

I. DETERMINING COVERAGE

- A. Measure the total square footage of the pool's interior surface (walls and floor). Include extra material for steps, benches and swim outs.
- B. Determine the required number of bags by using 25 square feet per bag for the average pool. More material will be required for a rougher shell. Use 18 square feet per bag for Pearl, Golden Pearl and Tahoe Blue Golden Pearl due to the larger aggregate size.
- C. **Always add 5% to 10% more bags to allow for error.** It will not be possible to match areas plastered later due to shortages on the job site. Always take more than you need.

II.

PREPARATION OF THE SUBSTRATE OR POOL SHELL

A. New Pool Shells

- 1. The shell must be free of any foreign material that may interfere with the bonding of the new plaster.
- 2. All loose material such as dripped thinset, grout, paint, dirt, patching or decking products must be removed by scraping, water blasting (pressure cleaning) or sand blasting.
- 3. Algae, mold and mildew must be eliminated by chlorine washing. Failure to do so will result in discoloration and bond failure (delaminations).
- 4. Remove any oil or grease with tri-sodium phosphate and water. Oils and grease left on the pool shell will cause bond failure and prevent proper etching and cleaning by waterborne acid solutions. To test for oil and grease, wet the entire pool shell surface and examine it carefully for beading water droplets. Heavily saturated areas may require soaking with liquid detergents until oil is removed.
- 5. Etch the surface with Muriatic Acid and water. Adjust the concentration as needed to properly clean and roughen the surface. Smoother shells will require a higher concentration of acid and vice versa.
- 6. All water penetration due to hydrostatic pressure (weepers) must be stopped. Use SGM Instant Hydraulic Cement to plug leaks and seal around fittings.
- 7. The shell must be fully cured at least 28 days.
- 8. All pool inlets and main drain lines should be plugged to prevent clogging during plasterwork and exposure. All plugs except the main drain should remain in place until the pool is filled to prevent drip stains.
- 9. Mark the location of all fittings with a small piece of tape placed on the coping directly above to prevent them from being accidentally covered during the plaster process. It may be best to draw a map indicating the locations of all fittings in projects with numerous inlets and outlets.

B. Resurfacing Projects

- 1. Follow all of the above procedures.
- 2. Undercut all existing tile and fittings 2" away and 3/8" deep into the existing plaster substrate.

3. Sound out and remove all hollow and delaminated plaster. Identify the hollow spots and saw an area 3" outside them. Remove the loose plaster inside the cut area.
4. Fill the hollow with SGM Vinyl Patching Compound or SGM Sand Topping Mix and Concrete Bonding Agent bringing the area level with the existing plaster.
5. Apply SGM Bond Kote as directed. Each unit of Bond Kote consists of one 5-gallon pail of Liquid Resin and two 65 lb., bags of Dry Mix and will cover approximately 500 square feet. Mix one 65 lb. bag of SGM Bond Kote with 1/2 pail of SGM Bond Kote Liquid Resin. Coat existing plaster using a 1 1/4" nap paint roller.

Allow material to set for one minute then create stipple texture by going over the area again with roller. Allow Bond Kote to cure for at least 6 hours before plastering. If Bond Kote is rained on or left to sit for more than a few days it may have to be reapplied.

III. MIXING

Note: **Diamond Brite** is made in batches of 60 to 80 bags using natural ingredients. For this reason there will be variations in shade between batches. Batch numbers are stamped on the ends of every bag. It is therefore incumbent upon the user to follow these instructions explicitly to ensure the most consistent color throughout the pool.

- A. Separate the bags according to the batch numbers stamped on the bottom of each bag. **Record all batch numbers. All warranties are rendered invalid without the batch numbers.**
- B. Blend different batches together in each mix according to the ratio present at the job site. For example: If there are 30 bags total on the job and there are 20 bags of Batch A and 10 bags of Batch B then use 2 bags of A to 1 bag of B in every mix.
- C. Measure and add water to mixer. Hold back a portion of the water and add as necessary as mixing progresses. Careful measuring of the mix water will produce the best material. Lower water to cement ratios will produce plaster of greater strength and density. It is therefore best to use as little water as needed to produce a workable mix. Excess water will reduce strength and increase shrinkage (check) cracks. Water requirements will vary according to job site conditions.

XX — **Note:** Mix water quality is extremely important. Well water or water high in metal and mineral content will cause discoloration in finished Diamond Brite. Additionally, mix water of high hardness or alkalinity will cause the plaster to effloresce, releasing high levels of salts that produce calcium scale. This is especially true of colored Diamond Brite such as Midnite Blue, Onyx, Tahoe Blue and French Gray. Check mix water for metals, minerals, hardness and alkalinity before using.

- D. Start mixer and add Diamond Brite as quickly as possibly to ensure that all the material has the proper mix time. Failure to do so will produce uneven set times and result in washouts and streaking.
- E. Mix for a minimum of 5 minutes but no more than 10 minutes. This ensures even distribution of aggregates and increases the working time of the plaster. Insufficient mix time will result in uneven setting and shade variations. Too much mix time will produce an overall weaker plaster and may entrain undesirable air bubbles. As a rule of thumb, mix for only the amount of time required to produce a consistent, homogenous batter.
- F. Calcium Chloride may be used as an accelerator. It must be fully dissolved in water allowing impurities to settle out. Pour off the solution from the top being careful not to add impurities to the mix. The impurities found in calcium chloride flake and pellets have