



DESCRIPTION

THE CRYSTAL SERIES is a factory blended mixture of white cement, colored quartz and various admixtures specifically designed as a coating for the interior of swimming pools.

FEATURES & BENEFITS

- A 10 Year Warranty
- Ease of application
- Ease of maintenance
- Radiant color selection
- A non-abrasive surface
- Natural beauty provided by natures polishing process

COVERAGE

THE CRYSTAL SERIES is packaged in 80 lb. bags and must be applied at a rate not to exceed 18-20 square feet per bag. Coverage will vary depending on the porosity of the substrate and application techniques.

SURFACE PREPARATION

Patch, level or resurface as required to provide a smooth substrate. Surface must be clean, cool, dry and free of dirt, grease, scaling paint, release agents, curing agents, special surface hardeners, efflorescence or other foreign matter that may prevent or inhibit proper bonding.

NOTE: Only the experienced applicator at poolside can make the decisions as to what surface preparation may be required.

- 1.] On previously plastered pools it is necessary to grind around the tile, lights, returns, etc., to allow for a smooth transition.
- 2.] On previously painted pools, the surface must be sandblasted to remove the old paint completely.
- 3.] Thoroughly wash the surface with a TSP solution to remove body oils and suntan lotions. Acid wash with a 50/50 solution of muriatic acid and water, rinse with a neutralizing solution of baking soda and water, then finally rinse with clean water.
- 4.] An application of SUPERBOND is highly recommended on previously plastered surfaces as a bond or scratch coat to provide a uniform base for adhesion and even curing.

MIXING

Measuring equal amounts of water and mixing for equal amounts of time from batch to batch will ensure product consistency from batch to batch. Boxing different batch require approximately 1½-2 gallons of potable water per bag. Start the mixing process by adding 2/3 of the total required water to the mixer. Add the appropriate amount of CRYSTAL and then add the remaining 1/3 of the required water. Mix for approximately 5 minutes, then remix and add additional water if necessary to achieve the desired workable consistency. Do not re-temper the mix after this.

CRYSTAL is a complete product and requires no other additives. To avoid any complications, it is highly recommended that no calcium chloride be used.

If you choose to use calcium chloride, it must be used with caution, as "more is not better". It is always best to use 94-97% purity at a maximum of 1/3 lb. per bag. If 77% purity is used, the maximum is ½ lb. per bag. 77% purity contains 23% filler material, which may include ingredients that could be harmful to the finished product. Always pre-dissolve calcium chloride and remove impurities by straining through cheesecloth.

APPLICATION

Prior to starting the application of CRYSTAL it is critical to have the drain pump equipment ready and the slurry drain system laid out. If the pool is a re-do, it is important to use a bonding agent such as SUPERBOND. Do not apply in the rain or when rain is expected. Do not apply when temperatures fall below or are expected to fall below 45°F within 24 hours.

- 1.] After CRYSTAL has been properly mixed, it may be troweled or spray applied over a dampened substrate. The recommended thickness is 3/8" 1/2".
- 2.] Several trowel passes will be required to compact and level as CRYSTAL finish sets.
- 3.] CRYSTAL finishes are designed to be monolithic coatings. Sufficient personnel should be employed to eliminate cold joints. If the pool must be completed in phases, pre-determined stopping points must be used, such as tile lane markers, etc.
- 4.) Once the surface of the CRYSTAL finish has set hard enough to allow light foot traffic, remove the "cream" or "fat" to expose the pebble aggregate by water washing with a soft bristle broom or soft sponge and water.

NOTE: The timing of the water wash procedure can only be determined at the jobsite taking into account the factors of heat, humidity, and substrate suction.

- 5.] After the finish has been water washed, the applicator may elect to clean the "haze" off the pebbles by washing with a 50/50 solution of muriatic acid and water. The experienced applicator will determine when an acid wash is needed.
- 6.] It is acceptable to wait until the following day to acid wash, but the finish must be water washed the same day as application to ensure adequate pebble exposure.

- 7.] Immediately fill the pool with water and balance to the Premix and NSPI recommended guidelines.
- 8.] Wastewater should be pumped into a temporary slurry bin or into slurry bags that should be removed the following day after it has set.

CLEAN UP

Clean all tools and equipment with water while still wet. Cured material can be removed mechanically or chemically.

STORAGE

Turn inventory regularly and keep bagged product protected from all forms of moisture, both direct and indirect, to assure maximum product usage, uniformity and productivity.

TECHNICAL SERVICES

Available upon request

MAINTENANCE

The long-term performance of FREESTONE will be directly proportional to the care taken during the filling process, the first ninety days of pool maintenance and consistent routine maintenance thereafter. Adjust the chemicals to the following levels in the order as recommended by Premix and NSPI.

- a.] pH 7.4 7.6
- b.] Alkalinity 100 125 ppm
- c.] Calcium 250 400 ppm
- d.] Chlorine gradually to 2 ppm
- e.] Total dissolved solids <1000 ppm
- f.] Cyanuric acid <50

NOTE: During the start-up phase keep the pool pump running 24 hours a day until the water clears. Refer to the start up proceedures at the back of this guide.