# KYNAR AQUATEC® Product Characteristics



Architects and home owners who want wood windows and doors for their projects often have concerns over durability and maintenance. No one wants the cost and inconvenience of re-painting every couple of years. They want to enjoy their home.

Kynar Aquatec is a coating that out-performs traditional latex and oil based paint products, significantly reducing maintenance costs when applied to a durable wood species.

Kynar Aquatec is manufactured by Arkema, a global coatings company, who summarize the benefits as follows:

Extreme weatherability . Outstanding water repellency . Excellent dirt shedding . Superb mildew resistance

## **Extreme weatherability**

Over time, sunlight, air and water will break down almost all construction materials. Kynar® PVDF resin is known for excellent performance under severe conditions. Similarly, Kynar Aquatec®-based coatings will withstand extended exposures to water, humidity, a wide range of temperatures, ultraviolet rays, oxygen, and atmospheric pollutants. Natural elements, such as sunlight, water, wind, and air, drastically break down coatings over time. The heart of the Kynar Aquatec emulsion technology is the carbon-fluorine (C-F) bond. The C-F bond is one of the strongest bonds known and it is the basis for the extreme weatherability of Kynar Aquatec® emulsion based coatings. Kynar Aquatec® coatings provide the protection of the traditional Kynar 500® resin-based coatings, in a water-based, low VOC field or factory-applied coating. After 10 years exposure in the hot Florida sun, coatings based on Kynar Aquatec® emulsion are similar in performance to the traditional Kynar 500® based coatings.



# **Outstanding Water Repellency**

Kynar Aquatec<sup>®</sup> based coatings are excellent at preventing water from penetrating the surface. Even after 200 hours of immersion, a coating based on this technology shows minimal water pick-up at 2% by weight versus an acrylic coating that can pick up more than 13%. The result of low water pick-up is excellent adhesion of the coating to the surface and reduced maintenance cost related to delamination and water damage.



#### **Excellent dirt shedding**

Kynar Aquatec<sup>®</sup> coatings resist dirt and grime accumulation. They also resist biological growth, even in conditions that are the most prone to harbor mold, mildew and unwanted biological growths.

Coatings based on Kynar Aquatec<sup>®</sup> emulsions pick up very little dirt. This resistance is important for all colors, but none more so than white. Roofing coated with Kynar Aquatec<sup>®</sup> emulsions can achieve total solar reflectance values greater than 0.80 and retain those high values for many years.



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## **Superb Mildew Resistance**

Mold and mildew have great difficulty gaining a foothold on Kynar  $^{\circledR}$  PVDF coatings. Likewise, Kynar Aquatec  $^{\circledR}$  emulsion-based coatings tend not to support biological growth, even in harsh, humid, mildew-prone areas. This has been shown through painted panel exposure tests in Florida, case studies from around the world for materials made with Kynar  $^{\circledR}$  resins, and materials studies on the Kynar  $^{\circledR}$  resins themselves.



After six years of exposure to Florida sun and weather, panels coated with Kynar Aquatec<sup>®</sup> emulsion-based coatings show no signs of biological growth and demonstrate excellent color retention.

