



# ECOnights Rolls and Tiles & ECOcomfort

## Technical Manual

### Installation · Maintenance · Warranty

Manufactured in the U.S.A.

Revised on 06Dec2021  
Supersedes all previous versions.  
Check website for updates.

#### **Installation**

Job Site Conditions	2
Subfloors	2
Subfloor Preparation	2
Storage & Handling	2
Roll Installation	3
ECOcomfort Installation	5

#### **Maintenance**

Floor protection	5
Cleaning Chart	6
Cleaning Procedures Uncoated	6

#### **Warranty**

7

## Installation

### I. JOB SITE CONDITIONS

- A. Installation should not begin until after all other trades are finished in the area. If the job requires other trades to work in the area after the installation of the floor, the flooring should be protected with an appropriate cover.
- B. Areas to receive flooring should be weather tight and maintained at a minimum uniform temperature of 65° F (18° C) for 48 hours prior to, during, and after installation.

### II. SUBFLOORS

ECONights may be installed over concrete, approved Portland based self-leveling materials, and wood.

**Note:** The selected Portland-based patching and self-leveling materials must be moisture resistant and rated to withstand the RH moisture levels on the project.

**Note:** Gypsum based patching and leveling compounds are not acceptable.

- A. Wood Subfloors: Should be double construction with a min. thickness of 1". It must be rigid, free from movement, and have at least 18" of well-ventilated air space below.
- B. Underlayments: The preferred underlayment panel is APA underlayment grade plywood, minimum thickness of 1/4", with a fully sanded face.

**Note:** Particle board, chip board, Masonite, and lauan are not suitable underlayments.

- C. Concrete Floors: Concrete shall have a minimum compressive strength of 3000 psi. It must be fully cured and permanently dry.

### IV. SUBFLOOR REQUIREMENTS AND PREPARATION

- A. Subfloor shall be dry, clean, smooth, level, and structurally sound. It should be free of dust, solvent, paint, wax, oil, grease, asphalt, sealers, curing and hardening compounds, alkaline salts, old adhesive residue, and other extraneous materials, according to ASTM F710.
- B. Subfloor should be smooth to prevent irregularities, roughness, or other defects from telegraphing through the new flooring. The surface should be flat to the equivalent of 3/16" (4.8 mm) in 10 feet (3.0 m).
- C. Mechanically remove all traces of old adhesives, paint, or other debris by scraping, sanding, or scarifying the substrate. Do not use solvents. All high spots shall be ground level and low spots filled with an approved cementitious based patching compound.
- D. All saw cuts (control joints), cracks, indentations, and other non-moving joints in the concrete must be filled with an approved cementitious based patching compound.
- E. Expansion joints in the concrete are designed to allow for expansion and contraction of the concrete. If a floor covering is installed over an expansion joint, it more than likely will fail in that area. Expansion joint covers designed for resilient floor coverings should be used.
- F. Always allow patching materials to dry thoroughly and install according to the manufacturer's instructions. Excessive moisture in patching material may cause bonding problems or a bubbling reaction with the adhesive.

#### HAZARDS:

**SILICA WARNING** - Concrete, floor patching compounds, toppings, and leveling compounds can contain free crystalline silica. Respirable crystalline silica (particles 1-10 micrometers) can be produced by cutting, sawing, grinding, or drilling. Respirable silica is classified by OSHA as an IA carcinogen and is known to cause silicosis and other respiratory diseases. Avoid actions that cause dust to become airborne. Use local or general ventilation or protective equipment to reduce exposure below applicable exposure limits.

**ASBESTOS WARNING** - Resilient flooring, backing, lining felt, paint, or asphaltic “cutback” adhesives can contain asbestos fibers. Avoid actions that cause dust to become airborne. Do not sand, dry sweep, dry scrape, drill, saw, beadblast, or mechanically chip or pulverize. Regulations may require that the material be tested to determine asbestos content. Consult the documents titled, “Recommended Work Practices for Removal of Existing Resilient Floor Coverings,” available from the Resilient Floor Covering Institute.

**LEAD WARNING** - Certain paints can contain lead. Exposure to excessive amounts of lead dust presents a health hazard. Refer to applicable federal, state, and local laws and the publication, “Lead Based Paint: Guidelines for Hazard Identification and Abatement in Public and Indian Housing,” available from the United States Department of Housing and Urban Development.

