Dry Pigment Ready Mix Color Card

Solomon Colors

SGS Integral Colors

These color chips represent shades of Integral Colors based on medium tone gray Type I-II Portland cement with 4" slump. Use this chart as a guideline only. The colors may not exactly represent the final color. Shade variations of cement and aggregate plus variations in the volume of water, the addition of admixtures and other additives may have an effect on the design mix and final color. We recommend that a test slab be poured and approved prior to the start of the job.

1 - 25lb. bag per 4 yards/1.04 lb. sack	1 - 25lb. bag per 2 yards/2.08 lb. sack	1 - 25lb. bag per 1 yards/4.16 lb. sack	1 - 25lb. bag per 4 yards/1.04 lb. sack	1 - 25lb. bag per 2 yards/2.08 lb. sack	1 - 25lb. bag per 1 yards/4.16 lb. sack
413 Colony Red	413 Clay	413 Terra Cotta	306 Canvas	306 Toffee	306 Cinnamon
417 Rose	417 Brick Red	417 Apple Red	238 Thyme	238 Doeskin	238 Marigold
489 Dusty Rose	489 Light Plum	489 Dark Redwood	338 Earthen	338 Rawhide	338 Leather
288 Rosemary	288 Ginger	288 Straw	385 Taupe	385 Lava	385 Bark
750 Desert Tan	750 Salmon	750 Peach	242 Sandstone	242 Sahara	242 Nutmeg
366 Blush	366 Dk. Blush	366 Natural Red	5092 Olive	5092 Sage	5092 Avocado
775 Sand	775 Cedar	775 Sedona	920 Slate	920 Smoke	920 Onyx
755 Trail Dust	755 Driftwood	755 Apricot			

1 - 25lb. bag per 4 yards	1 - 25lb. bag per 3 yards	1 - 25lb. bag per 2 yards
*908 Lunar Eclipse	*908 Asphalt	*908 Ultra Black

** Caution: 908 Carbon Black can negate the amount of entrained air in the concrete mix. See back page for more information*

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Equipment Products Solomon

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Integral Colors For Ready Mix

IRON OXIDE PIGMENTS
The use of iron oxide colors in concrete has grown to be the single largest application for this type of pigment. This increase in usage has created a demand for better technology and quality control throughout the concrete industry.

Mixing
- Mixer should be loaded to a minimum of 40% capacity to ensure good color dispersion.
- 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.
- Be sure to use the same mix design and maintain a consistent water to cement ratio throughout the job.
- Add the Solomon Color integral color to the drum and mix at full charging speed for 5-10 minutes (60-100 revolutions) before pouring concrete.
- After pour has begun, adding water to the load to improve workability often causes color variation.

Additives
- DO NOT use calcium chloride. This product can cause discoloration in the form of light and dark areas in the finished product. Non-chloride accelerators, including hot water are acceptable accelerators.
- The use of plasticizers, water reducers and air entraining products designed for colored concrete production are acceptable.

Job Preparation
Good drainage and compacted aggregate add many benefits to decorative concrete. Pouring concrete over an inconsistent sub-grade or mix of dirt, plastic, wood, asphalt and existing concrete will not cure evenly. These types of sub-grades will force the majority of water to the surface to evaporate, causing efflorescence in those affected areas. In hot conditions, dampen the sub-grade before each pour to keep moisture from being absorbed from the concrete too fast. Keep the sub-base moisture consistent throughout the day without allowing the water to pool.

Jobs requiring a vapor barrier and job sites having high heat and low humidity conditions are exceptions to pouring over plastic. Pouring concrete directly over plastic can lead to numerous problems including excessive bleed water, uneven drying time, shrinkage, cracking and efflorescence. Consider adding 2"-4" of sand between plastic and concrete. If pouring directly over plastic, mix design may need to be altered. Slump and placement techniques require tighter tolerances, and finishers need to be well trained and experienced.

