Installation Instructions -- RESILIENT TILE FLOORING – Stair Treads

INSTALLATION INSTRUCTIONS FOR STAIR TREADS & ACCESSORIES

IMPORTANT NOTE **- These products should be installed by a professional. There are practices in the application of these products that require professional expertise.**

A. Introduction & Preparation:

Burke Flooring manufactures First Quality Products with high quality materials, quality-controlled processes, and with careful inspection made before shipment. However, a quality installation is the responsibility of the installer. The installer should verify the accuracy of the order, check the material for damages or defects, and check for color match and/or shade/pattern variation during a dry lay installation. A BurkeMercer representative should be notified of any problems before the adhesive application begins.

Burke Flooring Products are manufactured for interior use only. They are not recommended for commercial kitchens, computer rooms, or areas where there will be constant exposure and contamination from animal fats or oils. If you have any questions about the suitability for a particular condition, call 800-669-7010 and ask for Flooring Technical Assistance.

Installers and or End-Users are responsible for determining the suitability of Burke Flooring by means of their own tests/research. Burke cannot accept responsibility for losses or damage resulting from improper use of this information, improper processes, improper working conditions, or workmanship.

Condition Flooring Products, Adhesives, and all Accessories at 70 +/- 5 Degrees F for 48 hours prior to installation, during installation, and afterwards for another 48 hours.

If storing for more than the 2 days prior to installation, store all materials in a weather-tight enclosure. Do not stack pallets, and do not stack tiles or boxes of tiles any higher than you received them. When handling, keep the tiles face-to-face and back-to-back, just the same as they are packaged. Do not lean the treads or packages of treads up against walls, or other surfaces, this can cause warpage in the nose area. Leave them flat.

In rooms that are exposed to intense or direct sunlight, protect the materials from the sunlight during storage, conditioning before and after, and installation. Excessive UV exposure can cause fading and/or color variation.

B. Sub-floor Types:

1. Wood Stairs

Wood staircases must be smooth, flat, clean, & dry. They must be securely nailed and stable. Fill all cracks, deformations, and depressions with a cement-type latex patching compound, or Nose-Filler Epoxy. Let patching compound dry thoroughly, and then sand smooth. Do not install over old resilient flooring, or adhesives. Clean all steps thoroughly before installing new material. Remove old adhesives by physical means only (sanding, scraping, etc), do not use any chemicals or solvents.

2. Concrete Stairs

Concrete steps must be tested for moisture in accordance with ASTM F2169 "Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Sub floor using Anhydrous Calcium Chloride". Insure that your floor is porous and breathing well before performing the test. If it is non-porous, then sand it with very abrasive sandpaper to open it up. It is porous enough when a few drops of water dropped on the surface readily absorb within 30 seconds. One test per every 1,000 sq. ft. of floor space and test results cannot exceed 3 pounds per 1,000 sq. ft. in 24 hours. If the test results exceed 3 pounds, the floor is not good for an installation. The moisture problem must be corrected first. If the ph of the concrete exceeds 9, the surface should be neutralized before continuing.

> ***Note*:** Keep in mind, that even if a moisture test shows that the slab has acceptable moisture levels, it is only at the time of the test that the levels were acceptable. It is possible for the weather, sprinkler systems, or other causes to bring the slab to unacceptable levels of moisture.
> Therefore, it is very important that some moisture vapor control and prevention was built for the slab as well, in the way of a moisture barrier. If no moisture barrier exists, then one must be installed. Any on or below grade slab should have a moisture barrier, according to industry standards.
> These Recommendations are about our products ability to bond to sub floors; the performance and warranty of said sub floors should be addressed with the manufacturer of said items.

It is recommended to test concrete for good bond. Test one-step or use a 12x12 sample of the material to bond on the steps, let sit for 72 hours and check for bond strength. If OK, continue with the installation.

Fill all depressions, cracks, etc. with a cement-type latex patching compound, let it dry thoroughly and sand smooth. All Steel-Troweled, or Power-Troweled, slick finished concrete steps need to be sanded and roughened up before installing.

Ambient temperature is important during installation. But the slab temperature should also be between 65 to 75 degrees F for 48 hours before, during, and for 48 hours after installation. Use a surface thermometer. If the temperature is too cold, it will retard the curing of the adhesive considerably. The colder the surface is, the slower the adhesive cures. If the temperature is above 75, the adhesive will set-up rapidly, you will have less working time, and will have to roll very soon. When these temperature conditions exist outside of the recommended range, it causes issues with the adhesive's ability to work normally. This in turn causes treads and steps to be rolled too soon, leaving gaps, or rolled too late so that thickness differences occur on the floor, because the adhesive cured before it was rolled down flat onto the substrate.

