### 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 floor should be protected with an appropriate cover. Kraft paper or plastic work well.
- B. Areas to receive flooring should be weather tight and maintained at a minimum uniform temperature of 65°F (18°C) for 48 hours before, during, and after the installation..

### II. SUBFLOORS

**REGUPOL Revolution** 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.

- 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. Underlayments The preferred underlayment panel is American Plywood Association (APA) underlayment grade plywood, minimum thickness of 1/4", with a fully sanded face.

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

C. Concrete Floors – Concrete shall have a minimum compressive strength of 3000 psi. New concrete slabs should cure for a minimum of 28 days and meet the relative humidity requirements per ASTM F2170 or the calcium chloride moisture emission test conducted in accordance to ASTM F1869 before installing **REGUPOL Revolution**. It must be fully cured and permanently dried.

**NOTE:** Read further for dryness requirements.

### III. 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' (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 Portland-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 Portland-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 will likely fail in that area. Use expansion joint covers designed for resilient flooring.

NOTE: Expansion joint covers can be obtained from:
Balco, Inc.
2626 South Sheridan
P.O. Box 17249 Witchita, KS 67217
(316) 945-9328
800-767-0082
balcousa.com

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 REGUPOL PU350 adhesive.



#### REGUPOL REVOLUTION INSTALLATION GUIDE

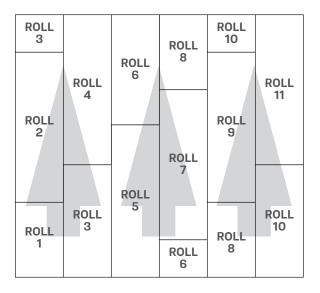
- G. Maximum moisture vapor emission of the concrete must not exceed 5.5 lbs./1,000 sq. ft. in a 24-hour period, as measured by the calcium chloride moisture emission test conducted in accordance to ASTM F1869. Alternatively, if the RH method is used, the maximum RH should not exceed 85% RH tested in accordance with ASTM 2170. 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.
- I. 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.

**NOTE:** This product is suitable for installation over a radiant heat source.

## IV. MATERIAL STORAGE AND HANDLING

- A. 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 more than six months. Material should only be stored on a clean, dry, smooth surface.
- B. 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.

C. All **REGUPOL Revolution** rolls must be unrolled and installed in the same direction. Installing rolls in the opposite direction will cause pattern and shade differences across the installed floor. To ensure rolls are installed in the same direction, the packing cores are marked on the left side with red paint (see below). Before unrolling, check that all red core marks are located on the left and unroll from one side of the room. Any drops or cuts off the rolls must continue to roll direction sequence to avoid shading. Use the painted core as a reference point or mark smaller cuts with blue painters tape with the direction of the roll. (See diagram below)



Roll in the same direction



D. All rolls are marked with batch numbers and roll sequence numbers on the product shipping label. Layout and installation of the rolls must insure that the rolls are installed in **batch number** and **roll number** consecutive order. Do not mix batch number and roll number sequence or shading may occur. (See below)



E. Roll material is stretched slightly during the manufacturing process. At the job site, the installer should allow all cuts to relax for a minimum of two hours before installing. Shaking the material once it is unrolled can help it to relax.

# Suggested Tool List:

Broom or vacuum

Chalk line & chalk

Gloves

Kraft paper (optional)

Metal straight edge or Drywall T-square

Rubber mallet

Standard tape measure

Utility Knife

1/16" Square-notched trowel (glue down only)

100 lb roller

#### V. INSTALLATION - ROLL 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.
- B. Remove the **REGUPOL Revolution** from the shrink-wrap and unroll it onto the floor. Lay the **REGUPOL® Revolution** 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.
- C. Allow the cuts to relax in position for a minimum of two hours. 24 hours is preferred.
- D. Place the edge of the first roll along the chalk line.
- E. Position the second roll with no more than a 1/16" overlap over the first roll at the seam. Work the material back to eliminate the overlap. This procedure will leave tight seams and eliminate any gaps.
- F. Repeat for each consecutive roll necessary to complete the area or those rolls that will be installed that day.
- G. METHOD 1 GLUE DOWN (4mm) rolls
  - After performing the above procedures, begin the application of the adhesive. We recommend REGUPOL PU350, a one-component moisture- cured polyurethane adhesive. REGUPOL PU350 should not be mixed. It is specially formulated for use right out of the pail. Apply REGUPOL PU350 to the substrate using a 1/16" square-notched trowel.
  - 2. Fold over the first drop along the wall (half the width of the roll).
  - Spread the adhesive using the proper size squarenotched trowel. Take care not to spread more REGUPOL PU350 than can be covered with flooring within 30 minutes. The open time of the adhesive is 30–40 minutes at 70°F and 50% relative humidity.

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

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- 4. 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.
- 5. Immediately roll the floor with a 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.
- Fold over the second half of the first roll and half
  of the second roll. Apply adhesive on the concrete.
  Hold the trowel at right angles in the seam area
  to prevent the adhesive from oozing up through
  the seam.
- 7. Roll the flooring.
- 8. 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.

- Do not allow REGUPOL PU350 to cure on your hands or the flooring. Immediately wipe off excess adhesive with a rag dampened with denatured alcohol or acetone. Cured adhesive is very difficult to remove from hands. We strongly suggest wearing gloves while using REGUPOL PU350.
- 10. If some seams are gapping, temporarily hold them together with masking tape. Do not use duct tape as it may leave a Residue on the floor. Remove the tape after the adhesive develops a firm set.
- 11. Keep traffic off the floor for a minimum of 24 hours. Foot traffic and rolling loads can cause permanent indentations in the uncured adhesive.

# **HAZARDS**

# **SILICA 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.

