



Reclaimed Wood Flooring PE

(Precision Engineered... People-friendly and Environment-friendly)

Installation Guidelines

From initial concept to finished product every detail of your 'precision engineered' wood floor from Goodwin has been produced from a carefully thought out design... from the environmental benefits to the beauty and long-term performance. It is important that you understand the following instructions before you begin in order to achieve a quality and lasting installation.

The natural characteristics of wood limit the range of conditions and the installation for which wood flooring will give acceptable performance. The suitability of this product for the environment it will be used in must be determined prior to installation. In general, this wood floor product can be installed above, on, or below grade and can also be installed over sub-floor equipped with radiant heat systems. It has been designed for glue down to concrete or plywood or nail down or stapled installation.

Wood is a natural material that will vary in appearance. Verifying that each piece meets appearance, finish and manufacturing standards prior to installation is the responsibility of the purchaser or the installer. Note: Floor inspection by the end-user should occur from a standing position. When ordering wood flooring, it is recommended to add at least 5% for a cutting allowance, or more depending on wider widths and place of installation.

Although care is taken in the manufacture and grading to ensure that your wood floor meets grade specifications, a tolerance for natural variation and milling up to 5 percent can be allowed outside the normal range. Material that has visible defects (beyond what is allowed in the grade and the grading tolerance) is covered by replacement of material returned to manufacturer prior to installation only. Installed material or material that was damaged prior to installation is not covered.

Engineered wood flooring will maintain its original shape and integrity only in a range of environmental conditions. Either very dry or wet conditions can cause wood flooring to deform, crack, or develop other structural or appearance characteristics that are not associated with good performance. Sub floors need to be sound, flat, and free from excessive moisture or deflection.

Filling nail holes, small cracks, and other minor irregularities in the surface is considered a normal part of the installation procedure. Trimming out, or upgrading the wood floor, onsite or during installation does not qualify for replacement material.

To maintain a satisfactory floor the relative humidity must be kept within the range of 35% to 55%. High temperatures or exposure to certain chemicals can also degrade the flooring. Problems arising from environmental conditions not appropriate for engineered wood flooring are not covered in the product warranty (see Goodwin Residential or Commercial Precision Engineered Floor Warranty as appropriate).

PREPARATION

Job Site Conditions

Appropriate job site environmental conditions should be achieved prior to delivery of the flooring. Wet trades such as paint, drywall, concrete, or masonry should be completed and dry before delivery of the flooring. The HVAC system should be operated a minimum of seven days prior to the delivery of the flooring. Relative humidity should be maintained in the 35% to 55% range during and after the installation. Problems arising from improper jobsite conditions are not the responsibility of the manufacturer.

- Wood sub-floor moisture testing with a moisture meter appropriate for the substrate should be conducted and recorded prior to delivery.
- Concrete
 - Must be cured from the initial mix for at least 60 days and must be porous enough to allow proper glue adhesion.
 - Test concrete for moisture; preferably with an ASTM F2170-2 type concrete moisture meter reading at or below 65 percent.
 - Steps should be taken to avoid future moisture intrusion and to prevent damage from moisture migration.

If wood sub-floor moisture exceeds 14% flooring should not be installed over it. Postpone delivery and installation and dry the site. When the sub floor moisture level is too high for direct installation, surface sealers (trowel on moisture cured urethane, latex, epoxy), silicate compounds that impregnate and seal the surface or roll out membrane moisture barriers are available. It is prudent to consider installing a moisture barrier prior to installing even if sub floor tests dry to diminish the chance of future moisture intrusion. Refer to the moisture barrier manufacturer for instructions and guarantee against moisture intrusion.

If moisture enters a concrete sub floor after a wood floor is installed on it the moisture can cause the wood floor to fail. For this reason it is prudent to consider a moisture barrier prior to installing a wood floor to diminish the chance of future problems even if testing indicates a dry condition before installations. This product is constructed to perform satisfactorily only in a range of humidity and temperature. The time required to achieve appropriate humidity and temperature in a room(s) in which wood flooring is to be installed can vary widely. It will not perform well when flooded with water or in extremes of relative humidity.

Handling

Pre-finished wood floor requires handling with more care to prevent board surface and finish damage. Do not deliver until site conditions noted above are achieved and store in proper site conditions noted above. Keep at least a four-inch air space under cartons stored upon 'on-grade' concrete floors. Keep in boxes prior to installation.

Sub-floor Preparation

Stapled or nail down installation requires minimum 3/4" plywood or 3/4" approved OSB sub-floor.

The sub-floor must be dry within moisture specifications, clean of debris and dried glue or other material. It must be flat to within 3/16" over 10 feet for nail down or staple installation or flat to within 1/8" in 6 feet for glue down installation.

For concrete sub floors leveling compounds must have sufficient tensile strength and adhesion to the concrete. Refer to the manufacturer's specifications and instructions. Lightweight gypsum products are typically not suitable.

Layout and design

Plan installation for best visual results. Decide on starting point, layout angle and check the width of the room to avoid narrow slivers along a wall. Some installations are better starting along a line placed away from a wall or in the middle of the room. Check even a rectangular room for square.

