



EnviroCork™: Enviro-Cork Flooring Installation Instructions

Beautiful cork floors are natural products and as a result are subject to shade variations, fading and indentations. Shade variations are inherent in cork floors and add beauty to this product. All of the floors Envirocork™ manufactures are in accordance with industry standards, which allow a defect tolerance (natural or manufacturing) not to exceed 5%.



OWNER/INSTALLATION TECHNICIAN RESPONSIBILITIES:

- When the flooring is ordered, a minimum of 5% (recommended 7% - 10%) must be added to the actual square footage to allow for overage (cutting) and selection (grading) allowance (recommended 15% for diagonal installations).
- Before any flooring is installed, the installer must make sure that the job-site environment and the condition of the sub-surface involved meet or exceed the standards and recommendations as outlined in the SUB-FLOOR and JOB SITE PREPARATION sections below.
- The owner/installation technician assumes final responsibility for inspecting product quality. Carefully examine each board for quality, color, and finish prior to installation – using reasonable selectivity to hold out or cut off pieces with defects. If an individual piece is doubtful as to grade, color, or finish, the installer should not install that piece.
- Correcting a minor defect during installation using filler, stain, or a putty stick is a normal procedure.



TOOLS AND/OR ACCESSORIES NEEDED: FLOATING INSTALLATION

WARNING: Envirocork™ is not responsible for damage caused by negligent installation practices or misuse of installation tools. Envirocork's™ cork flooring uses a 4 sided glue-less locking system. This glue-less locking system enables you to work up to 50% faster than gluing similar type floors and is much easier and cleaner to work with. It is **CRITICAL** when installing to use Envirocork's™ specific tapping block. Using any other tapping block may result in damaging the surface layer of the cork. Never attempt to knock the boards together with one strong hit – this can also lead to severe damage to the surface layer of the cork. Lightly tap the board with the block until it clicks together with the board you are tapping it into. Once they are engaged, do **NOT** tap them again as this can cause the joint to be too tight and peak. **To address environmental moisture penetration Envirocork™ provides acclimation instructions below and strongly advises to keep these products in controlled conditions with humidity within the 35%-55% range.** As far as the sub-floor moisture is concerned, it is **VITAL** that the concrete is within safe moisture parameters (determined via moisture test/Calcium Chloride Test).

- Broom
- Pencil
- Terry Cloths
- Tape Measure
- Moisture Meter
- Safety Equipment (Goggles and Mask)
- Circular or Hand Saw; Miter or Table Saw
- Hand/Jamb Saw (for undercutting door trim)
- Chalk Line and Chalk
- Hammer; Rubber Mallet (Light Colored...Dark Colored Mallets damage paint on walls)
- Nail Punch
- Finish Nails (if installing trim and molding)
- Pry/Pull Bar
- Tapping Block
- Spacing Wedges
- Utility Knife
- 6 mil Polyethylene Film (if a Moisture Barrier is required)
- 3-M Blue Painter's Tape
- Hardwood/Laminate Flooring Cleaner with Dry Mop



INSTALLATION INSTRUCTIONS: FLOATING INSTALLATION

STEP 1: Pre-Installation Jobsite Inspection

Prior to installation, the building must be structurally complete and enclosed. All exterior windows and doors must be installed. Any “wet” work inside the house (masonry, drywall, and paint) must also be complete – allowing adequate drying time to eliminate unnecessary moisture content within the building. Concrete should be at least 60 days old.

Permanent HVAC (heating/air conditioning) systems must be operating for at least 14 days before installation, **maintaining a constant room temperature between 60-75 degrees Fahrenheit and a relative humidity of 35-55%.**

Exterior drainage – including gutters and downspouts, must be in place and drain away from the building.

Envirocork's™ Enviro·Cork Floors can be installed **on, above, or below** grade (which includes BASEMENTS!!!), although they are not recommended for full bathroom installations or any areas with high moisture concentration.

