



Solid Flooring Installation Information

PLEASE NOTE: The following are offered as instructions for the installation on Home Legend solid flooring.

ATTENTION- Installer & Homeowner

The patterns and color variations created for a natural product

Please note your Home Legend warranty does not cover labor for defects visible prior to installation.

- The use of putty, stain or filler should be accepted as

<p>▲ ATTN: INSTALLERS Caution: Wood Dust</p> <p>Sawing, sanding and machining wood products can produce wood dust. Airborne wood dust can cause respiratory, skin and eye irritation. The International Agency for Research on Cancer (IARC) has classified wood dust as a nasal carcinogen in humans.</p> <p>Precautionary Measures: Power tools should be equipped with a dust collector. If high dust levels encountered use the appropriate NIOSH-designated dust mask. Avoid dust contact with skin and eyes.</p> <p>First Aid Measures in case of irritations: In case of irritation flush eyes and skin with water for at least 15 minutes.</p> <p>If questions please contact Home Legend at the following phone #: 877-630-1800.</p>	<p>WARNING! DO NOT MECHANICALLY CHIP OR PULVERIZE EXISTING RESILIENT FLOORING, BACKING, LINING FELT, ASPHALTIC "CUTBACK" ADHESIVES OR OTHER ADHESIVES.</p> <p>These products may contain either asbestos fibers and/or crystalline silica. Avoid creating dust. Inhalation of such dust is a cancer and respiratory tract hazard. Smoking by individuals exposed to asbestos fibers greatly increases the risk of serious bodily harm. Unless positively certain that the product is a non-asbestos-containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content and may govern the removal and disposal of material. See current edition of the Resilient Floorcovering Institute (RFI) publication "Recommended Work Practices for Removal of Resilient Floor Coverings" for detailed information and instructions on removing all resilient covering structures.</p>	<p>IMPORTANT HEALTH NOTICE FOR MINNESOTA RESIDENTS ONLY:</p> <p>THESE BUILDING MATERIALS EMIT FORMALDEHYDE. EYE, NOSE, AND THROAT IRRITATION, HEADACHE, NAUSEA AND A VARIETY OF ASTHMA-LIKE SYMPTOMS, INCLUDING SHORTNESS OF BREATH, HAVE BEEN REPORTED AS A RESULT OF FORMALDEHYDE EXPOSURE. ELDERLY PERSONS AND YOUNG CHILDREN, AS WELL AS ANYONE WITH A HISTORY OF ASTHMA, ALLERGIES, OR LUNG PROBLEMS, MAY BE AT GREATER RISK. RESEARCH IS CONTINUING ON THE POSSIBLE LONG-TERM EFFECTS OF EXPOSURE TO FORMALDEHYDE.</p> <p>REDUCED VENTILATION MAY ALLOW FORMALDEHYDE AND OTHER CONTAMINANTS TO ACCUMULATE IN THE INDOOR AIR. HIGH INDOOR TEMPERATURES AND HUMIDITY RAISE FORMALDEHYDE LEVELS. WHEN A HOME IS TO BE LOCATED IN AREAS SUBJECT TO EXTREME SUMMER TEMPERATURES, AN AIR-CONDITIONING SYSTEM CAN BE USED TO CONTROL INDOOR TEMPERATURE LEVELS. OTHER MEANS OF CONTROLLED MECHANICAL VENTILATION CAN BE USED TO REDUCE LEVELS OF FORMALDEHYDE AND OTHER INDOOR AIR CONTAMINANTS.</p> <p>IF YOU HAVE ANY QUESTIONS REGARDING THE HEALTH EFFECTS OF FORMALDEHYDE, CONSULT YOUR DOCTOR OR CALL LOCAL HEALTH DEPARTMENT.</p>
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and like all of nature are never repeated. Remember that your newly installed floor will vary from samples or pictures in brochures. One cannot expect uniformity from a natural product. Expect instead all of a trees beautiful natural variations.

This product is manufactured in accordance with industry standards, which permit a defect tolerance not to exceed 5%. The defects may be of any type, whether manufactured or natural.

