

JOHNSON HARDWOOD

CELLAR HOUSE SPC RIGID CORE PLANK FLOORING - INSTALLATION GUIDELINES

ALWAYS CHECK www.johnsonhardwood.com FOR THE LATEST INSTALLATION, WARRANTY AND MAINTENANCE INSTRUCTIONS. IT IS THE RESPONSIBILITY OF THE INSTALLER TO ENSURE THAT THE MOST CURRENT DOCUMENTS ARE USED DURING INSTALLATION OF JOHNSON HARDWOOD FLOORING PRODUCTS.

General Guidelines

1. The space where flooring is to be installed shall be fully enclosed and the permanent HVAC system shall be operational at 65° - 85° Fahrenheit (18.4° to 29.4° Celsius) for 5 days prior to installation, during installation, and for the life of the installation. **Note:** Maintaining an optimum temperature of 70° Fahrenheit and relative humidity of 35% – 55% is highly recommended. *Avoid dramatic and large temperature increases and/or decreases.*
2. Johnson Hardwood recommends acclimation of our Cellar House series for 24 hours prior to installation to ensure the product is at equilibrium with the installation environment.
3. Cellar House floating floors can withstand temperature fluctuations as low as -25°F and as high as 155°F for short periods, but as a general rule the ambient conditions should be maintained at 65° - 85° Fahrenheit and 35% - 55% relative humidity. In addition, the flooring should be protected from direct sunlight and not exposed to direct sunlight for extended periods by use of blinds, drapes, or suitable window coverings.
4. Doorways and archways 6 feet or less (in width) must have a suitable “T” molding installed as a control joint to allow for normal product movement between rooms. A minimum of 5/16” gap is to be allowed on either side of the installed track and/or the T mold post.
5. **“IMPORTANT” follow the installation illustration guidelines for the proper installation method for the Unilin 2G angle tap tongue and groove interlocking system.**
6. **Note:** This product cannot be installed with full spread adhesives.
7. Cellar House floating floors is designed to be installed as a “floating” floor. Do NOT secure individual planks to the subfloor with mechanical fasteners or adhesives. Using a jamb saw undercut all door jams and casings where the floor continues from one room to the next. **Do not install cabinets, kitchen islands, wall units and/or pool tables on top of Cellar House floating floors, as doing so, can/will result in impingement of the flooring which can/will result in cupping, peaking, buckling and/or joint separation failure which is not covered under any/all applicable warranty coverage offered with this product.**
8. Use of a small soft bristle brush to clean the joints prior to locking will ensure that there is no debris which will cause stressing or failure of the joint after interlocking the tongue and groove system.
9. Use care when installing wall moldings and transition strips to not fasten through flooring planks as this can/will cause impingement of the floor, which can/will cause the floor to buckle and/or the joints to separate. In addition, do NOT apply caulking between the bottom of the base board and/or base shoe trim and the surface of the floor as this can/will result in cupping, buckling and/or joint separation due to compression and/or contraction related stresses.
10. The flooring planks are best cut in the following ways: a VCT or laminate cutter; a sabre saw with a fine-tooth wood cutting blade; a 12” power miter saw with a shallow or negative kerf blade, similar or equal to a plastic cutting blade. As for rip cutting, use a table saw with a cutting blade diameter of 10 to 12”. **Note:** The cutting teeth of the blade should be comprised of carbide and should have a minimum of 90 cutting teeth.

SUBFLOOR INFORMATION**Approved Substrates**

The following are approved substrates for installation of Johnson Hardwood Cellar House flooring. See the next section for proper testing and substrate preparation prior to installing your Johnson Hardwood floorcovering.

