

You must read and understand these instructions completely before installing Natural CORK Carriage House flooring.

In the event these instructions leave unanswered questions or if you would like additional information, please contact Natural CORK, Inc. toll free, 800-404-2675 or 706-733-6120 prior to beginning installation. Responsibility for the suitability of Natural CORK hardwood for each individual installation cannot be assumed by Natural Cork Inc., since Natural Cork Inc., has no influence on the installer's proper application. Should an individual plank be doubtful as to appearance or dimension, the installer should not use this piece. Any defect must be reported directly to Natural CORK, Inc. or to a Natural CORK distributor/dealer immediately. Natural CORK will send a replacement in a timely manner.

NOTE: Natural products (i.e. wood) will vary in shade or pattern definition and are subject to the normal behavior of minor expansion during periods of high humidity and minor contraction during periods of low humidity (usually the heating season). Expansion and contraction can be kept to unnoticeable levels by stabilizing the building through temperature and humidity control, allowing for proper acclimatization of the product prior to installation, and providing the recommended expansion space mentioned below.

INSTALLATION ON CONCRETE SUBSTRATE:

Carriage House Engineered Floating Floor can be installed over concrete that is above grade, on grade or below grade. Concrete substrates are required to be sound, smooth and level. Tolerance of level must be within 1/8" in 10'. Check concrete slab for moisture with Calcium Chloride moisture test. Moisture content cannot be more than 3 pounds per 1,000 sq. ft. per 24 hours. Fill any low spots with Portland based leveler and scrape any high spots. Before installing Carriage House Engineered Floating Floor, cover concrete floor with 6 mil polyethylene sheets, run up the wall 3", overlap seams 8", and tape the sheets together. Install 1/8" Natural Cork Underlayment. 1/2" Expansion space should be left around the perimeter. (Typical expansion space is equal to the thickness of the product installed.) End joints should be staggered to avoid "H" pattern.

INSTALLATION ON UNDERLAYMENT-GRADE PLYWOOD AND MAN-MADE BOARD SUBSTRATES:

Subfloor **must** be clean and level. Fill any low spots with appropriate filler and sand any high spots. Tolerance of level must be within 1/8" in 10'. Subfloor must not exceed 14% moisture content (electrical resistance method). Check basements and under floor crawl spaces to be sure they are dry and well ventilated to avoid damage to planks caused by moisture. For buildings with crawl spaces, 6 mil polyethylene sheeting should be used as ground cover over the earth. 1/8" Natural Cork underlayment can be used loose laid directly over the plywood substrate. 1/2" Expansion space should be left around the perimeter. (Typical expansion space is equal to the

thickness of the product installed). End joints should be staggered to avoid "H" pattern.

CARRIAGE HOUSE ENGINEERED FLOATING FLOOR MUST BE ACCLIMATED:

Store flooring material out of the box at job site for a minimum of 72 hours. During storage and installation, maintain temperature and relative humidity to level consistent to the conditions that will prevail when building is occupied. Heating or air conditioning should be used for an appropriate length of time prior and during installation. With improper acclimation, the floor could noticeably expand or contract after installation.

NOTE: Installation of an expansion joint (T-Mold) is necessary when transitioning from one room to another.

CARRIAGE HOUSE ENGINEERED WOOD FLOORS ARE INSTALLED USING THE GLUELESS INTERLOCKING SYSTEM.

The plank profile has a milled tongue and groove to interlock the adjoining boards on the floor. Start installing the floor in one corner (preferably parallel to the longest wall) following the direction the light falls. It is equally possible to work from left to right or right to left. Always insert the tongue into the groove, not the other way around.

UNDERLAYMENT: Unroll 4' wide cork underlayment, one strip at a time, wall to wall, and loose lay flooring directly over. Over concrete slabs, a vapor barrier must be installed.

STRING LINE: Choose the longest wall that will be parallel to the plank floor. Tap a nail part way into the old floor 1/2" from the wall at each end of the room. String a line between the nails 3/4" above floor level. Use this string as a guide-line for the first row of planks. The 1/2" space from the wall allows room for expansion. Shuffle flooring planks for best visual mix. Mix planks from various cartons to maintain natural color and pattern variation.

FIRST ROW: Facing the guide-line, place the first plank at the left-hand end, tongue side facing wall, starting 1/2" off the wall. It is necessary to remove the tongue from all planks lining the starting wall. Use 1/2" spacers at the end and along the wall (2 to a plank) while keeping the planks aligned with the string. Spacers keep planks from shifting when subsequent rows are added. Lock the narrow side of the next plank using a tap-ping block and a hammer. Place block flat on floor, and tap gently until the ends of the two planks are firmly joined, with the joint completely closed up. Continue this process until you reach the end wall. Cut the last plank to fit allowing for a 1/2" perimeter expansion space on all sides.

NEVER TAP DIRECTLY ON THE SIDE OF THE BOARD AND ALWAYS USE A TAPPING BLOCK.