- Prior to installation, the installer must determine that the job site conditions meet or exceed standards set forth for a proper installation. Home Legend will decline responsibility for situations associated with improper installation or poor site conditions.
- The installer and homeowner should work together as the final inspector of grade, manufacturer, and factory finish. Pieces you consider imperfect should be used in hidden areas, closets or should be cut off and held out of the floor. Any doubtful piece should not be used.

normal.

- Your job site should have a consistent room temperature of 60-70°F and humidity of 35-60% for a minimum of five days prior to the installation of your solid flooring product. This environment should be maintained continuously thereafter.
- Building interiors are affected by two distinct humidity seasons Heating and Non-Heating. Recognizing that solid floor dimensions will be slightly affected by varying levels of humidity in your home; take care to control humidity levels to within the 35-60% range. During the heating season, a humidifier is recommended to prevent excess shrinkage in solid natural floors due to low humidity levels. During the non-heating season, humidity levels can be maintained by using an air conditioner, dehumidifier, or by turning on your heating system periodically during the summer months. Avoid excessive exposure to water from tracking during periods of inclement weather.

- Your solid flooring must undergo an acclimatization period (i.e. it must be stored in the room where it will be laid) for at least 72 hours prior to installation.

PRE-INSTALLATION

1. STORING AND HANDLING:

- Material should be stored on the job site for minimum of 72 hours before being installed.** Open the cartons but do not remove the product from the cartons. Make sure the room temperature is set at a normal living temperature as described above. The flooring is acclimated and ready for installation when it has reached a moisture level consistent with the job site and normal living conditions.

2. GENERAL INSPECTION

- All work involving water, such as pouring basement concrete floors, drywall and plasterwork, plumbing, etc. must be completed well in advance of the floor delivery.
- We recommend 3 types of subfloors- plywood, solid wood planks (1 X 6 or larger), or sleepers (2 X 4 inch). Each subfloor has separate installation instructions as follows:
 - PLYWOOD-** The plywood should be either 5/8 inch or 3/4 inch thick. If the plywood is being laid on joists, place it at right angles to the joists and leave at least a 1/8" to 1/4" gap between each sheet to allow for expansion.
 - SOLID WOOD SUBFLOOR-** Solid planks should be nailed diagonally across the joists with a 1/4" gap between the boards.
 - CONCRETE-** There is several methods of installing solid flooring over concrete. One method is to use 5/8" or 3/4" plywood. It is recommended that a vapor barrier be used prior to installation of the floor, preferably, a 4-6 mil. Polyethylene film with enough excess to be placed under the baseboards. Fasten the plywood to the concrete using the appropriate fasteners. Another way of laying the plywood on concrete is to cut the plywood in 4' X 4' squares and lay it in mastic. A moisture barrier must also be used with this method.
 - Another alternative would be to use "sleepers". This method uses treated 2" X 4" lumber laid flat in asphalt mastic every 12 inches at right angles to the finished floor. Overlap or stagger the sleepers by at least 4' and make sure each one is securely imbedded into the mastic. A polyethylene moisture barrier is then laid over the sleepers. Be certain not to puncture or bunch up the poly, or it will not create an effective vapor barrier. Nail the flooring through the plastic into the sleepers.
 - A third way is direct glue down method.
- Subfloors should be flat within 3/16" in each 10' direction. High areas should be sanded flat. Low areas should be filled with Portland based leveling compound

3. PRE-INSTALLATION PREPARATION

TOOLS NEEDED	SUPPLIES NEEDED
Tape Measure	10D Nails
Chalk line or string	Drill bit smaller than nail
Hammer	#15 Felt Paper
Nail Set	Power Nailer Cleats
	Color Matched Wood Putty
Drill	

Power Nailer
Pry Bar
Mallet
Broom

- Lay out trim moldings in advance and find planks or strips whose shade closely matches. Set these aside for future use.
- Remove existing base, shoe molding or threshold carefully. They can be used to cover the 3/4" expansion gap left around the edge of the room.
- Subfloors should be clean prior to the floor installation.
- Make sure the subfloor is dry to 12% moisture content or less and that will stay that way.
- Undercut doors and casings using a handsaw laid flat on a piece of scrap flooring. This will eliminate difficult scribe cuts.
- Sweep the area to remove all dust and debris.

