Brick or Tile Pattern Finish Instructions



Concrete Solutions Polymer Concrete Brick or Tile Pattern Finish is most commonly used to provide decorative borders and/or designs on driveways, patios, pool decks, commercial shopping center walkways, entertainment park entrances and exit pathways, etc. wherever an enhanced appearance is desired.

PRODUCTS AND TOOLS NEEDED

Application Steps	Product Name	Coverage Rate/Gallon	Tools for Application
Apply a Bond Coat of Polymer Concrete	OPTION 1: Concrete Polymer (Mix with water, cement & sand)	150 – 250 sqft per gallon of polymer	24" metal squeegee hand trowel
	OPTION 2: Resurfacer (Mix with water)	150 – 250 sqft per bag mix	
Apply a Brick or Tile Pattern Application of Polymer Concrete	OPTION 1: Concrete Polymer (Mix with water, cement & sand)	150 – 250 sqft per gallon of polymer	24" metal squeegeehopper gun spray unitstrapping tape/stencils
	OPTION 2: Resurfacer (Mix with water)	150 – 250 sqft per bag mix	
Apply one or two coats of Sealcoat 1000	Sealcoat 1000 (Apply undiluted using a pump-up sprayer and a soft broom)	400 sqft per gallon	pump-up or airless sprayersoft flag tip broom

SURFACE PREPARATION

Generally, the Brick or Tile Pattern Finish is applied over a Bond Coat (Resurfacer) of Concrete Solutions Polymer Concrete; therefore, there is no special surface preparation procedure. Just be sure the surface is clean. If you do not have a Bond Coat down, read the following instructions. Surface Preparation is often the most important part of a successful coating or resurfacing application. Surface must be clean, sound, and free from oil, dirt, waxes, or any other contaminant that may interfere with bonding. Popular methods of surface preparation include grinding, shotblasting, and/or scrubbing with detergent, acid etching, neutralizing, and pressure washing. The type of surface preparation needed will depend on the condition of the substrate to be repaired, resurfaced, textured, stamped, colorcoated and/or sealed. For commercial and industrial indoor jobs, grinding is required to prepare the surface. For residential indoor jobs, scrubbing with detergent, acid washing, neutralizing, rinsing and wet/dry vacuuming is recommended. For most outdoor jobs, the surface can be cleaned by detergent scrubbing, acid washing and pressure washing. The following is a step-by-step procedure.

- 1. Protect the walls with tape and plastic before scrubbing or rinsing.
- 2. Scrub and rinse the floors. First dampen the surface with water in 100 to 200 sq. ft. sections at a time using a water hose. Using the floor polisher machine, scrub the dampened surface with a strong detergent (such as Simple Green) diluted 2 to 1 or 5 to 1 with water. For oil spots use straight detergent with no dilution. While scrubbing, use a water hose and trigger gun nozzle to clean the surface behind the floor polisher. For large open areas such as a warehouse floors, etc., a 3000 psi (or higher) pressure washer with a 15 degree or spinner tip on the end of the gun can be used to clean behind the floor polisher. Rinse immediately behind the floor polisher, so the residue does not dry on the surface. Use a rubber squeegee and/or broom to keep the dirty water from running back into the rinsed clean areas. Use a wet/dry vacuum (one or more depending on the size of the job) to remove the dirty water and detergent from the surface. The persons scrubbing, rinsing, squeegeeing and vacuuming should all work closely together doing a section at a time. After rinsing the surface clean, check the oil spots by rubbing them with a white rag. If the rag gets dirty, it will need to be scrubbed with a heavy duty detergent using a floor polisher machine and then rinsed clean prior to using a grinder.

