wood or plastic spacers during installation to maintain this 3/8" expansion space. Work from several open flooring boxes and "dry lay" the planks before permanently laying the floor. This will allow you to examine the varying grains & colors and to arrange them in a harmonious pattern. It also allows you the opportunity to remove exceptionally dark & light pieces for use in "hidden" areas (such as closets & pantries) in order to create a more uniform floor.

Remember, it is the installer's responsibility to determine the expectations of what the finished floor will look like with the end user first and then to cull out pieces that do not meet those expectations.

Begin installation next to an outside wall. This is typically the straightest and best reference for establishing a straight working line. Establish this line by measuring an equal distance from the wall at both ends and snapping a chalk line. The distance you measure from the wall should be the width of a plank plus about 3/8" for expansion space. You may need to scribe cut the first row of planks to match the wall in order to make a straight working line if the wall is out of square.

It is recommended to dry lay, meaning no glue or nails, a few rows of planks before starting installation to confirm your layout decision and working line. When laying flooring, stagger end joints from row to row by at least 8". When cutting the last plank in a row to fit, you can use the cut-off end to begin the next row. If the cut-off end is less than 8", discard it and instead cut a new plank at a random length and use it to start the next row. Always begin each row from the same side of the room. To draw planks together, always use a tapping block (a short piece of flooring), as tapping the floor itself will result in edge damage. For best results, flip the tapping block upside down and use the groove edge to tap the tongue edge of the plank being installed. Fit end joints tightly together before tapping long edges together. When near a wall, you can use a pry bar to pry close the side and end joints. Take care not to damage the flooring edges. **DO NOT ADHERE TAPE OF ANY KIND TO OIL FINISHED FLOORS.**

#### **Part I: Acceptable Jobsite Conditions and Jobsite Checklist**

A. Refer to NWFA Installation Guidelines: "Jobsite Conditions"

#### **Part II: Acclimation Guidelines**

A. Refer to NWFA Installation Guidelines: "Acclimation & Conditioning"

#### **Part III: Appropriate Grade Levels**

- A. Engineered wood floors can be installed successfully on, above, or below grade level. Engineered wood floors can be installed directly to a concrete or wood subfloor.
- B. The entire flooring level is considered to be below grade where soil is present along any perimeter wall and is more than 3" above the installed wood flooring level. Ground should be sloped away from the house for proper drainage. Additionally, it is advised to check local building codes as local building codes always prevail. Always ensure to follow all local building codes.

#### **Part IV: Subfloors - Wood Joist Systems**

A. Refer to NWFA Installation Guidelines: "SUBSTRATES: Wood Subfloors"

#### **Part V: Subfloors - Concrete Slab**

A. Refer to NWFA Installation Guidelines: "SUBSTRATES: Concrete Subfloors," and also: "SUBSTRATES: Wood Subfloor Systems Over Concrete"

### **GLUE DOWN INSTALLATION**

Make sure subfloor is tested for moisture content first and is properly prepared.

On concrete subfloors, which are on or above grade (ground level), always assume the worst even if they measure dry. We recommend taking the following installation steps to ensure a trouble-free installation:

- Testing and documenting moisture content prior to installation
- Applying a sealer to the subfloor as needed

Follow adhesive manufacturer's instructions for proper trowel size, minimum temperature, adhesive set time and open times before beginning installation of flooring. Please refer to [www.loba-wakol.com](http://www.loba-wakol.com) for all technical information and instructions.

### **AFTER INSTALLATION**

Flooring should be one of the last items installed in a project. In order to protect the floors while other trades are finishing their work prior to final cleanup, use a protective and breathable covering over the floors. **DO NOT** use blue tape to adhere to the floor as it may damage the finish. Clean the floor thoroughly before laying the covering to ensure that no debris is trapped underneath. **DO NOT USE** plastic film or any other non-breathable covering as this can cause the floor to become damaged due to humidity buildup.

Remove expansion spacers and install base and/or quarter round moldings to cover the expansion space. Dust mop or vacuum your floor to remove any dirt or debris.

Install any transition pieces that may be needed such as reducers, T-moldings, nosings, etc.

Do not allow foot traffic or heavy furniture on floor for 24 hours post installation. The optimum recommended temperature is 70° F and relative humidity is 35-55%. *Note: exceptionally dry climates may require the use of a humidifier.*

### **PROTECTION AND MAINTENANCE OF YOUR FLOOR**

Purchasing quality flooring and providing proper on-going maintenance will result in a floor that lasts over time.

**Fading:** Natural floors contain organic pigments and as such are subject to fading when exposed to direct sunlight. Use drapes or other sun minimizing methods where possible to protect your floor from excessive light.

**Joints:** Natural flooring reacts to the conditions in the environment. Natural flooring plank systems expand and contract in response to fluctuations in temperature and humidity. Contraction and expansion is normal. You can minimize the visual appearance of this normal contraction and expansion by controlling the environment through maintaining an adequate temperature and relative humidity.

**Photosensitivity:** Hardwood floors are photosensitive and may change in color over time as they age or are exposed to U.V. light. As this is a naturally occurring phenomenon, which is accelerated by the direct exposure to U.V. light, this is not considered a material defect and is thereby excluded from coverage under the manufacturer's limited warranty.