



FLEXIBLE PVDF FLUOROPOLYMER Topcoat

For Professional Use Only

DESCRIPTION

- KYSTAR HR is a high gloss, single component, water-based, flexible PVDC coating for spray application.
- KYSTAR HR is designed to be a low build protective coating that provides unsurpassed weathering, abrasion resistance, color fastness and dirt pick-up resistance.
- At 88% KYSTAR HR has one of the highest reflectivities available in any roof coating.
- KYSTAR HR is higher solids, twice as flexible and has three times the gloss as the leading competitive product. This combination of properties provides exceptional dirt resistance and biological growth resistance in a crack resistant, extremely smooth and continuous film.
- Ultra-low VOC content meets even the most stringent roof coating VOC requirements
- With exceptional reflectivity, high gloss, dirt resistance, and resistance to both mildew and algae, KYSTAR HR affords the building owner unsurpassed energy savings vs traditional roofing materials. Surface temperature reductions can be reduced by as much as 80 degrees F.
- KYSTAR HR has excellent plasticizer migration resistance and has excellent bleed resistance for applications over asphaltic surfaces.
- KYSTAR HR can be use over a wide array of roofing and non-roofing substrates.
- KYSTAR HR is manufactured using Kynar Aquatec PVDF technology. This technology is based on the incredible Kynar 500 technology that has proven to be one of the most UV resistant coatings ever manufactured. For unmatched colorfastness and gloss retention KYSTAR HR is the product of choice.
- KYSTAR HR utilizes the highest performance and high IR reflectivity “cool” pigments to further maximize long term colorfastness.

RECOMMENDED USES

KYSTAR HR is a thin film coating that is designed to be applied over primed and unprimed substrates. KYSTAR HR should be utilized wherever long-term durability, dirt resistance and color fastness is critical. KYSTAR HR may be applied over these substrates with the use of high-performance acrylic basecoat; Spray foam, TPO, PVC EPDM and asphaltic products such as BUR and Modified Bitumen. KYSTAR HR can also be applied to these substrates without the elastomeric basecoat; Primed or pre-painted Metal, PVC, sealed cementitious surfaces and primed or pre-painted wood surfaces.

Property	Test Method	Result
Volume solids	ASTM D-1653	40.0 +2%
Weight Solids	ASTM D-1644	52.0 +2%
Tensile Strength	ASTM D-2370	1000 +50 PSI
Elongation	ASTM D-2370	300 +50%
Permeability	ASTM D-1653	3 +1
VOC	EPA Method 24	49 g /Liter
Gloss (60 degree)		69%
Low temperature Flexibility (-15', 1/2 in mandrel, 1000hrs weathering)		Pass
Reflectivity	ASTM C-1549	88%
Emittance	ASTM C-1371	.89
SRI	Calculated	110
Viscosity		100 + 10 KU
Density		10.4 lbs per gallon
Flashpoint		None
Shelf Life (When stored between 40°F and 70°F (4°C - 21°C)).		24 months (Unopened)
Clean Up		Water

To the best of our knowledge all technical data contained herein is true and accurate as of the date of issuance and subject to change without prior notice. Used must contact Everest systems Company to verify correctness before specifying or ordering. We guarantee our products to conform to the quality control standards established by Everest Systems Products. We assume no responsibility for coverage, performance or injuries resulting from use. Liability if any, is limited to replacement of the product. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY EVEREST SYSTEMS EXPRESSED OR IMPLIED; STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.



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of 0.66 total

COLORS

Standard Colors: White,
Custom Colors are available for an additional charge.

PACKAGING/SHIPPING INFORMATION

CONTAINER SIZE	SHIPPING CLASS
55 Gallon drum (208.2 liters)	Class 55
5 Gallon pail (18.9 liters)	Class 55

SURFACE PREPARATION

General: Surfaces to be coated should be dry, free of dust, dirt, oil, loose granules, gravel, peeling coating and other foreign matter. All wet insulation or foam should be removed and replaced with like materials.