For Vertical Applications (cast-in-place or tilt-wall): All forms should be cleaned thoroughly prior to use or reuse, and applied release agents should be non-staining. For best results, forms should be free of cement latents from any prior concrete pour of a different color. Also, vertical wood forms should be made of medium-density overlay plywood. For color uniformity, methods and material used in preparing the forms should be consistent through the completion of the job. Sandblasting vertical surfaces is recommended to remove minor form marks and any colored residue resulting from water, cement and coloring agents bleeding toward the forms during concrete placement.

Curing
- Do NOT fog or spray water on the surface during the initial curing period.
- Do NOT cover the surface with plastic.
- Failure to follow these guidelines can lead to uneven curing and coloration.
- We offer and recommend BRICKFORM or LEGACY branded CURE AND SEALS that meet the ASTM Standards C 309 and C 1315 for curing most new colored architectural concrete flatwork. Apply at a rate of 250-300 sq. ft per gallon (6.13-7.36m^2 per liter) once the slab is hard enough to be walked on without marring the surface. Do not apply these products in high heat, direct sunlight or in windy conditions. Please reference the appropriate cure and seal Technical Information Sheet for a full description of the product use, limitations and precautions. Links to these sheets and additional coloring information are available at www.solomoncolors.com.
- Proper curing, along with maintaining a low slump and protecting the surface against water penetration, reduces the possibility of efflorescence. If efflorescence does occur, wait until concrete has fully cured and remove efflorescence using Brickform E-Etch or Legacy Eco-Etch. Follow with a light scrubbing or the use of a low r.p.m. rotary scrubbing machine.

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TECHNICAL SPECIFICATION DATA
Composition and Materials: Pigments utilize pure red, yellow, and black synthetic iron oxides. SOLOMON COLORS has expanded the color range by formulating laboratory controlled high tinting strength blends. Each of these colors is 95% to 99% minus 325 mesh particle size. SOLOMON COLORS iron oxides are permanent, inert, stable to atmospheric condition, sunfast, limeproof, and free of deleterious fillers and extenders. All SOLOMON COLORS pigments comply with ASTM C979 for integrally colored concrete and are produced to .8 Delta E, an established plant standard.

Limitations
A level of 10% color based on the weight of total cementitious material used is the color saturation point. Color added in excess of 10% will not provide additional benefits and can reduce the overall strength of the finished product. Conversely, a level of color below 1% can cause irregular coloring and general "washed out" appearance. The suggested "optimum" range is 2% to 4% pigment loading based on total cementitious material weight.

***908 Carbon Black Limitations**: A level of 2% color based on the weight of total cementitious material used is the color saturation point. Color added in excess of 2% will not provide additional benefits. The suggested "optimum" range is 1% to 2% pigment loading based on total cementitious material weight. (Cement, Lime, Fly Ash, GBFS). Due to the particle size of Carbon, each has a tendency to dissipate out of concrete over time. Solomon Colors recommends sealing the concrete periodically as this will help slow this process down and in some cases prevent it. Carbon particles will decrease the amount of entrained air during the mixing process. Monitoring air content to specification will be necessary.

Limit of Warranty and Liability
Solomon Colors, Inc. warrants that their product conforms to the description and standards as stated on the product packaging and specific product literature. If properly mixed and applied, Solomon Colors, Inc. warrants the color to be uniform, limeproof, and sunfast. The exclusive remedy of the user or buyer and the limit of the liability of this company shall be the purchase price paid by the user or buyer for the quantity of the SOLOMON COLORS products involved.

For more information go to:
www.solomoncolors.com
www.brickform.com and
www.legacycolor.com

Smartphone users:
Use a QR reader app to learn more about this product.

SOLOMON COLORS, INC.

- **For information on placing and finishing decorative concrete, ask for "Solomon Colors Guide to Decorative Concrete Products."**
- **CSI 3-Part Tech Spec Sheets available at www.solomoncolors.com & www.sweets.com**

See Us In Directory CD SWEETS.COM

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