



Installation Data -- RESILIENT ATHLETIC FLOORING -- 09 65 66

ECOFITNESS RUBBER SHEET ROLLS INSTALLATION INSTRUCTIONS

RECOMMENDED TOOLS

Measuring Tape or Ruler
Metal Straight Edge
Utility Knife w/ extra blades (non-retractable is best)
White Marker or Chalk
Chalk line
2" x 4" Wood Block
Mallet
Cellophane, Masking, or Packaging Tape
Adhesive – BR-710 One Part Urethane
Mineral Spirits and Rag
Rubber Gloves
Trowel –
50-100# Roller
Seam Sealant & Commercial Grade Caulking Gun (optional)

UPON DELIVERY OF PRODUCT

- 1. VERIFY** packing slip matches with product and order.
- 2. INSPECT** delivered product thoroughly. Report any discrepancies of original order, product defects, etc. No reimbursement/warranty claim will be given for labor on material installed with visual defects. Any defects, size, color, or otherwise, must be reported to the place of purchase prior to installation.
- 3. STORE** product and adhesives in clean, dry, environment with temperatures between 70 and 95F.
- 4. READ** product information, installation instructions, and warranties completely before starting any installation.

IMPORTANT NOTES – Do not use EcoFitness Rolls in conjunction with any petroleum based products including solvents, adhesives, or sealers. Insure that the products you use are not petroleum based. All substrates must be fully cured (at least 60 days for concrete) before installing EcoFitness products.

EcoFitness should be installed by professional, experienced installers. These instructions are meant as a guide, and proper installation is the responsibility of the installer.

PREPARATION

EcoFitness rolled rubber must reach room temperature to ensure a secure, tight installation with minimal size fluctuation. Each piece should be completely unrolled and allowed to set at room temperature for a full 24 hours prior to beginning installation. This allows the product to relax from being rolled and to size-stabilize at the typical room temperature. Inspect product thoroughly prior to installing, checking for defects.

Only Approved Adhesives Must Be Used For Warranty to Apply:

BR 721™ Epoxy Adhesive – Solvent Free

BR 710 One Part Urethane Adhesive – Solvent Free

I. Storage

- A. Check rolls for completeness of order. Check for correct color and description.
- B. Store rolls off the ground and out of the elements. Do not stack skids, or stack other materials on rolls.
- C. Prior to installation, the rolls and adhesive must be conditioned to an ambient temperature at the actual job site of not less than 59°F (14°C) to not more than 85°F (29°C) for at least 48 hours. In severe climates an 8 day conditioning period may be necessary.

II. Sub-floor Preparation - For Additional Required Information, refer to ASTM F-710 - Practice for Preparing Concrete and Other Monolithic Floors to Receive Resilient Flooring.

A. Concrete Sub-floor

1. On-grade and below-grade sub-floors must be protected against ground moisture with a properly installed membrane type moisture barrier. New concrete sub-floors should be allowed to cure a minimum of 30 days.
2. Sufficient moisture test sampling should be made. The emission of moist vapor from the slab should not exceed 3 lbs. per 1,000 sq. ft. per 24 hours. Perform RMC/Calcium Chloride test to test for proper dryness conditions.

1. *RMA/Calcium Chloride Moisture Test*
2. The RMA moisture test provides a specific moisture reading for a limited area of the concrete slab. This procedure is the preferred way to judge the moisture content of the concrete substrate in question. Test kits can be

purchased from your local flooring supplies distributor. Follow instructions in the kit.

3. The RMA ("Calcium Chloride") test should be conducted after the HVAC has been turned on and the area being installed has been appropriately acclimated. False readings are possible if the area is not brought to normal operating temperatures for at least 5 days. If the readings are above 3 pounds per 1,000 square feet, **DO NOT INSTALL!**

Concrete Sub-floor Condition: The concrete sub-floor should be dry, clean, non-scaled and free of dust, and flat to within 1/8" in 10 linear feet. The surface should also be finished to a texture similar to 100 grit sandpaper. If the concrete is glazed or very smooth, it must be thoroughly sanded or shot blasted (see B-2) to assure proper adhesion. Remove all dust by vacuuming.

