# **INCRETE COLOR-CRETE**<sup>™</sup>

Powder & Liquid Integral Color for Concrete



Sandstone CC730/3*	Pecos Beige CC550/3	Fiesta CC320/3*	San Jose Buff CC715/1.5*	Austin Buff CC047/1*
Phoenix Tan CC575/1*	Sand Buff CC725/2*	Desert Tan CC275/4*	Autumn Brown CC050/5*	Cocoa CC177/6
Yuma Gold CC990/2*	Sombra CC805/3	Maplewood CC460/3*	Saltillo CC705/2	Terra Cotta CC875/4*
Tile Red CC895/3	Brick Red CC100/4*	Tahoe Red CC850/5	Cherokee Red CC153/5	Redwood CC630/6*
Navajo CC510/2	Cordova CC200/4	Sedona CC750/2	Tierra CC885/2	Pueblo CC595/4
Soft Gray CC802/.5	Silver Gray CC770/1*	Euro Gray CC285/3	Dark Gray CC230/4*	Charcoal CC150/6*

SPECIALTY COLORS Colors below require special pigments. Call your local representative for details.

Sun Buff CC840/6*	Pewter CC560/4*	Euro Slate CC290/3	Slate CC785/3	Philly Blue CC570/5

**NOTE**: Colors shown approximate laboratory samples made with type-1 portland, tan sand, Increte Color-Crete<sup>™</sup> pigment and 4 in slump.

\* Available in Universal Color Packs

Due to variations of job site conditions, actual colors on the chart can and will vary slightly. Conditions that cause variation are inconsistent slump (water content), finishing and curing methods, weather conditions, and concrete raw materials. A job-site or test slab sample should be made using specified materials, and the finishing and curing techniques to be used. For color consistency, batch to batch uniformity must be maintained.

# **INCRETE COLOR-CRETE** Powder & Liquid Integral Color for Concrete

# **Best Practices and Procedures**

#### Basic Use

Increte Color-Crete<sup>™</sup> is designed to be used in all cementitious materials, producing unlimited color effects. The primary applications are cast-in-place, slab on grade, precast, tilt-up, concrete pavers and roof tiles. Increte Color-Crete also can be used in concrete curbing, stucco, cast stone and plaster.

# Compostion

Euclid Chemical's colors are pure synthetic iron oxide pigments, manufactured to the highest standards. They are high strength and uniform in color and exceed ASTM C979 specifications for integrally colored concrete. Increte Color-Crete colors are lightfast, lime-proof and totally weather-proof, providing a permanent color fast solution.

# Packaging

Euclid Chemical offers Increte Color-Crete in many forms of packaging from Batch-Ready™ Powder to Liquid Color-Crete available pre-packaged by the yard.

For Powder: Batch-Ready disintegrating bags contain a precise measurement of pigment and are added to ready-mix drums eliminating waste and human error.

All Increte Color-Crete loadings are specific weight of pigment based on each sack/94 pounds of cement.

For Liquid: Order by the yard.

#### Additives

Calcium chloride is NOT to be added as it can create discoloration as uneven light and dark areas in the finished product. Nonchloride accelerators, including hot water, may be used as acceptable accelerators.

# Mix Design

Design concrete mixes to use the lowest water/cementitious ratio applicable for local conditions and materials. Type I, II, or V Portland Cement is recommended. When appropriate, use in combination with Supplementary Cementitious Materials (SCM's) such as Class F Fly Ash, Natural Pozzolan, or Ground Granulated Blast Furnace Slag. When SCM is used, use throughout the project for consistent color. Place concrete with a 4" slump (not to exceed 5"). If a higher slump is required use a mid-range or high-range water reducing admixture. Do not use admixtures containing calcium chloride. Placement slump should be appropriate for the application, non-segregating and consistent from batch to batch. A job site test batch placement is recommended using a minimum batch size that is 1/3 of the capacity of the mixing equipment using the same mix design, raw materials, slump, placement and finishing techniques that will be used on the actual job. Contact your local Euclid Chemical representative for technical assistance.

## **Adding Liquid & Powder Pigments**

Ideally the best procedure is to batch 40-50% of the load. With the mixer running, add color and mix for 1-2 minutes before adding the balance of materials. Once all materials have been added, mix the drum at mixing speed for 5 minutes. Be sure to use the same mix design and slump (4") from truck to truck. If higher slump is required, it can be obtained using a water reducing admixture. It's important to consistently use the same cement, as different cements can vary in color, thus affecting the final color. Watch the slump closely, as varying slumps can be an indication of water-to-cement ratio inconsistency that can affect final color. Never add Color-Crete to an empty drum or mixer.

#### Job Site Samples

A representative job site sample should be produced for each color and/or mix design. These job site samples should be of adequate size to be representative of the actual job and produced with a minimum of 3 yd<sup>3</sup> (2.3 m<sup>3</sup>) or 1/3 the capacity of the mixer. These samples should be cast using the same aggregates, cement, water-cement ratio and finishing techniques to be used on the job. These samples should also be produced and approved prior to commencing the first pour on site.

#### Job Site Prep

Concrete should be placed over a properly placed and compacted subgrade. This subgrade should be free of mud, standing water and frost. If placing over inconsistent subgrades such as wood, plastic, asphalt or existing concrete know that this will affect the evaporation rate and cure time of the concrete which can increase the likelihood of efflorescence and cause color variation.

#### **Placing Finishing and Curing**

Place all color-conditioned concrete on a thoroughly uniform compacted surface. Surface should be lightly dampened (no puddles). Concrete must be placed with consistent slump.

Troweling may begin after bleed water evaporates. Concrete should be stiff or plastic before troweling or brooming. Hard or late troweling will cause burns or dark spots. Do not add water or other foreign materials to surface upon finishing or discoloration will occur.

