

# Kynar Aquatec™

## WATER-BASED PVDF FIELD APPLICATION CASE STUDY



### PROJECT PROFILE – JOBING.COM ARENA, GLENDALE, ARIZONA

“This is the largest sign we have ever made” said Andy Salcido of bluemedia, the firm hired to create the enormous sponsorship advertisement on the roof of the Glendale Arena. The layout is 290 feet wide by 120 feet tall, with the largest letter being the “J” in Jobing.com. It measures 45 feet tall by 35 feet wide. The next largest letter is the “A” in Arena, which measures 32 feet tall by 37 feet wide.

The conditions and requirements for this project made it necessary to select a color stable finish that was capable of withstanding the harsh Arizona sun and compatible with the existing roof substrate. KYMAX™, a Kynar Aquatec™ emulsion-based coating, was selected based on its physical performance properties. Kynar Aquatec™ emulsion-based coatings are recognized as excellent long-lasting, color stable coatings. The logo was first laid out using Roof Mate™ basecoat, which provides a highly cohesive bond to both the base substrate and the KYMAX™ topcoat. The design layout was then approved from aerial photos. KYMAX™ was tinted using the highest quality, UV stable pigments available and then carefully applied according to factory specifications. With proper maintenance, the logo will last well beyond its 10 year warranty.

### EXTREME WEATHERABILITY

Outdoor exposure will break down almost all coatings causing them to chalk, fade, and discolor. Kynar 500 based coatings are known for excellent performance under severe conditions. Similarly, coatings based on Kynar Aquatec™ emulsions will withstand extended exposure to water, humidity, temperature extremes, ultraviolet rays, oxygen, and atmospheric pollutants. These coatings retain color and gloss like no other conventional water-based coating.