3. **An adhesion test of at least 24 hour duration should be performed.**

This is the safest check for bonding success to determine if curing compounds, other adhesive bond-breakers or too smooth a surface are present.

1. **Adhesion Test** – First, determine *sub-floor temperature* using a floor thermometer, noting the cure rate chart under Section IV B.2., then determine *moisture content* (see II A-3).
 2. The installer should make an adhesive bonding test (at least one per every thousand square feet). Cut Rubber tile into 9" x 9" pieces and install them using the recommended adhesive. These test patches should remain in place for a minimum of 24 hours to determine if there is good bond to the sub-floor and also to observe if there is sufficient transfer of adhesive both to the sub-floor and to the back of the floor tile.
 3. Removing the test patches from the sub-floor should be difficult with most of the cured adhesive remaining bonded to the sub-floor. If proper bond is not accomplished, do not proceed with the installation. Contact your Burke Flooring distributor.
 4. **Important:** With respect to the type of concrete or other cementitious patching material used in the sub-floor, responsibility for a warranty and performance of the sub-floor belongs to the concrete or cementitious patching material manufacturer and the installer.
4. *Curing compounds, bond breakers or sealers* will seriously inhibit the adhesion of the tile to the sub-floor. They should be completely removed by

scarifying, grinding (with a terrazzo grinder) or by shot blasting. One shot blasting machine, Blastrac, is made by U.S. Filter Blastrac; (405) 478-3440; (800) 256-3440; www.surfacepreparation.com.

5. *Oil or Grease on the sub-floor.* Grease or oil stain must be thoroughly washed with a degreaser and thoroughly flushed. If the concrete sub-floor is impregnated with oil or grease, do not attempt to install Rubber tile.
6. *Burke does not warrant installation of Rubber tile over un-removed old floor coverings (such as vinyl tile), coatings and adhesives.* Should the installer elect to install over old floor coatings or coverings such as tile, adhesives or paint, adequate adhesion may not be achieved.
7. Old black asphalt "cut back" adhesives are harmful to a good bond and must be mechanically removed or properly covered with approved cementitious patching compound (see #9 below). BR 725 can be used over cut-back **residue** left after the bulk of it has been scraped off the floor. **Do not use** epoxy or contact adhesives over cut-back adhesive residue.
8. *Ceramic tile, quarry tile or terrazzo floors.* Installing rubber tile over ceramic rolls is not recommended. However, when the ceramic glaze is sanded thoroughly and when the grout lines are filled and leveled properly with a cementitious leveler, the installation may be successful. Over terrazzo sub-floors adhesion is sometimes difficult due to waxes burnished into its very smooth surface. If installation over terrazzo is contemplated, the minimum preparation should be shot blasting or terrazzo grinding to remove all waxes or soil. Remove all dust by vacuuming. A thorough adhesive bond testing should be performed. BR 721 or BR 725 adhesives are the best suited adhesives for good bond, but caution is recommended.
9. *Cracks, depressions, "saw-cut" construction joints (non-moving) and rough areas* should be cleaned and filled with a top quality cementitious patching compound with a minimum compressive strength of 4000 psi such as Ardex or Mapei (see below). Use as directed by the manufacturer. If rubber tile epoxy is used as a crack filler, plow the epoxy well into the depression. Allow to cure completely. Sand the cured epoxy for better adhesion.

Sources include:

Ardex, Inc., 400 Ardex Park Drive, Aliquippa, PA 15001
(412) 264-4240.

Mapei Corp., 1144 E. Newport Ctr Drive, Deerfield Beach, FL 33442
(954) 246-8888; (800) 426-2734.

