

High Performance Fiber Board Flooring - Installation

Prior to Installation check CarbonCoreFloor.com for the latest installation, warranty, & Maintenance instructions. It is the responsibility of the installer to ensure that the most current documents are used during installation of CarbonCore Floors flooring products.

Product Quality

The Contractor/installer/end-user assumes all responsibility for final inspection of product quality. The flooring Must be inspected at time of delivery and prior to installation. Carefully examine the flooring color, finish quality, or any damage during transit before installing the material. The installer should use reasonable selectivity to cull out or cut off unacceptable pieces. If the flooring material is considered unacceptable, "STOP! DO NOT INSTALL THE FLOOR." contact the CarbonCore Floors dealer immediately to start the claims process. If the Flooring is installed, all preinstallation defect & damage claims are null & void.

Job Site Requirements

1. The Space where flooring is to be installed shall be fully enclosed and the permanent HVAC system shall be operational at 65 F - 78 F for no less than 5 days prior to installation, during installation and for the life of the installation. Note: Maintaining a temperature within the stated range and relative humidity of 35-65% is required to create/maintain optimal dimensional stability of the Flooring.

NOTE: that CarbonCore Laminate V.1 is NOT recommended for 3-Season Room Application.

- **2.** Flooring should be one of the last items installed in any new construction or remodel project to prevent damage to the new flooring.
- **3.** Failure to Properly acclimate CarbonCore Laminate V.1 Flooring can result in buckling, gapping, end-joint peaking, cupping, ledging, side and end-joint failure and/or difficulty engaging the tongue and grooves inner locking mechanism.

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<u>STORAGE:</u> Do NOT store CarbonCore Laminate V.1 in direct sunlight, damp or wet areas, in direct contact with concrete, or in areas without proper climate control.

Acclimation

Required jobsite ambient conditions must be achieved prior to the delivery of CarbonCoreLaminate V1.0. Delivery of the Material to the interior of the Jobsite is required no less than 72 hours prior to installation and box ends must be open.

Quick Tips

- 1. After Calculating the amount of material required, add 8-12% extra for waste, depending on your installation experience.
- 2. After delivering your flooring to the jobsite, lay the cartons on a flat surface in the rooms in which the flooring will be installed. NEVER stack flooring cartons in a standing position as this can damage the interlocking tongue and groove locking system, as well as cause the planks to take on a bowed effect.
- 3. Never use a tapping block on the tongue and groove locking system when installing CarbonCore Laminate V 1.0, as it can damage the tongue and groove of the locking system and prevent the planks from properly interlocking, leading to gapping and/or ledging at the seams.
- 4. Avoid applying tape directly to the floor's surface as it may cause permanent damage. When using protective coverings such as Red Rosin Paper, Ram Board, or any other type of protective paper, ensure that tape is only applied at the seams where the paper rows meet, including side and end joints. However, it is acceptable to leave masking painter's tape on the floor for up to 24 hours to secure the setup while gluing down moldings.
- 5. Keep a clean work environment. **ALWAYS**, use saws <u>outside</u> to avoid damage to the flooring, such as scratches, dents, and marks. It is essential to have a mat at every doorway to the house during and post installation to reduce the amount of dirt, grime, and sand brought inside, which can harm the surface of the flooring.
- 6. <u>NOTE</u> Our products do not include attached underlayment because attached underlayment does not cover 100% of your subfloor, nor does it come with a vapor barrier. CarbonCore Laminate V1.0 requires a vapor barrier & underlayment. We highly recommend using a 3mm 2-in-1 roll-out EVA pad & vapor barrier.

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Pre-installations Requirements