### Project:

Jobing.com Arena  
Glendale, AR

### Coating:

KYMAX™

### Coating Supplier:

United Coatings  
Spokane, WA

*Photographs courtesy of  
United Coatings*



*Photograph courtesy of United Coatings, Spokane, WA*

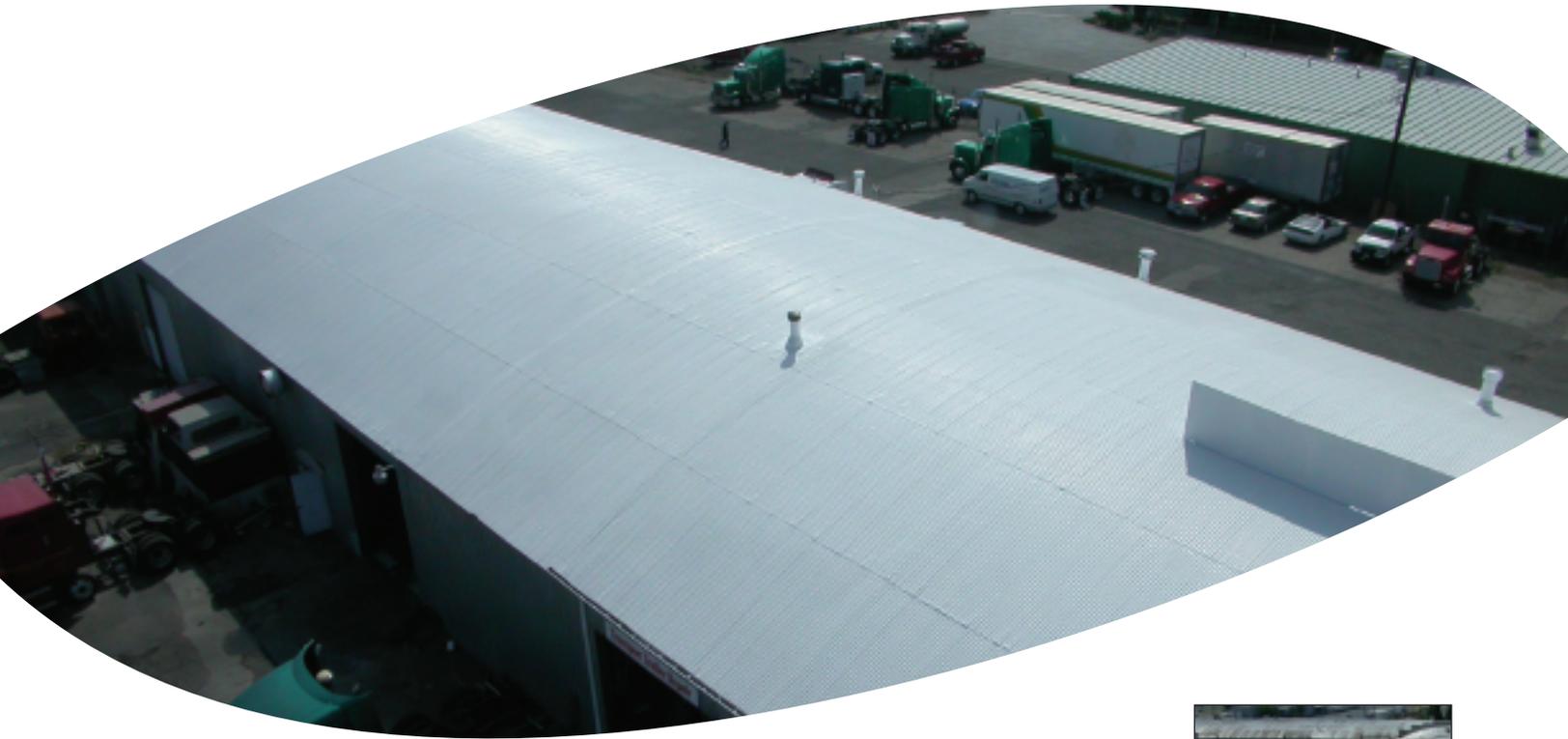
## **KYNAR AQUATEC™: A WATER-BASED FLUOROPOLYMER PLATFORM**

Kynar Aquatec™ is a new innovative platform of emulsions, which are used by paint formulators to make premium weatherable water-based coatings. Coatings formulated with these emulsions can provide the durability and performance of traditional Kynar 500® based coatings. They can be easily applied to a variety of substrates, including metals, plastics, wood, concrete, textiles, and previously painted surfaces.

Now the extreme weatherability of a Kynar 500® based coating is available in a VOC-compliant, field- or factory-applied, ambient air-dry system. Additional benefits include tremendous resistance to dirt pick-up, outstanding water repellency, and high initial and long-term Total Solar Reflectance and Emissivity.

# Kynar Aquatec™

## FIELD APPLICATION CASE STUDY



### PROJECT PROFILE – BROADWAY TRUCK REPAIR CENTER, SPOKANE VALLEY, WA

The Broadway Truck Repair Center is a 60,000 square foot corrugated steel facility located in Spokane Valley, WA. This project included roofing repair and recoating of the open-door depot. United Coatings of Spokane Valley, WA supplied the Roof Mate™ coating for waterproofing and KYMAX™ coating (Kynar Aquatec™ emulsion-based coating) for Total Solar Reflectance for this job. Seams, fasteners, and equipment were detailed out with Roof Mate™ and Roof Mate™ Butter Grade to waterproof the coating system included. One coat of metal primer at 8 wet mils and one coat of white KYMAX™ (with an initial Total Solar Reflectance value of 0.87 as reported by CRRC) at 8 wet mils were used. As one worker stated, “The section of the building with the repaired cool roof was significantly cooler than the unrepaired section.”

### COOL ROOFING

More than \$40 billion is spent annually in the United States on electricity to cool buildings, which is about a sixth of the total electricity generated. And, these energy costs are rising in hot climate regions. White cool roofs have been proven to reflect the sun’s energy and reduce the roof surface temperature by up to 100°F. This reduction in temperature reduces the heat transferred into the building and lowers the electrical demand for cooling.

Kynar Aquatec™ based coatings have been reported by CRRC (Cool Roof Rating Council) to have initial Total Solar Reflectance and Emissivity values greater than 0.85 each. Furthermore, additional south Florida exposure studies suggest that these coatings are expected to retain values over 0.80 for more than seven years and well beyond. Conventional elastomeric acrylic based roof coatings drop to 0.55 Total Solar Reflectance in less than two years. These new fluoropolymer coatings will revolutionize the roof coating market by providing long-term energy savings that no conventional coating can achieve.



### ▲ BEFORE

**Project:**  
Broadway Truck Repair Center  
Spokane Valley, WA

**Coating:**  
KYMAX™

**Coating Supplier:**  
United Coatings Corporation  
Spokane Valley, WA

*Photographs courtesy of  
United Coatings Corporation*





*Photograph courtesy of United Coatings Corporation*

### **KYNAR AQUATEC™: A WATER-BASED FLUOROPOLYMER PLATFORM**

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## WATER-BASED PVDF FIELD APPLICATION CASE STUDY



### PROJECT PROFILE – CONROE ISD, HOUSTON, TX

Conroe ISD in Houston, TX had a problem. Although their metal roof components still looked good after 10 plus years of exposure to the Texas sun, they were experiencing leaks at the seams and fasteners. Sealing these areas would also mean recoating the roof components to ensure uniform color throughout.

KynaKote, a Kynar Aquatec™ emulsion-based paint manufactured by ER Systems was used on this job. KynaKote was used on the metal as both a primer, before sealing the seams and fasteners, and as the finish coat. KynaKote exhibits exceptional adhesion to metal components featuring a Kynar 500® based coating and provides improved adhesion for many types of sealants. KynaKote was used as a finish coat due to its high durability and excellent color stability.

### METAL RESTORATION

Coatings based on Kynar Aquatec™ can now be applied in the field to protect metal surfaces with a weatherable fluoropolymer based finish. This enables metal surfaces to be touched-up, repaired, or restored. A non-cool metal roof can easily be converted to a white cool roof, the color of the roof can be changed to match building décor, and faded colors can be restored. And, these coatings have good adhesion to previously coated surfaces including Kynar 500® based coatings and acrylic coatings.

**Project:**  
Conroe ISD

**Coating:**  
KynaKote

**Coating Supplier:**  
ER Systems  
Rockford, MN

Photograph courtesy of  
ER Systems, Rockford, MN



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