For exterior installations, apply rotary, broom or other uniformly textured finish for both appearance and slip resistance. Broom, rotary and rough finishes will usually cure more even-colored than smooth troweled surfaces.

Evaporation of water can cause a white hazy film (efflorescence) on the surface of concrete. Efflorescence is more noticeable on colored concrete surfaces giving the appearance of a chalky or faded look. This effect can be reduced or eliminated by proper curing and protection against water penetration.

Efflorescence can be removed with mild acid cleaners formulated to remove efflorescence. Follow manufacturer instructions and always test a small area to insure product will not discolor or etch the surface. When applying curing compounds use only those recommended and approved by Euclid Chemical. Euclid Chemical should be contacted prior to the use of other curing methods.

Until it is completely cured, the color of concrete is normally less uniform and sometimes darker than the final color. Allow 28 days for full cure.

Do not place any foreign materials such as burlap, water, plastic, wood or paper on surface during the curing process. Contact with foreign materials during curing will cause discoloration. Do not water cure integrally colored concrete.

#### Curing

Once the surface will support foot traffic, Euclid Chemical's Super Diamond Clear or Super Diamond Clear 350 are recommended and may be applied to most new colored architectural concrete surfaces. These products meet the ASTM standards C309 and C1315. Do not apply cure and seal products in high heat, direct sunlight or windy conditions. See technical information for the appropriate cure product, limitations, precautions and application specifications.

# Limitations

Variations in cement color, type and brand can all produce variations in the final color. Variations in aggregates, finishes, forming materials and methods as well as curing can all affect the final color. It is very important to keep all materials, operations and techniques as consistent as possible. Calcium chloride should not be added to any concrete containing Increte Color-Crete as it can cause discoloration in the finished product.

#### Vertical Concrete

Prior to pouring, a jobsite sample should be cast. Whenever using new forms, they should be seasoned with a slurry of matching color. Please contact Euclid Chemical for more information on matching slurries. All holes, plugs, gaps and joints should be patched or filled to prevent water leaking out of these areas. If this is not performed the water-cement ratio in the area near the leaks will change and discolor the surface. If using internal vibrators, be careful not to allow the vibrator head to come in contact with reinforcing steel or the face of the form as this can create a dark spot on the surface known as a vibrator burn. If using form liners, be sure to remove any cement paste from previous pours and to clean prior to each pour. When pouring integrally-colored concrete, always use a nonstaining form release agent. To help achieve more color consistency, all forms should be stripped when concrete is of the same age.

#### Maintenance

Integrally-colored concrete can be maintained by sweeping. Spills should be cleaned up as they occur. Dirt may be rinsed with clean water. Heavily soiled areas may be scrubbed with water and a stiff bristle brush. Heavily soiled areas may be scrubbed with water and a stiff bristle brush. A concrete degreaser can be used to remove most stubborn stains. For maintenance of large areas, auto scrubbers may be used. To maintain surfaces that have been sealed with one of Euclid Chemical's acrylic sealers please refer to the Technical Data sheets for the particular sealers used.

# Technical Services Custom Colors and Matching Services

The Euclid Chemical color service laboratory is available to provide expert assistance for your color needs. Please contact your representative and indicate mix design along with sample of desired color that is to be produced.

SRI Values*	Cordova: 32	Fiesta: 35	Pewter: 42	Saltillo: 39	Sombra: 41	Tile Red: 37
Austin Buff: 41	Desert Tan: 31	Maplewood: 38	Philly Blue: 35	Sandstone: 42	Sun Buff: 46	Yuma Gold: 36
Brick Red: 36	Euro Gray: 30	Navajo: 34	Phoenix Tan: 37	San Jose Buff: 35	Terra Cotta: 32	
Cherokee Red: 35	Euro Slate: 33	Pecos Beige: 36	Pueblo: 36	Slate: 29	Tierra: 33	

\*SRI Values listed were derived using test samples made with medium gray type I/II Portland cement and test methods ASTM C1549 and ASTM E1980 as performed by an independent testing laboratory only.

WARRANTY: The Euclid Chemical Company ("Euclid") solely and expressly warrants that its products shall be free from defects in materials and workmanship for one (1) year from the date of purchase. Unless authorized in writing by an officer of Euclid, no other representations or statements made by Euclid or its representatives, in writing or orally, shall alter this warranty. EUCLID MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR ORDINARY OR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES THE SAME. If any Euclid product fails to conform with this warranty, Euclid will replace the product at no cost to Buyer. Replacement of any product shall be the sole and exclusive remedy available and buyer shall have no claim for incidental or consequential damages. Any warranty claim must be made within one (1) year from the date of the claimed breach. Euclid does not authorize anyone on its behalf to make any written or oral statements which in any way alter Euclid's installation information or instructions in its product literature or on its packaging labels. Any installation of Euclid products which fails to conform with such installation information or instructions shall void this warranty. Product demonstrations, if any, are done for illustrative purposes only and do not constitute a warranty alteration of any kind. Buyer shall be solely responsible for determining the suitability of Euclid's products for the Buyer's intended purposes.

CC35 Increte Color-Crete Color Chart © 2021 - The Euclid Chemical Company. All rights reserved. This material is provided for informational purposes only. The Euclid Chemical Company expressly disclaims any liability relating to the use of this material. Nothing stated herein shall give rise to or constitute any warranty by The Euclid Chemical Company, express or implied, including but not limited to any implied warranty of merchantability or fitness for a particular purpose. The information provided in this material is not intended to be all inclusive, as the manner in which any product is used or handled may involve other or additional considerations that are not addressed herein.



**EUCLID** CHEMICAL

1611 Gunn Highway Odessa, FL 33556 1-800-752-4626

www.euclidchemical.com