



Pre-Blended Integral Concrete Color

Pre-Blended Integral Concrete Colors are admixtures formulated from special pigments designed to color, beautify and improve the workability of concrete. They are composed of the highest grades of iron oxide pigments, specifically chosen for high tinting strength and uniform color while exceeding ASTM C 979 specifications for integrally colored concrete. Packaged conveniently for easy loading on site.

FEATURES & BENEFITS

- Light fast
- Lime-proof
- Waterproof
- Permanent - colorfast
- Uniform color throughout

APPLICATIONS

Use wherever integral colorants or colorant admixtures are specified.

PACKAGING

All colors are available in bags to be loaded at one bag per yard amounts. Please refer to color chart to find the correct loading. Bags are pre-weighed to make it easier on the jobsite.

SHELF LIFE

Under normal conditions, when kept dry and moisture free, the shelf life should be at least 1 year. Inventory should be rotated.

SPECIFICATION / COMPLIANCE

Complies with ASTM C 979, Specifications for Integrally Colored Concrete.

PRECAUTIONS / LIMITATIONS

- Do not use with admixtures containing calcium chloride
- Certain oxide pigments can reduce air content
- Do not change cement brands in the middle of a job
- Watch slump closely as a warning for water content change - Changes in water content will cause color variations.
- Must be stored in dry, moisture free conditions
- Inventory must be rotated
- Consult Safety Data Sheet prior to use

CLEAN UP

Clean tools and equipment with water before concrete hardens.

DIRECTIONS FOR USE

Mix Design: Use a minimum cement content of 470 pounds per cubic yard (5-bag mix). Aim for the lowest slump that can be placed and finished readily. Do not exceed a five-inch slump. Adding extra water to increase slump may cause excessive bleeding and non-uniformity in color. Using other plasticizers, resins, or admixtures, etc. can also cause color variations. If using any precast molds keep release agents at a minimum since many releases are petroleum based and can rise to the top of the molds drawing some color along with the release causing uneven color variations.

Do not use any admixtures that contain calcium chloride. Calcium Chloride will cause uneven color, discoloration, and salt deposits. For air-entrained concrete subjected to freezing and thawing, be aware that some coloring agents, particularly carbon black, will reduce air content. The amount of air entraining admixture may have been increased to keep the air content at desired levels. For large projects, make a mock-up wall panel or slab that requires at least 3 cubic yards of concrete. Use the same cement brand, aggregate type and construction methods that will be used on the job. If necessary, make adjustment in the amount of color added before the project gets under way. Special color blends to match existing structures or specific color needs are available in full batch-size packages.

Batching and mixing: Ideally, the best mixing procedure is to mix half of the cement, coarse aggregate, fine aggregate, and water. With mixer running, add the color and mix for at least a minute before adding the balance of materials. Turn the drum at mixing speed for an additional 3 to 5 minutes before the truck leaves the yard. Most colors are based on a ONE BAG PER YARD system. If mixing on site, once color is added make sure it turns for 120 revolutions before placement. There are a few colors which will require more than one bag per yard (usually darker colors). If the pigment is batched from large bulk bags, always use a whole number of bags per truck. Do not batch partial bags. On jobs requiring more than one truckload of concrete, use the same size truck for each load. This is especially important if color is batched from large bags. If you are using one 50 lb bag for a 10 yard load, switching to an 8 yard truck will require using a partial bag of color pigments which can cause changes in concrete color. Do not change cement brands in the middle of a job. Cement from different sources has different shades of gray. Changes in cement color cause changes in the concrete color. Watch slump particularly closely during batching. Slump variations often indicate that water content has changed, perhaps because of cleanout water left in the truck or changes in the surface moisture content of the aggregate. Changes in water content also causes color variations.

Forming & placing concrete for vertical surfaces: Seal joints in forms for vertical surfaces. Water leakage at joints causes changes in water-cement ration and discoloration near the leak. Use a non-staining form release agent and thoroughly clean forms before reusing them. Remnant cement from dirty forms can stain colored surfaces. Do not allow heads of internal vibrations to touch the forms. This will cause dark spots called vibrator burns. It may be necessary to precondition new natural grain wood forms before they are used on the job. This can be done by coating them with a cement slurry containing the pigment to be used, then removing the coating.

Finishing & curing flatwork: Do not start finishing colored concrete until the bleed water has evaporated. Finishing too early causes discoloration and a weak, non-durable surface. Use mechanical float or trowel if possible. The one-way motion of the blade creates a more uniform colored surface than the back and forth motion used in hand finishing. Move edgers in one direction only to produce a more uniform color. Concrete in the sun sets at a different rate than concrete in the shade. This may cause differences in color. If possible, time the pour to avoid having sunlit and shaded areas. Do not add water to the surface during finishing operations. Added water may create blotchy surface.