- G. Moisture must be measured using the RH Relative Humidity test method per the ASTM F2170 test standard. Moisture content should not exceed the allowable limit of the selected adhesive.

E-Grip III – RH limit of 85% – normally selected

E-Grip 95 – RH limit of 95% – higher RH applications

E-Grip 99 – RH limit of 99% – highest RH applications

If RH levels exceed the selected adhesive’s RH limit, stop and correct situation.

- H. In the event that a moisture mitigation system is required, it must conform to the ASTM F3010 Standard Practice for Two-Component Resin Based Membrane Forming Moisture Mitigation Systems for use Under Resilient Floor Coverings.
- I. Perform pH tests on all concrete floors. If greater than the allowable limit of the selected adhesive, neutralize prior to installation.
- J. Adhesive bond tests should be conducted in several locations throughout the area. Glue down 3’ x 3’ test pieces of the flooring with the recommended adhesive and trowel. Allow to set for 72 hours before attempting to remove. A sufficient amount of force should be required to remove the flooring and, when removed, there should be adhesive residue on the subfloor and on the back of the test pieces.
- K. Perform pH tests on all concrete floors. If greater than the allowable limit of the selected adhesive, neutralize prior to installation.
- L. Adhesive bond tests should be conducted in several locations throughout the area. Glue down 3’ x 3’ pieces of the flooring with the recommended adhesive and trowel. Allow to set for 72 hours before attempting to remove. A sufficient amount of force should be required to remove the flooring, and there should be adhesive on the subfloor and the back of the flooring.

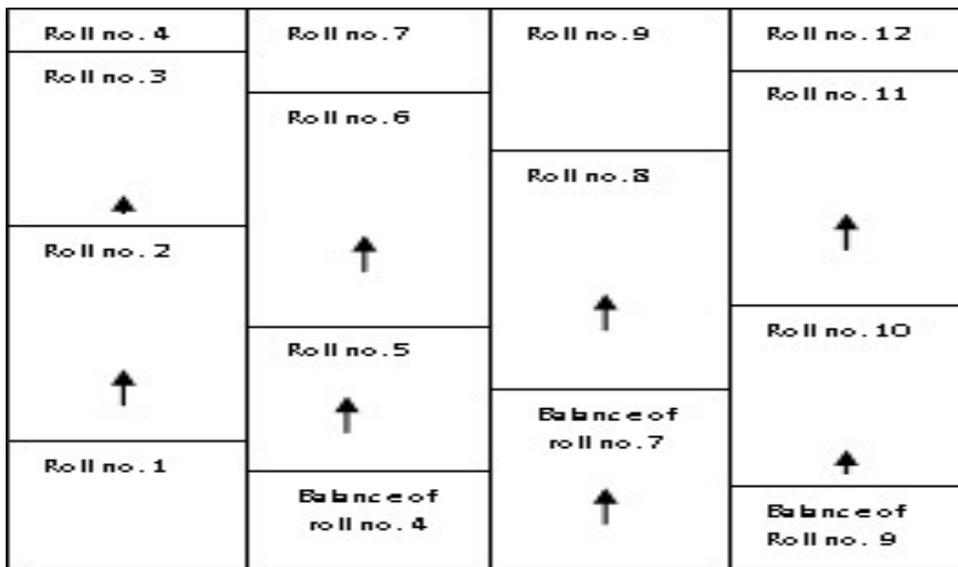
#### IV. Material Storage and Handling

- A. Material should be delivered to the job site in its original, unopened packaging with all labels intact.
- B. Note: Shipping pallets, cradles, banding, etc. are not intended for storage. After 7 days, remove material from shipping pallets, cradles, etc. Rubber roll material should always be stored laying down. Storing rubber rolls on end will curl the edges resulting in permanent memory of material. All edges with memory curl must be straight edge cut before installation.
- C. Material should only be stored on a clean, dry, smooth surface. Rolls should be stored with the end of the roll on top, facing up. The end of the roll should not be positioned against an adjacent roll or surface, or welts may be created on that roll and the roll below.
- D. Roll material is stretched slightly during the manufacturing process. At the job site, the installer should unroll all rolls and allow to relax overnight. A bare minimum of two hours is required. Shaking the material once it is unrolled can help it to relax.

