GRANITEX
2 Day

Arizona Polymer Flooring

Application Instructions: Granitex 2 Day

Moisture Vapor Emission Testing
All interior concrete floors are subject to possible moisture vapor emission and/or excessive alkalinity that could ultimately cause coating failure. Prior to application, calcium chloride moisture testing should be conducted according to ASTM 1869-04.

Surface Preparation
Surface preparation is vital to the long-term success of the installation. All surfaces to be coated must be clean, sound and free of mastics or other contaminants that may interfere with bonding. Landscape rock or grass must be removed from the perimeter of exterior slabs, allowing 1-2 inches of the vertical edge to be treated. For interior applications, moisture vapor emission testing should be conducted using the calcium chloride test method according to ASTM 1869-04. Concrete must be shot blasted or diamond ground to achieve a 5-10 mil profile. After proper surface preparation, the concrete must have a profile similar to 120-grit sandpaper.

After the initial preparation has been accomplished, inspect the surface for indentations and holes. These must be filled prior to application using Epoxy 300 Flex Paste. A flexible putty knife or trowel works well for this procedure. Patching may be done while the concrete is damp.

Generally on interior applications, cracks and control joints should be filled with Epoxy 300 Flex Paste and would have a low probability of recracking. Expansion joints should be filled with Epoxy 300 Flex Paste, and the system applied over the joint. After final cure, recut the joint and fill with a two-component urethane caulk. For exterior applications where more movement is anticipated, cracks and control joints are usually not filled, or if filled, would be expected to recrack. Bull nose joints in garage floor applications and in all exterior applications are not normally filled. Exterior felt expansion joints are normally coated well with Epoxy 300 Flex before priming. Expansion joints without felt should be honored and treated in the same manner as interior expansion joints. Interior felt joints should be coated with latex paint before priming. This reduces the porosity of the felt and helps the chips cover better.

Blending of Color Chips
Pre-blended chips are available from the factory to match the APF samples. Custom blending is also available. Determine the total pounds of chips needed for the installation. If you want the entire surface to be covered with chips, a “broadcast to refusal” is required. To determine the pounds of chips necessary to have on hand for your installation, multiply the total square feet by 0.12. If using the 1/8” chips, use 0.15. Of this total amount, 10-20% will be recovered and can be used on a future job. If both used chips and new chips are to be used on a job, they must be blended together to achieve uniformity. Use household screen to remove most of the powder from the mix before using. It is better to have too many chips on the job than not enough.

If the contractor chooses to purchase single color chips and do his own blending and processing, use the following procedure: Mix all the color chips thoroughly and put them through 1/8, 1/4 or 5/8 inch hardware mesh for sizing. Most of the powder generated from blending must be removed using regular household screen.

Application of Color Chips
The base coat for the system is Epoxy 550. Any vertical areas, such as coves or perimeter slab edges, must be chipped first. Brush a liberal coat of Epoxy 550 onto the vertical areas, stopping the material approximately 1 inch onto the horizontal surface. Throw the chips by hand into the fresh material until the area is uniformly covered. After completing all of the vertical areas, sweep up any excess chips from the horizontal surface.

Apply the Epoxy 550 to the horizontal surface with a 1/2 inch nap roller. Overlap slightly any vertical areas previously chipped. Apply a liberal coat, but do not allow to puddle. The application rate should be 150-200 sq. ft. per gallon. The application rate is important. Do not “stretch” the material.

Transfer the chips from the box into 5-gallon pails. (These pails are available through APF.) The mechanic sprinkling chips must walk onto the wet material wearing spiked shoes. Sprinkle the chips through the fingers with the palm turned upward. For larger areas, have two mechanics sprinkling the chips. It is advisable to practice sprinkling the chips on the dry primer to “get a feel” for sprinkling before you begin the actual process.

For the best finished appearance, an even distribution of color chips is essential. The easiest way to achieve this is broadcasting the chips to refusal. This means getting enough chips on the coated surface to obtain a completely covered, even appearance. Broadcast enough chips to achieve this without using an excessive amount. If a lighter distribution of chips is desired, it must be very carefully done to keep the look even. This takes practice and a keen eye. Focus on a 10-12 sq. ft. area and achieve the desired distribution in that area before moving on to another. Avoid getting a heavy concentration of chips in any one area. Achieve the desired distribution gradually. Do not sprinkle chips on any part of the substrate not yet base coated. Leave a 1-2 feet space of base coat unchipped to allow the roller to tie in. Do not use the chips from the last inch of the pail. These chips will be smaller and contain more powder than the rest of the blend. These chips can be blended in with the next full pail used.

Application of the 1st & 2nd Glaze Coats

After the base coat has dried overnight, sweep up the chips that have not adhered with a stiff bristled broom. Save these chips for future use. After sweeping, scrape the surface lightly but thoroughly with a drywall scraper. Scrape in both directions, both vertically and horizontally. After scraping, sweep, blow or vacuum the surface clean.

If you find that the chips have not covered the substrate uniformly, rolling the clear material will highlight areas that do not have the desired even distribution. Apply a coat of Cem–Seal clear from a 5-gallon pail using a 1/2 inch nap roller and the dip and roll method. Brush trim the vertical areas and edges.

After wetting the area with clear material, walk onto the wet surface wearing spiked shoes and sprinkle more chips to even out the appearance, if necessary. Wet the roller again and back roll over the freshly placed chips. Total usage of the Cem–Seal clear should be 250-300 sq. ft. per gallon. If more film build atop of the chips is desired, apply a second coat of Cem–Seal clear after the first coat has dried (15-45 minutes). Apply the second coat at 275-325 sq. ft. per gallon.

All exterior applications and interior applications that may be subject to wet conditions must incorporate slip-resistant particles. After all trim work is completed, add one full 3-oz. Dixie cup of 30-mesh Res-N-Sand to each gallon of Cem–Seal clear. Mix well and apply the material from a 5-gallon pail using a 1/2” nap roller and the dip and roll method. Coverage should be 300-350 sq. ft. per gallon. Roll the material well to achieve an even particle distribution.

Application of the Finish Glaze Coat

After an overnight cure, apply a finish coat of Polyurethane 100, Polyurethane 100 VOC or Polyurethane 501 at the rate of 275-325 sq. ft. per gallon. Allow to cure overnight for foot traffic and 5-7 days for vehicle traffic depending upon temperature.