

## Precision-Pac™ Integral Color for Concrete

**APC:** Iron oxide pigments are used in ready mix, pre-cast, tilt-up, ornamental concrete, shotcrete, mortar, concrete masonry units, pavers, roof tiles, and retaining wall units. Additional uses are to color stucco, plaster, cast stone, and many other cement-based construction materials.

**Materials:** APC Precision-Pacs™ are permanent, light-fast, inert and stable to atmospheric conditions. APC colors comply with ASTM C979, Pigments for Integrally Colored Concrete. Integral colors are not designed for dust-on application.

**Packaging:** APC Precision-Pacs™ are packaged in pre-measured per cubic yard repulpable bags. Precision-Pacs™ may be tossed into mixer without opening or pouring. The mixing action disintegrates the bag allowing the pigment to disperse throughout the mix. Select colors are available in standard 50lb paper bags, 2000lb super sacs, and bulk tanker loads. Quality is assured by a batch label system that tracks the product through production to the warehouse and to your job site. Standard packaging is based on a 5 sack mix (3000psi) per cubic yard.

**Mix Design:** Make sure to use the same mix design and a consistent water to cement ratio throughout the job with a consistent slump between 4" to 6". Color variation may occur if batch proportion and slump are not maintained from load to load. Keep all raw materials (sand, cement, and aggregates especially) as consistent as possible throughout the entire project. Changes in raw materials (size, color, moisture content) affect the final color. Remember water has a vast affect on final color. Adding too much water will lighten the color of the project giving it a pale or washed out look. When better flow ability is required, use a plasticizer or water-reducing admixture. Calcium chloride or any chloride based accelerator should not be used. Chloride based additives will cause discoloration in the finished project.

### Mixing Color:

**Batch Plant -** When mixing at batch plant, truck mixers should be thoroughly cleaned prior to use. For best results add two-thirds of the water and one-half of the aggregates to the drum. Add Precision-Pacs to the drum. Mix at full charging speed for three minutes or until bags break apart and pigment is dispersed evenly. Add balance of ingredients and mix at full charging speed for 8-12 minutes (120-150 revolutions).

**Job Site- APC Precision-Pac™ Integral Color** can also be added at the job site. Add bags to drum and mix for 10-12 minutes (120-150 revolutions). Order concrete at a workable slump (4"-6") and always keep water addition to a minimum. Make every effort to maintain consistency with multiple loads. Water addition can lead to inconsistent color.

## Additional Items for the Contractor

APC recommends following similar procedures for colored and uncolored concrete regarding base preparation, use of vapor barriers, form placement, reinforcement and joints. Integrally colored concrete should be installed the same way as high quality uncolored concrete. Listed are additional guidelines that should be observed for colored concrete. For more detailed information, please review our color guide.

- **Avoid adding extra water at the job site. Do not wet finishing tools or add water to the surface of the colored concrete.**
- **When the surface becomes wet, stop floating. Allow bleed water to evaporate, then begin troweling. Waiting too long, may allow dark spots or "burn" marks to appear.**
- **Do not use wet coverings, plastic sheeting, water proof paper, or liquid membrane curing compounds.**
- **Even curing + even drying = even color.**
- **Pigment loading should never exceed 10% of the weight of the cement content.**
- **Consistency = Reliability.**
- **Do not sprinkle pigment onto the surface of the concrete.**
- **Complete the job by sealing your project with one of APC's Precision-Seal™ products.**
- **Contact your local sales person for pump mix design color requirement.**

Efflorescence is a naturally occurring process. It is a white powdery substance that may occur on the surface of the concrete. This is a result of water evaporation and is more noticeable on colored concrete. Proper curing and protection from water penetration will help reduce the effects of efflorescence. If efflorescence occurs, care should be taken to clean the surface. Use APC Precision Clean & Etch for cleaning colored concrete and be sure to seal with an APC Precision sealer. APC Cure – Seal 25 is designed to be applied to freshly placed concrete as soon as the finishing process is completed. This product seals and protects, assures proper curing and will help to prevent efflorescence. Please refer to APC product label and data sheets for proper application. Always follow manufacturer's recommendations carefully.

09/19



**Birmingham Zoo • Birmingham, Alabama**  
Precision-Pac™ Integral Color



**Auburn University • Auburn, Alabama**  
Dark Ochre Integral



**Taco Bell • Oak Ridge, Tennessee**  
Midnight Integral



**Payne Stewart Golf Course • Branson, Missouri**  
Dark Ochre Integral



## NATURAL IRON OXIDE PIGMENTS

### Natural Iron Oxide Pigments

Alabama Pigments is known throughout the industry as being the manufacturer of high quality, natural iron oxide pigments. Our natural red iron oxides are mined, processed and packaged in the USA. APC 901 red iron oxide pigment is an industry leader in colored mortar, coatings, composite plastics, agricultural and brick. APC B101 black iron oxides are widely used in foundry sand mixes as well as agricultural and sound proofing applications. Our natural iron oxide pigments are available bulk or bagged. APC natural iron oxide pigments are recognized for their increased tinting strength, deep rich color and consistency. With APC natural iron oxide pigments, you get the best value in the market.

You can find APC's natural and synthetic iron oxide pigments in numerous applications across North, Central and South America. APC 901™ Natural Red has recently been proven to be highly effective as a stand alone pigment in wood plastic composites creating a low cost alternative in the plastic industry. APC offers its line of natural and synthetic iron oxide pigments packaged in 50lb bags, 2000lb supersacs, 4000lb supersacs and bulk tank loads.

#### Natural Red Iron Oxide

APC 901  
APC 900  
APC 902

#### Natural Black Iron Oxide

APC B101

#### Natural Yellow Iron Oxide

APC 458  
APC 412

CONTACT US TODAY



## SYNTHETIC IRON OXIDE PIGMENTS

APC has a full line of synthetic iron oxide pigments as well as many other specialty pigment products. All of our pigments meet the same rigid standards of consistent quality that have always distinguished APC's commitment to its customers. APC's Fine Grade line of synthetic iron oxide pigments are readily available from stocks in the US. Not only do our customers enjoy the lowest prices in the market but also the value of having product readily available for shipment, not 6-10 weeks later. Availability, Quality, Value, Trust; just a few more reasons APC is one of the fastest growing companies in the industry. You can find APC's natural and synthetic iron oxide pigments in numerous applications across North, Central and South America. APC 901™ Natural Red has recently been proven to be highly effective as a stand alone pigment in wood plastic composites creating a low cost alternative in the plastic industry. APC offers its line of natural and synthetic iron oxide pigments packaged in 50lb bags, 2000lb supersacs, 4000lb supersacs and bulk tank loads. To discuss the virtually limitless possibilities of colors and applications for our synthetic pigments, simply contact us. Samples are available for your evaluation.

### Color Cards

APC QUALITY CONSTRUCTION COLORS

APC SELECTION OF QUALITY COLOR

### Granular Low Dust Pigments

APC GRANFLO