For optimal results power wash all surfaces with a minimum of 2000 psi using a wide fan tip. All necessary precautions should be taken to avoid damage to the roof system. Mildew should be treated with a bleach solution (1 part bleach, 2 parts water) and rinsed thoroughly. Patch and repair cracks or holes with appropriate sealants or caulking materials.

Masonry: Allow fresh masonry to cure a minimum of 30 days, prime with Everprime CS

Metal: Unprimed or Rusty metal must be cleaned with a wire brush and primed with Everprime Metal.

EPDM: Prime with Everprime EP primer/cleaner, ensure no primer residue remains. Apply at least 20 mils elastomeric acrylic.

PVC, Hypalon, aged TPO: Prime with Everprime SP and apply at least 20 mils of high quality elastomeric acrylic.

Polyurethane foam: Apply at least 20 mils of a high quality elastomeric acrylic.

Granulated Asphalt: Apply at least 25 mils of a high quality elastomeric acrylic.

Smooth Asphalt: Apply at least 20 mils of a high quality elastomeric acrylic.

Other: For other substrates check with your Everest Representative.

APPLICATION

This product should be sprayed on a clean, dry surface. For applications over an elastomeric Acrylic, acrylic should be cured for at least 24 hours and 48 hours would be better.

For details see Equipment Recommendations at the end of this sheet. If sprayed, material should be at least 75°F. Before applying additional coat, the previous coat must be completely dry and cured. If any contamination is present on the cured surface it must be washed and completely dry before application of subsequent coats.

Application Properties

Yield (1 gal to 100 sq ft)	6.1 dry mils
Dry Time (75° F)	60 mins @ 50% humidity
Recoat window	>6 hrs
Complete Cure	30 days

COVERAGE RATE

Apply KYSTAR HR at the rate of 0.33 gallons per 100 sq. ft. (5 wet mils) per coat. Two coats must be applied for a final application

gallons (4 dry mils). Surface texture and wind will affect applied mil thickness.

ENVIRONMENTAL CONDITIONS

This product cures by water evaporation only. Product must not be applied when the ambient temperature is below 50°F or if there is any possibility it could fall below 32°F within 24 hours of application. Application is not recommended if rain or dew is likely to occur before product dries. In high humidity conditions late afternoon applications should be avoided as overnight dew formation on uncured surface can cause coating wash-off. On marginal days, multiple applications of thin coats can ensure proper drying before rain or overnight freezes.

PONDED WATER

- Everest Systems warranties do not cover damage due to ponding water.
- The National Roofing Contractors Association considers ponding water on any roof unacceptable.
(See the NRCA Roofing and Waterproofing Manual).

LIMITATIONS

Surface must be clean and dry. Application is not recommended on roofs with slopes less than 1/8 in 12 or where ponded water is present. Do not apply over wet substrates or when inclement weather is imminent. Complete cure of KYSTAR HR requires complete evaporation of water. Cool temperatures and high humidity retard cure. In addition, this product is not recommended for use without a vapor barrier in cryogenic tank or cold storage roofing applications. It is not intended for use as a thermal barrier.

SAFE PRACTICES

This product is designed for professional installation. Before working with this product, you must read and become familiar with the available information on its risks, proper use and handling. Information sources include but are not limited to SDS and product labels. More resources are available at everestsystemsco.com or by contacting Everest Systems directly.

EQUIPMENT

Minimum requirements:

Spray

- Minimum 1500 psi capable pump
- 3/4 gallons or more per minute (continuous)
- Filter screen 60 mesh or larger
- Hose rated to 2x maximum pump pressure
- Hose lining should be compatible with coating and required cleanout materials
- Hose lengths: (Largest diameter at pump)
 - 3/8 minimum 6 ft wip
 - 3/8 minimum I.D. up to 75 feet
 - 1/2 minimum I.D. up to 200 feet
- 3/4 minimum I.D. over 200 feet
- Spray gun: Graco Hydra Mastic or equivalent
- Spray Tip:
 - Reversible self-cleaning type
 - Orifice size of .027 to .039
 - Fan angle of 40° to 50°
- Always use components rated for pump pressures.