- **All substrates regardless of composition MUST be smooth and flat to within 3/16" (4.75mm) or achieve an "F32" rating by use of mechanical grinding/sanding or suitable Portland cement-based patching and leveling compounds.**
- APA registered underlayment, sanded face exterior grade with minimum rating of C-C plugged face.
- APA registered exterior grade plywood sanded face C-C plugged face.
- APA rated sheathing exposure 1 plywood (aka cdx plywood). **Note: Open knots must be filled.**
- Single layer Sturd-I-Floor rated panels (minimum 23/32" thickness) with sanded face.
- APA rated OSB or Particle Board, ¾" minimum thickness if single layer. Must be properly fastened, free of moisture and visible defects. Ensure proper gapping at seams and no ledging exists.
- Properly prepared and well bonded existing resilient floor covering.
- Cement Terrazzo, Epoxy terrazzo, ceramic tile, marble – must be properly prepared; all grouts are patched with appropriate patching compounds or leveler.
- Certain metal floors – all gaps are patched with appropriate patching compounds or leveler.
- Old adhesive residue- must be properly prepared with embossing leveler.
- Radiant heated floors where heat does not exceed 85°F (29°C).

The following are not approved substrates for installing Cellar House flooring:

- Foam, soft rubber underlayment's, and/or any other soft type underlay pads
- Asphalt tiles
- Textured or cushion backed resilient flooring
- "Sleeper" floor systems
- Plywood floors that have been installed directly over a concrete slab
- Luan and mahogany-type plywood panels
- Masonite™ or other hardboard underlayment
- CCA (pressure treated), oil treated or other coated plywood
- CDX or other plywood with loose or open knots and/or open defects
- 1" X 6" planks laid perpendicular to the direction of the joists, or at a 45°-degree angle to the direction of the joists.
- Underlayment made of pine or other soft woods

- Hardwood and/or engineered wood flooring
- Paint, wax, oil, grease, residual adhesive, mold, mildew, and other foreign materials that might prevent loose-lay planks and tiles from natural movement
- Other uneven or unstable substrates.

Substrate Preparation

All substrates must be properly prepared and tested according to the following guidelines.

1. Concrete Subfloors

Although Johnson Hardwood Cellar House flooring is resistant to topical moisture, it is not a moisture barrier. Excessive subfloor moisture is an ideal breeding ground for mold, mildew, and fungus—all of which can contribute to an unhealthy indoor living environment. Use of a suitable vapor barrier (i.e., 6 mil poly sheeting) is required over the surface of a concrete slab.

- a. Concrete slab construction shall be in accordance with industry standards for specification related to concrete mix design, curing methods and drying times to prevent moisture problems.
- b. On-grade and below-grade slabs should be installed with a suitable vapor barrier directly underneath the concrete slab.
- c. New concrete shall be properly cured and dried prior to the installation of floor covering. Curing agents, surface hardeners and other membranes or compounds shall be mechanically removed immediately after initial cure to allow the slab to properly dry before installation. Approximately 30 days per 1" of slab thickness.
- d. Concrete substrates should be properly prepared according to ASTM F710-11, *Preparing Concrete Floors to Receive Resilient Flooring*.
- e. All concrete substrates regardless of grade or age of slab must be properly tested for warranty to apply. Acceptable test method is the ASTM F 2170 In Situ Relative Humidity. Testing shall be conducted according to the relevant ASTM documentation and instructions of the manufacturer of the testing equipment. Consult Johnson Hardwood Technical support for RH values greater than 75%.
- f. Concrete Alkalinity / pH Test shall be conducted in accordance with ASTM standards. Acceptable level of pH in the substrate is 7.

2. Wood Subfloors

- a. All wood substrates shall be prepared according to ASTM F1482-04 *Installation and Preparation of Panel Type Underlayments to Receive Resilient Flooring*.
- b. All wood panels for use under Johnson Hardwood Cellar House flooring must be smooth, flat, structurally sound, free of defects and free of deflection.
- c. Wood subfloor panel thickness requirements for the following joist spans: 5/8" minimum over 16" OC. 3/4" minimum over 19.2" OC. And 1" minimum T&G over 24" OC.
- d. There shall be at least 18" of well-ventilated air space (i.e., 1 1/2 vents per each 100 SF of crawl space area) beneath all wood subfloors. Crawl spaces shall be insulated and protected by a suitable vapor barrier placed over the soil, consisting of 6 mil "black" polyethylene sheeting overlapping the seams a minimum of 12" followed by sealing the seams completely using 3" wide clear packing tape. Note: Make sure to run the poly sheeting a minimum of 4 to 6" up the stem walls.

