

# Engineered Hardwood Installation

## Installer / Owner Responsibility

Carefully inspect all materials before installation. Materials installed with visible defects are not covered under the warranty. Do not install if you are not satisfied with the flooring; contact your dealer immediately. Final quality checks and approval of the product is the sole responsibility of the owner and installer. Make sure you are installing the correct color; no claims will be accepted for color once the material is installed. The installer must determine that the job-site environment and sub-floor surfaces meet applicable construction and material industry standards. We decline any responsibility for job failure resulting from deficiencies caused by sub-floor or job-site environment or installation related items. All sub-floors must be clean, flat, dry and structurally sound.

## Basic Tools and Equipment

Broom or vacuum, moisture meter, chalk line & chalk, tapping block, tape measure, safety glasses, hand or electric saw, miter saw, 3M blue tape, hardwood floor cleaner, hammer, pry bar, color wood filler, straight edge, trowel.

## Putty and Filler Use

Please keep on hand like colored putty or filler as well as colored markers to touchup minor chips and nicks in the finished product. It is also advised to fill any allowable gaps before leaving jobsite

## Recommended Installation Methods

All of our products\* can be installed using the direct glue down method, the floating method and by the use of proper mechanical fasteners. However we recommend that the product be direct glued for the best installation for the following reasons;

- 1) Approved adhesives provide enhanced vapor emission protection
- 2) Approved adhesives can provide increased Sound Transmission Class (STC)
- 3) Approved adhesives may help to increase Impact Isolation Class (IIC)
- 4) Approved adhesives stop squeaking, crackling and other noises due to loose or improperly placed fasteners.

## Handling and Storage.

- Don't truck or unload wood flooring in the rain, snow or other humid conditions.
- Store wood flooring in an enclosed building that is well ventilated with weather proof windows. Garages and exterior patios, for example, are not appropriate for storing wood flooring.

## Job-site Conditions

Wood flooring should be one of the last jobs completed in a construction project. Prior to installing hardwood floors, the building must be structurally complete and enclosed, including installation of exterior doors and windows. All finished wall coverings and painting should be completed. Concrete, masonry, drywall, and paint must also be complete, allowing adequate drying time as to not raise moisture content within the building.

- HVAC systems must be fully operational at least 7 days prior to flooring installation, maintaining a consistent room temperature between 65-85 degrees and relative humidity between 35-55%.
- Engineered hardwood floor may be installed above, on, and below grade level.
- It is essential that basements and crawl spaces are dry. Crawl spaces must be a minimum of 18" from the ground to underside of joists. A vapor barrier must be established in crawl spaces using 6 mil black polyethylene film with joints overlapped and taped.
- During the final pre-installation inspection, sub-floors must be checked for moisture content using the appropriate metering device for wood and/or concrete.

- Cross stack the cartons in the environment that they will be installed in. Acclimating material for as long as it takes to reach equilibrium. Work out of multiple cartons to mix material. Only opening cartons as you are ready to use them.
- Flatness required as follows- 3/16" in 10' or 1/8" in 6'. Floating floors requirements are more stringent. If the floor is to be glued down then fill low areas with the appropriate cementations sub-floor leveling compound. The leveling material should provide structural soundness for the flooring being installed. Structural soundness is the responsibility of the installer
- Distribute lengths, avoiding "H" patterns and other discernible patterns in adjacent runs. Stagger end joints of boards row to row a minimum of 6" for strip flooring, 8-10" for 3" to 5" plank, and 10" for plank wider than 5" for better visual effects when possible. However the length of the material may dictate end joint proximity. Close end joint proximity may affect structural stability on mechanically fastened installations if there is deflection of the substrate present.

### **Sub-floor Preparation**

#### **Wood Sub-floors**

- Sub-floor must be structurally sound and properly secured with nails or screws every 6 inches along joists to reduce the possibility of squeaking.
- Wood sub-floors must be dry and free of wax, paint, oil, and debris. Replace any water-damaged or delaminated sub-flooring or underlayments.
- Additional requirements for flatness are required for floating floors as stated in installation guidelines
- **Preferred sub-floors** - 3/4" CDX Grade Plywood or 3/4" OSB PS Rated sub-floor/underlayment, sealed side down, with joist spacing of 19.2" or less; **Minimum sub-floors** - 5/8" CDX Grade Plywood sub-floor/underlayment with joist spacing of no more than 16". If joist spacing is greater than 19.2" on center, add a second layer of sub-flooring material to bring the overall thickness to 1-1/8" for optimum floor performance. Hardwood flooring should be installed perpendicular to flooring joists. If flooring is installed parallel with joists then an additional layer of 1/2" plywood must be installed to meet minimum requirements of 1-1/8"
- **Sub-floor moisture check.** Measure the moisture content of both the sub-floor and the hardwood flooring with a pin moisture meter. Sub-floors should