- 1. Ensure that the delivered materials item #, style, and color name match the information contained on the sales order. Note: Installation of the material is considered acceptance of the flooring.
- 2. CarbonCore Laminate V1.0 requires no less than 72 hours of acclimation prior to installation to ensure the product is at equilibrium, with the installation environment.
- 3. For doorways and archways with a width of 6 feet or less, it's essential to install an appropriate T-molding over the control joint to accommodate regular expansion & contraction of the product between rooms. Additionally, any room that exceeds 50 feet in length or width needs a T-mold break. Remember to maintain a 1/2" gap on both sides of the T-mold "leg" to avoid creating a pinch point that will lead to buckling.
- 4. CarbonCore Laminate V1.0 requires an expansion gap of ½" from all vertical obstructions.
- 5. Prior to starting installation, loose lay several cartons of flooring to show your customer the full variation of the floor and ensure their satisfaction. Note: Installation of the material is considered acceptance of the flooring.
- 6. This product cannot be installed using a glue down or nailed methods. The only approved installation method is floating. Avoid attaching individual planks directly to the subfloor using mechanical fasteners or adhesives as this voids your warranty.
- 7. "URGENT" follow the installation literature and illustrations located below.
- 8. Never install Cabinets or kitchen Islands on top of CarbonCore Laminate V1.0. Always undercut door jambs after floor prep. Installing cabinets on the floor and or not undercutting door jambs before floor prep WILLvoid all applicable warranties offered Do not install cabinets or kitchen islands on top of High Performance Plank Flooring as this WILL void all applicable warranties offered by CarbonCore Floors
- 9. Use a small soft bristle brush to clean the tongue & groove joints prior to engaging the Vilange G5 Dry locking system to ensure no debris is trapped between the tongue and groove. Failure to remove milling debris can result in joint impingement, which can/will prevent proper engagement of the locking mechanism, and cause separation and/or peaking.
- 10. End joints within a 2 row span must be at least 6" above or below each other on the row. Failure to properly space end-joints will void warranty and can lead to locking system failure and plank separation.

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- 11.Exercise caution when installing wall moldings and transition strips to ensure they are not fastened through the flooring planks or pinning the floor. Do not apply caulking between the bottom of the baseboard or shoe trim molding and the floor's surface. Both situations can impinge on the floor's ability to naturally expand and contract, potentially leading to buckling and/or separation.
- 12. The flooring planks are best cut in the following ways: A guillotine lopper for end cuts to avoid excess dust, or <u>outdoors</u> with dust mitigation, a 12" chop 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 your saw blades should be carbide and should have a minimum of 90 cutting teeth.

13. Crawl Space: Per industry standards to foster proper airflow there MUST be at least 1½ vents for every 100 sq. ft. of crawl space area. In addition, the distance between the surface of the soil and the bottom of the joist must have a clearance of minimum 18" inches.

Sub-floor Preparation

Wood Subfloors

- 1. Subfloor must be dry and must not exceed 12% mc.
- **2.** Subfloors must be clean and free from all debris to the subfloors surface thereby creating a bump.
- 3. <u>Note:</u> Rubber, textured or cushioned backed resilient flooring and/or "sleeper" floor systems are not approved substrates.
- **4.** Subfloor must be flat to within ½"" in 6' in all directions. For areas that exceed 1/4" out of flat in 6'; sanding, grinding & floating (Use a portland based cementitious patching material) will be required to bring those areas into the required specification.

Note: When sanding or grinding we highly recommend using a dustless vacuum system. Note: Always check with the patching material manufacturer to ensure no other jobsite circumstances would be a contraindication in using their product. As well as always follow their installation instructions for their materials.

- 5. Ensure there are no screws and/or nails protruding from the subfloors surface.
- **6.** Wood subfloors installed directly on concrete slabs or installed over sleeper type systems are NOT suitable for installation of CarbonCore Laminate V1.0.
- 7. Plywood, OSB, chip/flake board, and/or particle board are suitable subfloor panels provided they are smooth, structurally sound, and free of deflection.

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Concrete Subfloor

- 1. The concrete slab must be dry, smooth, and free from contamination.
- **2.** The Subfloor must be flat to within $\frac{1}{4}$ " in 6' in all directions. For areas that exceed $\frac{1}{4}$ " out of flat in 6'; sanding, grinding & floating (Use a portland based cementitious patching material) will be required to bring those areas into the required specification.

<u>NOTE:</u> When sanding or grinding we highly recommend using a dustless vacuum system. <u>NOTE:</u> Always check with the patching material manufacturer to ensure no other jobsite circumstances would be a contraindication in using their product. As well as always follow their installation instructions for their materials.

- **3.** Fill pocket holes, cracks and feather out cracks with ledging using a Portland cement based patching material.
- **4.** The newly poured (Green) concrete slab usually takes 30-days per 1" of slab thickness for the batch water to work its way out of the slab. That means that a 4" thick slab will take approximately 120 days to dry to a moisture content level suitable for the installation of CarbonCore Laminate V1.0

Existing Floors

1. Marble, ceramic, granite and/or porcelain are suitable flooring surfaces that can be installed over as long as they can be made flat applying a cement-based embossing leveler/patch.

NOTE: Check with the cement-based embossing leveler/path manufacturer as to what product they suggest for such type applications.