- E. Inspect all materials for visual defects before beginning the installation. No labor claim will be honored on material installed with visual defects. Verify the material delivered is the correct style, color, and amount. Any discrepancies must be reported immediately before beginning installation.

**NOTE:** ECOnights flooring is manufactured from recycled materials and slight variance in shade and color chip dispersion is normal.

- F. Unroll and install rolls in the same direction (see “This Side Down” stamp at beginning of roll). Rolls are labeled with batch and roll numbers. Do not mix batch numbers together and install all rolls in consecutive order. (See diagram below.)



- G. Roll material is stretched slightly when it is rolled at the factory. At the job site, the installer should allow all rolls to relax for a minimum of two hours before gluing or cutting material.

**V. INSTALLATION – Rolls 8mm and Thicker Material.**

- A. Make the assumption that the walls you are butting against are not straight or square. Using a chalk line, make a starting point for an edge of the flooring to follow. The chalk line should be set where the first seam will be located.
- B. Remove the ECOnights from the shrink wrap and unroll it onto the floor. Lay the rubber on the floor in a way that will use your cuts efficiently. Cut all rolls at the required length, including enough to run up the wall a few inches.
- C. If end seams are necessary, they should be staggered on the floor and overlapped approximately 3-6". End seams will be trimmed after acclimation period, using a square to ensure they fit tightly without gaps.
- D. Allow the rough cuts to relax in position for a minimum of two hours. 24 hours is preferred.
- E. After allowing the flooring to relax, you may begin the installation.
- F. Align the first edge to the chalk line.

**Note: it is very important the first seam is perfectly straight.**

- G. Position the second roll with no more than a 1/8" overlap over the first roll at the seam. After adhesive is applied to substrate, the material will be worked back to eliminate the overlap. This procedure will leave tight seams and eliminate any gaps.
- H. Care should be taken to not over compress the seam. Over compressed seams will cause peaking.

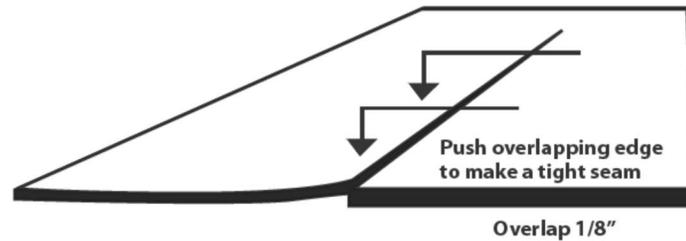


diagram 3

- I. It may be necessary to trim the edge of the second lineal drop, if the rolls do not extend the length or width of the room. Rolls laid end-to-end with a variance in roll width greater than 1/4" could result in peaked seams.
- J. Repeat for each consecutive sheet necessary to complete the area or those rolls that will be installed that day.

## VI. ADHESIVE APPLICATION

- A. After above procedures are performed, begin application of E-Grip III using a 1/16" x 1/16" x 1/16" square notch trowel.
- B. Fold the first drop lengthwise (half the width of the roll).
- C. Spread adhesive using the proper notched trowel. Take care not to spread more E-Grip III than can be covered by flooring and rolled within 30 minutes. The open time of the adhesive is 30 - 40 minutes at 70° F and 50% relative humidity.

**Note:** The open time of adhesive is affected by temperature and humidity. High temperatures and high humidity will cause the adhesive to set quickly. Low temperatures and low humidity will cause adhesive to cure at a slower rate. The installer should monitor on-site conditions and adjust open time accordingly.

- D. Carefully lay the material into the wet adhesive. DO NOT let the material drop, because this will cause air to be trapped beneath the flooring.
- E. Immediately roll the floor with a 75 pound or 100 pound roller to ensure proper transfer of adhesive. Overlap each pass of the roller by 50% of the previous pass to ensure that the floor is properly rolled. Roll the width first, then the length. Re-roll again after 30-45 minutes.
- F. Fold over second half of first roll and half of second sheet. Spread adhesive. At seam area spread adhesive at 90 degrees to seam to eliminate excessive adhesive oozing up at seam.
- G. In some instances, it may be necessary to weigh down the seam until the adhesive develops a firm set. Boxes of cove base or tile work well.
- H. Continue the process for each consecutive drop. Always work at a pace so you are always folding material back into wet adhesive.

