# Buddy Rhodes<sup>™</sup>Color Wheel Pigments Limitless Color Options for Decorative Concrete



## **Overview**

Buddy Rhodes Color Wheel<sup>™</sup> Pigments are designed specifically to withstand the caustic nature of concrete, are UV stable, and provide the widest range of color possibilities on the planet. Whatever color you are after, one of these collections will provide an integral concrete color to match your needs.

The natural color of all of our mixes (with the exception of Buddy Rhodes Vertical Mix) is bone white. We use Federal White Cement as a primary ingredient because it is more consistent in quality and color compared to grey cements. For this reason, all our colors are developed using this white cement base. You can use grey cement as a base for your piece, but understand that this will shift the final color.

Buddy Rhodes Pigments are derived from a wide variety of materials, from natural mineral pigments to organic and inorganic chemical compounds, each chosen for compatibility with concrete and final appearance. The cost of individual colors can vary widely, depending on the source and cost of the primary ingredients.

The Buddy Rhodes Color Wheel® features three distinct color collections:

## **Buddy Rhodes Signature Color Collection**

This is a collection of 15 timeless colors, hand selected by Buddy Rhodes himself. They are blended in such a way that a 1 lb (0.45 kg) package of pigment will perfectly color one bag of any of our white cement-based blended bagged mixes. This simple ratio makes it easy to achieve consistent and predictable results time after time. The addition of Signature Collection colors can be increased, if desired, up to 2 lb (0.9 kg) per bag of blended mix to achieve richer tones, and can be reduced for more subtle colors.

### **Buddy Rhodes Pure Collection**

If you are looking for a color that is not in the Signature Collection, you have the option of choosing from a range of 24 Pure Pigment colors. These are single tone colors that can be blended with each other to provide virtually any color you desire, from earth tones to jewel-bright.

Colors in the Pure Pigment collection require a bit of knowledge to use properly. Some of them color more strongly than others in the same amount of concrete, and you must calculate the appropriate amount to add based on the shade you wish to achieve. Another factor is the fact that too much of some pigments can weaken concrete, and therefore each Pure Pigment has a maximum loading percentage that must not be exceeded.

When calculating pigment loading, percentages are not based on the weight of the bagged mix, but rather the mix's TCB, or Total Cementitious Binder. This is the weight of just the portion of the mix made up of the Portland cement and pozzolans, excluding the weight of any other ingredients. This is because the color is only taken up and distributed through the cementitious portion of the mix. Therefore, a 50 lb (22.68 kg) bag of Buddy Rhodes Craftsman Mix will contain 20.5 lb (9.3 kg) of TCB, and any calculation of pigment percentage is based on that 20.5 lb (9.3 kg), not the full weight of the bag.

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Craftsman Mix	GFRC Mix	ECC Mix	Artisan Mix	Countertop Mix	
TCB = 20.5 lbs (9.3 kg) per 50 lb (22.68 kg) bag	TCB = 26 lbs (11.8 kg) per 50 lb (22.68 kg) bag	TCB = 28.45 lbs (12.9kg) per 50 lb (22.68 kg) bag	TCB = 5.2 lb (2.36 kg) per 10 lb (4.45 kg) pail	TCB = 19 lb (8.62 kg) per 50 lb (22.68 kg) bag	

#### **Total Cementitious Binder Amounts for Buddy Rhodes Mixes**

For example, when using Red Oxide (SB-065), the maximum load is 10% of TCB, so for GFRC Blended Mix you should not exceed (26 lb x 10%) or 2.6 lb of pigment per 50 lb bag. Anything less than that percentage is fine.

On the Buddy Rhodes website and in the printed catalog, there is a chart showing all 24 colors of the Pure Pigment collection, along with loading percentages for various shades of each color pigment. Those shades are also based on the TCB of the bagged mix, so calculate accordingly. The darkest shade shown of each color is the maximum loading rate for that pigment. See the example at right-the maximum loading rate for *Super Green VG-20* is 4.5% of TCB, and the other shades presented have corresponding loading percentages.

When mixing two or more Pure Pigments together for custom colors, the calculation becomes a bit more complicated. The maximum pigment load must be split proportionally between all the pigments

being used. So two colors, one with a maximum loading rate of 10% of TCB and one with a maximum loading rate of 4.5% of TCB can be combined (to achieve the richest possible shade of each in the final color without weakening the concrete) at 5% and 2.25% each. Note that this is not as rich a color for each component as is possible using one pigment alone. This is usually not an issue, since clever color mixing can achieve almost any shade without exceeding the maximum loading rate for a mix.

# **Buddy Rhodes Specialty Collection**

In addition to the previous collections, we offer over 400 individual custom formulated color blends to match Benjamin Moore color swatches in the Buddy Rhodes Color Wheel<sup>™</sup>. Find the latest color selection guide on our website. These colors are exact color matches, and each has a precise loading rate associated with it. Note: GFRC Blended Mix is used in the color matching process. So, for example, color number *27 San Antonio Rose* is achieved in GFRC by adding (28.45 lb TCB x 7.96%) = 2.264 lb of pigment blend to one bag of GFRC Blended Mix.

The Specialty Collection is broken into four catagories, Type I through Type IV, based on the cost of the pigments in the blend. Type I are the least expensive, and Type IV are the most costly.

## **Custom Colors**

Do you have a color in mind that you want to match, but is not in our list of Specialty Colors? We can do that for you. Our inhouse color lab can match any Benjamin Moore<sup>™</sup> swatch, giving you the freedom to pursue unmatched concrete aesthetics. There is an additional one time charge and a minimum purchase requirement for new Benjamin Moore<sup>™</sup> color formulations. Contact us for details.

# **Best Practices**

The final color in a piece does not depend on pigment alone, but also on how that concrete is produced, finished, and sealed. Surface texture, water-cement ratio, aggregate color, type of sealer used, and other factors can affect the final color appearance of the piece. We therefore recommend that you test and process a small batch of the colored mix you intend to use before any large pour and verify that the result is what you intend.

# **Packaging Options**

All pigments in the Buddy Rhodes Color Wheel® are available in 5 lb. (2.27 kg), 20 lb. (9.07 kg), and 80 lb. (36.29 kg) units. Pigments in the BR Signature and BR Pure Collections are also available in 1 lb. (0.45 kg) units.





