

Swimming Pool Tile and Plaster Preparation

**PART 1      General**

**1.01      Summary**

Prepare pool to receive new **Diamond Brite®** finish. This specification section includes work for retiling the existing waterline tile and preparation for plaster.

**1.02      Submittals**

Submit tile samples (for color selection by Owner) and submit data sheets on all setting materials and grout. Owner to select grout color.

**PART 2      Products**

**2.01      Materials**

1. Waterline & Skimmer Tile: 6x6" solid (Owner's choice of color) porcelain ceramic tile for pools.
2. Trim Tile: 2x2" solid (Owner's choice of color) unglazed porcelain ceramic tile (stairs/benches).
3. Racing Lanes & Targets: 2x2" black unglazed porcelain ceramic tile.
3. Depth Markers: 6x6" Tile with 4" black numerals/lettering
4. Thinset for tile shall be Laticrete Platinum 254®, or approved equivalent, polymer modified thinset.
5. Grout shall be SGM Security Polymer Grout®, or approved equivalent, polymer modified portland cement based grout.
6. Scratch Kote 2000® (Multicoat®), or approved equivalent, shall be used for the bond coat between the pool shell and the new plaster.

**PART 3 Execution**

**3.01 Preparation**

A. Site Preparation

1. This facility includes well-point systems for the control of ground water. Ensure that the shell stays empty during the Work and that the hydrostatic pressure under and around the pool shell is properly relieved.

B. Tile Preparation

1. Remove, haul and dispose of existing waterline, skimmer, trim, racing lane, target and depth marker tile.
2. Remove or grind off old thinset to expose bond beam or concrete shell.

C. Plaster Preparation

1. Remove all return covers, drain covers, rope anchors, and fittings.
2. Remove and dispose of all layers of plaster and paint back to original pool shell. Removal may be performed by chipping hammers or water blasting, or approved equivalent.
3. Secure and protect main drain sumps and frames and any embedded fittings or items in the pool that cannot be removed during the removal.
4. Secure pool lights on top of the pool deck from falling.
5. Clean the substrate from loose debris, loose substrate or any material that could interfere with the plaster's ability to bond to the substrate.
6. Acid-wash the pool shell and neutralize.
7. Install bond coat (Scratch Kote 2000) per manufacturer's instructions.

**3.02 Tile Work**

A. Tile Installation

1. Install 6x6" waterline tile and depth markers around the pool perimeter and skimmer throats.
2. Depth markers should be installed according to local code.
3. Install 2x2" racing lanes and targets. The new racing lanes shall be 6" wide (three 2x2 tiles wide) along the lane and 12" wide x 6" tall on the ends.
4. Install 2x2" trim tile along the top of each step and bench within 2" from the edge.
5. Grout all tile with sanded grout, color selection by owner.

- END OF SECTION -

Swimming Pool Plaster

**Part 1 General**

**1.01 Summary**

- A. Provide a **Diamond Brite® plaster** interior finish to the pool structure per manufacturer instructions.
- B. Provide water analysis and pre-fill requirements.

**1.02 Submittals**

- A. Samples
  - 1. Submit a 10" round panel to Owner showing color and texture for the Diamond Brite selection. If approved, the finished **Diamond Brite®** shall match the approved sample panel.
- B. Test Report
  - 1. Submit results of domestic water analysis and calculations of chemicals required to balance the water.

**1.03 Product Delivery and Storage**

- 1. Deliver manufactured materials to site in manufacturer's original and unbroken packages or containers bearing the manufacturer's name and labels. Keep cementitious materials dry until ready to be used and stored off the ground, under cover and away from damp surfaces.

