

ComCORK™ - Installation Instructions

IMPORTANT: COMPLETELY READ ALL OF THE FOLLOWING GUIDELINES, AS THEY ARE PROVIDED TO HELP WITH THE INSTALLATION PROCESS. INSTALLATIONS SHOULD BE DONE BY A PROFESSIONAL FLOORING INSTALLER WHO HAS INSTALLED THIS MATERIAL BEFORE. THE INSTALLER SHOULD ADHERE TO THE INFORMATION AND GUIDELINES PROVIDED BY THE NATIONAL WOOD FLOORING ASSOCIATION (WWW.NWFA.ORG; 800-422-4556). WHERE THESE INSTRUCTIONS DIFFER FROM THE NWFA'S, THESE GUIDELINES TAKE PRECEDENCE. IF YOU HAVE ANY QUESTIONS OR CONCERNS, PLEASE CONTACT A SUSTAINABLE MATERIALS REPRESENTATIVE PRIOR TO STARTING THE INSTALLATION.

GENERAL INSTALLATION CONSIDERATIONS

Interior Installation sites: ComCORK® can be installed in interior settings, on, above, or below grade; however, it is unsuitable for saunas or persistently wet areas.

Water resistance: If you plan to install this flooring in areas where water exposure is possible, such as bathrooms or areas with frequent spillage, take additional precautions. Seal the joints around the walls and vertical fixtures with a polyurethane sealant or water-proof silicone caulk to prevent water from penetrating under the floor. Doing this will help avoid adhesive deterioration and the growth of fungus, mold, or unpleasant odors.

Avoid shortcuts: While there may be less expensive or quicker methods of subfloor preparation, it's essential not to take shortcuts. Cutting corners during subfloor preparation can lead to installation problems and failures. Proper preparation is vital to a long-lasting and successful installation.

Crawl space: The crawl space must be adequately prepared when installing ComCORK® flooring, either floating or glue-down. Improper vapor barriers installed in crawl spaces could result in an installation failure or compromised planks or tiles. Air vents must be open. Sustain is not responsible for failed installations caused by improperly prepared crawl spaces. For more information about proper crawl space requirements, go to: www.NWFA.org.

Transport, storage, and <u>ACCLIMATION</u>: Transport and store the cartons horizontally. Packed planks or tiles should be acclimated at the job site in a dry, well-ventilated area. Acclimating involves opening the packs of cork so that the tiles have access to air on all sides, so they achieve an equalized moisture/humidity level as the conditioned environment into which it will be installed (ie: HVAC running and operable). If the cork is not acclimated prior to installation, either gapping or expansion can occur. During acclimation and installation, dwelling mechanicals must be functioning to maintain the space as it will be when occupied. In most cases, this means keeping a temperature range from 18°C to 28°C (65°F to 82°F) and a relative humidity range from 35% to 65%. **NOTE:** expansion and/or contraction are not considered a product defect, and nor is it a warrantable claim.

Pre-Installation Inspection: ComCORK® shade variation is an inherent and attractive characteristic. To achieve the most pleasant blend of shades, shuffle the planks or tiles before installation. Natural products will vary in shading and color and are not considered a defect. Prior to installation, please inspect the tiles or planks in daylight for any visible faults or damage, and check if the subfloor and site conditions are in accordance with the specifications described within these instructions.

Expansion Requirements: ComCORK® when installed as a floating floor means that the planks should not be affixed to the subfloor, as they are designed to move after installation according to temperature and moisture changes in the environment, and this movement is expected. Using installation methods that restrict these movements, such as nailing, screwing, or improper glue-down methods, can lead to the failure of the flooring.

The skirting boards/moldings, such as baseboards or quarter round, cannot be pressed down tight to the flooring, restricting movement, and hindering free-floating. Remember, not only will the flooring float, but the building will expand and contract during seasonal changes. The thickness of a business card is a good idea between the moldings and flooring for better expansion capabilities. A 5mm (3/16") expansion gap is required when installing up to the walls and other vertical penetrations. Do not install any permanent and heavy structures like kitchen islands or cabinets on top of floating floors. Baseboards or moldings should cover a



minimum of 7mm (7/16") of the floor. For items such as pool tables or other heavy furniture, contact our technical department for guidance.