- e. Wood subfloors installed directly on concrete or over “sleeper” joist systems are NOT acceptable for use under Johnson Hardwood (Cellar House) Flooring.
 - f. Panels designed as suitable underlayment shall be dimensionally stable, fully sanded face to eliminate grain texture or show through and free of Ledging (raised edges between panels).
 - g. Panels shall be installed according to Local building codes.
 - h. Johnson Hardwood will not cover or accept responsibility for joint telegraphing, either as a “ridge” or “valley”; grain or texture telegraphing; discoloration of finished flooring due to materials used for filling of voids and defects in the face of the underlayment.
 - i. Unacceptable substrates shall be covered using a ¼” or thicker panel underlayment.
3. Gypsum and Lightweight Cellular Concrete Substrates:
- Gypsum, and/or lightweight concrete subfloors and substrates must be in accordance with acceptable industry standards.
- a. Check moisture content of the gypsum, gypcrete and/or lightweight cellular concrete substrate via the appropriate testing method according to manufacturers’ guidelines and/or per ASTM Testing Standards.
 - b. All patching compounds shall be recommended for use with gypsum, or lightweight cellular concrete surfaces by the patching compound manufacturer. Follow the manufacturer’s instructions regarding mixing, use, and application.
 - c. Place a suitable vapor barrier (i.e., 6 mil poly sheeting) over the Gypsum and/or Lightweight Cellular Concrete prior to commencing with the installation of the flooring.
4. Existing resilient flooring must be single layer only, be firmly bonded to the substrate, flat and smooth with no curling edges or loose seams. Must not be of a cushion back, loose-lay, or perimeter bonded floor.
5. Old Adhesives
- a. Adhesive residue shall be properly prepared prior to the installation of Johnson’s Cellar House Flooring. It is recommended that mechanical scraping or grinding be used as a primary means of removing old adhesive residue.
 - b. Residues include, but are not limited to carpet, vinyl, VCT, and or wood flooring adhesives.
 - c. Black cutback/asphalt adhesives shall be scraped by hand to remove any loose patches, trowel ridges and puddles so that only a thin residue layer remains. This layer shall then be properly covered using a Portland based patching compound properly mixed with the manufacturer’s recommended latex/acrylic additive. **NOTE: SEE BELOW WARNING!!!**
 - d. Do not use chemical adhesive removers.

WARNING!!!

DO NOT SAND, DRY SWEEP, BEADBLAST, SHOTBLAST OR USE ANY OTHER MECHANICAL MEANS TO PULVERIZE EXISTING TILE FLOORING, BACKING, LINING FELT, ASPHALTIC “CUT-BACK” OR ANY OTHER ADHESIVES. THESE PRODUCTS MAY CONTAIN 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.

6. Other substrates

- Cement terrazzo, epoxy terrazzo flooring, stained or painted concrete and metal floors may be suitable for installation. However, most will need to be prepared with a suitable Portland-based cement patching compound, see manufacturer's recommendations for use and preparation of subfloor. Note: Place a suitable vapor barrier (i.e., 6 mil poly sheeting) over the existing flooring.
- Ceramic, porcelain, marble, and granite tiles are suitable and must be properly bonded with intact grout joints and free of cracks, ledging or loose tiles. Surface of tile and grout joints should be free from sealers, coatings, dirt, and contaminants. Properly prepare the surface of tiles by grinding any high areas and using a suitable Portland-based leveling compound and primer to fill in all low areas. Follow leveling compound manufacturer's recommendations for surface preparation and application of product. Note: Place a suitable vapor barrier (i.e., 6 mil poly sheeting) over the existing flooring.
- The following are not suitable substrates for installation of Johnson's (Cellar House) Flooring: rubber, cork, or asphalt tiles; and any other material covered in the sections above and listed as unsuitable.
- Unsuitable substrates should be covered with an approved ¼" wood underlayment or suitable Portland-based cement leveler or patching compound. Always follow the manufacturer's recommended practices when covering an existing substrate.

