

INSTALLATION AND MAINTENANCE GUIDE FOR P-ECO

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INSTALLATION

- I. Job Site Conditions
 1. 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 floor should be protected with an appropriate cover. Kraft paper or plastic works well.
 2. Areas to receive flooring should be weather tight and maintained at a minimum uniform temperature of 65 degrees Fahrenheit (18 Celsius) for 48 hours before, during, and after the installation.

- II. Subfloors: P-Eco rolled rubber flooring may be installed over concrete, approved Portland-based patching and leveling materials, such as Ardex K-15 or equivalent, and wood.

Note: Ardex Engineered Cements
400 Ardex Park Drive
Aliquippa, PA 15001
724-203-5000

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

1. Wood Subfloors- Wood subfloors should be double construction with a minimum thickness of one inch. The floor must be rigid and free from movement with a minimum of 18 inches of well-ventilated air space below.
2. Underlayments- The preferred underlayment panel is American Plywood Association (APA) underlayment grade plywood, minimum thickness of 1/4-inch, with a fully sanded face.

NOTE: Particleboard, chipboard, Masonite, and lauan are not considered to be suitable underlayments.

3. Concrete Floors- Concrete shall have a minimum compressive strength of 3000 psi. New concrete slabs should cure for a minimum of 28 days before installing P-Eco. It must be fully cured and permanently dried.

III. Subfloor Requirements and Preparation

1. Subfloors shall be dry, clean, smooth, level, and structurally sound. They 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.
2. Subfloors 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" (4.8mm) in 10' (3.0 m).
3. 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 Portland-based patching compound.
4. All saw cuts (control joints), cracks, indentations, and other non-moving joints in the concrete must be filled with an approved Portland-based patching compound.
5. 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 will likely fail in that area. Use expansion joint covers designed for resilient.

NOTE: Expansion joint covers can be obtained from your Centaur sales representative or from:

Balco, Inc.
2626 South Sheridan
PO Box 17249
Wichita, KS 67217
316-945-9328

6. 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 Rubberflex adhesive.
7. Maximum moisture vapor emission of the concrete must not exceed 5 ½ lbs./1000 sq.ft. in a 24-hour period, as measured by the calcium chloride moisture emission test conducted in accordance to ASTM F1869. Moisture can also be measured using the RH Relative Humidity test method per the ASTM F23170 standard. Moisture content should not exceed 75% RH. If levels are higher using either test method, than an approved vapor retardant must be utilized. Contact your Centaur sales representative for approved vapor retardants.

NOTE: For moisture remediation, Centaur recommends the following two vapor retardant products:

1. ARDEX MC- 724-203-5000
www.ardex.com
 2. Bostik Durabond D-250- 888-592-8558
www.bostik-us.com
8. It is essential that pH tests be taken on all concrete floors. If the pH is greater than 9, it must be neutralized prior to beginning the installation.
9. Adhesive bond tests should be conducted in several locations throughout the area. Glue down 3'x3' 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.

HAZARDS:

SLICA WARNING- concrete, floor patching compounds, toppings, and leveling compounds can contain free crystalline silica. Cutting, sawing, grinding, or drilling can produce respirable crystalline silica (particles 1-10 micrometers). Classified by OSHA as an IA carcinogen, respirable silica is known to cause silicosis and other respiratory diseases. Avoid actions that may cause dust to become airborne. Use local or general ventilation or provide protective equipment to reduce exposure to below the 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 the asbestos content. Consult the document "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.

IV. Material Storage & Handling

1. Material should be delivered to the job site in its original, unopened packaging with all labels intact.
2. Roll material should always be stored lying down. Storing rubber on end will curl the edges resulting in permanent memory of the material. All edges with memory curl must be straight edge cut before installation. Do not store rolls higher than 4 rolls or for more than six months. Material should only be stored on a clean, dry, smooth surface. Rolls should be stored with the end of the sheet facing up. If rubber is stored upside down the weight of the roll may cause the end of the sheet to compress, resulting in residual indentation.
3. **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.**
4. The material and adhesive must be acclimated at room temperature for a minimum of 48 hours before starting installation.
5. **All P-Eco rolls must be unrolled and installed in the same direction. See diagram 1. Each roll is marked on the side of the core with red or orange paint to aid in this process. Use the colored edge of the core as a guide. Laying rolls in the opposite direction will cause color variation between the rolls.**
6. Rolls are labeled with batch numbers and roll numbers. Do not mix batch numbers together and install all rolls in consecutive order.
7. Roll material is stretched slightly during the manufacturing process. At the job site, the installer should unroll all cuts and allow to relax overnight. A bar minimum of two hours is required. Shaking the material once it is unrolled can help it to relax.

V. Roll Installation

1. 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.
2. Remove the P-Eco from the shrink-wrap and unroll it onto the floor. Lay the P-Eco on the flooring in a way that will use your cuts efficiently. Cut all rolls at the required length, including enough to run up the wall.
3. Place the edge of the first roll along the chalk line.
4. Snap a chalk line where the seam will be located. Straight edge seam edge of first piece. Align the first edge to the chalk line; it is very important that the seam is perfectly straight. Straight edge seam edge of second lineal drop if the first roll does not extend the length or width of the room. If end seams are necessary, they should be staggered on the floor and overlapped approximately 3-6”.

