



TILE INSTALLATION INSTRUCTIONS

Using **EXPANKO XCR4 ADHESIVE-or-HENRY452 (2-PART EPOXY)**

TECHNICAL SUPPORT 800.345.6202

A. INTRODUCTION

XCR4 flooring, a unique blend of cork and rubber, is a natural product with shade variations. These shade variations are a result of the recycled cork content. It is the responsibility of the installer to blend shades. **INSTALLATION DEEMS ACCEPTANCE OF SHADE VARIATIONS.**

Stiletto heels, certain furniture and appliance footings may cause indentations in XCR4. As with all resilient flooring, complete recovery should not be expected. Use recommended glides of at least 1 ¼" in diameter on all furniture and use chair mats under chairs at desks and workstations. Do not move heavy furniture, fixtures or appliances directly across the floor. Use protective boards or other furniture moving equipment that will protect the floor. Do not use XCR4 in areas where cooking oils, vegetable fats, oil or grease may be spilled or tracked on to the surface.

B. SITE CONDITIONS

1. Store / acclimate the flooring and adhesive in the installation area for 72 hours.
2. Installation area temperature must be maintained between 65°F and 75°F for 72 hours before, during and after installation.
3. During unpacking and installation flooring, may appear to have an inconsistent gloss appearance. This effect is a result of the manufacturing and packaging process and will be removed during the initial maintenance procedure.
4. Before installation do not place flooring in direct sunlight (windows or doors) for extended periods of time, as it could create shading.
5. The permanent HVAC (heating, ventilation and air conditioning) system shall be in operation for at least one week prior to the floor installation. Do not use portable heaters.

C. MOISTURE TESTING

1. Follow ASTM F 710 "Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring". This includes determining Moisture Levels, Relative Humidity and pH Levels, as per the ASTM specifications listed below:
 - a) ASTM F 1869, Anhydrous Calcium Chloride test for Moisture levels. The maximum allowable readings are:3 lbs/1,000 sq. ft/24 hours

- b) ASTM F 2170, Relative Humidity (RH) test using in situ probes. The maximum allowable reading is 75% RH.
 - c) ASTM F 710, pH levels (test procedure 5.3.1). The readings should be between 8 and 10.
2. The ASTM test frequency recommendation is 3 measures for the first 1,000 sq. ft. and one measure for each additional 1,000 sq. ft.
3. Ensure Moisture, Relative Humidity and pH tests have all been conducted and measures meet manufacturer's recommendations. Record all test results for reference.
4. For all grade installations (on, above or below), it is the flooring contractor's responsibility to ascertain that there is not too much moisture in the concrete and that it will not increase at a future date above the recommended levels. Expanko will not be responsible for hydrostatic pressure that may occur in the future.

SUBFLOOR PREPARATION

1. Porous Surfaces: construction-grade plywood, cementitious underlayments, dry concrete that is above, on or below grade. Refer to ASTM F 1482 "Standard Practice for Installation and Preparation of Panel-Type Underlayment to Receive Resilient Flooring" for general guidelines for porous-type surface preparation.
2. Non-Porous Surfaces: terrazzo, ceramic tile, metal, existing fully adhered non-cushion backed resilient on all grade levels except existing tile below grade. Refer to ASTM F 710 for general guidelines.
3. Concrete subfloor must be smooth and flat. Imperfections in the subfloor may show through the finished flooring. All cracks, voids and undulations must be repaired prior to flooring installation; with high strength Portland cement based patching material. Refer to WWHenry / Ardex for product recommendations and installation methods, www.ardex.com. Expanko only recommends Ardex Products.
4. Saw cuts must be cleaned carefully, and flooring must not be installed over expansion joints.
5. All surfaces must be clean, dry and free of dust, grease, paint, oil sealers and curing compounds or any other foreign material that may interfere with proper adhesion.
6. Do not use chemical adhesive removal products (chemical abatement products): their use will void the Expanko adhesive system warranty.
7. For detailed instructions, refer to the Resilient Flooring Pre Installation Guidelines document #010 available on our Web site at www.expanko.com

ADHESIVE SYSTEMS

1. The use of the proper adhesive is critical to a successful end result. Expanko will only guarantee its flooring products if Expanko XCR4 Trowel-on and Henry 452 (2-part epoxy) adhesives are used.
2. Expanko XCR4 Trowel-on adhesive is a wet-set adhesive for general use; for demanding applications such as heavy rolling load traffic, Henry 452 (2-part epoxy) must be used.
3. Protect from freezing in transit and storage.
4. Kneepads should be used during installation and effort should be made to work off the flooring whenever possible.
5. Clean excess adhesive immediately using soapy water, ethyl alcohol or isopropyl alcohol.
6. Do not reuse container. Dispose of container and adhesive in accordance with federal, provincial/state and local waste disposal regulations.

7. Contact Expanko directly or the local Expanko Agents or Distributor for additional information.

EXPANKO XCR4 TROWEL-ON ADHESIVE

1. Expanko XCR4 Trowel-on is a wet-set adhesive; it is off-white with a syrupy consistency. 1/16"D X 1/32"W X 1/32"A, U Notch Trowel should be used.
2. Coverage: up to 150 sq ft per gallon.
3. Roll the flooring in both directions prior to adhesive hardening with a 75-100 lb. sectional roller.
4. We recommend the following guidelines for traffic:
 - No traffic for 12 hours
 - Light foot traffic between 12 and 72 hours
 - Moderate to heavy traffic after 72 hours.