Envirocork's Enviro·Cork Floors can also be installed over Radiant Heat Flooring. With Radiant Heat, the heating source is directly underneath the flooring, so it may gain moisture or dry out faster than in a home with conventional heating sources. If installing over Radiant Heat Flooring, allow the concrete slab to cure completely without the aid of the floor heating, then turn the heat on – regardless of season, and leave it on steady for 5-7 days before installation of the flooring. Approximately 2 days before installation, the heating system should be reduced to 65 degrees Fahrenheit. Once the flooring is installed, NEVER let the surface temperature get above 85 degrees Fahrenheit. At the start and

end of a heating period the temperature of the water must always be increased or decreased in steps of 10 degrees Fahrenheit per day. During the heating period it must be ensured that the relative air humidity in the rooms is not too low. To properly care for your floor, **maintain a constant room temperature between 60-75 degrees Fahrenheit and a relative humidity of 35-55%.** Always prevent an excess accumulation of heat due to installing carpets on the floor or not leaving adequate space between the furniture and the floor. NOTE: During the heating season, open joints between boards may appear – this is a natural occurrence and the joints close with time.

Basements and crawl spaces must be dry. Crawl spaces must be a minimum of 24” from the ground to the underside of the joists. A vapor inhibitor(6- 8 mil black polyethylene film) must be put in crawl spaces with joints overlapped and taped.

Sub-floors must be checked for moisture content using the appropriate metering device for concrete or wood. Examples of concrete moisture meters that work very well: the Delmhorst Moisture Meter Model G and the Tramex Concrete Encounter.

Performing Moisture Tests:

WOOD SUBSTRATES: Test the moisture of the wood sub-floor using a calibrated moisture meter approved for testing wood moisture according to the meter manufacturer. The reading should not exceed 14%, or read more than 5% different than the moisture content of the product being installed.

CONCRETE SUBSTRATES: There are multiple ways to test for excess moisture in concrete.

- Use an approved, calibrated moisture meter such as the Delmhorst Moisture Meter Model G or the Tramex Concrete Encounter. On the Tramex Concrete Encounter Meter, moisture readings should not exceed 4.5 on the upper scale.
- Perform a Polyfilm Test. Tape down 2' x 2' polyfilm squares (a clear garbage bag or plastic drop cloth will do) in several places on the floor. Wait 24-48 hours, then check for the appearance of condensation on the inside of the bag or plastic and for a darkening on the concrete in that area. Either occurrence signals the likely presence of excess moisture, requiring a mandatory Calcium Chloride Test.

Once you have determined the moisture content and that excess moisture is indeed present, a Calcium Chloride and pH Alkalinity Test must be performed to determine moisture emissions and alkalinity from the concrete slab.

- Perform a Calcium Chloride test (these can be found in flooring retail stores or online at www.moisturetestkit.com). The maximum acceptable reading is 3 lbs./24 hours/1000 sq. ft. for moisture emissions.
- Perform a pH Alkalinity Test (a 3% Phenolphthalein in Anhydrous alcohol solution). Chip the concrete at least ¼” deep (do not apply directly to the concrete surface) and apply several drops of the solution to the chipped area. If any color change occurs, further testing is required. Using

the number method on the test, a pH reading of 6-9 on a pH scale of 1-14 is considered acceptable.

If the tests results exceed this number, the concrete slab should be sealed with an appropriate sealer, such as Bostik's MVP4 (Moisture Vapor Protection) Sealer, prior to installation. **Envirocork™ is not responsible for Hydrostatic, Hygrostatic, or Thermal dynamics resulting from an improper concrete slab installation.**

STEP 2: Storing the Material Prior to Installation

Once the building meets the above conditions, the material can be delivered to the site. Handle and unload the flooring with care and **store within the area in which it is expected to perform.**

Flooring stored on concrete floors should be elevated at least four inches to allow circulation under the cartons. Cartons must be stored horizontally (parallel to the ground). Never store them standing on end. **Leave all boxes SEALED while they are acclimating (this way all boards will acclimate within the boxes at the same rate).**

Envirocork's™ Enviro·Cork Flooring **must** acclimate for 72 hours prior to installation.

