



INTEGRAL GRANULATED PIGMENT

IRON OXIDE PIGMENTS TECHNICAL DATA & APPLICATION INSTRUCTION

PRODUCT DESCRIPTION

Integral Granulated Pigments are used in cast-in-place, slab-on-grade, Precast, tilt-up and decorative concrete; shotcrete, mortar, concrete masonry units, pavers, retaining wall units and roof tile. They can also be used to color cast stone, plaster, stucco and other cement-based construction materials. Designed for mix-in use only; they are not intended for nor should be sprinkled or dusted onto the concrete surface.

PACKAGING

Integral Granulated Pigments are dosed in a computer-controlled color dosing system. Custom packaged. Many colors are available in dissolvable toss in mixer bags to order specifications.

SPECIFICATIONS/COMPLIANCES

ASTM C979--82, EN 12 878 (Category A), DIN 53237 and BS 1014

MIXING

Use the same mix design and water-to-cement ratio, type and brand of cement and aggregates throughout project from start to finish. Changes in cement, sand or water content will change and affect final color outcome. Keep slump between 4" - 5" and water content consistent. High water content causes concrete to appear pale or "faded". If higher slump is required, use a water reducing admixture instead of added water. Specify air content of 4% to 7% for improved workability and long term durability in freeze/thaw climates. Always check package label for accuracy of order. Schedule loads for reasonable deliver times. Deliver and discharge in less than 1 1/2 hours. Clean mixer thoroughly between color changeovers. Add the Mix Ready bag or combination of bags to truck onsite or at Redi-Mix plant and mix for 3 - 5 minutes prior to pouring. **Calcium Chloride set-accelerators cause discoloration; DO NOT use with this color.**

INSTALLATION

Integrally colored concrete is installed the same way as high quality uncolored concrete. Choose a color from designated color chart and specify it by name and color number. Dry color dose rates range from 1/2 to 7 lbs. per 94lbs of cement content and should NEVER exceed 10% of the cement content. Cement content includes Portland cement, fly ash, silica fume, lime and other cementitious materials but does not include aggregate or sand. Granulated colors have been used successfully in a wide variety of mix designs and are compatible with commercially available admixtures. The only known incompatibility is with *calcium chloride* set accelerator which causes blotching and discoloration.

FINISHING TIP

Paving and floors can be finished with pattern-stamped, broomed, troweled, exposed aggregate, sand-blasted, diamond-polishing or many visually appealing textures. NOTE: when brooming or troweling make sure you go in same direction with each pass otherwise you will change color outcome. Cast-in-place, Precast and tilt-up structures can be textured with sand-blasting, bush hammering, grinding, polishing, and special forms or form liners. The combinations and possibilities are endless. For best results; materials, curing, weather conditions and workmanship should be uniform throughout the project. Quality starts with the concrete mix; use a low water-content, high-performance mix design.