**NOTE:** Never leave adhesive ridges or puddles, they will telegraph through the material.

- I. **Do not allow E-Grip III to cure on your hands or the flooring. Cured adhesive is very difficult to remove. We strongly suggest wearing gloves while using E-Grip III. Immediately wipe off excess**

adhesive with a rag slightly dampened with mineral spirits. Follow the mineral spirits with a rag dampened with water to remove the mineral spirits.

**NOTE: Use mineral spirits sparingly. Saturating the rubber with mineral spirits may cause the adhesive to be pushed too deeply into the pores of the rubber.**

- J. Hand roll all seams after the entire floor has been rolled. If some seams are gapping, it is possible to hold them together temporarily with blue painter's tape. Tape should be removed after adhesive has developed a firm set (approximately 2-3 hours). Allowing tape to remain longer than 2-3 hours or using aggressive tapes may result in adhesive residue. **ECOsurfaces will not be responsible for residue left behind from tape of any kind.**
- K. After rolling the floor, keep all foot traffic off the floor for a minimum of 24 hours. Foot traffic and rolling loads can cause permanent indentations or bubbles in the uncured adhesive.

## VII. ECOcomfort

- A. Installation under ECOsurfaces
  - 1. See ECOfit "Field Lamination" technical Manual at [www.ecosurfaces.com](http://www.ecosurfaces.com).
- B. Installation Under Carpet
  - 1. Complete Glue Down
    - a. Install ECOcomfort on sub-base following ECONights installation instructions.
    - b. Adhere carpet to ECOcomfort using carpet manufacturer's recommended adhesive or tape.
  - 2. Installation With (Wall-To-Wall) Tack Strips
    - a. Install tack strips.
    - b. Install ECOcomfort up to strips.
    - c. Install carpeting over ECOcomfort following carpet manufacturer's recommended wall-to-wall installation instructions.

## Maintenance

### IMPORTANT INFORMATION FOR THE SPECIFIER

**ECOsurfaces recommends our environmentally friendly line of maintenance products, including E-Cleaner.**

Proper protection and maintenance of pavers post-installation should be specified by the architect/ designer.

ECOsurfaces products must not be subjected to construction debris and damage from construction activities. The specifier should include details to protect the floor until job and construction are complete and floor is thoroughly cleaned.

### ASSIGNMENT OF CLEANING AND MAINTENANCE

The specifier should determine and assign the responsibility for the initial cleaning. This responsibility should be specifically assigned to the flooring contractor, general contractor, maintenance contractor or owner.

**Uncoated Cleaning Instructions**

Steps	Cleaner/ Stripper	Dilute	Diluted Coverage	Pads & Brushes
Initial Cleaning	E-Cleaner	10 oz./gal. water	2,000 sq. ft./gal.	Microfiber mop, Soft Nylon Brush or 3M 5100 Red Pad or equal
Daily Cleaning	E-Cleaner	2-4 oz./gal. water	6,000 sq. ft./gal.	Microfiber Mop, Soft Nylon Brush or 3M 5100 Red Pad or equal
Heavy Soil and Restorative Cleaning "Uncoated" Surfaces	E-Cleaner E-Strip	10 oz./gal. water 16 oz./gal. water	2,000 sq. ft./gal. 1,200 sq. ft./gal.	3M 7100 Brown or 7200 Black stripper pad or equal

**I. ECOsurfaces Cleaning Program**

A. Initial Cleaning

1. Remove all surface soil, debris, sand, and grit by sweeping, dust mopping, or vacuuming.
2. Scrub floor with E-Cleaner, using a Microfiber mop, a soft nylon brush or 3M 5100 Red Pad or equal on a low-speed scrubber or auto scrubber.
3. Pick up solution with a wet vacuum, rinse with clean water, and allow to dry thoroughly (6-8 hours).

B. Daily/Regular Cleaning

1. Sweep, dust mop, or vacuum floor to remove surface soil, debris, sand, and grit.
2. Damp mop with a Microfiber Mop or scrub floor using E-Cleaner with a Soft Nylon Brush or 3M 5100 Red Pad or equal on a low-speed scrubber or auto scrubber.