HENRY 452 2 PART EPOXY ADHESIVE

1. Henry 452 adhesive is a two-part epoxy-based adhesive that is beige when mixed.
2. A very strong bond is created when applied to porous and non-porous surfaces.
3. Remove the lid of part A and stir using a mechanical mixer. Remove the lid of part B and pour all the contents into the container of part A. Use a rubber spatula to remove everything from the container. Use a mechanical mixer to ensure proper blending, as inadequate mixing could cause bond failure.
4. Pour the entire adhesive onto the floor immediately after mixing. Do not leave the mixed adhesive in the original can; the heat generated by the chemical reaction will reduce the open time of the adhesive.
5. **Porous and non-porous surfaces:** Spread adhesive with a 1/32"D x 1/16"W x 5/64"A U-notched trowel on surfaces.
6. Coverage: up to 250 sq. ft. /gal.
7. Curing time will vary depending on site conditions (i.e. temperature, humidity). It is still workable if it is wet and sticks to the fingers when touched. If a dry skin has formed on the surface of the adhesive, remove the adhesive and start over.
8. The floor must be rolled in both directions prior to adhesive hardening with a (75-100 lb.) sectional roller. Rolling must be done within 30 minutes of laying the flooring; roll again 2 to 3 hours later.
9. We recommend the following guidelines for traffic:
 - First 12 hours: no traffic;
 - 12 -72 hours: light traffic only;
 - 72 hours: moderate to heavy foot traffic, placement of furniture and light rolling traffic;
 - After 7 days: regular rolling traffic.

D. PRODUCTION ACCLIMATION

1. Acclimate adhesives and flooring at the installation site, in the area they are to be installed, for at least 72 hours (3 days) prior to installation. Temperature during acclimation period and installation shall be maintained between 65°F and 75°F and relative humidity shall be between 45% and 65%.
2. The permanent HVAC (heating, ventilation and air conditioning) system shall be in operation for at least one week prior to the floor installation. Do not use portable heaters.

E. INSTALLATION INSTRUCTIONS

Tiles can be cut with a utility knife and a straight edge. "Shuffle" tiles from alternate boxes to help evenly distribute any shade or color variations in tiles. Tiles may be laid in any desired pattern. **INSTALLATION OF TILES DEEMS ACCEPTANCE OF SHADE OR COLOR VARIATION.** Do not slide tiles into place as adhesive may be forced up between tiles, preventing tight seams.

TILE INSTALLATION USING EXPANKO XCR4 ADHESIVE:

1. XCR4 tiles are directional tiles. Be sure to follow the arrow on the back of each tile.
2. Apply adhesive in a uniform semi-circle pattern onto substrate. When troweling do not leave ridges in the adhesive from the trowel tip. Troweled adhesive should have consistent ridge/trowel pattern across the entire floor. Imperfect troweling may telegraph through the finished floor.
3. Lay tile into adhesive after 10 minutes; once adhesive is spread (after 10 minutes) you have approximately 45 minutes to working time. Working time has expired when adhesive ridges are no longer wet and they cannot be flattened when touched, although they still have tack.
4. Lift tiles regularly during installation to ensure that there is at least 95% adhesive transfer to the tile. If adhesive does not transfer then the adhesive has been open too long.
5. Install tiles by butting the tile to the edge of the previously laid tile. Fit the tiles "next" to one another and do not set tiles into adhesive and slide into place. Sliding tiles into place may force the adhesive up between tiles, preventing tight seams or resulting in peaking. Use a hand roller on all tile seams and around walls to ensure proper adhesive transfer to tile.
6. Within 10 minutes after the tile has been laid, the floor must be rolled in both directions with a 100 lb roller.
7. 30 minutes after the first rolling, roll in 2 directions again. If any joints are not flat or bubbles are present, re-roll and apply weight such as sand bags to the particular area for 12 hours.

TILE INSTALLATION USING HENRY 452 2-PART EPOXY:

1. Mix and spread adhesive according to label instructions. Set tiles following steps 5, 6 & 7 listed in the previous section.
2. Remove any excess wet adhesive on the tile surface by gently rubbing with a clean white cloth. Dried adhesive may be removed by using a well-moistened, non-abrasive pad.

FLOOR PROTECTION AND INITIAL MAINTENANCE:

1. Following installation and cleanup of the tile protect it by laying sheets of brown Kraft paper over the flooring and then a layer of plywood sheets. Leave until the work of all other trades has been completed.
2. Do not start any maintenance procedures for a minimum of five (5) days after installation.
3. Do not, at any time during the initial maintenance or thereafter, flood the floor with water or maintenance solutions.
4. Refer to Maintenance Instructions (Document ID: 211) for specific details.

WARNING: REMOVAL OF OLD FLOORING

Do not sand, dry sweep, dry scrape, drill, saw, bead blast, or mechanically chip or pulverize existing resilient flooring, backing, lining felt, paint, asphaltic cutback adhesives or other adhesives. These products may contain asbestos fibres or crystalline silica. Avoid creating dust as inhalation

increases the risk of cancer and respiratory disease. Smokers exposed to asbestos fibres are at greater risk of serious bodily harm. Unless certain that the product is asbestos-free, assume that it contains asbestos. Regulations may require that material be tested to determine asbestos content. Consult the Resilient Floor Covering Institute's (RFCI's) recommendations for removal of existing resilient floor coverings.

Pre-Installation Guidelines (Document ID: 010) and XCR4 Care and Maintenance Instructions (Document D: 211) sited are available at www.expanko.com.

For more information visit www.expanko.com or call 800-345-6202.