- **2.** Resilient type floors must be firmly bonded to the subfloor. Note: Cushion-backed vinyl and floating vinyl floors are NOT suitable substrates.
- 3. Existing wood floors (i.e., solid and/or engineered) are Not suitable substrates

Before Installing Your Floor

- **1.** Plan your layout to allow for a 1/2" expansion space from all vertical obstructions
- **2.** Dry lay several cartons of flooring to get a feel for color and surface variations and to make sure the floor meets the end user's satisfaction. Claims for color, surface appearance, and grain variations cannot be accepted once the floor is installed.
- **3.** If a color coordinated molding is to be used, find and set aside flooring planks that best match the intended molding and make sure the selected planks are installed adjacent to the molding.

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Floor Installation

Required Tools

- Tape measure
- Black Sharpie pen
- Chalk line
- Razor knife
- Small bristle brush for cleaning debris from locking mechanism
- Miter saw/table saw/jig saw
- 1/2" wall spacers

NOTE: Never nail, staple, or glue planks to the subfloor.

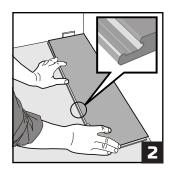
- 1. Roll out 2mm 2-in-1 roll-out EVA pad & vapor barrier. Ensure that the Vapor barrier side of the roll is facing down. Use the self adhering strips to ensure every row of pad's vapor barrier is overlapped by at least $1\frac{1}{2}$ ".
- **2.** Work from 3 to 5 cartons as this will produce a random color tone throughout the installation.
- **3.** Snap a chalk line away from the starting wall the width of a plank plus add an additional 1/2" for expansion.
- **4.** For the first row remove the tongue on all long side joints, along with the narrow side of the first plank only. Next, starting from the top left corner of the room, align the plank edge onto the chalk line with the tongue side (which you just removed) facing the wall leaving a 1/2" expansion space. Next, refer to the step-by-step 5G installation instructions for laminate, which are located below.
- 5. <u>NOTE:</u> As a rule, the use of tapping blocks and pull bars are not recommended as they can damage the 5G Dry tongue and groove locking system. In addition, do not tap on the edge of the planks as this can/will damage the inner locking system preventing the planks seams from full and complete engagement.
- **6.** For the remaining rows repeat the steps used to install the second row making sure that you continually check that your rows are straight with no gaps between the side and end-joints and that you maintain a minimum of 1/2" expansion around all vertical obstructions.
- 7. The last row may need to be cut lengthwise which can be achieved by use of a table saw.
- 8. Install base moldings and doorway transition strips last.

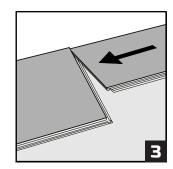


9. If you have any questions before or while installing the floor, **Email CarbonCore Floors Tech Desk at tech@carboncorefloor.com**

Floating Floor Installation







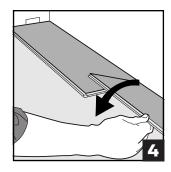
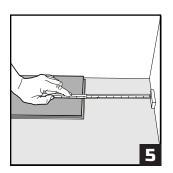


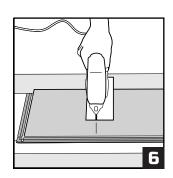
Image 1: Door frames can be removed and raised, but it's usually easier to cut them. Use a loose plank as a template and saw off the excess. Ensure that the floor is not pressed between the subfloor and the door frame.

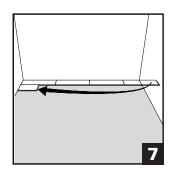
Image 2: Now it's time to lay the first plank in the first row. Start in a left corner and lay a plank with the tongue side facing the wall. Now insert a wedge between the wall and the plank's left short side so there is a gap at least 1/2" (8-10mm) wide.

Image 3: Position the second plank to the right shirt side of the plank.

Image 4: Fold down the second plank - press down firmly and listen for the click. The click means it has locked into place.







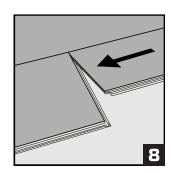


Image 5: Continue installing the first row. When you are close to the wall on the right side, place a wedge at the wall and measure the length to determine the size of the row's last plank.

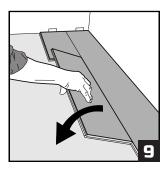
Image 6: Cut the row's last plank to size. If you are using a jigsaw, cut it face down. If you are using a hand saw, cut it face up.

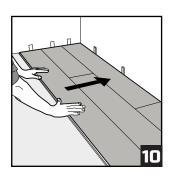
Image 7: To begin the second row, use the remainder of the cut plank you used to finish the first row.

Image 8: Position the second plank to the right short side of the first plank.

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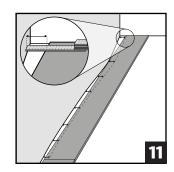
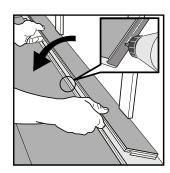


Image 9: Folding down the second plank, making sure it's positioned tightly to the first plank - press down firmly and listen for the click. The click means it locked in place.

