GENERAL INFORMATION

ATTENTION INSTALLERS

WARNING: Installation of wood product may create wood dust, which is known to the state of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection.

Sawing, sanding and machining wood products can produce wood dust. Airborne wood dust can cause respiratory, eye and skin irritation. The International Agency for Research on Cancer (IARC) has classified wood dust as a nasal carcinogen in humans.

Precautionary Measures: If power tools are used, they should be equipped with a dust collector. If high dust levels are encountered, use an appropriate NIOSH-designated dust mask. Avoid dust contact with eye and skin.

First Aid Measures in Case of Irritation: In case of irritation, flush eyes or skin with water for at least 15 minutes.

THIS PRODUCT MANUFACTURED USING CARB PHASE II AND TSCA TITLE VI COMPLIANT MATERIALS.

WARNING: Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information go to www.P65Warnings.ca.gov/wood-dust.

All Engineered wood products meet and exceed CARB Phase2 compliance requirements. Certified by the HPVA (TPC-8)

Always wear appropriate personal protective equipment (PPE) which include NIOSH or OSHA approved dust masks, safety goggles and work gloves.

WARNING: EXISTING IN-PLACE RESILIENT FLOOR COVERING AND ASPHALTIC ADHESIVES. DO NOT SAND, DRY SWEEP, DRY SCRAPE, DRILL, SAW, BEADBLAST, OR MECHANICALLY CHIP OR PULVERIZE EXISTING

PRE-INSTALLATION PLANNING

JOBSITE CONDITIONS

• Structure must be completely enclosed (including exterior windows and doors).
• Gutters, downspouts, and exterior grading should direct drainage away from the structure's foundation.
• Basements and crawl spaces must be dry and well ventilated. Crawl spaces should not exceed 2 lbs. using a standard calcium chloride test.
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APPLICATIONS:

GRADE LEVEL

ON GRADE

BELOW GRADE

REINSTALLING EXISTING RESILIENT FLOORING

• Prior to beginning any installation, concrete subfloors with radiant heat installed should not exceed 2 lbs. using a standard calcium chloride test.
• Plywood subfloors should not exceed a 3% difference in moisture content prior to installation.
• To ensure a successful installation and allow excess moisture to evaporate, the heating system should be operational and running for a minimum of 14 days prior to installation, three to four days prior to installing the floor the system should be reduced or shut off. At time of installation, the subfloor must be between 64-68°F.
• Radiant heat setting temperature should be adjusted gradually and never vary more than 15°F seasonally.
• When using radiant subfloor heating, heat should be increased in 5° increments. Never exceed 80°F.

INSTALLATION LOCATIONS

• Can be installed ON, ABOVE, and BELOW GRADE
• Can be installed on most any dry, flat, clean, and structurally sound solid surface including flooring grade plywood & OSB board, concrete, and soundly secured existing floors (linoleum, vinyl, tile, etc.). When doing floating installation only, also over particle board and lightweight concrete.
• Not warranted for installing in full bathrooms.

APPLICATIONS:

GRADE LEVEL

ON GRADE

BELOW GRADE

PRE-PLANNING

• Slightly bowed (curved) boards can be installed and are not considered to be defective.
• When cutting or sanding wood flooring it is recommended that you wear a protective dust mask to avoid inhaling wood dust, and safety glasses for eye protection.
• A floating floor expands and contracts with the seasons and should never be restricted in any way. Be careful not to put fasteners (nails, screws, etc.) through the floor or “pinch” the floor under doorways, cabinets, etc. This could cause the floor to pull apart or buckle because it is not allowed to float freely. Be especially careful
PRE-INSTALLATION PLANNING CONTINUED

when installing moldings and trim not to nail into the floating floor.

• While installing flooring, it is best to work from several cartons of material to properly blend the naturally occurring lighter and darker boards to achieve a more uniform floor appearance. In addition, this will help distribute the random length planks.

• Decide the direction the flooring will be installed in the room. If possible, it is best to install perpendicular to the direction of the flooring joints. Flooring will be accentuated best if installed parallel to the largest windows in the room.