Sub-Floor Requirements

Home legend Solid flooring may be installed On or Above grade provided that the sub-floor is:

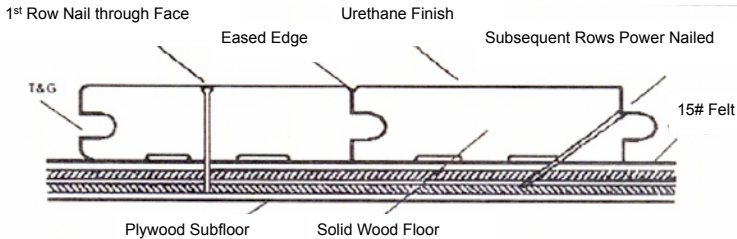
- Flat - within 3/16 inch in a 10' radius.
- Dry - always test the sub-floor with the appropriate moisture meter. Installation cannot continue until the sub-floor moisture does not exceed 12% and the sub-floor and flooring moisture differ no more than 4%.
- Clean – all construction debris, soil, mud and any other objects on or adhering to the floor are scraped and swept away before the installation.
- Sound – All damaged or swollen sub-flooring should be replaced. Check the floor for squeaks / loose components, repair any found by adding fasteners or adhesive.

Installation over Solid and Engineered Joist Construction is recommended as follows:

- CDX Plywood or OSB conforming to APA standards PRI-108, PS-1, or PS-2 and in a thickness appropriate to the joist spacing. The approved sheathing must be glued and nailed or screwed to the joist system as recommended by the APA to avoid squeaks and excessive vertical movement.
- 3/4" kiln dried Group 1 Softwood Boards not more than 6" wide laid diagonally to the joist system.
- Existing Hardwood Flooring provided it is flat and well fastened to an acceptable sub-floor.

Do not install Home Legend Solid Flooring over particleboard, fiberboard, wafer board, or pressed wood panels.

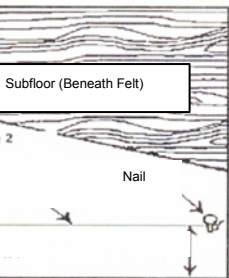
INSTALLATION



STEP 1- LAYOUT

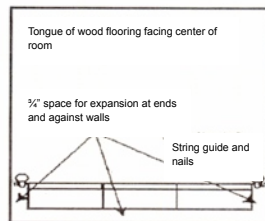
- Measure and mark 3-1/4" from the wall at two spots near each end of the room. Drive a nail at each spot. Stretch string and tie each end of the string around the nails so the nails become posts. Use the string as your flooring guide.

Note: this dimension should be 4-1/4" when installing 3-1/4" wide flooring.



STEP 2- INSTALL FIRST ROW

• Using the string as a straight edge lay the first row of flooring in place with the tongue facing the center of the room. Leaving a 3/4" gap at the wall, pre-drill and face nail using 10D nails. Continue nailing the entire length of the room 6" to 8" apart.



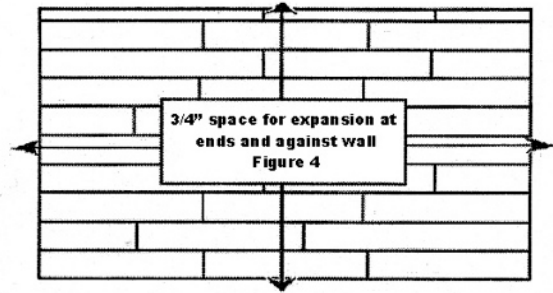
- Leave a 3/4" expansion gap at each end. Set nails and fill holes with matching putty. Remove string and nails.

STEP 3 – INSTALL REMAINING ROWS

- Continue the laying process (using a power nailer) until the room is complete

Helpful Hint – Use flooring lengths that offset (or stagger) the ends 6" or more for a professional look.