Transitions between two rooms with doorways less than 4' must have expansion moldings such as T-molds. Asymmetrical floor areas also require extra expansion gaps in floor areas. For large areas greater than 325 square meters (3500 sq ft) or with dimensions exceeding 18 m (60 feet) in either direction, a T-mold is required. These requirements can be avoided if ComCORK® is installed as a glue-down (see glue-down installations instructions).

Installation with excessive heat or direct sunlight: ComCORK® should be protected from heat and sunlight by using curtains and/or blinds. In areas that will be exposed to excessive heat (\geq 45°C/110°F) or direct sunlight, the whole area must be glued to the subfloor with the use of an approved adhesive. Transition profiles must separate floating areas and glued areas.

NOTE: Sustainable Materials cannot be held responsible for claims associated with improper subfloors, improper applications, adhesives, varnishes, and the use of maintenance products not recommended or detectable defects verifiable prior to installation.

SUBFLOOR PREPARATION

Surface condition: Ensure that the subfloor's surface is in good condition. It should be sound, clean, and free of contaminants that could hinder the adhesive bond. Common contaminants to watch out for include oil, grease, wax, dirt, asphalt, curing compounds, latex, gypsum, dust, paint, or other substances that might act as bond breakers.

LEVELING AND REPAIR: All subfloors must be even, flat, level, and dry. Variations should not exceed 5mm in 2m (3/16" in 6 ½'). It is possible to use ComCORK® in other areas like bathrooms or areas where spillages frequently occur, providing the expansion gaps are filled with a flexible polyurethane sealant caulk to prevent water seeping between the flooring and subfloor, creating an atmosphere for mold and mildew to propagate. ComCORK® floors are suitable for indoor use only. If the subfloor has any unevenness, crack, or imperfections, use a suitable leveling compound to level, smooth, or repair the surface. It's essential to address any subfloor irregularities before proceeding with the installation. Remember that the leveling compound's strength depends on the surface quality to which it is bonded.

Subfloor moisture requirements: Subfloors must be permanently dry, especially on concrete substrates without radiant heat.

SUBFLOOR TYPES:

General subfloor considerations: Substrates intended to be covered with ComCORK® need to be dry (and continually dry), which depending on the subfloor you are installing upon, you will likely need to isolate it from the flooring material being installed. This could involve sealing the substrate using a 100% mitigating sealer, installing a minimum 6-mil PE over the slab, or using a 100% mitigating adhesive (but this assumes you will be gluing the material down – which these Installation Instructions do not cover). Installing a wooden subfloor over a basement depends on the basement's condition and the moisture that may permeate upwards into the flooring. Installing a wooden subfloor over a crawl space is dependent on the proper preparation of that crawl space. Sustainable Materials is not responsible for issues below the flooring that affect our products.

Wooden subfloors: Wood subfloors should have any existing flooring removed. All wooden subfloors must be APA-rated, including a three or five-ply underlayment if it is installed over the subfloor. The preparation methods may vary depending on the type of subfloor you have. No signs of mold and/ or insect infestations should be visible. Make certain that any APA-rated subfloors are mechanically fixed (screwed or proper ring-shanked nails) and are stable, showing no movement at any time. At the same time, the joints between the panels are even and firmly closed. Existing engineered or solid



wooden planks must be free of tension. Any visible open seams and /or height differences between panels must be entirely removed.

Existing 'covered' subfloors: ComCORK® can be installed on top of most hard surfaces, such as resilient floor coverings and ceramic tiles, which are sufficiently affixed, completely leveled, and have no loose areas. ComCORK® must not be installed over carpet or other soft flooring. Existing wood planks engineered wood boards, OSB, or any wooden subfloor must not be covered with a PE membrane acting as a vapor barrier. The area below the floor should also be sufficiently ventilated. Crawl spaces must be properly treated as per NWFA guidelines. The moisture of the subfloor must not exceed 10% moisture content.

ComCORK® installation over ceramic tile floors: The maximum joint should not be wider than 2mm (1/16") and 1mm (3/64") in depth. If this is not the case, or if there is any embossing, skim-coat the grout lines and tile with a floor leveler.

Concrete subfloors: without radiant heat must have an RH of 75% or less. All concrete subfloors, whether new construction or existing must have a 6 mil PE installed prior to installation. Overlap each sheet with a minimum of 4 inches and secure with duct tape.