• This floating wood floor requires a minimum 3/8” expansion space around the perimeter of the room to allow for normal expansion and contraction, as well as around any other vertical objects in the room (cabinets, columns, etc.). In areas larger than 24 ft. length in either direction, an expansion break in the flooring (covered by T-Molding), or additional expansion space is required. Allow an additional 1/4” space for every 12 ft. in length above 24 ft. Example: For a 36’x36’ size room, allow 5/8” expansion (normal 3/8” plus 1/4” expansion for the 12ft. over 24ft.) in both directions.

• Pre-plan the number of rows (based off of board face width). Often the last row will need to be ripper length wise to fit. If the measurement for the last row is less than 2” (allowing for required expansion space), it would best to rip the boards in the first and last rows to balance the installation. If the ripped boards have to be narrower than 2”, use a high quality carpenter’s glue to secure the narrower boards to the wider adjoining planks.

• Remove any base, shoe, or threshold moldings prior to beginning installation. These can be replaced at the end of the install.

• Under cut door jambs to allow for expansion space and to avoid difficult scribe cuts. This can be done by using a small piece of the flooring as a guide/step for your jamb saw. Expansion breaks (covered by T-Molding) are recommended in doorway flooring.

• The use of putty to fill small gaps or correct minor defects should be considered normal in any wood flooring installation. When using putty on wood floors, use a plastic putty knife and remove excess immediately with a soft cloth to prevent gloss-up of the finish.

SUBFLOOR REQUIREMENTS

CHECKING SUBFLOOR FLATNESS

• Use a straight edge to determine subfloor flatness (throughout floor). The subfloor should be flat to within 3/16” in an 8” area.

• High areas need to be sanded and low areas filled. NEVER SAND ANY EXISTING FLOOR OR ADHESIVE SUSPECTED TO CONTAIN ASBESTOS OR CRYSTALLINE SILICA (such as resilient vinyl or linoleum, or the adhesives used to bond them).

• High or low areas in the subfloor could cause the floated floor to flex causing squeaking, popping, or other noises. Over time this flexing could also cause the locking system to weaken resulting in gaps or loose boards in the floor.

CHECKING SUBFLOOR MOISTURE

WOOD SUBFLOORS:

• The moisture content of the subfloor must be checked using a reputable manufacturer’s moisture meter. Wood subfloors should not exceed a 14% moisture content, and the moisture variance between the wooden subfloor and the new flooring to be installed should not exceed 4%.

CONCRETE SUBFLOORS:

• When flooring is installed directly to a concrete subfloor, one of the following moisture tests is recommended:

  • Calcium Chloride Test (maximum of 3.0 pounds)
  • Tramex Moisture Meter (maximum reading of 4.5)
  • Delmhorst BD2100 Moisture Meter (reading of green/dry)
  • RH (Relative Humidity) should not exceed 75% in slab

• Keep documentation of all moisture readings. If results indicate a moisture problem exists, DO NOT INSTALL THE FLOORING! Most moisture issues can be corrected easily (sealing, etc.). When corrected, test the subfloor to assure moisture guidelines have been met.

FLOATING INSTALLATION

TOOLS NEEDED

• Foam Underlayment
• 6-mil Polyethylene film (if going over concrete)
• Roberts #1406 T&G Adhesive
• Chalk Line
• 3/8” Wood or Plastic Spacers
• T-square
• Tapping Block
• Pencil
• Measuring Tape
• Wood Chisel
• Safety Glasses
• Circular or Rip Saw
• Jamb Saw
• Dust Mask
• Knee Pads
• Pull Bar

INSTALLING FLOOR

ROLL OUT FOAM UNDERLAYMENT (FOLLOW INSTRUCTIONS INSIDE PACKAGING). ON A CONCRETE SUBFLOOR, IF YOU ARE USING AN UNDERLAYERMENT THAT DOES NOT HAVE A VAPOR BARRIER ATTACHED, LOOSE LAY 6 MIL POLY SHEETING WITH THE SEAMS OVERLAPPED 8”, TAPE WITH CLEAR PACKAGING TAPE AND LAPPED IF YOU ARE USING AN UNDERLAYERMENT THAT DOES NOT HAVE A VAPOR BARRIER ATTACHED, LOOSE LAY 6

SIDE AND END GLUING

• The engineered boards must be side and end glued using wood glue. Apply glue in the groove of each plank as you install. Begin at the end and fill the entire length of the board. Fully glue the end joint. It is very important to fill the groove to its full thickness. This will ensure proper transfer to the tongue of the adjoining planks. Failure to follow proper glue schedule will void all warranties. If any excess glue squeezes up to the finished surface, wipe off using a paper towel or cloth.