Installation and Layout

Cellar House floating flooring is designed with a Unilin 2G tongue and groove interlocking mechanism. Please refer to and follow the installation process and procedures as illustrated in these guidelines. **Please note that the guidelines are for an angle tap method of installation, which MUST be followed. Installing the floor using any other method of engaging the tongue and groove locking mechanism can/will result in failure of said locking system, which can/will result in joint separation and/or ledging which is NOT covered under ANY/ALL applicable warranties offered by Johnson for this product. NOTE: It is recommended to work out of 3 to 5 cartons when installing the floor.**

NOTE: Upon delivery of the material to the jobsite, the contractor and/or installer and/or homeowner and/or renter MUST determine that the delivered materials identification label located on the end of each carton matches the information contained on the sales order/receipt. Failure to confirm that the correct product has been delivered to the jobsite and the product is installed, constitutes acceptance of the material and No compensation will be given towards replacement material, labor of any/all types, loss of time, hotel expenses, additional mortgage payments, rental payments, food, pain and suffering etc.

NOTE: If the delivered material consists of different runs, it is the installers responsibility to open one carton from each of the different runs and compare them to one another to make sure that they sufficiently blend when installed. Once the flooring is installed there is no question as to its acceptability. No compensation will be given towards replacement material, labor of any/all types, loss of time, hotel expenses, additional mortgage payments, rental payments, food, pain and suffering etc., if flooring is installed without determining suitability of the material being installed.

NOTE: Johnson allows up to 5% manufacturing related defects and up to plus or minus 5 degrees difference in gloss level from plank to plank.

Layout

- a. Install flooring perpendicular to direct sunlight sources, including large windows, doors, etc.
- b. It is important to balance the layout of the plank format. Proper planning and layout will prevent narrow piece widths at wall junctures. Determine layout to prevent having less than a half the width or very short length pieces.
- c. Be sure to allow for a 5/16" spacing along all walls when determining your starting plank width. On rooms greater than 2,500 ft² (232 m²) or runs longer than 50 feet (15.24 meters) control joints with a suitable T-molding must be installed with a minimum of 5/16" (8mm) gap between the vertical edges of the T-molding post.
- d. Installation of the product must start from the left side to the right of the room. Tongue side facing the wall.
- e. Install the second plank in the row by angling the end tongue into the end groove of the first plank. Be careful not to bend the corner of the plank. Maintain an expansion gap of approximately 5/16" or 8mm from the wall (and/or ALL vertical obstructions). Start the second row with cutting a plank to the desired length. Keep in mind that the plank must not be shorter than 6" or 150mm to receive the best-looking appearance. In addition, end joints MUST be spaced a minimum of 8".
- f. Install the first plank in the second row by inserting the long side tongue into the groove of the plank in the first row. This is best done with a low angle (15 to 20 degrees) of the plank. Install the second plank in the second row by inserting the short end tongue into the previously installed plank groove. Align the plank so that the long side tongue tip is positioned just over the groove lip of the plank in the first row. Working from the end seam, at a low angle, insert the long tongue into the groove of the adjoining plank. Very little force is required to seat the tongue into the groove. You should feel the tongue click the luxury vinyl plank into the groove.
- g. Work across the length of the room installing planks along the wall in the first row and then aligning the planks in the second row. It is critical to keep these two rows straight and square, as they are the "foundation" for the rest of the installation. Check squareness and straightness often.
- h. Cut the last plank in the first row and leave an expansion gap of around 5/16" or 8mm.
- i. Planks may be cut with a utility knife using the "score and snap" technique. The leftover of this plank may be used to start the third row if it is minimum 6" or 150mm long. Continue installing planks and make sure to achieve a random appearance with end pieces of minimum 6" or 150mm. Check that all planks are fully engaged; if a slight gapping is noted, the gap can be tapped together by using a tapping block (**do not tap on the tongue and groove with a hammer or mallet as doing so WILL damage the locking mechanism**) made to fit the profile of the Unilin 2G locking mechanism and/or a piece of the flooring approximately 10" long works well when used as a tapping block to close tiny gaps that may exist.
- j. When fitting under door casings, etc., the flexibility and convenient connection of Click Luxury Vinyl Plank becomes evident. If necessary, a flat pull bar may be used to assist in locking the planks.