3. Steel Stairs

The steps should be carefully cleaned by physical means of wire brush, sandblasting, etc., removing all rust, sealers, coatings, and contaminants. Then the steps should be coated with an anti-corrosive coating to prevent rust, if rust is a concern in your environment. Use Burke Flooring's BR 721 Epoxy adhesive only on this type staircase.

C. Installation of Stair Treads

1. Conditions

Proper ventilation and adequate lighting should be available. Check steps for conformance to the recommendations above. All materials (the flooring products, adhesives, any patching, or leveling compounds, and the sub floor itself) need to be conditioned to 70 +/- 5 degrees, for 48 hours prior to installation, during installation, and for 48 hours after installation.

Porosity Test -- If using the BR-711 adhesive you'll need to test your substrate for porosity. NOTE: Do not assume that wood or concrete are porous, you must test. Test by dropping a few drops of water on the substrate, if they readily absorb within 30 seconds, it is porous, if not, then your substrate should be considered non-porous. The application of the tile depends on the porosity of the floor with this adhesive.

2. Equipment

1. Burke Epoxy Adhesive BR-721, or BR-711 adhesive for Stair Treads
2. Epoxy Nose-Filler BR-715
3. BR-101 – for the Skirting, Risers, and any needed wall base
4. Mixing Sticks or Drill w/ Mixing Paddle
5. Carpenter's Square
6. Straight Edge
7. Scribe
8. Utility Knife
9. Chalk Line
10. Tape Measure
11. Hand Roller
12. Sandbags
13. Recommended trowel – 1/16" X 1/16" X 1/16" Square-Notched for most applications or 1/8" X 1/16" X 1/8" V-Notched for only certain conditions (see instructions below)
14. Rags
15. Water
16. Rubbing Alcohol

3. Fitting

Stair Treads, Risers, and Skirting/Stringers must be scribed and/or measured on each step and trimmed to fit each step and dry laid on each step prior to installing.

IT IS THE INSTALLERS RESPONSIBILITY TO INSPECT THE DRY LAID INSTALLATION AND NOTIFY THE APPROPRIATE AUTHORITY OF ANY IMPERFECTION, OR IRREGULARITIES PRIOR TO FINAL ADHESIVE INSTALLATION.

4. Stringer/Skirting Installation

If Skirting/Stringers are required, they must be installed first.

Make a template of cardboard or other suitable material, measuring the height and depth of each step, and transferring that data to your template. Rough cut the template, set in place and then trim to form a snug fit to the stairwell. Lay the template over the Skirting/Stringer and transfer the pattern using an awl. Cut the Skirting/Stringer material and check the fit. Trim to form a snug fit.

If the wall is porous, use the Cove Base adhesive BR-101. If the wall is non-porous, use BR-711 and follow the instructions on the label for non-porous applications.

Install Skirting/Stringers, roll with the hand roller to insure good adhesive contact.

5. Stair Tread/Riser Installation

Adhesives

BR-721, Burke Epoxy is the most commonly used adhesive for our stair Treads. Pour either unit A or B into the other unit and mix until homogenous, no more and no less. Insufficient mixing will cause adhesive failures, and over-mixing breaks down the viscosity of the adhesive and it can become runny. Pot Life is short, around 30-60 minutes (depending on temperature and humidity, hot and dry is quicker, and cold and moist is slower).

Once mixed, it is best to get the material out of the can and onto the installation surface (or another surface to work off of) as soon as possible. The air space in the can is small and the chemical reaction can happen very quickly, with the can getting hot to the touch.

It is recommended that you use Mixing Sticks in a folding and stirring fashion until mixed, to avoid over-mixing. If you use a Mixing Paddle on a drill, keep your RPM's low and be careful not to over-mix, just mix enough to bring it together to a homogenous state, no more. Moisture testing of the substrate is necessary, see Moisture Testing section above. BR-721 can be used on porous or non-porous applications.

BR-711, a one-part acrylic adhesive can be used on Stair Treads if there is no threat of moisture. It can be used on wood or concrete, but the substrate must be tested for porosity and moisture. The label on the can thoroughly explains the simple porosity test (a couple of drops of water is all that's required, and

observation). The adhesive must be used accordingly for non-porous conditions, or for porous conditions. The label describes both methods. Essentially, if its porous, you can lay into it wet, if non-porous, you must let it flash-off first, the label explains.