INSTALLING THE LAST ROW

• The boards in the last row will need to be cut to the necessary width. Remember to allow the appropriate expansion space between the last row and any vertical surface it adjoins. Mark the board to the correct width and contours of the wall.

• After the floor is completely installed, remove spacers, install molding and thoroughly clean the floor with an approved Wood Floor Cleaner.

• Never cover a newly installed floor with plastic. Always use a breathable material such as craft paper or cardboard.

NAIL/STAPLE INSTALLATION

TOOLS NEEDED

FOR 3/8”:

• 15 lb. Asphalt felt or Roberts Silicone Vapor Shield (SVS)
• Chalk Line
• 3/8” Wood or Plastic Spacers
• Square
• 80-85 lb of air pressure
• 1” minimum fastener length
• 20 Gauge

• Tapping Block
• Pencil
• Tape measure
• Wood Chisel
• Safety glasses
• Circular or rip saw
• Jamb Saw
• Dust mask
• Knee pads
• Pull bar

FOR 1/2”:

• 80-85 lb of air pressure
• 1-1/4” minimum fastener length
• 18 Gauge
**INSTALLATION FLOOR**

**PLEASE SEE PAGE 1 FOR PRE-INSTALLATION REQUIREMENTS**

**GENERAL SUBFLOOR REQUIREMENTS**

- All subfloors must be flat to 3/16” per 8’ radius. If subfloor prep is required, “high spots” should be sanded or ground down. Do not sand surfaces such as vinyl or synthetic tiles that may contain asbestos.
- All subfloors must be clean and free of debris.
- Nail or screw any loose areas to prevent squeaking. Subfloors should have minimum deflection (vertical movement).

**SUBFLOOR REQUIREMENTS**

- These products can be installed over dry, flat wood subfloors such as plywood and OSB. If used over an existing subfloor, the thickness of the overlay material must be such as to yield a total of 1/2” subfloor thickness.
- Particle board is NOT recommended for staple down installations.
- **NOTE SUBFLOOR IRREGULARITIES THAT CAUSE WOOD FLOORING INSTALLATIONS TO DEVELOP MOVEMENT OR HOLLOW SPOTS BETWEEN THE SUBFLOOR AND THE WOOD FLOORING, ARE NOT THE RESULT OF MANUFACTURING DEFECTS AND ARE NOT COVERED BY WARRANTIES.**

**SUBFLOOR MOISTURE REQUIREMENTS**

- Wooden Subfloors should be checked for moisture using a reputable manufacturer's moisture meter, designed for use with wood flooring. In general, wood or plywood subflooring should not exceed 14% moisture content, with a maximum moisture variance not to exceed 4% difference between the flooring and subfloor.

**GLUEDOWN INSTALLATION**

**TOOLS NEEDED**

- Urethane adhesive
- Adhesive remover
- Trowel (check adhesive for recommended notch/size)
- Hammer
- Tape Measure
- Safety Glasses
- Chalk line
- Square
- Pencil
- Wood Chisel
- Circular or rip saw
- Jamb Saw

**INSTALLING FLOOR**

**PLEASE SEE PAGE 1 FOR PRE-INSTALLATION REQUIREMENTS**

**INSTALLING THE FLOOR**

- The clean subfloor surface should be covered, wall-to-wall, with 15-lb. asphalt saturated felt or SVS. Lap the edges of the felt/SVS 4” when positioning. Double the felt/SVS around heating ducts.
- Flooring should be laid at right angles to the floor joists and, if possible, in the direction of the longest dimension of the room.
- Snap a working line parallel to the starting wall, allowing for expansion space. (Expansion space should be equivalent to the thickness of the flooring.)
- With the tongue out, lay one row of planks along the length of the working line. The first row should be face-nailed and countersunk.
- Subsequent rows should be blind nailed wherever possible. With the proper nailer, nail planks every 4”- 6” and within 2” of the end joint. Push or gently tap boards flush to the previous row. Only tap against the tongue; tapping the groove may damage edges.
- Stagger at least 6” between end joints of adjacent board rows. End joints should not repeat visually across the installed floor. Avoid “H” joints and other discernible patterns.
- **FACE-nailed and countersink final rows of flooring as necessary.**

**IMPORTANT NOTES:**

- The use of putty to fill small gaps or correct minor defects should be considered normal in any hardwood installation.
- Hardwood floors should be maintained year round at 35-55% relative humidity and a temperature between 60-80 degrees. A humidifier / de-humidifier may be necessary in some homes to maintain these climate conditions.

