

## APPLICATION INSTRUCTIONS: GRANITEX 1 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 re-cracking. 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 re-crack. 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

Preblended 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 a factor of 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. If the chips are to be distributed sparingly on the job, the factor to determine the pounds needed could range from 0.04 - 0.09. 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.

### PRIMING

Apply Polyurea 5001 reduced 20% with acetone. Coverage rates for the primer should be 300-350 sq. ft. per gallon. As soon as the primer is tack-free (one to three 3 hours), you may proceed with the application of the color chips.

### APPLICATION OF COLOR CHIPS

The base coat for the system is Polyurea 5001. Any vertical areas, such as coves or perimeter slab edges, must be chipped first. Brush a liberal coat of Polyurea 5001 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 Polyurea 5001 to the horizontal surface with a 3/8 inch nap roller out of 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 to puddle. The application rate should be 250-300 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.

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 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 foot space of basecoat 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**

After the base coat has dried (usually 1 - 3 hours), 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. Apply a finish coat of Polyurea 5000 at the rate of 200-250 sq. ft. per gallon for a full broadcast and 250-300 sq. ft. per gallon for a light broadcast.