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Topic: DuroTone Pigment UV Resistance

Master Wall® DuroTone pigments are the next generation in performance pigments formulated specifically for exterior stucco and CIFS® walls. Formulated for deep and intense colors, it is an option to supplement standard pigments and has some unique properties:

- The pigments are more intense than standard pigments.
- They are formulated to block efflorescence more effectively.
- High colorfastness and resistance to UV degradation is significantly better.
- The colors are warranted for colorfastness rather than fade resistance.

All these claims could easily be perceived by an architect or owner as creative marketing, especially when the pail and even the tint in the pail generally look the same. So what can a distributor or applicator do to demonstrate this is needed or even better?

**Color & Formula Review**

Architects are selecting deeper, intense and vivid colors for many projects. This is not how it used to be. For the past thirty years colors have generally been beige or gray. Bold colors with standard pigments can be tinted and the pigments are fade resistant, but they just break down quicker and are not fade proof.

When custom colors are requested we review the formulations to determine if DuroTone pigments would be a good choice for the color and suggest their use where appropriate. Architects and designers need to be aware DuroTone pigments cost more and projects bidding with a standard formulation may not include DuroTone. You need to request it.

One may be tempted to deduce Master Wall® just uses poor quality pigments. The standard pigments we use are used by most if not all manufacturers in our industry and are considered the benchmark of quality. DuroTone is simply a better option when colorfastness is needed.

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UV Aging
Explaining the benefits of DuroTone pigments is difficult without quality testing equipment. A weatherometer is a piece of state-of-the-art equipment used to rapidly age color samples. In this case we are looking for visible color change.

DuroTone Aging Experiment
To demonstrate the benefit of DuroTone pigments, a standard base Superior Finish was tinted with 10-oz of standard primary color and another sample with the same quantity of DuroTone pigments and subjected to a 2000 hour-UV aging.

The first thing you notice about the samples is the DuroTone is much more vivid. This is due to the intensity of the color. These samples represent pure color. Keep in mind that tinted colors will be a mixture of several pigments.

Pthalo Green
In this primary green tinted finish you can clearly see the degree of fading in the color.

In these samples the lighter square is exposed to the UV while the top portion is protected by the jig that holds it in place.
**Organic Red**
In this primary red tinted finish you can see a slight shifting of the color with the intensity of the DuroTone remaining vivid.

![Organic Red](image)

**Pthalo Blue**
This primary blue tinted finish had a significant difference in color intensity and a very recognizable color shift.

![Pthalo Blue](image)

**Lamp Black/Carbon Black**
Being at the end of the color scale, absolute black changes absolutely. Here the color shift and breakdown of the organic pigment has significantly changed.

![Lamp Black/Carbon Black](image)

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