**Part 2 Products**

- A. Portland Cement
  - 1. ASTM C150, Type I white portland cement
- B. Hydrated Lime
  - 1. ASTM C206, Type S

- C. Water
  - 1. Clean, fresh water from potable source.
- D. Bonding Agent
  - 1. If conventional pool plaster finish is to be used, use Scratch Kote 2000® (Multicoat®) in accordance with manufacturer's instructions.
- E. Proportions & Mixing
  - 1. Materials are specified on a volume basis and shall be measured in approved containers which will ensure that the specific proportions will be controlled and accurately maintained during the progress of the work.
  - 2. Conventional white marble pool plaster finish coat: Mix finish in proportion of one part by volume of white portland cement to not more than two parts by volume of aggregates (specified white marble dust).
  - 3. Mixing. (If Diamond Brite, follow manufacturer's instructions). Perform mixing in approved mechanical mixers of the type in which the quantity of water can be controlled accurately and uniformly. While mixer is in continuous operation, charge approximately 90% of estimated quantity of water, half of all sand, all cement, and the other one-half of the sand into the mixer in that sequence and mix thoroughly with remainder of water until the mixture is uniform in color and consistency. Avoid excess mixing to prevent hasty solution of cement resulting in accelerated set. Do not use any caked or lumped materials. Completely empty mixer and mixing boxes after each batch is mixed and keep free of old plaster.

## **Part 3 Execution**

### **3.01 Preparation of Surfaces and Bond Coat**

- A. After complete chip-out of all plaster and paint layers, clean base surfaces of projections, dust, loose particles, grease, bond breakers and foreign matter; make sufficiently rough to provide a strong mechanical bond. Wash entire shell with acidic solution. Thoroughly neutralize the entire acidic surface with 2,000 psi high pressure water.
- B. Utilizing a hopper gun and compressor, apply the bond coat onto the pool shell. If necessary, use still bristle brush to ensure total coverage and penetration of the bond coat.

### **3.01 Application for Plaster**

#### **A. General**

1. Confirm all application requirements with manufacturer. Apply finish plaster to the properly prepared substrate at the minimum thickness required by the manufacturer, but no less than 3/8" thickness at any location. Apply finish plaster by hand. Do not overwork the plaster.

#### **B. Workmanship**

1. Unless otherwise required by the manufacturer, apply finish plaster in two coats by "double-back" method with second coat applied as soon as first coat is tamped and initially floated. Apply plaster with a sufficient pressure to provide a good bond on bases. Work plaster to screeds at intervals from 5 to 8 feet on straight surfaces. Apply smooth trowel finish without waves, cracks, trowel marks, ridges, pits, crazing, discoloration, projections, feet impressions, or other imperfections. Form plaster carefully around curves and angles, well up to screeds. Take special care to prevent sagging and consequent drooping of applications. Produce surface free of visible junction marks in finish coat where one days work adjoins another. Finish proprietary plaster as required by the manufacturer.

#### **C. Patching**

Upon completion, cut out and patch loose, cracked, damaged or defective plaster; patches matching existing plaster in texture, color, and finish, flush with adjoining plaster. Perform pointing and patching of surfaces and plasterwork abutting or adjoining any other finish work in a neat and workmanlike manner. If 10% or more of the plaster finish is found to be defective, the plaster shall be removed and replaced complete from all surfaces. Remove plaster droppings or spattering from all surfaces in a clean and unblemished condition ready for pool filling. Remove protective coverings from adjoining surfaces. Remove rubbish and debris from site.

### **3.01 Pre-fill Specification**

A. Contractor shall employ a qualified water testing agency to analyze the domestic water with which the pool will be filled within 1 week of the plaster date, and shall employ a swimming pool experienced water chemistry consultant to determine the types and quantities of chemicals

required to ensure calcium-balanced water immediately upon the completion of the water filling.

1. Have on hand quantities of the chemicals as determined above, plus 25% for overage for follow-up treatment. These chemicals, typically including calcium chloride, bicarbonate of soda, and muriatic acid are in addition to standard bromine/chlorine products and alkalizer/pH control products required for elsewhere.

- B. Pool shall not be plastered until directed by Owner and the filtration system and chlorination system are complete and ready for start-up. The Contractor shall supply all chemicals required for treatment of the pool water.
- C. The Contractor shall submit domestic water analysis to the Owner at least 1 week prior to filling the pool.
- D. The Contractor shall monitor and adjust chemicals, along with brushing pool for 14 consecutive days following installation.

- END OF SECTION -