

Color BY NATURE



Long Lasting



Vibrant



Protective

DITTO

Color by



Metal Roof & Wall Panels



McElroy Metal has been a leading manufacturer of metal roofing and siding for over 50 years. McElroy's long-standing reputation of providing high quality products and services has been earned through product innovation and dedication to customers. In keeping with that tradition, McElroy's entire line of painted wall and roof panels is available with a 70% PVDF (fluoropolymer) based paint system. Chemically similar to Teflon®, 70% PVDF based coatings offer the most superior performance available in the industry today. This brochure will answer many questions you may have about paint systems, as well as describe and illustrate some of the extensive testing that has been conducted comparing the performance of 70% PVDF coatings versus other commonly used systems.

What is a 70% PVDF coating?

70% PVDF (fluoropolymer) resins are used to manufacture high quality paint. Only two 70% PVDF resins are manufactured in the U.S. marketplace, Kynar 500® and Hylar 5000™. These two resins are used by The Valspar Corporation to make Fluoropon®, McElroy's 70% PVDF coating of choice. The 70% refers to the fact that 70% of the paint's resin is made of Kynar 500® or Hylar 5000™.

What are some of the benefits of Kynar 500® coatings?

Unsurpassed resistance to chalking and fading, combined with ease of maintenance and chemical resistance, are a few of the many benefits. Kynar 500 coatings are highly resistant to chalking and fading due to the inherent nature of the resin's chemistry. When the PVDF resins are combined with other durable ingredients, such as ceramic pigmentation, the resulting paint's resistance to chalking and fading is unequalled. In addition, Kynar 500 coatings are non-attractant to dirt and other airborne particles. If cleaning is necessary, just like your Teflon coated pan, your panels will clean up easily with a little soap and water. Kynar 500 coatings are also virtually unaffected by incidental contact with most chemicals or air pollution.

What are other commonly used resin systems in this industry?

Paints using resins made of polyester and siliconized polyester are commonly used in the metal construction industry. In test after test, Kynar 500 resin based paint systems outperform all other resin systems.

Why should I specify a Kynar 500® coating for my building?

Adding a new roof or building to your property is a major financial investment, and you want it to be both functional and attractive for many years to come. Nothing makes a bigger impact or says "quality maintenance" of your property like a sparkling new paint finish. When you specify McElroy panels with a Kynar 500 PVDF paint system, you are ensured of a "just painted" freshness year-after-year.

How do I know Kynar 500® systems are better?

Kynar 500 systems are the coating of choice for building owners and architects worldwide. In fact, over 10 billion square feet of building products coated with Kynar 500 systems can be found on skyscrapers, airports, shopping malls, and other structures all throughout the world.





Both Kynar 500® and Siliconized Polyester panels were install on this Louisiana residence.

On day one, colors were identical. Photo taken less than (8) years later shows fading and chalking of the lighter Siliconized Polyester panels. Note, no fade or chalking of the darker Kynar 500 panels.

The building on the right had signs removed from the metal panels. The different colors that are evident are directly attributed to the level of chalk and fade due to exposure to nature's elements.



Are Kynar 500® finishes new?

No. Kynar 500 finishes have been manufactured for over 40 years. Historically, these finishes have been primarily used in the high-rise and architectural market place. Although PVDF paint technology is not new, the standardized use of these systems in the metal clad construction market is relatively new. McElroy Metal is the first metal components company to offer PVDF coatings on all products as a standard inventoried item.

How do I ensure that a Kynar 500® coating is used on my building?

Specify to your builder or supplier that you will only accept metal panels coated with a Kynar 500 finish on your building. Contact the McElroy office nearest you to find a McElroy supplier or contractor in your area.

Are Kynar 500® coatings important for all colors?

Yes. However, the damaging effects of nature's elements are more visible on darker colors. The darker the color, the more obvious chalking and fading are. As white metal panels fade and chalk, the weathered appearance of the panel is still white. However, the fading and chalking will dull the appearance of the panel.

Aside from coatings, what else is important in choosing a metal panel?

The metal substrate is an important factor in regards to panel longevity and performance. The most commonly used substrates in the metal roofing and the siding industry are galvanized and GALVALUME®. Galvanized substrates utilize zinc as a protective coating, while GALVALUME® uses an alloy of zinc plus aluminum. For most applications, GALVALUME® is the preferred substrate due to superior performance history.

Fluropon® is a registered trademark of The Valspar Corporation.

Teflon® is a registered trademark of DuPont.

Kynar 500® is a registered trademark of Arkema.

Hylar 5000® is a trademark of Solvay Solexis.

GALVALUME® is a registered trademark of BIEC International.



Chalking

Chalking occurs when environmental conditions cause degradation of the resin. Contributors to the degradation include: ultraviolet rays from the sun, acid rain, and pollution. As the resin degrades, it takes on a white appearance, commonly called chalk. Kynar 500® PVDF finishes offer the strongest resistance to chalking of any paint system on the market.

Fading

Fading occurs when the environment attacks the pigment portion of the paint system. As a metal panel is continually exposed to the elements, it will lose

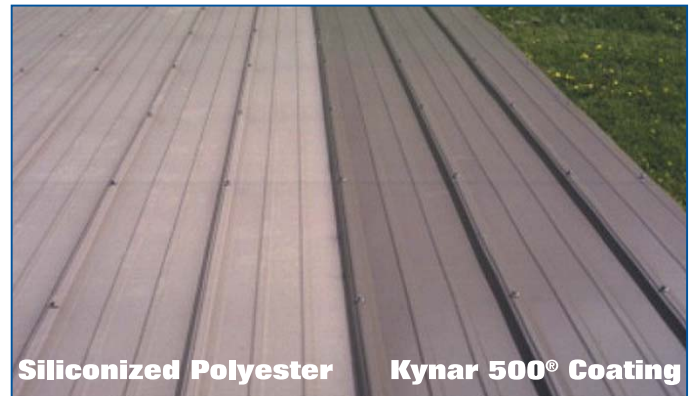
more and more of its original color. Valspar's Kynar 500 coating, fluropon, incorporates the highest quality ceramic pigments available for proven resistance against the fading phenomena.

Case Study

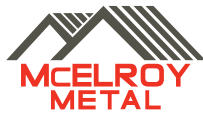
Two panels with McElroy Tudor Brown Kynar 500 coating were included in a shipment of Tudor Brown Max-Rib panels with Siliconized Polyester coating bound for a Belpre, Ohio job-site. After 5 years of exposure to Ohio weather, note the fading and chalking of the siliconized polyester panels compared to the "look-like-new" Kynar 500 panels.

Video

Take the mystery out of purchasing metal panels. Visit: www.mcelroymetal.com/university to view an educational video about metal panel substrates and coatings.



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www.mcelroymetal.com

MANUFACTURING LOCATIONS

ADELANTO, CA	ASHBURN, GA	BOSSIER CITY, LA	CLINTON, IL
HOUSTON, TX	LEWISPORT, KY	MARSHALL, MI	MAUSTON, WI
MERKEL, TX	PEACHTREE CITY, GA	SUNNYVALE, TX	WINCHESTER, VA



Alexandria, LA	Bossier City, LA	Chesapeake, VA	Clinton, IL
Diamond, MO	Fenton, MO	Ft. Walton Beach, FL	Garland, TX
Houston, TX	Indianapolis, IN	Lewisport, KY	McFarland, WI
Nashville, TN	North Little Rock, AR	Pearl, MS	
Sacramento, CA	Savannah, GA	Union City, GA	
West Columbia, SC	Winchester, VA	Winston, MO	