

INSTALLATION GUIDE

RUBBER FLOORING

Revision 1

I. General

- A.** This installation guide applies to the following EcoFloors products.
 - 1. Sustain Cork Rubber
- B.** Inspection - Upon receipt of order, immediately inspect to confirm material received is correct.
- C.** Storage. Store in original packing on shipping pallets. If material will be stored for long periods, remove strapping if present. Do not stack pallets.
- D.** Material Storage Climate – Material shall be stored in a cool, dry, enclosed space with a minimum temperature of 45°F. Prior to installation, verify job site conditions are maintained between 65°F and 75°F with a relative humidity between 45% and 65%. These conditions must be maintained for 72 hours prior to, during and 72 hours after installation. Temporary heating may not be used during acclimation or installation.

II. Sub-Floor Preparation

Proper sub-floor preparation is critical. All guidelines contained in these instructions must be followed to ensure a successful floor covering installation. Should you have any questions regarding sub-floor preparation, contact EcoFloors.

A. General Information & Requirements for All Sub-Floors

- 1. EcoFloors products must be installed on a subfloor that is dry, clean, smooth and structurally sound. The sub-floor must be free of contaminants such as paint, oil, wax, mold, adhesive residues, sealers or any other materials that may interfere with adhesive bonding. Check for moisture content by hygrometer to BRANZ BU 330 and do not commence laying resilient flooring until readings for the whole area show 75% relative humidity or less.
- 2. Prior to installation an adhesive bond test must be performed by gluing four 30cm x 30cm pieces of floor covering to the sub-floor. Allow adhesive to cure 24 hours. If bond is sufficient, material will be laying flat and it will be extremely difficult or impossible to remove by hand.
- 3. Existing flooring should be removed or covered with 10mm or 12mm plywood. If product must be installed over existing flooring material, contact EcoFloors for specific instructions. *Installer accepts any and all liability for issues related to installation over existing floor coverings including but not limited to adhesive problems and/or delamination.*

- 4. For best results, sub-floors should be level to within 3mm in 3m and shall be patched or skim coated with a hard setting underlayment compound to ensure substrate is completely smooth. EcoFloors recommends Durabond Ultra Finish, Ardex SDF, Durabond 83P, Ardex K15 or other equal feather finish and self leveling products. Products with a minimum compressive strength of 3,000 psi are required. Do not apply patching material over existing adhesives. EcoFloors will not accept claims submitted on floors where patching materials have been applied over adhesive residue. After patching or skimming is complete, floor must be sanded or scraped to remove any trowel marks or inconsistencies which may telegraph through the flooring material. Follow manufacturers guidelines for product use. Gypsum products with a compressive strength of less than 3,000 psi may not be used. EcoFloors cautions against the use of gypsum based products even over 3,000 psi and requires a bond test prior to installation.

A. Preparation of Wood Sub-Floors

- 1) EcoFloors floor covering products may be installed over 10mm or greater A/C grade plywood or underlayment board.
- 2) Wood sub-floors must have a cross ventilated below with a minimum of 45.7mm between the ground and the bottom of the joists. Bare ground should be covered with plastic polyethylene moisture barrier.
- 3) EcoFloors products are not approved for installation over panel underlayments such as Masonite, luan, particle board, OSB, cementitious underlayment panel, wood underlayment with knots or coated wood.
- 4) Follow manufacturer's instructions for sub-floor installation regarding fastening pattern and joint spacing. Use suitable screws or ring shank nails. Do Not use drywall screws.
- 5) Once installed, patch subfloor with cementitious material.

B. Preparation of Concrete Sub-Floors

NEW CONCRETE

Clear substrate of debris, clean off surface contamination and carry out surface repairs using a proprietary levelling compound. Carefully feather out at perimeters of repaired areas. Grind level, then vacuum to remove all dust. Check for moisture content by hygrometer to BRANZ BU 330 and do not

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commence laying vinyl until readings for the whole area show 75% relative humidity or less.

