

# ENGINEERED HARDWOOD FLOORING INSTALLATION

## Engineered Hardwood Flooring Installation Instructions

### INSTALLER / OWNER RESPONSIBILITY - VERY IMPORTANT

INSTALLATION CONSTITUTES ACCEPTANCE of hardwood flooring, subfloor, substrate, the jobsite (including the ambient temperature and relative humidity), and all other variables that may affect the performance of wood flooring.

Somerset manufactures flooring, not finished floors; the flooring installer must complete the finished product. Many critical decisions must be made at the installation site, and therefore are the sole responsibility of the installer and/or owner. These include, but are not limited to, proper storage and handling of flooring, complete evaluation of site conditions including moisture testing of the site and flooring, acclimation of flooring to normal living conditions, site preparation, flooring layout, milling, grade and color, proper installation methods, and cleanup. DO NOT INSTALL if there is any question as to acceptability, including stain color consistency and sufficient quantity to complete the job.

- Keep flooring dry at all times Provide good air circulation around pallets, bundles, or cartons. Do not stack flooring bundles or cartons more than three layers high, and maintain a flat stack. Record flooring moisture content upon delivery and at time of installation, and retain these records. Acclimate Somerset flooring to proper site conditions; refer to NWFA Installation Guidelines, Sec. I, Ch. 2 for further information.
- HVAC must be in operation before, during, and after installation (refer to NWFA Installation Guidelines, Sec. I, Ch. 1, Part 1). A temperature of 70 degrees F +/- 10 degrees and a relative humidity between 35-55% is recommended. Heating units or uninsulated ductwork close to the flooring or subfloor may cause "hot spots" which must be eliminated prior to installation.
- Radiant Heat: Wood flooring can be installed over radiant heat as long as you understand radiant heat and how it can impact wood flooring, what precautions to take, and what type of wood flooring to use. Somerset engineered hardwood flooring may be installed over many radiant heat systems (excluding hickory and exotic (imported) species). As these precautions and installation methods are very detailed, please consult NWFA Installation Guidelines, Sec. IV, Appendix H for details. Problems typically associated with radiant heat systems are excluded from coverage under the Somerset warranty.
- Moisture testing is critical (refer to NWFA Installation Guidelines, Sec. I, Ch. 3). Confirm proper drainage exists around the structure. In crawl spaces, exposed earth must be fully covered with minimum 6-mil polyethylene sheeting. Crawl space vents must be open at all times, and must equal at least 1.5% of the total square footage of the crawl space. Basements must be dry and remain dry.

### Subfloor Types And Conditions (NWFA Installation Guidelines, Sec. II)

- **General:**  
The subfloor must be clean, dry, flat (within 3/16" in 10'), and structurally sound. Correct any joints or areas that are not flat. Secure any loose boards or panels.
- **Wood:** (refer to NWFA Installation Guidelines, Sec. II, Ch. 4)  
CD Exposure 1 plywood and OSB Exposure 1 subfloor panels are appropriate subfloor materials (grade stamped US PS1-95). Solid board subfloors should be 1" x 6" nominal, Group 1 dense softwoods, #2 Common, KD. Minimum single layer subfloor thickness is 5/8" on 16" o.c. joists or 3/4" on 19.2" o.c. joists. The flooring must run perpendicular to the floor joists, or additional subfloor thickness is required.
- **Concrete:** (also refer to NWFA Installation Guidelines, Sec. II, Ch. 5)  
Concrete should have a minimum of 3000 psi; refer to NWFA for details and alternate installation methods. Concrete must be tested for moisture. If a concrete moisture meter or other test indicates moisture presence, perform a calcium chloride test. Moisture content must not exceed 3 lbs./1000 sq.ft./per 24 hours. Moisture barrier systems must be used correctly and must be compatible with the adhesive used. Check with the moisture barrier manufacturer for details.

## **Installation (NWFA Installation Guidelines, Sec. III)**

### **Preparation:**

Allow 1/2" expansion space between the wood flooring and any walls or obstructions. Undercut door jambs, casings, etc. as needed so flooring has adequate expansion space.

### **Layout:**

The best appearance is usually achieved by installing parallel to the length of the room, but always install perpendicular to the floor joists (wood subfloors) unless special subfloor conditions are met. Always rack out the flooring before installing to avoid clustered end joints and repeating patterns. Work simultaneously from several cartons to achieve good color distribution.

### **Installation with Mechanical Cleats/Staples:**

Use caution to avoid edge and face damage during installation. Special footer plates are available for flooring tools to protect factory finished flooring faces and edges.

Use backer boards of 1/2" plywood ripped to an appropriate width to establish straight lines. Backer boards should be secured to the subfloor and carefully aligned with starter lines.

Use flooring fasteners (refer to NWFA Installation Guidelines, Sec. IV, Appendix F) appropriate for engineered flooring (minimum 1" long, maximum 3/8 crown, designed for engineered flooring; check with the fastener manufacturer). Air pressure and tool settings should be adjusted so the fastener seats properly, does not split the wood, and does not distort the finished face. Fastening schedule should be every 4-6", with a fastener within 2" of each end, and at least two fasteners per piece. **DO NOT USE TOOLS / FASTENERS DESIGNED FOR 3/4" SOLID FLOORING.**

Face nail only as required with 1" (4d) finish nails or cleats, 1/2" from the groove, pre-drilling the nail holes to prevent splitting. Face nails need to be countersunk and covered by molding or properly filled.

### **Direct Glue Installation:**

Use a quality hardwood flooring adhesive recommended for engineered plank flooring. Follow all instructions of the adhesive manufacturer including, but not limited to, adhesive storage, room temperature and humidity, proper ventilation, spread rate, open time, rolling, safety procedures and equipment, cleanup and cure time. Avoid allowing adhesive residue to dry on the face of the flooring. Special cleaners are available (from the adhesive mfg.) to clean off any residue.

### **Floating Installation:**

Somerset engineered flooring may be floated over a structurally sound subfloor, using a quality floating floor adhesive (PVA type) applied in a continuous bead along the bottom of the grooves (both long edges and ends). A quality floating floor underlayment product should be installed between the subfloor and the flooring installation. Other installation instructions remain unchanged.

### **Finishing Touches:**

Somerset offers five standard molding profiles factory finished to blend with your Somerset wood floor. These moldings will address most trim and transition situations quickly and cost effectively, and should be ordered with the flooring to avoid needless delays in closing.

Fill any nail holes or small cracks with the proper filler (use Somerset Touch-Up Kits). Leave the Touch-Up Kit with your customer for their use as needed.

Clean the floor thoroughly and remove all scraps and debris. Some solvents may attack the finish, so test any cleaner for finish compatibility before using on installed flooring. Somerset recommends that the installer leave care and maintenance information with the consumer. While some installers might leave floor care products for the consumer, we suggest you at least leave information as to how the consumer can purchase floor care products from the retailer or online at [www.somersetfloors.com/market](http://www.somersetfloors.com/market).

Applying additional finish over the factory finish may cause problems and does not improve durability or permanently seal the joints. Any finish materials used that are not recommended by Somerset Hardwood Flooring will void your warranty.

If you have installation questions, contact Somerset, your Somerset distributor, or the National Wood Flooring Association ([www.nwfa.org](http://www.nwfa.org)).

### **Somerset Hardwood Flooring**

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NO WARRANTIES APPLY TO ANY PRODUCTS NOT SPECIFICALLY ADDRESSED IN SOMERSET'S WRITTEN WARRANTY DOCUMENT.