

matcrete®

THE ULTIMATE IN CONCRETE DESIGN

INTEGRAL COLOR

DESCRIPTION AND BASIC USE • MATCRETE® Integral Color is a pre-measured admixture for integrally coloring ready mixed concrete during batching. Our pigments are lime-proof, pure synthetic mineral oxides which meet or exceed the requirements of ASTM C979 and "Design and Control of Concrete Mixtures" by the Portland Cement Association. MATCRETE Integral Color is suitable for all concrete flat work installations, interior floors and exterior hardscapes, as well as, precast, tilt-up and cast in place applications.

LIMITATIONS • Inconsistencies in jobsite conditions, concrete mix design, slump, curing methods, finishing practices, and sealers may produce variations in the color of the finished product. Do not use color with Calcium Chloride accelerators as dark spots may occur that will not lighten. Designed for mix-in use only, MATCRETE Integral Color should not be sprinkled or dusted onto the concrete surface. Don't fog the colored concrete with water or add water to tools or brooms. Adding water causes the surface to pale or discolor.

STORAGE • Store in a dry place away from oxidizers and acids. Shelf life is approximately 12 months.

PACKAGING • For fast batching and easy installation, MATCRETE Integral Color is packaged in 25 pound disintegrating bags.

COVERAGE • Under each color swatch you will find a product number and dosage rate. This dosage rate is the amount of color needed to tint 94 pounds of cement. Typical dosage rates range from ½ pound to 4 pounds of MATCRETE Integral Color per sack (94 pounds of cement). Cement content includes cement, fly ash, silica fume and other cementitious materials but not sand or aggregate. Exceeding 10% color content can have an adverse affect on the strength of the concrete. If a more vibrant color is desired consider using MATCRETE Dustone Color Hardener™ which due to its application is not limited to these same restrictions and in fact can increase surface strength.

PREPARATION • The subgrade must be uniformly, graded, compacted, free of standing water and dry at the time of placement. Mask off and cover all nearby structures and slabs that could be damaged through contamination by the concrete.

CONCRETE • The concrete should be designed to meet the strength and finishing requirements of the project. All fine and course aggregates must be non-reactive and free of deleterious material. The maximum recommended slump is 5 inches. Avoid using admixtures containing Calcium Chloride. Slump greater than 5" should definitely be avoided unless a water-reducing or super-plasticizing admixture is added by the concrete supplier. Low water content (water-cement ratio) minimizes shrinkage and cracking, maximizes hardness and promotes a richer, darker color. For consistent color, the use of pozzolans or fly ash mixes is strongly discouraged.

APPLICATION • Type of aggregate, mix design and water content may affect disintegration of bags. Mixing times and procedures are based on best practices. Mixing times and procedures may vary by region depending on aggregate type, mix design, etc.. Before discharging the mix, ready mixed supplier should monitor mix inside the drum to determine that the bags have broken down completely.

READY MIXED: The drum must be cleaned, and approximately two-thirds of the mix water and one-half of the aggregates needed should be added to the drum. Do not use slurry water or reclaimed aggregates. Add the correct amount of MATCRETE Integral Color to the drum and mix at full charging speed for three to five minutes or until all bags break apart and pigment is distributed evenly. Add the balance of the ingredients (water, aggregates, cement and admixtures) and mix at a full charging speed for 8 to 10 minutes (80 to 100 revolutions). It is the ready mixed supplier's responsibility to make sure bags have fully disintegrated. Failure to follow instructions can result in bags not fully disintegrating.

JOBSITE LOADING: When applying MATCRETE Integral Color at the jobsite, it is highly recommended to open the bag and pour pigment directly into the drum, then discard the bag. Failure to do so may result in improper dispersion which leads to inconsistent color. Once pigment has been added, no additional water may be added.

*For fiber-reinforced concrete, add fibers after the color load has been thoroughly mixed. This reduces the potential for fiber/color balling.

*For sand-blasted horizontal surfaces, exposed aggregate (3/8-inch-size pea gravel) finishes, or typical 3/8-inch-size pea gravel mixes, open MATCRETE Integral Color bag and pour in color to ensure proper dispersion.

MATCRETE • 1495 Hudson Avenue • Ontario, CA • 91761
PHONE (800)777-7063 • FAX (909)635-0165
www.matcrete.com

TECHNICAL BULLETIN
INTEGRAL COLOR-10/08

matcrete®

THE ULTIMATE IN CONCRETE DESIGN

INTEGRAL COLOR

FINISHING • Consistency in finishing pays off big in quality colored concrete. The wide variety of finishes you can apply shows off your craftsmanship and commands a premium for your extra effort. Bull float after striking off the slab. For most finishes, use wood bull floats and darbies, not magnesium. Wait for bleed water sheen to disappear before starting floating and troweling. Do not over trowel or start troweling late. This leads to burns and dark spots.

BROOMED: Made by pulling special brooms across stiff, freshly floated or troweled surface. For variety, broom texture can be heavy or light, or in straight or wavy lines.

EXPOSED AGGREGATE: Aggregate is exposed by "seeding the fresh concrete with aggregate, or spraying a surface set-retarding compound scrubbing cement "paste" from the surface of concrete. If retarders are used, exercise caution and follow manufacturer's instructions explicitly. Aggregates can be colored or sparkling, fractured or smooth.

MECHANICALLY ABRADED: Aggregate can also be exposed by removing the surface cement "paste" by using a high pressure water wash, acid etching, sand blasting, grinding, or bush-hammering. Exposure level can vary from barely revealing fine aggregate or up to 1/3 the diameter of coarse aggregate.

STAMPED: A powder release agent or plastic sheet is placed on the colored concrete surface after floating and troweling. Stamping tools are pressed into the concrete to create a pattern and then removed.

SALT: Rock salt is pressed into the surface after finishing. After 24 hours, the salt is washed away with water and a brush. Remove all traces of salt. Allow surface and pockets to dry before applying curing compound. Finish is not recommended in cold areas where water could collect and freeze in pockets.

FORMLINERS: Form liners allow endless design possibilities for texture, pattern and relief. They are available in a wide range of standard patterns and well as custom designs. There are more considerations in vertical formwork.

CURING • The use of a clear, non-staining, acrylic or wax curing-compound is recommended. Do not cure with plastic sheeting, membrane paper or water misting. Avoid the use of sodium-silicate type concrete hardeners. Products not recommended could cause discoloration or mottling of the concrete surface.

WARNING • Add bag unopened to minimize dust. Use with adequate ventilation. Should dusty conditions develop, a dust mask (NIOSH/MSHA TC 21C approved) is recommended. Before using or handling, read the MSDS and Warranty. DO NOT TAKE INTERNALLY. KEEP OUT OF REACH OF CHILDREN.

WARRANTY • This product is not for public use and is intended for use by licensed contractors, experienced and trained in the use of these products. It is warranted to be of uniform quality within manufacturing tolerances. The manufacturer has no control over the use of this product, therefore, no warranty, expressed or implied, is or can be made either as to the affects or as results of such use. In any case, the manufacturer's obligations shall be limited to refunding the purchase price or replacing material proven defective. The end user shall be responsible for determining product's suitability and assumes all risks and liability.

MATCRETE • 1 495 Hudson Avenue • Ontario, CA • 91761
PHONE (800)777-7063 • FAX (909)635-0165
www.matcrete.com

TECHNICAL BULLETIN
INTEGRAL COLOR-10/08