GRANITEX
Light Broadcast

Arizona Polymer Flooring

Application Instructions: Granitex Light Broadcast

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 the 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 acid etched, 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. Wood surfaces must be exterior grade plywood, securely fastened to the subfloor or joists. Wood must be sanded before application. Read our detailed instructions on surface preparation before proceeding.

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, reducing the porosity of the felt and helping 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. To determine the pounds of chips necessary to have on hand for your installation, multiply the total square feet by the factor of 0.02 – 0.04.

Priming
Prime with either Epoxy 100 or Epoxy 200. Coverage rates for both primers should be 275-325 sq. ft. per gallon. If the concrete has been patched with Epoxy 300 Flex Paste the same day, it is permissible to coat over these patches, but do it carefully so as not to disturb the patch. If Epoxy 100 is used as a primer, wait overnight before continuing. If using Epoxy 200, continue when the primer has become tack-free, usually one to three hours depending on conditions. If making a garage floor application, setting up two fans to blow air back into the garage will speed the dry time.

Application of Color Chips
The base coat for the system is pigmented Polyurethane 100. Any vertical areas, such as coves or perimeter slab edges, must be chipped first. Brush a liberal coat of Polyurethane 100 onto the vertical areas, stopping the material approximately one 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 Polyurethane 100 to the horizontal surface with a 3/8 inch nap roller from a 5-gallon pail. Use the dip and roll method. Do not pour the material onto the substrate. Overlap slightly any vertical areas previously chipped. Apply a liberal coat, but do not allow puddling. The application rate should be 275-300 sq. ft. per gallon. The application rate is important. Do not “stretch” the material. It is important to place the chips as soon as possible into the wet material. If the mechanic rolling the base coat gets too far ahead of the mechanic sprinkling the chips, the material will dry and the chips will not adhere. In hot weather, the addition of 15% Xylene will slow the dry and allow more time for the placement of the chips.

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. Focus on a 10-12 sq. ft. area and achieve the desired distribution in that area before moving to another. Avoid getting a heavy concentration of chips in any one area. Achieve the desired distribution gradually. Be sure not to sprinkle chips on any part of the substrate not yet base coated. Leave a 1 – 2 feet 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 Glaze Coats

After the base coat has dried (usually 30-60 minutes), 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. After an overnight cure, apply a finish coat of Polyurethane 100 or Polyurethane 100 VOC 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 on temperatures.