Three Season Rooms

Cellar House Series is an ideal choice for installations in 3 season environments where the ambient conditions may not be controlled for extended periods of time. In fact, Cellar House can withstand temperatures as low as -25°F and highs up to 155° F for short periods of time. However, it is important to note that prior

to, as well as during the installation the flooring MUST be properly acclimated for a minimum of 24-hours and then maintained for the life of the installation. **Note:** a controlled environment is interpreted as 65°F to 85°F. Failure to comply with these requirements can/will result cupping, end joint peaking, buckling and/or gapping which is NOT covered under All applicable warranties offered with Johnson's Cellar House Flooring.

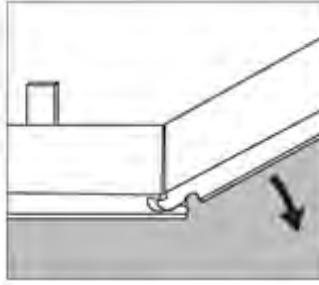
After Installation

1. Be sure planks are set, flat, and have tight edges.
2. If the plank flooring is not the last portion of the construction project the floor must be protected from construction traffic and damage. Utilize a reinforced fiber protective board or a heavy Kraft paper (min. 60 lbs.) and cover the floor. **Note: When taping the paper together, NEVER tape directly to the floors surface, but rather tape the paper to the paper using Scotch 3M masking tape.**
 - a. Initial maintenance can begin upon completion of the installation using a neutral pH cleaner. Please see below section on Maintaining and Protecting Your Floor.
 - b. If necessary, a slow (175 rpm) buffer can be utilized with a white, non-abrasive pad to remove heavy deposits.
 - c. Rinse the floor thoroughly with distilled water and allow to dry.
3. **Daily and weekly maintenance**
 - a. Sweep, vacuum, or dust mop the floor as needed to remove dust loose dirt and grit. In high traffic areas this may be a daily or twice daily procedure. Use only vacuums that do not have bristle beater bars, plastic and/or metal heads.
 - b. Clean liquid spills immediately to prevent the possibility of stains, slips or falls.
 - c. Damp mop the floor as needed to remove dirt and stains. Use a neutral pH cleaner and a white pad if needed to remove ground in dirt. Soft bristle brushes can also be used on flooring with embossed surfaces.
4. **Preventative steps**
 - a. Use mats at all entry areas to keep dirt, sand, and water off the floor. Clean the mats on a regular basis. If mats are placed directly on top of the floor be sure the mats have a non-staining back. Rubber mats are also not recommended over Johnson LVP/SPC flooring products.
 - b. Furniture shall have protective glides made from felt or indoor/outdoor carpet (which can be purchased at your local big box store) of at least 1" in diameter to minimize the chance of indentations or scratching to the surface of the floor. Do not use narrow chair glides. Felt pads are also excellent protection for the floor for furniture that will be frequently moved directly across the floor.
 - c. Do not move heavy furniture, appliances, or fixtures directly across the floor. Use protective boards, paneling, glides, or appropriate furniture movers designed for use over hard and/or resilient surface flooring.
 - d. Protect the floor from direct sunlight by using appropriate window coverings.
 - e. Use chair mats at desks to protect the floor from damage due to chair legs or casters.
 - f. Periodically clean caster wheels and check for wheels that may be broken or no longer rotating. Replace damaged wheels immediately.
 - g. Avoid use of metal or razor scrapers to remove dirt, residues, or other marks from flooring. This will damage the protective wear layer of the flooring.