STEP 3: Recommended Sub-floor Types (Wood and Concrete)

Floating Installation:

- Can be installed over any sound structural surface meeting or exceeding building codes. **Do NOT install over carpeting!**

STEP 4: Preparing the Sub-floor

All Sub-floors must be:

- **CLEAN:** scraped, sanded, or swept; free of wax, grease, paint, oil, and other debris.
- **SMOOTH/FLAT:** within 3/16" in 10' and/or 1/8" in 6'. Sand high areas or joints. Fill low areas (no more than 1/8") with a cement type filler.
- **STRUCTURALLY SOUND:** Replace any water-damaged, swollen or delaminated sub-flooring or underlayment. Plywood sheets should be laid with grained outer plies at right angles to joists; adjacent rows staggered four feet and nailed every 6" along each joist with 7d or larger nails. When installing directly over old wood or strip floor, sand any high spots, re-nail old floor to eliminate squeaks or loose boards, and install new planks at right angle (perpendicular) to the old floor, or overlay old floor with 1/4" plywood underlayment. Leave a 1/8" gap at the edges and nail with 7d or larger nails every 6" at the edges and every 12" in both directions and through the interior of each sheet of plywood.

- DRY: Moisture content of sub-floor must not exceed 14% prior to installation of wood flooring. All moisture testing must be done before wood has been acclimated 72 hours and job-site requirements met.

STEP 5: Installing the Floor

GENERAL TIPS:

- Open several different cartons and mix the pieces to maximize the color and shade variations.
- Install the product parallel to the longest wall to provide the most appealing visual effect.
- Stagger the ends of the boards at least 10" in adjacent rows for a more appealing overall look.
- Allowing for a ½" minimum expansion gap around all vertical obstructions is CRITICAL! Cork flooring expands and contracts with changes in humidity. Cork flooring will buckle and/or cup if an adequate expansion space is not allowed for. **ALWAYS** allow for expansion space when making cuts around or beside vertical objects (i.e. walls, pipes, etc.).

DOORWAY/WALL PREPARATION:

- Undercut or notch-out door casings 1/16" higher than the thickness of the floor being installed.
- Remove existing base and shoe molding on walls as well as doorway thresholds. These can be reapplied after the installation is complete.

ESTABLISH A STARTING POINT: FLOATING INSTALLATION

An exterior wall is usually the straightest and best reference line to start the installation from. Start installing the floor in one corner, preferably parallel to the longest exterior wall. For hallways, the installation usually looks best when planks are installed parallel to the longest wall instead of perpendicular to it. If possible, the direction of the flooring being installed should be at right angles to the floor joists. Establish a starting line by leaving a minimum 1/2" expansion gap around all vertical obstructions. In at **LEAST** 2 places, measure out equal distances from the starting wall. It is recommended to measure 1/2" out from the starting wall and 12" – 18" in from the corners. Mark these points and snap a working chalk line parallel to the starting wall allowing the required expansion space between the starting wall and the edge of the first row of flooring. Plan the floor layout (width-wise) so you don't have to rip the last row **NARROWER** than 1". You may have to rip the **FIRST** row to ensure the **LAST** row is at **LEAST** 1" wide. A run of flooring exceeding 30 feet in any direction will require the installation of an expansion joint (T-Molding for instance). Expansion joints are also required when transitioning from one room to another.



INSTALLING THE UNDERLAYMENT: FLOATING INSTALLATION

- Envirocork's™ Enviro-Cork Flooring already has a pre-attached cork cushion, thus it does not require any additional underlayment.

NOTE: While some underlayments include an inherent moisture barrier (i.e. 2-in-1 foam or 3-in-1 foam), cork underlayments do not. If a moisture barrier is needed (if floating a cork floor over concrete for instance), a 6 mil polyethylene film is required: run the film up the walls 3-5" with the edges overlapped 8-10" and taped. Then install the cork over the top of the polyethylene film.