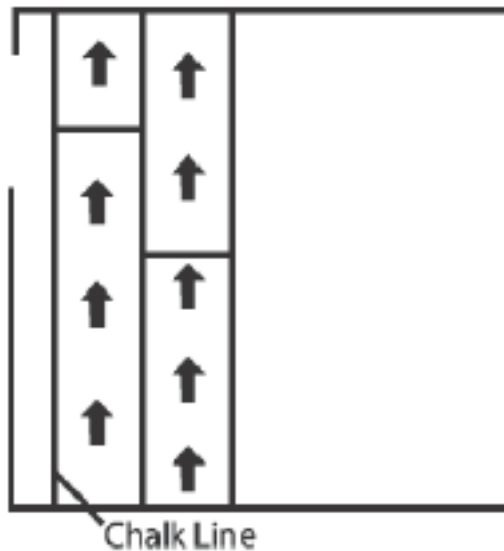


Diagram 1

5. Some thicker versions of P-Eco such as the 4+6 and 4+8 can be difficult to cut. It is recommended to trace cut these carefully and preferred to cut at a slight bevel, causing the bottom layer to be slightly shorter than the finished top layer. If the bevel is cut in the wrong direction, gaps will be seen on the top finished surface.
6. Position the second row with no more than a 1/8” overlap of 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. Care should be taken to

not over compress the seam. Over compressed seams will cause peaking and bond failure at seam edge.

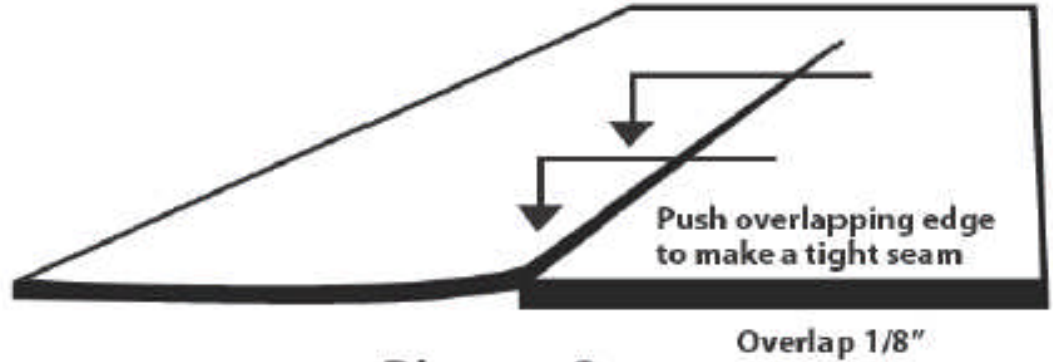


Diagram 2

NOTE: Over compressing the seam will result in bond failure.

7. **To alleviate cutting the long edge of the seam, it is recommended to order the rolls either the entire width or length of the room. If rolls span from one side of the room to the other, it is not necessary to cut the seams. This will substantially decrease the amount of time required to install the product.**
8. Repeat for each consecutive roll necessary to complete the area or those rolls that will be installed that day.
9. **INSTALLATION- GLUE DOWN (8mm, 10mm, and 12mm rolls)**
 - a. After performing the above procedures, begin the application of the adhesive. We recommend Centaur Rubberflex adhesive, a one-component moisture-cured polyurethane adhesive. Rubberflex Adhesive should not be mixed. It is specially formulated for use right out of the pail. Apply Rubberflex adhesive to the substrate using a 1/16" square-notched trowel.
 - b. Fold over the first drop along the wall (half the width of the roll).
 - c. Spread the adhesive using the proper size square-notched trowel. Take care not to spread more adhesive than can be covered with flooring within 30 minutes. The open time of the adhesive is 30-40 minutes at 70 degrees Fahrenheit and 50% relative humidity.

NOTE: Temperature and humidity affect the open time of the adhesive. Temperatures above 70 degrees Fahrenheit and/or relative humidity above 50% will cause the adhesive to set up more quickly. Temperatures below 70 degrees Fahrenheit and/or relative humidity below 50% will cause the adhesive to

set up more slowly. The installer should monitor the on-site conditions and adjust the open time accordingly.

- d. Lay the flooring into the wet adhesive. Do not allow the material to “flop” into place; this may cause air entrapment and bubbles beneath the flooring.
- e. Immediately roll the floor with a 75-100 lb. roller to ensure proper adhesive transfer. Overlap each pass of the roller by 50% of the previous pass to ensure the floor is properly rolled. Roll the width first and then the length.
- f. Fold over the second half of the first roll and half of the second roll. Spread the adhesive. **Spread the adhesive at right angles to the seam to achieve full coverage across the seam.** Roll the flooring.
- g. If one side of the seam is slightly higher than the other, use a small J-type had roller, applying pressure on the high side to level out.
- h. Continue the process for each consecutive drop. Work at a pace so that 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 Rubberflex adhesive to cure on your hands or the flooring. Immediately wipe off excess adhesive with a rag dampened with mineral spirits! Cured adhesive is very difficult to remove from hands.