EXISTING CONCRETE

Strip off existing floor coverings, adhesive and surface contaminants. Ensure concrete is dry and if in doubt check for moisture content by hygrometer to BRANZ BU 330. Do not commence laying vinyl until readings for the whole area show 75% relative humidity or less. Carry out minor repairs using a cement-based levelling compound, carefully feathered out at all perimeters of repaired areas. Grind level, then vacuum to remove all dust.

C. Radiant Heated Sub-Floors – Concrete and Wood

- a. Lightweight concrete such as gypcrete or other gypsum based products are commonly used with radiant systems and may have an insufficient compressive strength. Concrete sub-floors must have a compressive strength greater than 3000 PSI and must be dust free. If after cleaning, a white dust is present when you wipe the floor it is most likely of insufficient compressive strength. Gypsum products with a compressive strength of less than 3,000 psi may not be used. EcoFloors cautions against the use of gypsum based products even over 3,000 psi and requires a bond test prior to installation.
- b. Only in-slab or below sub-floor radiant heating systems are compatible with EcoFloors materials. Do not install product over mat type systems.
- c. Prior to sub-floor preparation, heating system must be activated to maximum temperature for a minimum of 3 days. Then reduce heat to room temperature, 5°F per day, until it is reached. Then shut off system prior to sub-floor preparation and installation. Install once sub-floor reaches room temperature. Re-activate system no less than 72 hours after installation and increase temperature no more than 5°F per day until reaching normal temperature. Temperature of sub-floor shall not exceed 85°F at any time.
- d. If acclimation and general use is not per instruction, slight gaps may appear at seams. Urgent care is required during installation and initial use to limit the chances of such occurrence which is not warranted.

B. Metal Substrates

- a. Remove rust and other contaminants by sanding, scraping, etc.

- b. Apply primer such as Sherwin Williams Kromik according to manufacturers' instructions.
- c. Be certain to perform adhesion test to verify compatibility.
- d. Install product using Adesilex G19 (Two part epoxy).

C. Existing Flooring as a Substrate

- a. EcoFloors products are typically only recommended for installation on the sub-floors listed above. In some situations however, it may be desired to install over existing flooring material. Because the condition and properties of the existing flooring and adhesion are unknown, this process can be risky and any claims as a result are not covered by warranty unless otherwise specified in writing by EcoFloors.
- b. Installation without the use of an embossing leveler (where required), over flooring that has not been stripped of waxes or finishes or installation over degraded materials will most certainly result in problems.
- c. As with all installations, an adhesion test is required.
- d. Contact EcoFloors technical services to review any specific project where this type of installation is planned, prior to commencement.

III. Floor Covering Installation

A. Pre-Installation Checks

- a. Acclimation – Flooring, adhesives and finishes must be acclimated to jobsite at least 24 hours prior to installation.
- b. Job Site Conditions – Job site conditions must be maintained between 65°F and 75°F with a relative humidity between 45% and 65% for 72 hours prior to, during and 72 hours after installation. Temporary heating may not be used during acclimation or installation.
- c. Sub-Floor – Verify sub-floor has been prepared according to Section II and is dry, level and dust free.
- d. Patching/Skim Coat – Ensure that the correct Durabond, Ardex or equal cementitious patching compound was used and is properly cured. If sub-floor or patching material is easily scratched or is dusty even after being cleaned, installation cannot occur. Contact EcoFloors for assistance.
- e. Material Verification – Prior to installation, randomly remove a few pieces of material from different packages and compare to submittal sample to ensure client is satisfied with color,

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shade and/or shade variation. Additionally, verify squareness, thickness and all other visual aspects to verify acceptance. If the material does not meet client or contractor expectations, contact EcoFloors immediately. Installation signifies acceptance of material in all visual aspects. After the product is installed, the EcoFloors warranty does not cover incorrectly shipped or use of incorrect materials regardless of the situation. Additionally the EcoFloors warranty does not cover visual defects including pattern, color, shade variance, squareness or thickness after the product is installed.