The perimeter of 6 mil PE must extend up any vertical penetration not less than 2 inches, including walls. This includes ceramic over concrete and stone floors. Testing is required for all concrete or gypcrete flooring. ASTM F2170 testing using in-situ probes must be in accordance with the ASTM requirements of three tests for the first 1000 square feet and one for every 1000 square feet after that. Calcium chloride moisture tests are not as effective in analyzing a concrete slab's moisture content except at the concrete's surface. The use of Calcium chloride moisture tests is to ensure that moisture emissions levels must be less than 3 lbs/1000 sf in a 24h-hour period. Substrates with higher than 75% RH may be at risk of hydrostatic pressure.

Subfloor Type	Moisture content (MC%) - Heated	Non-heated
Concrete	1.5 or ≤ 75% RH	2.0 or ≤ 75% RH
Anhydrite	0.3 or ≤ 75% RH	0.5 or ≤ 75% RH

**Test results of a substrate may vary over time, resulting in excessive moisture developing within the substrate. Also, it is unknown if a minimum PE was properly installed under the concrete slab per IBC codes. Old concrete may have been poured before the IBC codes were in effect, requiring a minimum of 10 or 12mil PE over the ground. This being the case, old concrete slabs may have significant moisture content variations throughout the year, and mitigation steps should be preemptively made. **

Sustainable Materials is not responsible for any flooring issues tied to subfloor preparation, and lack thereof.

Radiant-Heated Subfloors:

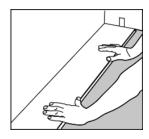
ComCORK® can be laid in combination with floor heating and/or cooling systems. For heating or cooling systems, follow the instructions supplied by the system manufacturer/contractor, or contact your supplier. To avoid problems with functioning and durability during the construction phase, follow the norms and rules concerning installation.

Very important for subfloor heating systems: please consider that drying a heated subfloor must be done by turning the heating on/off with a pause before installing the floor. After that, you can begin the heating phase. The beginning of the heating phase in concrete subfloors is to be made not before 21 days after the complete curing of the substrate. The heating phase must begin with a



running temperature of 25°C (78°F) for three days. The subfloor should be in place and cured for at least 60-90 days. The temperature should then be increased each day until the maximum temperature is allowed according to the manufacturer's system. Please note, do not increase, or decrease temperatures more than 5 °F per 24-hour period. This maximum value should be kept for at least 72 hours and maintained for 5-7 days without turning it off. The decrease of temperature is made by reducing it gradually every day until 18°C (65°F) on the surface is achieved. It should be kept for 3 days after finishing the installation (for floating floors). Then the temperature should be increased slowly to a maximum of 28°C (82°F) on the subfloor surface. Remember that rugs or mats placed on top of the floor may function as a heat accumulator and increase the floor's surface temperature. Maximum floor surface temperature should not exceed 25°C (78°F). Caution should be taken when electric heat vs. hydronic heat is installed. Electric radiant heat will increase temperatures more quickly than hydronic, resulting in quicker heating time. Increasing the flooring to 5°F in a 24-period may only take one hour, which could result in damaging the dimensional stability of the flooring.

INSTALLATION PROCEDURE and TIPS



Turn the tongue side of the plank facing the wall. Maintain a gap of 5mm (0.2") on the short side.

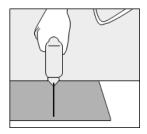


Hold the next plank against the first at an angle to the first one and lay it flat on the floor.

Complete the first row in the same way.

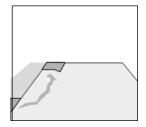


Cut the final plank of the first row to the correct length. Place the final plank face down and the short side without the locking strip towards the wall. The distance to the wall should be 5mm (0.2").



Mark where the plank is to be cut and place it on the work surface and cut to size using any kind of saw.



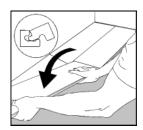


Make sure that the long sides of the planks make a straight line. Use the cut piece of the plank from the previous row to start the next one. However, it must be at least 30cm (12") long. If the piece is too short, start with a new board and cut it in half. Always ensure that the end joints are staggered at least 30cm (12").



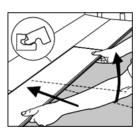
Place the first plank of the new row with the tongue side at an angle against the groove side of the plank in the previous row.

Press forward and lay it flat at the same time.



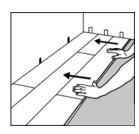
Place the short end of the plank at an angle against the previous installed plank and fold down.

