

ComCORK™ - Glue Down 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 FLOORING REPRESENTATIVE PRIOR TO STARTING THE INSTALLATION.

CRITICAL COMPONENTS OF THE INSTALLATION PROCESS/PROCEDURE:

- Effective Subfloor preparation (and applicable site conditions) is critical.
- Follow the Installation Instructions for the flooring, and the independent instructions from the 'adhesive manufacturer', inclusive of all 'warnings', tips, recommendations, and guidance.

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: 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 TYPES: 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. Gypcrete MUST be sealed and follow the recommended preparation procedures for that specific subfloor material.

INTERIOR INSTALLATION SITES: ComCORK as a Glue-Down 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 spillages, 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 SHOURCUTS: 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.



ALKALINE TESTING: In addition to moisture testing, consider testing the concrete for alkalinity, especially on newly poured slabs. Alkaline deposits on concrete can negatively affect the adhesive bond. Use pH testing paper to check the concrete's pH level. If the pH reading is ten or higher, neutralize the alkalinity before starting installation. Contact the adhesive company for instructions.

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.

SUBFLOOR MOISTURE REQUIREMENTS: Subfloors must be permanently dry, especially on concrete substrates without radiant heat.

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 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.

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

Substrates with higher than 75% RH may be at risk of hydrostatic pressure. ComCORK is not responsible for issues under its flooring.

GLUE-DOWN INSTALLATION AND VAPOR-PROOF SUBFLOORS: Substrates intended to be covered with ComCORK as a Glue-Down installation (vapor-proof) require either sealing the substrate using a 100% mitigating sealer, installing a minimum 6-mil PE over the slab, or using a 100% mitigating adhesive. Installing on 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. ComCORK is not responsible for issues below the flooring that affect our products.

TRANSPORT, STORAGE, AND ACCLIMATION:

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 is not considered a product defect, and nor is it a warrantable claim. For additional general information on acclimating, please see the acclimating resource on this page: https://www.sustainableflooring.com/acclimating/.

ADHESIVE:

The adhesive used must be appropriate for the chosen installation. Over concrete, it is unknown if there is a minimum of a 12 mil PE under the concrete as is required by IBC codes or if it may have been damaged or not adequately seamed, allowing vapor to permeate from the ground. For these reasons, we require a mitigating adhesive rated at 100% vapor resistant. Many adhesives may be used over concrete but may only resist vapor as low as 70%. Never use a mitigating adhesive on a wooden subfloor. ALWAYS follow the adhesive manufacturer's installation instructions.

FOLLOW THE MANUFACTURER'S GUIDELINES: Always follow the adhesive manufacturer's guidelines and recommendations for installing ComCORK as a Glue-Down flooring.

RECOMMENDED ADHESIVES: (listed based on the subfloor 'composition' in general terms).

For **WOOD** subfloors:

Taylor Pinnacle

For **CONCRETE** subfloors:

Taylor Resolute

NOTE: it is up to the installer to ensure the proper adhesive is selected based on the application and site conditions. Adhesion or the use of the improper adhesive is not considered a product defect, and nor is it a warrantable claim.

FLOOR TYPES: If you have any doubts about what constitutes the right adhesive to use for the right subfloor type and/or the condition of that subfloor, always *contact the adhesive manufacturer* before installing or procuring the adhesive. The choice of adhesive for a specific application or site is outside the realm of the product warranty related to the ComCORK flooring.



FLOATING FLOOR WARNING:

ComCORK can also be installed via the 'floating' method, but that has separate instructions (refer to 'ComCORK – Floating Installation Instructions'). ComCORK floating floors are designed to move after installation according to temperature and moisture changes in the environment, and this 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 use of a Glue-Down installation will not eliminate the risks of failure, and Sustainable Flooring will not provide any guarantees or warranties for floors improperly installed this way. If an adhesive fails, a claim MUST be made with that adhesive manufacturer.