9. ***Do not use gypsum based leveling or patching compounds under any circumstances. Rubber tile is extremely resilient and will cause all gypsum or plaster-based patching compounds to crack or split. Use only cementitious based trowel-able patching or self leveling compounds!***
10. *Expansion Joint.* No attempt should be made to lay Rubber tile over an architectural concrete expansion joint that is designed to move. Instead, the tile should stop before the joint on both sides. The joint should be protected with a metal cap fastened on one side allowing the joint to move without restriction. Use expansion joint systems as manufactured by C/S Group, Muncy, PA 17756 (570) 546-5941; (800) 233-8493.
11. *Exposure to extreme heat.* Extreme heat from sun, blowers or radiant heat during the adhesive cure will cause the rolls to expand and peak. During the period of 24 hours before installation and throughout the adhesive curing period, the sub-floor temperature should be at 72°F (24°C) and must not be colder than 59°F (14°C) or warmer than 85°F (29°C). Refer to cure time chart in Section IV B.2. Direct sunlight should be blocked during installation and for the first 8-12 hours of adhesive cure time.

B. Wood Sub-floors

1. Exterior grade plywood with a minimum total thickness of 1" should be used with smooth plugged side up. Hardboard, Luan, MDF, chip boards or other engineered wood substrates, are not strong or stable enough and are not recommended.
2. Wood sub-floors will require ventilation when laid over concrete to avoid wet and dry rot. At least 18" of airspace and air circulation between an on grade or below grade concrete sub-floor and the wood sub-floor is mandatory.
3. Planked wood floors used as a sub-floor may "telegraph" through a rubber tile installation. It is best to install plywood over plank floors.
4. Unevenness of wood sub-floors should be planed or machine sanded. Remove all dust by vacuuming.
5. Loose sub-floor panels should be refastened with screws.
6. Protruding nails should be leveled or removed. Holdfast or screw nails should be used.
7. Single sheets of wooden sub-floors should not exceed 16 square feet or 1.2 square meters.
8. Expansion space between wood panels should be .038" or 1 mm.
9. Dents, seams and holes may be leveled with the rubber tile epoxy adhesive or cementitious leveling compound. After cure, the adhesive must be sanded to roughen its smooth surface.
10. Plywood sub-floors should be screwed down or nailed with flooring ring nails. Use a minimum of 1 fastener per 9 square inches of sub-floor.

Note: the use of cement board such as Hardie Backer is acceptable. Be sure to smooth all points and dimples made by fasteners with a cementitious patching compound.

C. Asphalt Sub-floors

asphalt requires the same preparation as concrete however due to variations in asphalt substrates it is the users responsibility to check the adhesion of a curate adhesive on a typical test area on the site before application begins. See paragraph 4 on performing tests installation procedures.

D. Rock-Based Substrates

1. Begin preparing the surface 2 to 3 inches below the level of the finished floor. Fill prepared area with 3/4" or smaller crushed gravel, decomposed granite or limestone products. Tamp down to 2 to 3 inch thickness so that the base is near level with the area of installation, minus the thickness of the EcoFitness rolled rubber flooring.
2. A border should be installed to further house the rubber flooring once it is installed. This "housing" or border holds the EcoFitness Rolled Rubber Flooring edges in place. The housing or border can be a concrete curb, wood or other permanent or semi-permanent border.
3. If a border is not an option, ceiling or adhering this seems together is recommended. Use the CX - 22 seam sealer or BR 726 urethane adhesive should. Check the seam sealing installation section of the construction for more details.

III. Installation

A. *Sufficient light is essential.* Lighting conditions must be bright enough to observe color consistency, registration and seaming quality during dry fit inspection.

B. Indoors

1. EcoScore Rolled Rubber should be installed by a trained professional flooring installer with experience installing rubber flooring. Assume that the walls, and/or curbs that the rolls will abut are not perfectly straight or square.
2. Begin by determining the vertical center of the area to be installed. Snap a chalk line. Snap two additional chalk lines 24" out from either side of the original chalk line. This is the guideline for the first 48" wide roll. Insure that the flooring is laid so that any curl is facing down. This will prevent the ends from curling up.
3. Placing the roll end against the wall, unroll the first piece over the prepared area. Maneuver the rubber to lay precisely within the two chalk lines by tapping with a mallet and the wood block. If the length of the rubber roll exceeds the length of the floor, use a straight edge and utility knife to trim the excess length, leaving an extra inch for the final cut (see cutting tips).