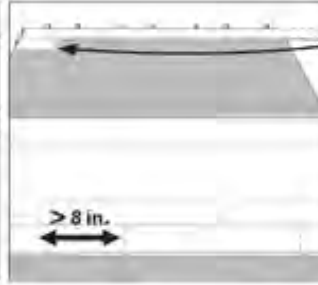
INSTALLATION:



Step 1: Begin installation working from left to right. Insert 1/4" wide spacers at ends and edges where planks meet wall.



Step 2: Lock short end of plank by inserting tongue into groove at an approximate 30 degree angle and drop into place. Continue this process throughout the installation.



Step 3: Use the remaining plank from your cut piece to begin the next row (you will repeat this process through-out the installation). Note: It is recommended that you space end-joints by minimum of 8 inches.



Step 4: Lock long edge of plank by inserting tongue into groove at an approximate 15 degree angle and drop into place. Next slide toward end of previously installed plank until the tongue touches the groove.



Step 5: IMPORTANT! Use a hammer and tapping block to tap the long edge of the plank to ensure a tight fit. Note: Tap-ping block should be a minimum of 10" to 12" long. It is important to note that any/all gapping can/will compromise locking system.



Step 6: Attach a scrap piece of floor to bridge the gap between ends of planks.



Step 7: Tap end of plank with hammer and tapping block to lock ends of planks together. Remove support bridge and continue with this method until you have completed installing the row. Note: BE SURE TO TAP ON EDGE OF VINYL SO AS NOT TO DAMAGE LOCKING PROFILE.



Step 8: Use hammer and pull bar to lock final piece in row. Insert spacer at end of row. Continue installation to final row.



Step 9: Use hammer and pull bar to lock long edges of planks on final row.

INSTALLING UNDER DOOR JAMBS:

Step 1: Undercut door jamb to provide space to allow plank to slide freely. Tap long edge with hammer and tapping block to lock long edge.



Step 2: Use hammer and pull bar to draw in and lock short end of plank.

MAINTAINING AND PROTECTING YOUR FLOOR

- As with any fine floor covering, care should be taken when moving heavy furniture or appliances back into the room. Use wood panels to protect the floor when rolling heavy appliances back into place.
- Proper floor protectors must be used under any furniture which is regularly moved, or which is heavy and may dent the floor.
- Non staining, non-rubber backed protective mats must be used under rolling office chairs, and any rolling furniture/carts need to have wide, flat wheels.
- Do NOT use rubber back area rugs as the rubber may contain chemicals such as sulfur that can/will discolor the floor. Instead, Johnson recommends rug underlayment pads specifically designed for use on LVP/SPC types of flooring, such as rug pads from rugpadusa.com.
- Protective walk off mats must be used at all exterior doors.
- Oil and petroleum-based driveways can stain vinyl floors. Do not track petroleum-based products onto a Cellar House floor.
- Sweep or vacuum the floor regularly to remove dirt/grit. Do not use a vacuum with a revolving beater bar. Johnson recommends Miele brand canister type of vacuum with a China bristle attachment as the firm rubber wheels and semi firm China bristle attachment will not scratch or mar the surface of the floor.
- Cellar House should be regularly cleaned with a neutral pH cleaner such as Bona Professional Series Stone, Tile & Laminate Cleaner, Mannington Rinse-Free Cleaner, Rejuvenate Luxury Vinyl Floor Cleaner and/or Zep Neutral pH Floor Cleaner. Follow manufactures instruction. **Note: Using a cleaner (and/or topical maintenance products of any kind) other than a neutral pH cleaner can/will result in irreversible damage to the floors surface, which can/will void ALL applicable warranties.**
- **Do NOT use steam cleaners of any kind to steam clean the floor as it can/will cause perminate damage to the floors surface, which will Not be covered under any/all applicable warranties offered with this product.**

The JOHNSON HARDWOOD - CELLAR HOUSE SPC RIGID CORE PLANK FLOORING warranty information is available on our web site at johnsonhardwood.com