- f. Adhesive Selection and Use – Select appropriate adhesive based upon EcoFloors recommendations, type of application and site conditions. Adhesives shall be used by qualified, experienced professionals only.
- g. Adhesion Test – In order to verify adhesion test according to instruction in section II 1 B. If material is not sufficiently adhered after 24 hours and can be easily pulled up, contact EcoFloors. DO NOT proceed with installation.

B. Layout of floor

1. Mark center and other lines according to specified pattern. Layout must be done such that no sections less than 1/4 of a tile are required. Use chalk to mark installation lines, however it is recommended to re-mark chalk lines with pencil or marker as adhesive MUST be troweled over the line to ensure 100% adhesive coverage particularly along the edge of the tiles.
2. Install in either an ashlar (staggered joint) pattern or corner to corner.

C. Adhesive Selection

1. EcoFloors recommends the use of one of the following types of adhesive.

Adhesives

ULTRABOND ECO V4 SP FIBER 16kg pail

UZIN KE2000 S

UZIN KE 66

Bathroom Laundry or external applications

Adesilex G19 (Two part epoxy) 5kg pail

Note: Where high sub-floor moisture and/or pH levels are found, appropriate moisture barriers must be applied to bring sub-floor within the

specified moisture emissions or RH range. Sub-Floors must test as noted above AFTER application of moisture barrier prior to installation.

2. Prior to installation of materials, perform sub-floor moisture and pH tests. Selection of appropriate adhesives can be made only after test results are known in conjunction with the type of use the flooring will experience (heavy rolling loads, surface moisture, etc.).

D. Installation in Normal Applications Using Acrylic Adhesive

1. Refer to Table 2 to verify the appropriate adhesive is used for the installation.
2. Note that due to typical applications of sport products, the use of Mapei adhesive is required to ensure proper adhesion even under heavy duty use. Acrylic adhesive is not recommended for these applications.
3. Materials may be cut using a sharp utility knife and straight edge.
4. Installer may work off of previously installed material, however a knee board must be used to ensure that indentations in the uncured adhesive do not occur. Caution must be taken to ensure tiles do not slide underfoot.
5. Using the recommended trowel, apply adhesive in a uniform, semi-circle pattern. Do not over trowel adhesive (which gradually removes it). Ensure that there are no lumps or ridges created by the leading trowel tip. Imperfect troweling can telegraph through the floor. Apply adhesive to an area which can be installed in approximately 20-30 minutes.
6. Once troweled onto floor, adhesive should be left open for 5-10 minutes. At that time, you may begin to install material and should have 20-30 minutes of open time. When adhesive does not transfer to your finger when touched lightly, the adhesive is no longer open and must be removed and reapplied. Adhesive open times may vary greatly due to relative humidity temperature and porosity of the sub-floor.
7. Product Setting:

a. Tiles

- i. Once adhesive is ready to accept flooring, tiles should be installed tightly against adjacent tile, however tiles should not be pushed together forcefully or edges may

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- peak.
- ii. Within 10 minutes of installing material, roll in two directions using a 100 lb. 3-section roller. Roll floor again 30-45 minutes after installation. Look for any edges or corners that are raised and hand roll. If the edge or corner does not stay down, verify nothing is under the tile. Then weigh down tile with a sand bag. If air bubbles are present, either use a small needle to let air out or remove and re-install tile.

8. Immediately after installation, inspect floor for any raised tile edges or adhesive on the surface. Should you find any raised edges, repair them as directed. To remove adhesive, use a cloth dampened with warm soapy water. Use of any solvents can cause discoloration of the floor and should not be used. If required, use denatured alcohol, however note that this can cause discoloration of the floor which is not covered by the warranty. Dry adhesive can be removed from the floor by rubbing the adhesive with a water dampened cloth.