4. Repeat steps above for remaining rolls. For subsequent roll placement, chalk lines can be used to define the areas of installation, but is not as crucial as with the initial piece. To insure a tight fitting seam when butting one roll up to another, overlap the seam by 1/8". Working from one end, work the overlapping roll down into the seam. If a gap appears, lift the roll and overlap the roll to before the gap and repeat the process. If rippling appears on the far side of the overlapping roll, remove this by stretching the material by pulling or a kicking motion. Always insure a tight fitting seam prior to applying adhesive. Prior to curing, the adhesive will not have enough grab to fix a misaligned seam. Never apply tape to the surface of the flooring as it may leave a residue on the surface when removed.
5. After the room has been laid out and allowed to fully acclimate to the room and floor temperature, trim the roll lengths as required for an exact fit. Beginning with a roll aligned along a front edge or wall; pull the roll back half of its length. Apply adhesive as described below. Lay the flooring back down being careful not to form any air pockets. Repeat for the other half of the roll and move on to adjacent rolls. When laying the other rolls, be sure to overlap the seams by 1/8" and force the overlap into the seam. Be careful not to allow the overlapping part to touch the adhesive first. Thoroughly roll the floor with a 50-100# roller to assure bonding of the rubber to the adhesive. Be careful not to shift the roll while rolling. Rolling should be done again at 30 and 60 minutes after initial placement of the roll into the adhesive. Roll in both directions, width and lengthwise to insure maximum contact.
6. Adhesive should be applied thinly and evenly with 3/16"x1/4"x1/4" V trowel. Clean up excess and tools with mineral spirits, but don't allow mineral spirits to contact rubber. Any adhesive coming up through seams should be cut away. Allow 48 hours curing time for the adhesive before traffic is on the floor.
7. **Outdoors**
Outdoor installations typically require complete adhesion for maximum floor strength. Use same procedures as for Indoor applications. Using seam sealers will also add strength and immobility to the floor (if using a seam sealant, leave 1/8" gap between rolls). Take note of outdoor temperature when using adhesive, as it will affect the curing time. In some areas, nighttime installations may work better.

ADHESIVE CONCERNS

1. Protect unopened containers from heat and direct sunshine. Store containers in temperatures of 70-75F for at least 24 hours before installation.
2. Wear gloves and remove any wet adhesive you get on your skin with a dry rag immediately.

3. Do not apply on frozen surfaces or standing water.
4. Avoid contact with alcohol or water before use and until adhesive is completely cured.
5. Do not use in areas subject to hydrostatic pressure.
6. Do not use on wet, contaminated, or friable surfaces.
7. It is the user's responsibility to check adhesion of the adhesive on a typical test area at the project BEFORE application.

OPTIONAL SEAM SEALING

Seam sealing is not necessary, but may be recommended in some cases, or be desired by the end-user. We recommend SikaFlex 1A as a good seam sealer. It will act as a bonding agent, help seams to be more water-resistant, and be as flexible as the rubber it bonds. To apply:

1. Leave approx 1/8" space between seams when installing the floor, then insert seam sealer between seams after floor is laid, allowing 48 hours drying time.
2. To assure a strong bond, clean the edges of the seam by steam cleaning with a mild dish soap or by using denatured alcohol.
3. Allow the cleaning materials to dry completely before applying seam sealer.

CUTTING TIPS

This works best with a good, strong, safe, non-retractable utility knife with extra blades. Blades will get dull, and should be replaced often enough to help reduce the possibility of injury from a dull blade.

1. Mark the rubber roll you will need to cut with chalk or chalkline.
2. Put your straight edge on the corresponding marks on the rubber roll
3. Holding the straight edge firmly in place, score the rubber roll 2-3 cuts.
4. Grab the roll close to the cut and bend upwards. The score line should open up some.
5. Now make enough passes with the knife to score it all the way through, being careful and safe. One can use the 2x4 block to put under the roll at the cut to help keep it bent upward and make final cuts easier.