NEXT ROWS: If the cut-off piece from the previous row is more than 10" long it can be used to start the next row as long as end-joints between adjacent rows are always staggered by at least 10".

a) Position the long side of the plank to be installed at an angle of 20-30° to the plank already installed. Move the plank to be fitted slightly up and down at the same time as exerting forward pressure. Using the tapping block on the long edge can help to achieve the proper locking of planks.

b) To connect the sides, use a number of smaller taps on the short edge with the tapping block, until the planks lock together completely.

c) In some cases, such as under a door frame, the planks cannot be rotated into one another. In these situations, the planks can be fitted horizontally by tapping on the edges using the tapping block. A floor pullbar might be needed for tight spaces and in this case, it is recommended to use a piece of cork underlayment between the pullbar and the plank to protect its surface. In order to cut around pipes, take a drill bit with a diameter similar to the diameter of the pipe + 1/4" for expansion.

LAST ROWS: Usually the last row will require all planks be cut lengthwise. Measure each plank at several places along the length to ensure a proper fit. Remember to allow a 1/2" expansion space along the wall side. Use floor pull bar and mallet again protecting the surface of the floor using a piece of cork underlayment.

FINISH: One of the major benefits of using the glueless interlocking system is that after installation you can immediately walk on the floor. Remove all spacer blocks. Fix the skirting board over the extended poly-ethylene sheeting. Never attach skirting board to the floor itself, but allow space for the floor to expand and contract beneath it. In order to fill in the expansion gap around pipes and any other areas not covered by trim, use a flexible caulk.

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INSTALLATION ON CONCRETE SUBSTRATE: Glue down installation over concrete substrates is not recommended for Carriage House solid floors. Engineered floors protected by a moisture barrier and cork underlayment are more suitable for such application.

INSTALLATION ON UNDERLAYMENT-GRADE PLYWOOD AND MAN-MADE BOARD SUBSTRATES: Subfloor must be clean and level. Fill any low spots with appropriate filler and sand any high spots. Tolerance of level must be within 1/8" in 10'. Subfloor must not exceed 14% moisture content (electrical resistance method). Check basements and under floor crawl spaces to be sure they are dry and well ventilated to avoid damage to planks caused by moisture. For buildings with crawl spaces, 6 mil polyethylene sheeting should be used as ground cover over the earth. **SUBFLOOR MUST BE WITHIN A MAXIMUM OF 4% OF THE MOISTURE CONTENT OF THE HARDWOOD FLOORING TO INSURE A SUCCESSFUL INSTALLATION.**

IN-FLOOR RADIANT HEATING SYSTEM: With radiant heat, heat source is directly beneath the flooring, so flooring may gain moisture or dry out faster than in a home with conventional heating system. For this installation, once slab has cured, turn heat on, regardless of season, and leave it on for at least 5-6 days before installation. Maximum surface temperature should never be more than 85 degrees Fahrenheit (30 degrees Celsius). Care should be taken to ensure fasteners do not penetrate radiant heating tubes.

SOLID FLOOR MUST BE ACCLIMATED: Store flooring out of the box at job site for a minimum of 72 hours. During storage and installation, maintain temperature and relative humidity to a level consistent to the conditions that will prevail when building is occupied. Heating or air conditioning should be used for an appropriate length of time prior and during installation. With improper acclimation, the floor could noticeably expand or contract after installation. Ideal conditions are 68 degrees temperature and 50-60% humidity.

NOTE: NAIL DOWN PLANK FLOORING MUST HAVE AN APPROVED SUBFLOOR OVER THE CONCRETE. PLANK CAN NOT BE SHOT TO THE CONCRETE. 3/4" PLANK CANNOT BE DIRECT GLUED TO CONCRETE. PLANKS CANNOT BE GLUED AND NAILED DIRECTLY TO CONCRETE.

STRING LINE: Choose the longest wall that will be parallel to the plank floor. Snap a working line parallel to the starting wall allowing 3/4" expansion space between the starting wall and the edge of the first plank run. A 3/4" expansion space must be left around the perimeter and at all vertical obstructions. Shuffle planks for best visual mix. Mix planks from various cartons to maintain color and pattern variation.

FIRST ROW: Planks are laid out in the same manner as strip flooring. Lengths of boards range from 12" to 48". When installing, alternate board length for best visual appearance. Tongues must face wall, and must be removed off the first row of planks. Lay first row of planks along the entire length of the working line. Top and blind nail the first row (hand nail if necessary), using appropriate fasteners. Use rubber mallet to insert tongue inside the groove of the preceding board.

1/2 inch cork expansion strip can be placed along the perimeter of the room between the wall and planks.

NEXT ROWS: Each receding row should be blind nailed with a nailing machine wherever possible. Add each additional row of flooring, watching the pattern repeat and offsetting or staggering the end joints at least 6 inches. Racking rule of thumb: Stagger end joint a minimum of 6" between pieces on adjacent rows. Avoid "H" joints.

LAST ROWS: At the finishing wall and other obstructions, it may be necessary to blind nail by hand until top nailing is required. Usually the last row will require all planks be cut lengthwise. Measure each plank at several places along the length to ensure a proper fit. Remember to allow a 3/4" expansion space along the wall side. Use floor pull bar and mallet to insert the long side of planks. The short edge can be joined using a rubber mallet.

FINISH: Remove all spacer blocks. Fix the skirting board over the extended polyethylene sheeting. Never attach skirting board to the floor itself, but allow space for the floor to expand and contract beneath the skirting board. In order to fill in the expansion gap around pipes and any other areas not covered by trim, use a flexible caulk.