C. Restorative Maintenance

Restorative maintenance is not needed until there is a noticeable accumulation of dirt and contaminant build up. Normally this accumulation occurs in hard-to-reach and high traffic areas. A good maintenance program will minimize the frequency of restorative cleanings.

1. Sweep or vacuum to remove loose soil.
2. Heavy scrub using a low-speed scrubber or auto scrubber with a Brown or Black stripper pad and stripper solution of E-Strip.
3. Pick up solution with wet vac.
4. Rinse with clean water.
5. Allow floor to thoroughly dry.
6. Apply floor finish following initial finish application instructions.

D. Heavy Soil

1. Hard-to-clean and greasy areas may require a higher concentration of E-Cleaner and may require a restorative maintenance.

## Warranty

All ECOsurfaces rubber flooring is guaranteed to be free from manufacturing defects on both material and workmanship. If such a defect is discovered, the customer must notify ECOsurfaces either through the contracting installer, distributor, or directly. If found to be defective within five years under normal non-abusive conditions, at the discretion of ECOsurfaces, the sole remedy against the seller will be to repair, to replace, or to issue a credit not exceeding the selling price of the defective goods.

ECOsurfaces warranty shall not cover dissatisfaction due to improper installation, normal wear or quality of installation expected from the use or environment of installation, damage from improper maintenance or usage, or general misuse, including and without limitation: burns, cuts, tears, scratches, scuffs, damage from rolling loads, damage from cleaning products not recommended by ECOsurfaces, slight shade variations or shade variations due to exposure to direct sunlight, or differences in color between samples or photographs and actual flooring.

**Excluded from Warranty** – ECOsurfaces warranty does not apply to the following.

1. The exact matching of shade, color, or mottling.
2. Any express or implied promise made by any salesman or representative.
3. Tears, burns, cuts, or damage due to improper installation, improper use, or improper cleaning agents or maintenance methods.
4. Wear from chairs or other furniture without proper floor protectors will void the warranty. Care should be taken to protect the flooring from damage by using good quality protective feet for chairs, tables, and other furniture. Chair mats may be required under chairs with casters/wheels.
5. Labor costs for installation of original or replacement material.
6. Sale of “seconds,” “off goods,” or other irregular (non-first quality) flooring materials. With respect to “seconds” or “off goods,” such are sold “as is,” and ECOsurfaces makes no warranties whatsoever, express or implied with respect thereto, including warranties of merchantability or fitness for a particular purpose.
7. Problems caused by moisture, hydrostatic pressure, or alkali in the sub-floor.
8. Problems caused by uses, maintenance, and installation that are contrary to ECOsurfaces specifications, recommendations or instructions.
9. Material installed with obvious defects.
10. Damage to flooring products from high heels or spike heels.
11. Damage to flooring products from rubber mats, rubber backed mats, or car tires.
12. Installation of ECOsurfaces products with adhesives other than those recommended by ECOsurfaces.
13. Fading and/or discoloration resulting from heavy sunlight penetration and ultraviolet ray exposure from direct or glass-filtered sunlight.
14. Material that is not installed and maintained as recommended by ECOsurfaces.
15. Damage to flooring products from pallet jack and tow-motor traffic.
16. Environments where the product will be exposed to animal fats, vegetable oils, grease, or petroleum-based materials. (i.e., commercial kitchens or auto repair facilities)
17. Premature wear and deterioration from spikes and skate blade exposure.
18. Differences in color between products and photography.
19. Embossing/density deviations between product and samples, photography.

These warranties are in lieu of any other warranty expressed or implied. ECOsurfaces shall not be liable for any incidental or consequential damages which may result from a defect. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. These warranties give you specific rights, and you may also have rights which may vary from state to state. To know what your legal rights are in your state, consult your local or state Consumer Affairs Office or your State Attorney General. For complete and latest warranty information, please visit [www.ecosurfaces.com](http://www.ecosurfaces.com).



833-888-1760

[www.ecosurfaces.com](http://www.ecosurfaces.com)

**Manufactured in the U.S.A.**

©2021 All designs and colors are copyrighted by ECOsurfaces.