- Carefully cut the last row to leave a 3/4" expansion space (See Figure 3)
- Replace trim moldings



Other Helpful Hints

1. Do not install this product BELOW ground level. Use only AT or ABOVE ground level.
2. Make sure power cleats are approved for use in OSB or particle board if plywood is not used as a substrate.
3. Do not mix lot numbers without checking for color match.
4. Lay out several cartons to make sure of quality and grading and "rack" or stagger them in random lengths.
5. Leave 3/4" at all edges for expansion. Cover gap with trim moldings. (See Figure 3)
6. The power nailer probably can't be used on the first and last few rows. Pre-drill, nail with 10D nails, countersink the nails and use matching putty to fill holes.
7. Some rows that are hand nailed may be drilled at an angle through the top of the tongue to hide nail heads.
8. Lay flooring perpendicular to the direction of the floor joists.
 - Occasionally, a piece may be slightly bowed. Nail one end first, then use the pry bar to push the other end in place, nailing as you go.
 - The last few rows may need to be faced nailed because the nailer can no longer be used safely. Simply repeat the procedure used for the first few rows.
 - Using shorter piece at undercut door jams will help when fitting flooring in place.

COMPLETING THE JOB

- Countersink and fill all nail holes.
- Clean the floor with hard surface flooring cleaner.
- Reinstall all moldings and transition pieces, nailing into the walls or subfloor, not the flooring.
- Use felt tips on the bottom of all furniture.

INSTALLING SOLID FLOORING OVER CONCRETE

Home Legend Solid Floors may be installed on Concrete Slabs after the moisture content of the slab has been confirmed at less than 3 pounds per 1000 square feet per 24 hours and the appropriate nailing surface has been installed. There are several methods by which this can be accomplished:

- 3/4" or thicker Exterior Grade Plywood laid over a vapor retarder of 6 mil poly or two layers of 15# felt and power

nailed into the concrete slab. The ends of the plywood panels should be staggered ½ panel in alternating rows and an expansion space of ½" should be left around the perimeter of the room. An expansion gap of ⅛" must be left between the panels. The flooring may then be nailed to the plywood surface using 1½" fasteners.

- ¾" or thicker Exterior Grade Plywood may also be glued to the vapor retarder that has been glued to the concrete floor. The vapor retarder and plywood should be glued using cutback adhesive or other approved adhesive, applied according to the manufacturer's directions. The plywood panels should be cut down to 4' X 4' or 16" X 8' and the panel joints should be staggered by 2'. Score the backs of the panels 3/8" deep on a 12" grid, laying the scored side into the adhesive observing a 1/8" gap between the panels and a ½" space around the perimeter.
- As an alternative a floating plywood base can be installed. In this method a 6 mil poly vapor retarder is laid on the floor lapping the seams at least 6". Loose lay 3/8" exterior grade plywood panels on the floor, allowing 1/8" between panels and ½" between the panels and walls or other vertical surfaces and offsetting the ends by ½ panel. Lay a second layer of plywood at 90° angles to the first layer allowing 1/8" between the panels and ½" between the panels and walls or other vertical surfaces and offsetting the ends ½ panel. Staple the panels together with staples that have crowns at least ¼" and that do not penetrate the bottom layer in a pattern not exceeding 6 X 6". Lay an additional vapor retardant barrier over the plywood panels and begin installation of the flooring.
- Flat, dry Screeds or 2x4" boards of Group 1 softwood in random lengths from 18" to 48" may be used as a nailing base. The boards must be preservative treated (suitable for interior use) and dried to no more than 12% moisture. The screeds should be adhered to the floor using suitable mastic adhesive at 12" on center. A 6mil poly vapor retarder is draped over the screeds and the flooring is nailed directly to the screeds, provided the flooring is less than 4" wide. For flooring 4" wide and over a wood sub-floor must be applied over the screeds to provide adequate nailing surface. 5/8" CDX plywood or ¾" OSB are recommended for this application. In high moisture conditions such as coastal areas an additional vapor retarder should be glued directly to the slab before the screeds are installed in addition to the vapor retarder over the screeds.

- Remove any existing wall base, shoe molding, quarter round or doorway threshold moldings.

Direct Gluing: With this system glue is applied directly to the concrete screed sub-floor to adhere the planks.