Image 10: Continue to install the row as before. When you have completed 2-3 rows insert wedges between the wall and the first row so there is a gab at least 1/2" (8-10mm) wide.

Image 11: The first and last row may need to be adjusted if the wall is uneven. To achieve this, trace the wall profile to the first or last plank. Cut and install.





When Angling Is Not Possible

Remove the locking element/hook as shown in the diagram. Use white PVAc glue to connect the planks. Press or place wedges between the glued strip and the wall.

Reverse Installation



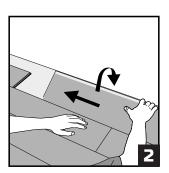


Image 1: When installing in reverse, start from the left. Angle the long side grove into position at the tongue of the adjacent plank from the previous row and fold down to lock into place.

Image 2: Angle the long side grove of the second plank into position at the tongue of the adjacent plank from the previous row and fold down. Now slide the second plank to the left to position it to the right short side of the first plank. Press down firmly and listen for the click that means it's locked in place.



Radiant Heat

CarbonCore Laminate V1.0 is approved for installations over "hydronic" radiant heat type systems only. Flooring can be installed over ½" embedded (hydronic type) radiant heat type system. Note: Surface applied heating mats or electrical wires are not an acceptable form of radiant heat. Maximum surface temperature of the High Performance Flooring CANNOT exceed 85 F. Use of an in-floor temperature sensor is recommended to avoid overheating which can/will result in permanent damage to the flooring

The Following Guidelines Apply

NOTE: CarbonCore Laminate is designed to have increased resistance to moisture and is much more dimensionally stable compared to solid and/or engineered wood flooring products. However, since we incorporate the use of wood fiber into our CarbonCore Laminate V1.0, the flooring is considered to be of a "hygroscopic" nature which simply means it can/will absorb and/or release moisture due to the following influences; Changes in temperature and relative humidity outside the specified range for optimal dimensional stability, improper maintenance, lack of or insufficient moisture mitigation system(s), and/or installing the flooring over a wet substrate/subfloor are likely sources of unwanted moisture which can be absorbed into the flooring thereby resulting in expansion of the individual planks (the floor as a whole), which can result in cupping and/or buckling of the floor which if were to occur, would not be covered under CarbonCore Floors limited warranty program.

3-Season Rooms

CarbonCore Laminate cannot be installed in 3-Season Rooms.

Maintaing And Protecting Your Floor

- 1. 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.
- 2. Proper floor protectors must be used under any furniture which is regularly moved, or which is heavy and may dent the floor. Note: Felt and/or indoor-outdoor carpet type protectors can be purchased at your local big box store or can be purchased online.
- **3.** Non-staining, non-rubber backed protective mats must be used under rolling office chairs, and any rolling furniture and/or carts need to have wide, flat wheels.
- **4.** Area rugs cannot include rubber backing and/or a rough textured backing, as the chemistry in some rubber backing can bleed into the surface of the protective coating leaving a stain that is impossible to remove. As for rough textured backing, it can/will scratch the floor's surface.

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<u>NOTE:</u> We recommend reaching out to your local flooring retail store for purchasing rug pads.

- 5. Protective walk off mats should be used at all exterior doors.
- **6.** Oil and petroleum-based driveways can stain the surface of the floor. Do not track petroleum-based products onto the floor.
- **7.** Sweep or vacuum the floor regularly to remove dirt/grit. Do not use a vacuum with a revolving beater bar, floor scrubbers, steam cleaners, jet mops, buffers, or like type products.

Note: We recommend using a canister type vacuum with a China bristle attachment such as a Miele canister vacuum as the firm rubber wheels will not mar the floors surface.

8. Protect the floor from direct sunlight by using appropriate window coverings and/or UV tinted film.

Note: Before installing UV tinted film on double or triple pane windows, consult the window manufacturer for guidance and approval.

9. CarbonCore Laminate should be vacuumed once a week (or as needed), dust mop once or twice a week (or as needed), damp mop clean up to once a week or less using distilled water or any PH neutral cleaner (sprayed onto a microfiber cleaning mop).

<u>NOTE:</u> Never use tap water to clean your flooring. Most tap water includes minerals that can accumulate on the floor's surface, leading to a buildup over time that can make the floor appear dull and dingy.

<u>NOTE:</u> Damage resulting from the use of non-recommended flooring cleaners, excessively wet maintenance or from using detergents, abrasive cleaners, soaps of any kind, waxes or polish are not covered by the products limited warranty.