Select Grade[™] Integral Color

Coloring System Guide

Engineered Concrete Performance
BUTTERFIELD
COLOR

Many things can affect the appearance of color. For best color matching results, a repre entative job site sample should be cast using materials and finishing techniques that wi ne used on the project.

Colors shown on this chart represent formulations using medium gray cement and sealed
with solvent based Clear Guard® Cure and Seal. Variations can be expected due to differences in cement, aggregates and method of application. MOTE: When using lower color
loadings, such as one bag per two yards, the color of the cement and sand have a more
pronounced influence on the final color resulting in a greater chance of color variation.



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Butterfield Color® | Engineered Concrete Performance | 625 W Illinois Ave, Aurora, IL 60506 | www.butterfieldcolor.com | 800-282-3388

FOR PROFESSIONAL USE ONLY. Read all applicable and current product information for your project: Technical Data Sheet (TDS), Color Chart, Installation Guide, Material Safety Data Sheet (MSDS). All information is available for download online at www.butterfieldcolor.com and at point of purchase.

MasterFormat™ Guide Specifications, and Butterfield Color® Architectural Details and Specifications are available for the specifier/designer. All information is available for download online at www.butterfieldcolor.com and at point of purchase.

Description: Select Grade[™] Integral Concrete Colorant is an economical pre-measured pigment for integrally coloring ready mixed concrete and all manufactured concrete products during batching. Conforming to ASTM Standard C979 (Standard Specification for Pigments for Integrally Colored Concrete), it is a blend of non-fading, synthetic iron oxides. Select Grade[™] Integral Concrete Colorant is suitable for integrally colored concrete projects of all types. Superior quality control during manufacturing and packaging help to ensure your jobs will have uniform color from load-to-load.

Packaging: 11 standard base colors are available in pre-measured dissolving bags. The Select Grade™ Integral Concrete Colorant color chart represents dosages ranging from 1 bag of a single base color for two cubic yards of concrete to 3 bags of a single base color for one cubic yard of concrete. By varying the bag dosage, each base color can be used to produce up to 4 different colors depending on the base color chosen. Do not open bags. Simply toss the dissolving bag(s) into the mixer. This eliminates the mess and inaccuracy associated with the handling of loose colorants. The use of multiple dose base color bags also simplifies inventory management. The color chart approximates the color of cured and sealed concrete designed with a medium gray Portland cement. Local materials, finishing techniques, texture, and method of curing and sealing will affect the final color. NOTE: When using lower color loadings, such as one bag per two yards, the color of the cement and sand have a more pronounced influence on the final color resulting in a greater chance of color variation.

Concrete Mix Design: Select Grade™ Integral Concrete Colorant is always consistent. There are other variables that can affect the appearance of concrete. Therefore, it is important that you discuss your project with your Ready Mix supplier. The same cement, aggregate, sand and water cement ratio must be maintained throughout the project. The recommended slump is 4 inch. **DO NOT USE CALCIUM CHLORIDE**. Only use non-chloride accelerators. Concrete subject to freeze/thaw cycling should always be air entrained between 5-8%. Consult with your Ready Mix supplier and Butterfield Color® at 800-282-3388.

Subgrade: Must be free of frost, with no standing water.

Adding Color to Mix: Mixer drum should be in good condition with little or no buildup on fins. One quarter (1/4) of the volume of mixer is the minimum amount of concrete that should be used to develop a homogenous mix. Spin drum in reverse until the load backs to the top. Place the unopened bag of Select Grade™ Integral Concrete Colorant directly onto the concrete and mix approximately 100 revolutions at optimal mixing speed as recommended by the mixer manufacturer.

Placing and Finishing: Once placing has begun, do not add water to the mix, as it will affect color. After placing and floating, no further finishing should be performed until bleed water has evaporated, after which final finishing can take place. Water should never be added to the surface of concrete as it will weaken and discolor it. When broom finishing concrete, do not wet the broom as it will cause efflorescence and streak the surface. Finishing techniques should be consistent.

Curing: Use curing paper, Clear Guard® Cure and Seal, Clear Guard® H₂O Cure and Seal, or Color Guard™ Cure and Seal to cure colored concrete. Read Technical Data Sheets before using these products. All information is available for download online at www. butterfieldcolor.com and at point of purchase. Never use plastic sheeting or water spray to cure colored concrete, as it will mottle and streak the surface.

Quality Control: Cast a job site sample at least 21 days prior to the installation for approval of color and finish. Utilize all materials, tools, and techniques from the actual job in the mock-up. Consistent batching, pouring, finishing, curing, sealing, and preparation techniques, will ensure the uniformity of architectural concrete. Verify adequate wet and dry slip resistance. Verify maintenance requirements. Site visits by Butterfield Color, Inc. Personnel are for making technical recommendations only and not for supervising or providing quality control.

WARNING: USE WITH ADEQUATE VENTILATION WHEN DUSTY CONDITIONS OCCUR, USE PROTECTIVE GLASSES, GLOVES AND DUST MASK (NIOSH/MSHA TC 21 APPROVED). IMMEDIATELY AFTER USE WASH ANY AREA OF EXPOSED SKIN. IF CONTACT IS MADE WITH EYES FLUSH THOROUGHLY WITH WATER. DO NOT RUB. MOVE TO FRESH AIR IF INHALED. IF SYMPTOMS DEVELOP OR PERSIST, OR IF INGESTED, SEEK MEDICAL ATTENTION. KEEP OUT OF REACH OF CHILDREN.

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