INSTALLING THE FLOOR: FLOATING INSTALLATION

- Establish your starting row (SEE ESTABLISH A STARTING POINT ABOVE).
- Select your first board.
- **REMINDER: Take boards from multiple boxes while installing. Do not install 2 pieces from the same box in a row – mix the colors and shades while installing to get a more favorable overall look. Also, remember to stagger the end-joints of adjacent rows at least 10" to create a more appealing look for the floor.**
- **The tongue of the boards should be facing the starting wall.** Use the longest boards available for the starter row. Envirocork's™ Enviro-Cork should be installed left to right.
- When installing the first row, starting from left to right, lay the first board flat on the floor. Move to the second board (which will be immediately right from the first board), and position it at a 20 – 45 degree angle to the board you have already laid down. When fitting the second board to the first, move it upwards and downwards slightly until the butt joints of the boards click into place. Continue doing this for the entire first row.
- Use the pull/pry bar to install the last board in the row. Install wedges into the expansion space.
- Complete the first row. Remember to keep a ½" expansion space on all sides touching the wall. Install wedges all along the wall against your first row to maintain that expansion space while you're installing. AVOID installing any boards shorter than 16" in the first four rows.
- Install the rest of the floor by connecting the boards together the long way first (by positioning them at a 20 – 45 degree angle to the board it will be connected to in the previous row, then moving it upwards and downwards slightly, pushing it forward at the same time until the boards click together). The board will then be lying flat on the floor, with a space approximately 1/8" – 3/16" between the two boards to be joined together. Then, tap the end of the board lightly with Envirocork's Tapping Block until the boards click together on the butt ends. You will be starting your rows from left to right, clicking the boards to the previous row lengthwise, then tapping your second and consecutive boards together in the row from right to left.
- Continue clicking then tapping the boards together using Envirocork's™ Tapping Block. Do NOT hammer DIRECTLY on the tongue of the product – this will smash the end of the tongues making it impossible to install the next board to it.
- Using the 3-M Painter's tape, tape all of the boards together after they have been clicked and tapped together. This ensures that the boards will remain tightly connected to each other while you are clicking and installing the rest of the floor.
- Install the remaining rows the same way.
- Remember to insert the wedges on the ends (as necessary) to restrain the movement of the floor while you are installing.



COMPLETING THE INSTALLATION: FLOATING INSTALLATION

- After you have finished, remove all of the tape and clean the floor using a hardwood/laminate flooring cleaner.
- Inspect the floor closely, filling in any gaps with a hardwood filler or matching putty.
- Remove all spacing wedges and install (or re-install) any trims or moldings as may be needed. Remember to nail the moldings into the WALL, not the FLOOR.
- After installation is complete, you can immediately walk on your floor. This is a major benefit of using the glue-less locking system.
- If further construction is necessary after the cork is installed, you can protect the installed floor by laying a quality paper or cardboard that allows the floor to breathe, taping it to the baseboards. **NEVER** use plastic, solid rubber, or polyethylene film to cover the installed floor since they both trap moisture and will damage the installed flooring (creating cupping or swelling issues).

GENERAL TIPS: CORK FLOORING AND FLOOR REPAIR

- When cork flooring is subjected to direct sunlight, it will fade. In areas where rugs and furniture are placed on cork flooring, fading will NOT occur and there will be contrast when those rugs and furniture are moved in the future. Fading is not a product defect.
- Furniture and appliances may cause indentations which when moved, may not recover 100%. Stiletto heels or high heel shoes may cause indentations that will also not fully recover. Indentations can occur in cork but will not reduce the life of the floor.
- If the floor becomes scratched or dinged, it can be repaired with a putty, filler, or touch-up kit. If a board is severely damaged, it may need to be replaced, which can be done by a qualified flooring technician.

GENERAL TIPS: CORK AND SEASONS

Once the floor is installed it is critical to keep it well maintained. Envirocork™ is not responsible for improper maintenance of the floor. **Cork floors will be slightly affected by varying levels of humidity within your building. To make sure the floors are protected for as long as possible, it is VITAL for you to keep the relative humidity levels between 35% - 55%. Below are some recommendations on how to achieve that in the different seasons:**

- Wet/Humid (cork expands): Heaters are not generally used during these months. Therefore the floor holds in the humidity and expands. To maintain a proper humidity level, use a dehumidifier or air conditioner. You can also turn on your heater every once in a while during the summer months – this will help lower the humidity in the building. Make sure the expansion space is not blocked in any way!
- Dry (cork contracts/shrinks): Wood-burning stoves and electric heating systems are used a lot during winter months – creating very dry conditions indoors. The low humidity causes the cork to contract and shrink – leaving gaps between individual boards. To prevent this, use a humidifier to keep the humidity level between 35% - 55%.