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- **3.** If the surface is coated with a paint or sealer, it will be necessary to remove the coating using a paint stripper, sandblaster, shotblaster or surface grinder. If a shotblaster is used, a dustless grinder can be used to clean the edges where the shotblaster cannot reach.
- **4. Open the concrete pores.** Acid washing is recommended to etch a concrete surface when grinding, shot-blasting or sandblasting is not possible or unavailable. Opening the concrete pores allows the coating material to get good adhesion or bite into the substrate. Always wear the appropriate safety protection. The proper procedure to acid wash a concrete surface is as follows:
 - **a.** Mix a solution in a 5 gallon pail consisting of 4 parts water and 1 part muriatic, hydrochloric or phosphoric acid. ALWAYS ADD THE ACID TO THE WATER FOR SAFETY AND TO AVOID SPLATTERING.
 - b. Dampen the surface with water (no puddles) before applying the acid solution.
 - **c.** Pour or spray the acid solution onto the dampened concrete surface. When spraying, use an acid-resistant pump-up sprayer.
 - d. Scrub the acid solution evenly over the surface using an acid-resistant broom. Allow the acid solution to sit on the surface and work for 3 5 minutes etching the concrete. Do not allow any areas on the concrete to dry during the etching process. If this occurs, spray more water or acid solution to keep the surface wet.
 - e. Once the acid solution stops fizzing, spray a solution of 10 parts water and 1 part household ammonia onto the acid solution to increase the pH and neutralize it prior to rinsing.
 - f. Thoroughly rinse any acid residue off the concrete surface using a pressure washer. Pre-wet any surfaces the acid solution will be rinsed over. If indoors, rinse with water a section at a time and remove the water and acid solution with a wet/dry vacuum.

CRACK & JOINT REPAIR

Structural moving cracks should be repaired/treated with Concrete Solutions Crack Repair System prior to applying Texture-Top or any other Concrete Solutions polymer concrete products. Please refer to Concrete Solutions Crack Repair Instructions for the complete and detailed procedure.

MIXING INSTRUCTIONS

BOND COAT MIXING FORMULA (OPTION 1)

Mix by Volume

1 Part Concrete Polymer1 Part Water (Clean)

2 Parts Cement (Portland Type I/II, regular and/or white cement)

2 Parts Silica Sand (#60 or 90)

Note: To make a four gallon mix in a five gallon bucket which should cover approximately 150 sqft, mix one gallon of Polymer, one gallon of Water, two gallons of cement and two gallons of #60 silica sand. Mix with a drill and mixing paddle for 3 – 5 minutes.

The Bond Mixes are also available premixed. Resurfacer is a just-add-water premixed bag mix.

BRICK/TILE PATTERN MIXING FORMULA (OPTION 1)

Mix by Volume

1 Part Concrete Polymer 2 Parts Water (Clean)

3 Parts Cement (Portland Type I/II, regular and/or white cement)

3 – 6 Parts Silica Sand #60 (usually 3 – 5 parts for spraying; 6 parts for troweling)

Coverage Rate - 150 - 250 square feet per gallon of Concrete Polymer

Directions – Put the liquid ingredients (the concrete polymer and water) into the mixing container. Start the mixer. (a 1/2 inch drill motor and mixing blade for smaller batches; a plaster or mortar mixer for larger batches) Slowly add the cement and sand. Mix all of the ingredients together. Add the pigment after the sand to achieve the brick or tile color desired. Use iron oxide ground powder pigments designed for cement mixes or liquid color pigments or colorants used to pigment waterbase paints. Thoroughly mix three to five minutes to achieve a uniform, no lump consistency.

Note: Use the least amount of pigment required to achieve the desired color. Too much pigment can weaken a polymer concrete mixture. In a four gallon mixture of Polymer Concrete, normally 1/2 – 1 pound of pigment is all that is required. This can vary according to the color you desire. For small mixes (3 – 5 gallons), gradually add 1/4 cup of pigment slowly, and mix thoroughly for 30 seconds to 1 minute; then, as more color is desired, add additional pigment slowly, up to 1/4 cup at a time and mix again. Proceed in this manner until the desired color is achieved. For larger batches, slowly add 1 cup of pigment at a time.

If premixed bag mixes are preferred, Resurfacer can be substituted for the cement and silica sand com-bination. Resurfacer is a just-add-water premixed bag mix.

APPLICATION INSTRUCTIONS

Using strapping tape:

- 1. Apply a grout coat using the Concrete Solutions Polymer Concrete Bond Coat Mix. You can use regular gray cement, white cement or a combination of gray cement and white cement to achieve the color desired; also, you can pigment the polymer concrete mix to achieve the color desired. (Most popular is the standard gray cement polymer concrete mix]. After application, allow the Bond Coat Mix (the grout coat) to dry for 4 hours or more before taping off the desired pattern with grout tape (strapping tape).
- 2. Tape out the border, design or pattern desired. 3/8 to 1/2" strapping tape is suggested. (See photos for a picture description.) For standard brick borders measure 4 inches by 8 inches. For brick patterns and designs measure off a 4 inch grid using a pencil to make the 4 inch marks along each edge. Stretch the strapping tape from mark to mark in both directions to achieve a 4 inch grid of tape. From this 4 inch grid, at least 3 brick patterns (basketweave, bond-beam pattern or herring-bone patterns) can be cut out. Use a razor blade or razor knife to cut out unwanted pieces of tape to reveal the desired pattern. **Note:** To create the herring-bone brick pattern, the 4 inch grid will have to be laid out at a 45 degree angle.
- 3. After cutting out the unwanted tape, the brick color mix can be made and applied over the tape using a compressor and hopper gun spray unit and/or trowel. When using a trowel it is recommended to first trowel a thin bond coat mix (in the same color used for the grout line color) over the taped area, to seal the edges of the tape. This will prevent the contrasting brick color from bleeding under the tape. Trowel this Bond Coat mix as thin as possible so the tape still shows through. When dry to touch, generally 30 minutes to 1 hour, mix and apply the brick color of Concrete Solutions Polymer Concrete. Do not spray water before or during the application as you would normally do in a regular polymer concrete application. Trowel the Concrete Solutions Polymer Concrete Brick Mix over the tape, approximately 1/32" thick or less (just a little thicker than the grout tape). Trowel it smooth or if you prefer; leave some texture marks. Either peel the tape immediately after the brick mix application to reveal the grout lines or wait until the brick mix dries completely (generally one to two hours) to peel the tape away.
- 4. Seal the brick designs and grout lines with Sealcoat 1000. Do this immediately before any water gets onto the surface of your finished design. Water can cause the pigment in the brick mix to streak or discolor. An application of Sealcoat 1000 will protect your work and seal to maintain a uniform appearance. Sealcoat 1000 can be applied when the pigmented polymer concrete material is dry to touch generally in one to two hours.
- 5. For heavier traffic areas that require greater abrasion resistance, apply Concrete Solutions Stamped Concrete Sealer instead of Sealcoat 1000. Do NOT apply Stamped Concrete Sealer over Sealcoat 1000. When Stamped Concrete Sealer is applied, allow a minimum 4 6 hours for the Concrete Solutions Polymer Concrete Brick Mix material to dry prior to the Stamped Concrete Sealer application.

Using paper or plastic stencils:

- 1. Apply the Concrete Solutions Polymer Concrete Bond Coat Mix to create the grout line color in the same manner as described above for the strapping tape method. Allow the polymer concrete mix to dry to touch which is usually 1-2 hours.
- 2. Layout stencils over the polymer concrete grout line coat. Use disposable, sticky back paper stencils or reuseable plastic stencils.
- 3. Mix up the Concrete Solutions Polymer Concrete Brick or Tile Mix and pigment to the color desired.
- 4. Using a compressor and hopper gun spray unit, spray the polymer concrete brick mix over the patterned stencil at a 100% coverage rate. Adjust the sprayer and the consistency of the mix, as needed, to achieve the desired spray texture. Option: To create a different look, wait a few minutes after the brick mix application; then trowel over the spray texture to create the finish desired. Note: Be careful not to get the polymer concrete brick mix material too thick over the stencil. Try to finish the material flush with the top surface of the stencil.
- 5. Remove the stencils when the Concrete Solutions Polymer Concrete Brick or Tile Mix dries enough so that it won't drip or damage the edges of your brick or tile pattern.
- 6. Seal the completed brick or tile design, including grout lines within 1 2 hours after the pigmented polymer concrete application with Concrete Solutions Sealcoat 1000. If maximum abrasion resistance is required for heavy traffic situations, apply Concrete Solutions Stamped Concrete Sealer instead of Sealcoat 1000. Do NOT apply

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Stamped Concrete Sealer over Sealcoat 1000. Wait 4 – 6 hours or until the following day to allow the pigmented polymer concrete material adequate time to dry. Apply one or two thin coats.

Notes: When different batches of pigmented concrete polymer brick or tile mix are required, mix each batch precisely to achieve a consistent color. If you have a problem achieving a consistent color, where required, Concrete Solutions Concrete Colorcoat or Sealcoat 1000 in a matching color can be applied to achieve a uniform color prior to removing the tape or stencil. The most natural look occurs, however, when a uniform in color look is achieved with the pigmented polymer concrete brick or tile mix without having to colorcoat with Concrete Colorcoat or Sealcoat 1000.

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