BR-715, an epoxy Nose-Filler is required to maintain your warranty. If there is any void between the step nose and the Tread nose, BR-715 must be used to fill that void. If you do not use it, you will start cracking at the nose from traffic and flex.

To apply, spread liberally in the back of the nose enough material to fill the void. When the Tread is pushed into place, the Nose-Filler should fill the existing void if enough material was used. CAUTION – Do not use if the void is greater than ¼". If the gap is greater than ¼", then we do not recommend our Stair Treads for that application until the substrate is modified to allow a void of less than ¼".

BR-101, a Cove Base adhesive that can be used on the Risers, Skirting/Stringers, or any wall base needed for the Stairwell, if the wall is porous.

Step-Bond Tape is a 2-sided, pressure sensitive tape for installing Treads and Risers. There is a 1" wide roll for use with the Nose, and 6" wide rolls for the step part of the tread, and the riser if using the one-part Tread/Riser combination part. Use 2 - 6" wide strips for Stair Treads and
3 - 6" wide strips for Tread/Riser combination parts. This product requires a very clean substrate. We are not recommending this tape for Vinyl Tread Applications at this time.

WARNING - ANY EXCESS ADHESIVE THAT COMES UP BETWEEN SEAMS OR AROUND THE PERIMETER OF PARTS, MUST BE CLEANED UP IMMEDIATELY WITH WATER OR RUBBING ALCOHOL AND A RAG. IF THAT EXCESS ADHESIVE HARDENS ON YOUR FLOORING IT WILL BE PRACTICALLY IMPOSSIBLE TO CLEAN OR REMOVE WITHOUT DAMAGING THE TILE OR TREADS.

Trowel Size

For most conditions, use a 1/16" X 1/16" X 1/16" Square-Notched Trowel. If your steps are new, porous wood, or new concrete with very open pores, use a 1/8" X 1/16" X 1/8" V-Notched Trowel.

Application

Note: If installing the Tread/Riser Combination part, you must install Cove Stick (Part No. 070) in the 90-degree junction area, where the tread ends and the riser begins. This will work as a support for the bend at that junction, where the tread bends up to become the riser.

If you have ordered Butt Treads, they will be marked in sets, on the backside of each Tread, so that the mechanic can install them properly.

Spread adhesive on the Tread and Riser. Do this separately, if using separate treads and risers. Use BR-101 on the Riser, if substrate is porous, or use same adhesive as the Tread otherwise. If applying the Tread/Riser Combination part, then spread both the tread and riser together. If using the tape, then lay the 1" wide strip on the nose (leaving the peel paper in place) and the 6" strips across the step (leaving peel paper in place), until it is covered. Apply any BR-715 Nose-Filler keep other adhesives ½" back from the nose point to allow for the Nose-Filler.

For BR-711, remember to test for porosity, and use adhesive according to whether or not it is porous. If porous, let adhesive sit for 5-10 minutes, then lay into it wet. If non-porous, let the adhesive dry to the state where nothing comes off on your finger from touching it. At that point, start installing, you have 45 minutes to work. Only apply enough adhesive to allow for 45 minutes of application. If you allow the dry-state to sit open longer than 45 minutes, you lose bond-strength.

Position and place tread into place, starting at the nose, and pushing back and pressing down until it is all in place. Roll Tread and riser immediately after application with the hand roller to ensure good adhesion. If using the tape, peel the paper from the nose and set your nose first, while holding back the rest of the tread. Peel the paper off strips as you lay the tread back into place from the nose, being careful to keep the tread in proper position. Roll immediately with the hand roller. Make sure that each tread is fit tight to the nose, and is adhered to the nose. Once the installation is complete, roll the treads again, firmly.

Cleanup any excess adhesive on the flooring surface while its wet with water, or rubbing alcohol, and a rag. Do not allow it to harden, it cannot be cleaned or removed without damage to the flooring, if hardened.

Final Steps

Insure that all areas are securely bonded. Sandbag any areas where needed to insure bond in seams, edges, or any potential problem area.

Mark off the area to keep traffic off for at least 12 hours, and do not allow heavy foot traffic for a minimum of 24 hours, 72 hours is best if possible.

Permit no heavy equipment or rolling loads for 72 hours.

Protect from other construction by covering until construction is complete.

Do not perform maintenance for 72 hours.

Maintain 65-75 degrees F for the next 48 hours.

Inspect the floor 2.5 hours after installation; roll a 3rd time if necessary.