Ensure that the plank is positioned on the integral locking strip of the plank in the previous row.

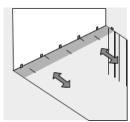


Lift the plank (together with the previous one laid in the same row) slightly up (about 30mm (1.2"), push it against the row in front and then put it down.

Tip: This movement requires some gentle adjustments on the pressing angle.



Adjust the distance to the wall to 5mm (0.2") when three rows are complete.

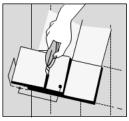


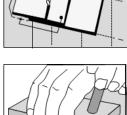
Proceed with the installation as described above until reaching the opposite wall.

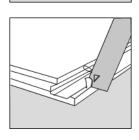
Measure and cut the planks in the last row to the correct size.

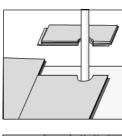
Allow for a 5mm (0.2") distance to the wall. No plank should be less than 5cm (2") wide.















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The last and first plank can be cut in the correct width. Place the last plank on top of the second to last plank.

Mark the plank with the help of a piece of plank without locking the strip.

Allow for 5mm (0.2") distance to the wall for the expansion gap.

Sometimes the first row must be cut to match an uneven wall.

Transfer the shape of the wall to the planks. Do not forget to allow 5 mm (0.2") to 10 mm (0.4") for the expansion gap.

The width of the first row of planks should be equal or bigger than 5cm (2").

If you cannot angle the tile under the door frame or a low fitted radiator cut away the locking edge and apply glue (PVA D3 or Supper glue) on the groove and slide the plank into the right position.

Vertical Obstructions

Drill the required holes in the planks, making a hole on the plank 10mm (0.4") bigger than the pipe diameter.

If a door frame needs to be cut, use a piece of plank to obtain the correct height.

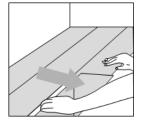
Saw the door frame and architrave to the required height allowing for 2mm (0.08") of space to the planks.

The planks can be laid from all directions. This makes it easier to plan the installation e.g. around doors.

Uninstalling Planks

To uninstall the floor, lift the planks (long side) a few centimeters and then slide the planks on the short side.





Do not bend connected planks backwards as this will damage it.

Care and Maintenance Procedures

(both Installer and Owner Responsibility):

After Installation (General):

- Once the floor is installed, it is not recommended to place carpets on the floor for the first few months. If the floor has lighter colors from rugs or other coverings, it will change color quickly when they are exposed to daylight.
- Use protective pads on the base of furniture legs and protective mats under caster chairs with hard wheels.
- Always use a protective mat at entrances.

Floor Treatment after Installation:

- Cleaning the floor before use is recommended use a hardwood floor cleaner for lacquered floors, such as Bona Hardwood Floor Cleaner.
- Important Note: Always use a detergent specifically for UV acrylic finishes, as normal soap can leave a fat residue on the floor surface, which may be difficult to clean off.
- <u>Important Note</u>: In commercial and high-traffic areas, an additional topcoat would be recommended.
- Clean the floor and make sure it is dust-free.

Daily cleaning / Regular cleaning:

- For daily cleaning use mainly dry methods, such as vacuum cleaner, dust mop or microfiber mop. Stains/dirt can easily be removed by using a magic melamine sponge.
- For regular cleaning, clean the surface with a microfiber cleaning pad and a Hardwood floor cleaner for lacquered wood floors (ie: Bona Hardwood Floor Cleaner) to clean the floor.

Maintenance

- When needed, a hardwood floor 'refresher' for lacquered wooden floors, such as Bona Hardwood Floor Refresher, can be used to freshen up the surface and remove microscratches. A floor refresher is suitable for restoring worn lacquer (giving a protective layer for easier cleaning and maintenance), but it is not a substitute for a refinish. Please note that applying a 'refresher' will likely change the sheen level and/or clarity of the finish, and it is recommended to test in a non-conspicuous area to verify suitability of results prior to doing the entire surface area.
- ComCORK® can be 'refinished', which is a process of recoating the floor with a protective coating like what came on the material originally. This should only be attempted by professional flooring installers. We typically recommend using Bona Kemi Traffic for the topcoat, which is applied via a multi-step preparation and application process. If you would like specific recommendations for this, contact your Sustainable Materials representative, or Bona Kemi directly (www.bona.com).

If you have any questions or need additional information, contact your ComCORK® representative, or Sustainable Materials directly.