Randomly staggered end joints are visually preferable rather than end joints that line up in nearby rows. End joints should be staggered by 9" or at least twice the width of the board, or by 10", or 5" for wide flooring. The floor should be installed with an expansion gap of at least 1/2" at all vertical obstructions. You may need to cut off some existing trim pieces and slide the flooring underneath to fit. To enhance the floor's look, use several boxes at once and mix boards to ensure variations in color, shade and length. Start by selecting boards that best go with transition floor covering and moldings. Complementary moldings, stair parts and trim are available from your Goodwin dealer to match your floor.

INSTALLATION

General Installation

The starting row is critical to a good installation. It should be set along a straight line usually marked on the floor with a chalk line. Measure from the wall to allow at least 1/2" perimeter expansion space plus the width of the board.

For walls that are not straight, some boards in the first row may need to be trimmed. First, take a width measurement from the starting line to the opposite wall in several places. Calculate the number of rows by dividing the width of the room by the face width of the flooring.

If narrow or small tapered pieces are going to result, adjust the starting line prior to installing the first row to improve the appearance of the final floor. Move the starting line closer to the wall and increase the amount trimmed off one side of the first piece to increase the width (decrease the amount trimmed off) the pieces along the ending wall.

Check occasionally to ensure that rows remain straight. Carefully select boards for gradual color variation or save some highly varied boards for low visibility areas. Minimize waste on ends and beginning of rows by selecting for length. It is sometimes more efficient to cut larger trim pieces from the end of a row which can then be used as starter pieces in another row.

Glued Down Installation Tips

Store and apply adhesive according to adhesive manufacturer's directions. Sub-floor must be dry, level, clean and free of contaminants that could prevent proper adhesion. When required, acoustic underlayment must be glued down over sub-floor prior to gluing down boards using the same recommended glue and flattened completely to ensure adhesion. Whenever using low-density concrete products and/or sound barriers follow concrete or sound barrier manufacturer's directions carefully.

Use release tape, weights, and rollers with protective covering as recommended by the adhesive manufacturer to avoid gaps or loose boards. Straps can create excessive pressure turning the edges of boards or over compressing the installation.

Insert tongue into groove and lowering into place as close as possible to the adjacent board. Slide the tongue into the groove and press the board down into place. Precise milling may require a 'tapping block' to pull the board into place. Avoid excessive force. Do not use mallets or hammers for this purpose as they can damage the edge or surface of the flooring.

Avoid getting glue into the tongue and groove. If any glue gets on the floor surface clean it up immediately. Test any adhesive remover for compatibility with the finish prior to use.

If you need to install transition molding, base boards and quarter round or shoe molding do not nail them to flooring material to allow free floor movement.

Wait as directed by the adhesive manufacturer, then clean floor thoroughly using appropriate maintenance procedures before moving furniture into place or allowing heavy traffic. Save aside a few boards in case of future repairs.

Nail Down Installation Tips

Install a vapor retarder as indicated by sub-floor type and based on Job Site Conditions findings above. 30/30/30 Kraft paper such as Aquabar "B" has water vapor permeability appropriate to use as a vapor retarder.

Check mechanical fasteners for surface deformation prior to installing the floor. Align the first board tongue side with starting line, grooved side facing wall. Nail the first row vertically as close to the wall as possible to hide nail heads under the trim if any, predrilled if necessary. Nail at a 45-degree angle at the top of the tong. You may need to face nail for a few rows near an ending wall where a nailer cannot be used. Set hand nailed fasteners.

Nail or staple every 4" on 7" flooring, 5" on 5-1/4" flooring and 6" on 3-1/4" flooring and no closer than 1-1/2" from ends of boards. It is important that the air pressure be set correctly for pneumatic nailers.

Avoid damage to boards from the fastener tool. Ensure that the stapler or nailer base plate remains clean and free from nicks. When not being used, place the fastener tool on plywood or cardboard and not directly on the prefinished floor. Ensure that the stapler or nailer base sits flat on the floor and is plumb against the tongue before fastening the board. Check the base plate condition, proper operation of fastener and air pressure regularly.

Apply fill as necessary in nail holes.

MAINTENANCE TIPS

To protect your investment and ensure long lasting satisfaction with your wood floors you may want to consider adding ventilation and humidification control systems to your existing home.

Beyond Indoor Environmental Quality (IEQ) for your wood floors, the simplest thing you can do is keep grit off the floor. Sweep or dust regularly to eliminate abrasives that can scratch the finish. Wipe spills quickly and check appliance seals to prevent water leaks. Here are a few more tips:

- Use 'walk off' mats at entrances or near sink and workstations.
- Use felt pads under furniture and check the pads for signs of wear regularly.
- Use casters specifically designed for wood floors on rolling chairs and avoid rigid plastic casters. Protect your floor when moving large objects.
- Spike heels and sport shoes can damage wood floors.
- Avoid wax, oil-based detergents or other household cleaning agents besides a spray on hardwood floor cleaner on your wood floors.
- Use only a terry cloth mop pad and spray a wood floor cleaner directly on the mop pad, not on the wood floor, when needed for cleaning.
- If you have radiant heat avoid raising the temperature of the wood floor surface over 80 degrees Fahrenheit and don't increase or decrease heat by more than 5 degrees per day when turning the system on or off.

Best wishes for a great wood floor that lasts a lifetime. Please feel free to call on Goodwin for any additional information that we can provide. We are glad to help with any installation questions.