**INSTALLATION TIPS:**

**INSTALLATION TIP 1**

- To assist with the stability of the first few rows, we recommend that you install the first row, then 2 to 3 boards in the second row, then 1 to 2 boards in the third row. Go back to the second row and install another 2 boards, then 2 boards in the third row. Complete this “stepping” arrangement until the three rows are complete. Always stagger the end joints of adjacent rows a minimum of 12”. Try to avoid a “stair-step” pattern when looking across several rows, and try to avoid “H” patterns in the installation.

**INSTALLATION TIP 2**

- In narrow areas (i.e. hallways) where planks will be installed width wise, the planks must be staggered to incorporate at least one end joint in every other row. Installing same length boards side by side without this stagger will cause the flooring to bow upward.

**INSTALLATION TIP 3**

- Transition pieces (moldings), and the floor itself, are made from real wood and will exhibit all the natural variations of the particular species. Every transition piece will not match every board of flooring. Therefore, the best results will be achieved by identifying boards that are complimentary to the transition prior to installation, setting the boards aside to be installed next to the transition.
FLOOR CARE AND PREVENTIVE MAINTENANCE

With today's finishes, maintenance of your wood floor could not be easier. Normal maintenance consists of regular sweeping or vacuuming to collect dirt and grit that can dull your finish, along with periodic use of an approved no-wax hardwood floor cleaner. For Handscraped/Distressed floors, the uneven surface may trap dirt and dust so we recommend vacuuming more often. Always vacuum thoroughly prior to the use of approved floor cleaner. Be certain the wheels of the vacuum are clean and do not damage the finish. Scrubbing machinery, power scrubbers and steam cleaners are not recommended to clean the floor.

PREVENTIVE MAINTENANCE

Aside from those mentioned above, other steps can also be taken to minimize wear and tear and keep your floor looking new for years to come.

• DO NOT USE liquid or paste wax, oil soaps, or any other cleaners that contain silicon, lemon oil, tung oil, acrylics or ammonia. Furthermore, avoid ‘home recipes’ found on the internet or other sources. These products and techniques can cause your floors to become slippery, or cloud and dull the finish. Use of these and similar products can harm the performance of your floor and may also affect its re-coat ability.

• DO NOT USE A VACUUM WITH A BEATER BAR HEAD

• Use throw rugs inside and outside of entryways to prevent dirt and grit from being tracked in and scratching your finish. Rugs, mats or backings should not be abrasive to prevent scratching to the wood floor. Material should be breathable to avoid trapping moisture underneath.

• Wood and water don’t mix! Never damp mop your floor. Clean up spills promptly with a soft cloth and recommended cleaning products.

• Place felt-type protectors on the bottom of all furniture and fixture legs to assist in preventing denting and scratching.

• High heels and sports cleats will likely dent, gouge or scratch hardwood floors, which is not covered by our warranty.

• Keep pet’s nails trimmed and clean of dirt and debris.

• Avoid sliding or rolling heavy furniture or appliances across the floor. Whenever possible, lift the item to be moved. If it must be rolled, protect the floor with plywood or other hard sheeting to prevent dents.

• Use a humidifier/dehumidifier to maintain a consistent year round climate, keeping wood shrinkage and movement to a minimum.

• The exposure of sun, UV rays and artificial lighting accelerate the oxidation and aging of wood. This can cause the wood and/or stain to change color and/or fade over time. If possible, we recommend that you rearrange fixtures, rugs and furniture periodically to ensure the flooring ages evenly. Our warranties do not cover damage from the sun, UV rays or artificial light. Note: American Cherry and Walnut species are especially susceptible to the effect of light and may darken or lighten due to UV or artificial light exposure. These species change color more rapidly than other Domestic Species.

• Furniture casters should have wheels constructed with soft, non-marring/marking material such as soft rubber, or covered with felt. Hard wheeled casters such as plastic, vinyl or hard rubber can mark or dent hardwood floors. Caster wheel width and diameter should comply with load guidelines.