



Synergy Integral Colors

Concrete and Precast Spec 03300



Description

Prism Pigments concrete colors are pure, synthetic iron oxide pigments containing no fillers that will affect the performance of the concrete mix design. Prism Pigments concrete color applications provide the user with a lightfast, weather resistant, lime-proof, no maintenance finished product. Prism Pigments maintains the highest tinting strength and color consistency from bag to bag. Prism Pigments concrete colors are ideal for use for integrally colored concrete in highly visible areas such as driveways, patios, walkways, cart paths, curbing, athletic courts, or stamped concrete. A stable, weather resistant color is always the end result.

Composition and Material

Prism Pigments concrete colors contain only finely milled synthetic iron oxides, the strongest and most stable colors available. These colors are lime-proof, sunfast, inert, and meet or exceed the criteria of ASTM C979.

Colors

Prism Pigments concrete colors cover the full color spectrum: brown, buff, tan, black, yellow, orange, red, green, blue, and white. Each color match is handled on an individual basis. In cases where exact color matching is required, samples of your field raw materials may be required for sample preparation.

Concentration Rates

Prism Pigments concrete colors are available specially packaged for your on-site use. Because of the inherent tinting strength of synthetic iron oxides, standard loadings do not exceed 8%. Levels greater than 8% will not enhance the finished color.

Mixing Precautions

Always follow approved mixing practices, which include the following tips:

- Cement for the entire job/project should be from the same manufacturer. Changes in cement will affect the final cured color.
- All aggregate, fine or coarse, should be supplied from one source and be non-reactive.
- The mix design must be consistent from batch to batch. If the batch size is changed, the pigment must be also.
- Concrete slump should not exceed 5".
- Clean the drum before and after mixing.
- Add color directly into the mixer with the other ingredients. Mix 5-10 minutes.

Placement of Concrete Slab Work

A successful slab starts with a well drained subgrade that can sustain the load imposed on the slab. The subgrade should be graded, compacted and dampened. Prevent soft spots and standing water. Minimize handling, movement and spreading of colored concrete for the color consistency. Do not over-trowel, as it will cause darkening. Do not finish until bleed water has left the surface to protect against scaling, efflorescence and uneven coloring.

Placement of Vertical Colored Concrete

Planning is crucial in placement of vertical and poured-in-place concrete. Consider type of cement, detailing of formwork, mixing and placing techniques, slump control, and temperature of cure. It is recommended that a field mock-up panel be prepared. Include all materials, reinforcing steel as in the finished product.

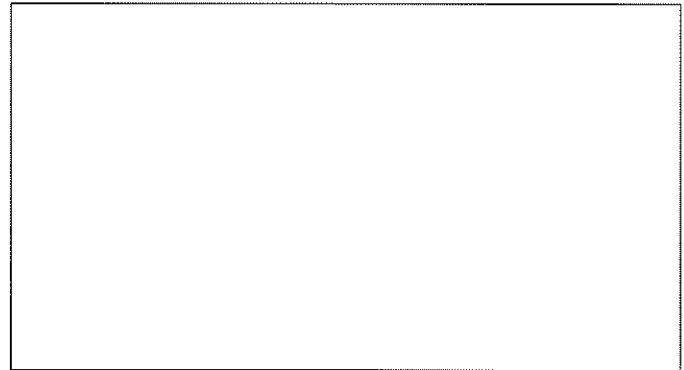
Design Criteria for Colored Concrete

The following points should be considered in designing colored concrete. The concrete temperature should be between 65 and 85 degrees. Timing of the arrival of concrete trucks is crucial so that there is no excessive mixing. Avoid using porous forming materials. Conveying methods must be consistent with ACT-304-73. The concrete should be deposited in the level lifts 12-18" thick. The distance between intersections should be generally about 18" depending on the concrete mix and vibrator used. Tilt-up concrete panels should be textured using sandblasting and surface retarders to expose the course aggregate.

Patching Colored Concrete

Do repair work within two days to minimize color variances. The same materials and methods should be used. It is recommended that a 50/50 mix of white cement/gray cement be used to compensate for the darker patch area. The same color loading should be used on all repairs.

Distributed by:



Warranties

Seller warrants that its products will conform to and perform in accordance with the products specifications. This foregoing warranty is in lieu of all other warranties, expressed or implied, including, but not limited to, those concerning merchantability and fitness for a particular purpose. Because of the difficulty in ascertaining and measuring damages hereunder, it is agreed that, except for claims for bodily injury. Seller's liability to the Buyer or any third party, arising out of the purchase of the product from Seller by Buyer shall not exceed the total amount billed and billable to the Buyer for the product hereunder.