## **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.

## **Subfloors**

Rubberflex / EarthSaver rolls and tiles may be installed over concrete, approved cementitious based selfleveling 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 recommended.

- A. Wood Subfloors: Wood subfloors should be double construction with a minimum thickness of 1". The floor must be rigid, free from movement and have at least 18" of well-ventilated air space below.
- B. Underlayment's: The preferred underlayment panel is APA underlayment grade plywood, minimum thickness of ¼" with a fully sanded face.

Note: Particle board, chip board, Masonite, and lauan are not considered suitable underlayment's.

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

## **Subfloor Requirements and Preparation**

- A. Subfloor 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 slts, old adhesive residue and other extraneous materials, according to ASTM FD710.
- 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' (3.0 m) radius.
- 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 fall 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 E-Grip III™ adhesive.



## Hazards

SILICA WARNING – Concrete, floor patching compounds, toppings and leveling compounds can contain sawing, grinding or drilling. Respirable crystalline silica (particles 1-10 micrometers) can be produced by cutting, sawing, grinding or drilling. Respirable silica is classified by OSHA as a 1A 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, bead blast or mechanically ship or pulverize. Regulations may require that the material be tested to determine asbestos content. Consult the document titles, 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 of 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. Maximum moisture vapor emission of the concrete must not exceed 5.5 lbs. per 1000 sq. ft. in a 24 hour period as measured by the calcium chloride moisture emission test conducted in accordance to ASTM F1869. If the emissions exceed the limitations, the installation should not proceed until the problem has been corrected.
- H. 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.
- 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 towel. 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.

## **Material Storage and Handling**

## (Rubberflex / EarthSaver Rolls and Tiles)

- A. Material should be delivered to the job site in its original unopened packaging with all the labels intact.
- B. 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 for more than 6 months. Material should only be stored on a clean, dry, smooth surface.
- C. Inspect all material for visual defects prior to beginning the installation. No labor claim will be honored on materials installed with visual defects. Verify the material delivered is the correct style, color and amount. Any discrepancies must be reported immediately before beginning installation.
- D. The material and adhesive must be acclimated at room temperature for a minimum of 24 hours before starting installation.
- E. All rolls must be unrolled and installed in the same direction. Tiles must also be installed in the same direction.
- F. 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.



## Installation - Rolls

- A. Cut the first sheet at the required length including enough to run up the wall and overlap for seaming at each end.
- B. Position the first sheet against the wall and square with the room.
- C. Cut second sheet with proper extra length.
- D. Position second sheet with a 1'' 1.5'' overlap over the first roll at the seam.
- E. Repeat for each consecutive sheet necessary to complete the area or those rolls that will be installed that day.
- F. Allow the cuts to relax in position for a minimum of 2 hours before gluing.
- G. SEAMING METHODS
  - 1. ¼" (6mm) and thinner: place a 4" wide scrap of material under the seam area, Using a straight edge and new razor blade, hold the knife straight up and down and cut through both pieces in one cut.
  - 2. 3/8" nominal or thicker: snap a chalk line where the seam will be located. Straight edge seam for first piece. Align the first edge to the chalk line; it is very important that the seam is perfectly straight. Straight edge seam edge if second drop and butt to first edge. Do not try to compress or stretch the material.
- H. After all above procedures are performed, begin application of the recommended onecomponent polyurethane adhesive. Apply adhesive to the substrate using one of the following trowel sizes:
  - 1. 3.2mm to 4.0mm thickness: 1/16" x 1/32" x 5/64" U-Notched Trowel.
  - 2. 6.0mm to 12.0mm thickness: 1/16" x 1/16" x 1/16" Square Notched Trowel.
- ١. Fold the first drop lengthwise (half the width of the roll)
- Spread adhesive using proper notch trowel. Take care not to spread more adhesive than can be covered by flooring and rolled within 30 minutes. The open time of the adhesive is 30 - 40minutes 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 up quickly. Low temperatures and low humidity will cause adhesive to sure a t a slower rate. The installer should monitor on-site conditions and adjust open time accordingly.

- K. 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.
- L. Immediately roll the floor with a 75lb. 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.
- M. Fold over second half of first roll and half if second sheet. Spread adhesive. At seam area spread adhesive at 90 degrees to seam to eliminate excessive adhesive oozing up at seam. Roll material.
- N. With 5/32" (4mm) and thinner material, it may be necessary to weight down he seam until the adhesive sets. Boxes of cove base or bricks work well. Cover the entire seam.
- O. Continue the process for each consecutive roll. Always 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.

- Do not allow the 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. We strongly suggest wearing gloves.
- Q. Hand roll all seams after the entire floor has been rolled. If some seams are gapping, hold them together temporarily with masking tape or blue painters tape. Do not use duct tape as it may leave a residue on the floor. Remove tape after adhesive has developed a firm set (approximately 8 - 12 hours).
- R. After you rolled the floor, keep all foot traffic off of the floor for a minimum of 24 hours. Foot traffic and rolling loads can cause permanent indentations or bubbles in the uncured adhesive.