Step 1: GETTING STARTED

- Install the flooring parallel to the longest wall in the room. Measure out from the wall in two places allowing the proper expansion space, 5/8 inch. Mark and snap a chalk line across the two marks. Glue the first row and place spacers against the walls to secure the row in place. Continue installing the floor from left to right.
- Spread only enough glue to install what can be set within 45 minutes that is, **15 minutes of OPEN TIME** and an additional 30 minutes for actual installation. It is the installer's responsibility to check the transfer of adhesive THROUGHOUT the installation process. If the adhesive no longer transfers to the back of the flooring material, it must be removed and new adhesive applied.
- **DO NOT WET LAY SOLID FLOORING INTO ADHESIVE (wet set), as Roberts 1408 Adhesive requires a minimum of 15 minutes of OPEN TIME at ideal conditions (72 degrees F. at 50% RH.) If the temperature is below 72 degrees F. the OPEN TIME must be extended, but not beyond 30 minutes.**
- Work your way out of the room.
- After the install is completed, keep the floor free from foot traffic for a minimum of 24 hours to allow adhesive to properly set.

**GLUE DOWN INSTALLATION METHOD
JOBSITE PREPARATION**

- Undercut door case moldings as needed.

Step 2: SPREADING THE ROBERTS 1408 ADHESIVE

- Always refer to the specific instructions on the Roberts 1408 flooring adhesive label.
- When using Roberts 1408 Adhesive, use a 1/4"x1/4" flat top V trowel, held at a 45 degree angle to the floor and proper coverage must be maintained.
- Frequently check to make sure the adhesive is transferring properly to the back of the flooring material.

Step 3: STARTING THE INSTALLATION

- The flooring should be installed from several cartons at the same time to insure proper color, grain and shade mix.
- The proper expansion spacing of 5/8 inch is required on all installations.
- Working from the sub-floor and not on the solid wood floor from left to right, lay the next board and continue working towards the right until you need to cut a piece to complete the first row. Measure the size you need to complete the first row and cut to length. The balance of the piece you cut may possibly be used to start the next row, if the length is a minimum of 12". Do not forget the 5/8 inch space for expansion.
- Be attentive to staggering the ends of the boards correctly in adjacent rows to avoid clustering end joints.
- A tapping block + hammer can be used to tap the boards until they are in proper position. Lock the row in place using spacers against the wall in the expansion space.
- Once the first row of planks is correctly aligned and glued in place, weigh them down while the glue sets.
- Any surplus glue which may seep onto the surface of the floor must be removed immediately with a damp cloth.
- The glue should not be applied in the groove or the tongue of the flooring.

Step 4: INSTALLING THE SOLID WOOD FLOORING

- Complete the rest of the installation by spreading enough adhesive to install.
- Make sure that there is 100% contact between the solid floor and the adhesive. Use a clean, smooth, 75 pound roller to roll

the flooring immediately after installation and after every 150 square foot interval during the installation to insure proper adhesive transfer.

- The flooring should be tapped together during installation using 3M blue masking tape to keep the planks from moving during installation. The tape must be left in place for a minimum of 24 hours. Flooring straps can be used to pull boards together and hold them in place while the glue dries.
- At doorways, a door threshold strip should be used to protect the edges of the floor and to provide a decorative transition from one floor type to another.

Step 5: INSTALLING THE LAST ROW

- Most often the entire length of the last row will need to be cut so that it is narrow enough to fit the remaining space. When this occurs, follow this simple procedure:
- 1. Lay a row of boards, unglued, with the tongue toward the wall, directly on top of the last row installed.
- 2. Take a short piece of the **HOME LEGEND SOLID FLOORING PLANK** product that is being installed with the face down and the tongue side against the wall.
- 3. Draw a line with a pencil along the row moving down the wall. The resulting line gives the proper width for the last row which, when cut, can then be wedged into place using the pull bar.
- 4. You will need to use the Pull Bar with care to make the last row fit tightly and to allow for the proper expansion space of 5/8 inch.
- 5. Leave spacers in the expansion space until the adhesive has cured, then remove.
- Keep the floor free from foot traffic, for a minimum of 24 hours or until adhesive has set securely.

Finishing off – Once the flooring is installed, the expansion gaps can be covered by re-fitting the base boards. Alternatively, if the base boards have been kept in place attaching quarter round to the base boards using glue or small nails will also achieve the desired results.

If questions contact Home Legend's technical department: 877-630-1800