E. Installation Using Two Part Urethane or Two Part Epoxy

1. Refer to Table 2 to verify the appropriate adhesive is used for the installation
2. Materials may be cut using a sharp utility knife and straight edge.
3. Installer may work off of previously installed material, however a knee board or other appropriate material must be used to ensure that indentations in the uncured adhesive do not occur. Kneeling and walking on the floor over uncured adhesive without appropriate protection can cause indentations in the adhesive under the tile which are permanent and visible in the finished floor.
4. Caution must be taken to ensure tiles do not slide underfoot. Use blue masking tape to secure tiles.
5. Mix part A and part B together and blend well using a mixing paddle on a power drill. Do not mix by hand as sufficient blending will not occur. Approximate pot life of adhesive will be 30- 45 minutes depending on site conditions.
6. Snap a chalk line parallel to the longest wall in the direction you will be installing. This line should be a distance equal to or less than the width of the material being installed. Continue marking lines across the floor parallel to the first line. The

distance between lines must equal the width of the material.

7. Using the recommended trowel, apply adhesive in a uniform, semi-circle pattern. Spread adhesive in the first marked row. Trowel adhesive slightly over the line – do not trowel short of the line. You will install the material and then trowel adhesive on the next row and so on. Trowel adhesive evenly, ensuring not to leave excess adhesive. Do not over trowel adhesive as that gradually reduces the amount on the sub-floor. Apply adhesive to an area which can be installed in approximately 20-30 minutes.
8. Once troweled onto floor, material may be installed immediately. The adhesives have a working time of approximately 30 minutes. Do not install after this period of time, even if the adhesive still transfers, as the chemical curing process has begun and adhesion will be compromised. Adhesive open times may vary greatly due to relative humidity temperature and porosity of the sub-floor.
9. Product Setting:

a. Tiles

- i. Tiles should be installed tightly against adjacent tile; however tiles should not be pushed together forcefully or edges may peak.
 - ii. Within 10 minutes of installing material, roll in two directions using a 100 lb 3-section roller. Roll floor again 30-45 minutes after installation. Look for any edges or corners that are raised and hand roll. If the edge or corner does not stay down, verify nothing is under the tile. Then weigh down tile with a sand bag. If air bubbles are present, either use a small needle to let air out or remove and re-install tile.
 - iii. Trowel adhesive on the next row and continue installation using blue masking tape to hold materials in place.
10. Immediately after installation, inspect floor for any raised tile edges or adhesive on the surface. Should you find any raised edges, repair them as directed. To remove adhesive, use a cloth dampened with warm soapy water. If solvent is required, use de-natured alcohol sparingly. Note that the use of any solvents can cause discoloration of the floor which is not covered under warranty.

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F. Seam Sealing and Welding

1. All EcoFloors rubber products may be chemically seam welded.
2. Contact EcoFloors for specific Welding instructions.

IV. Post Installation Procedures

- A.** Floor must not be used until adhesive is cured. Floors must be covered immediately after installation with kraft paper, plywood or other protective, breathable material. Do not cover uncured floor with plastic. Ensure that the protective covering will not scratch or otherwise damage the floor.
- B.** HVAC system must maintain temperatures in jobsite for a minimum of 72 hours according to the temperature requirements specified herein. Temporary heating systems may not be used.
- C.** Depending on actual conditions, minimal foot traffic is possible 8 hours after installation when Acrylic adhesive is used and in 12 hours when Urethane or Epoxy is used. Normal use of floor may not commence for a minimum of 24 hours after installation. Floor should not be submitted to heavy point loads for a minimum of 72 hours after installation. Heavy point loads include but are not limited to ladders, moving equipment, rolling loads and high heels.
- D. Post Installation Maintenance**
1. Floor must not be exposed to liquids, scrubbed or finished until adhesive has cured for 72 hours.
 2. EcoFloors Rubber Flooring, must be cleaned according to instructions and processes accompanying material prior to regular use to remove residual factory coating. If this process is not done, the floor will attract dust and dirt and be very difficult to keep looking clean. Refer to Maintenance document for instruction.
 3. EcoFloors Rubber flooring products may be left unfinished or they may have a top coat of acrylic finish applied. In areas subjected to abnormal abuse, regular exposure to potentially staining materials or regular spills, the finish system is recommended. If you wish to apply a finish, refer to Maintenance document for instruction.