RADIANT HEAT Applications:

When installing ComCORK as a Glue-Down flooring over a heated subfloor, it's crucial to follow specific guidelines to ensure the proper functioning of the underfloor heating system and the longevity of your flooring. Subfloor temperature should not exceed 28°C (82°F) when using ComCORK as a Glue-Down over heated floors. This temperature limit is essential to prevent damage to the flooring and maintain its performance. Ensure all hot water pipes and electrical heating elements are embedded in the concrete subfloor, following the appropriate building codes and regulations. The thickness of the screed for such systems ranges from 45-64mm (2 to 3 inches).

DRYING PROCESS: Proper drying of the heated subfloor is essential before installing the flooring. The concrete must be heated gradually before installation. Be aware that rugs or mats placed on the floor can act as heat accumulators and raise the floor surface, which should not exceed the recommended 20- 22°C (82°F).

HEATING PHASE: the heating phase of concrete subfloors should begin no earlier than 21 days after the complete curing of the substrate. Start 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 before the heating phase begins.

WOODEN SUBFLOORS: We <u>do not</u> recommend installing over radiant heat in a wooden subfloor due to the fluctuation of temperatures that could cause expansion or contraction of the subfloor, resulting in an adhesive failure.

TEMPERATURE INCREASE/DECREASE: Gradually increase the temperature each day by no more than five degrees in a 24-hour period. Please be aware that electric heating systems may increase the temperature within an hour. Any increase within the 24-hour period should not exceed more than two degrees over a four-hour period. This allows for a slow increase in temperature to avoid compromising the dimensional stability of the flooring.

POST-INSTALLATION HEATING: After the flooring is installed, slowly increase the temperature to a normal level, not exceeding five degrees within a 24-hour period and not more than two degrees within a four-hour time period.



INSTALLATION PROCESS:

(follow **NWFA** guidelines for glue down planks, with the caveats referenced herein for additional required guidance)

APPLY ADEHESIVE: Follow adhesive manufacturers' recommendations and Installation Instructions to ensure their method and precautions are carefully addressed.

INSTALL PLANKS: Start with 'tongue' side facing the wall.

EQUAL OR BIGGER WIDTH FOR THE FIRST AND LAST ROWS: Ensure that the widths of the planks in the first and last rows are equal to or larger than 5cm (2 inches) of the plank or tile. Doing this ensures a balanced and visually appealing layout.

EXPANSION GAP REQUIREMENTS: Floor covering may expand or contract, as may the buildings. Leaving the same proper expansion gaps as a floating installation is essential. Doing this will eliminate pressure along planks around the perimeter.

EXPANSION JOINTS: Flooring must not be glued over any expansion joints. Doing so may tear or damage the flooring. ComCORK is not responsible for damage due to expansion joints. As the NWFA installation guidelines indicate, flooring that is secured to a slab should not bridge moving joints without allowing for a breaking point. When concrete decides to move, it is going to move. Expansion cracks in concrete have a purpose. These joints are placed or cut into the concrete to encourage cracking to follow an orderly, predetermined pattern. There are several types of cracks to be aware of when installing over a concrete slab, including Construction (or cold joints), Control (or Contraction joints), Isolation joints, Acoustic joints, and expansion joints. During installation, this crack must be honored. When gluing down flooring, the safest way to honor these cracks is to use specific bridging products made by adhesive manufacturers to help isolate the flooring from the slab in those areas.



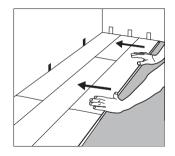
Turn the tongue side of the plank facing the wall



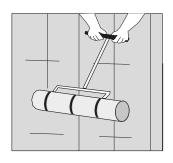
Hold the next plank against the first at an angle to the first one and lay it flat on the floor.



Complete the first row in the same way.



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



The floor must be rolled with a 50 Kg roller, every 30 minutes, and upon completion of installation, to ensure that the tiles are firmly bedded into the adhesive.

After-Install Maintenance and 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 covering, 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.
- o <u>Important Note:</u> 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.
- o <u>Important Note</u>: In commercial and high-traffic areas, an additional topcoat would be recommended.
- Clean the floor and make sure it 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 Flooring representative, or Bona Kemi directly (www.bona.com).

If you have any questions or need additional information, contact your ComCORK representative, or Sustainable Flooring directly:

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