We strongly suggest wearing gloves while using Rubberflex Adhesive.

- j. If some seams are gapping, temporarily hold them together with masking tape. Do not use duct tape as it will leave a residue on the floor. Remove the tape after the adhesive develops a firm set (6-12 hours).
- k. **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.**

Keep traffic off the floor for a minimum of 24 hours. The floor should be free from rolling loads for a minimum of 48 to 72 hours. Foot traffic and rolling loads can cause permanent indentations or disbonding in the uncured adhesive.

MAINTENANCE

IMPORTANT INFORMATION FOR THE INSTALLER

Centaur recommends TASKI products by JohnsonDiversey for Centaur rubber floor products. TASKI products are available in most areas of the United States or can be obtained by calling your Centaur sales representative or at www.centaurmaintenancesupplies.com.

FLOOR PROTECTION

The specifier should include specification details to protect the floor post-installation and until job construction is complete, such as covering the entire floor with paper or other floor covering device (plastic, plywood, etc.) until construction is completed and thorough cleaning and maintenance can be implemented.

ASSIGNMENT OF CLEANING AND MAINTENANCE

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

The recommendations contained in this manual are listed because of their extensive testing and field experience with the P-Eco product. These instructions are given only as guidance to our customers and for use with our recommended tools and adhesives. The manufacturer cannot accept any responsibility for loss or damage that may result from the use of this information due to variations in working conditions and/or workmanship of the installer. Users are advised to conduct their own tests for a particular application and assign installers that are familiar with this type of flooring product.

Inspect all rolls for visual defects including shade variances prior to beginning installation. No labor claim will be honored on material installed with visual defects or shade variances. Any discrepancies must be reported immediately before beginning installation. Ensure that all job site and subfloor conditions are met.

Steps	Cleaning Product	Mixture	Equipment
Initial Cleaning	TASKI® profi	10 oz./gal. water	Purple pad or soft nylon brush
Daily Cleaning	TASKI® profi	6-10 oz./gal. water	Mint pad, soft nylon brush, or microfiber mop
Heavy Soil and Restorative Cleaning	TASKI® profi or TASKI® ice it	10 oz./gal. water	Purple pad or black pad

The application rates and concentrations are based on Taski recommendations. For rates and concentrations of other products, consult the specific manufacturer's instructions.

CLEANING PROCEDURES

- I. Initial Cleaning
 - a. Remove all surface soil, debris, sand, and grit by sweeping, dust mopping, or vacuuming with a high CFM vacuum. For large areas, use auto scrubbers to clean floors.
 - b. Scrub floor with a neutral pH (7-9) detergent, such as TASKI Profi cleaner (10 oz. /gal. of water), using buffer or auto scrubber with a soft nylon brush or purple pad. Avoid flooding the floor.
 - c. Pick up solution with a wet vacuum, rinse with clean water, picking up the rinse water with a wet vacuum and allow to dry thoroughly (6-8 hours).

- II. Daily/Regular Cleaning
 - a. Sweep, dust mop, or vacuum floor to remove surface soil, debris, sand, and grit.
 - b. Damp mop with a microfiber mop or auto scrub using TASKI mint pad or nylon brush with TASKI Profi (6-10 oz./gal. of water) or equivalent pH neutral cleaner.

III. Restorative Maintenance

- a. Sweep and dry vacuum floor thoroughly.
- b. Heavy scrub floor with TASKI Profi (10 oz./gal. of water) or TASKI Ice-It. This cleaning may be performed with an auto scrubber or rotary scrubber (TASKI purple or black pad).
- c. Vacuum soiled solution with a wet/dry vacuum.
- d. Rinse with clean water.
- e. Pick up solution with wet vacuum.
- f. Allow floor to thoroughly dry.

IV. Heavy Soil

- a. Remove as much surface soil, debris, sand, and grit as possible by sweeping, dust mopping, or vacuuming.
- b. Scrub floor with a neutral pH (7-9) detergent, such as TASKI Profi cleaner or TASKI Ice-It stripper, using a buffer or auto scrubber with a TASKI black pad.
- c. Pick up solution with a wet vacuum, rinse with clean water and allow to dry thoroughly (6-8 hours).

WARRANTY

All Centaur P-Eco rubber flooring is guaranteed by the manufacturer to be free from manufacturing defects on both material and workmanship. If such a defect is discovered, the customer must notify Centaur either through the contracting installer, or directly. If found to be defective within three years under normal non-abusive conditions, the sole remedy against the seller will be the replacement or repair of the defective goods, or at the seller's option, credit may be issued not exceeding the selling price of the defective goods.

Centaur warranty shall not cover dissatisfaction due to improper 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 product not recommended by Centaur, shade variations due to exposure to direct sunlight, or differences in color between samples or photographs and actual flooring.

Centaur reserves the right to make updates to this manual at any time. For the most updated version, please call your local sales representative or visit www.centaurfloors.com