

Ultimate Performance

Technical Data Sheet



General Description

PVF₂Series™ is a custom formulated fluorocarbon solar-reflective paint system designed for ultimate colour and gloss retention providing lasting outdoor performance.

Standard

ASTM A755(M)

American Society for Testing and Materials

JIS G3322

Japanese Industrial Standard

Recommended End Use

General exterior architectural application, especially for long-term, maintenance-free applications. Roofing & wall cladding in residential, industrial & commercial construction.

Product Composition

PVF₂ Series™ finishes consist of full strength 70% Kynar 500® or Hylar 5000®, PVDF fluoropolymer resin. The remaining 30% is a proprietary acrylic polymer. Only specially selected, lead-free colourfast ceramic/inorganic infrared solar reflective pigments are used in PVF₂ Series™ colours. Heat and sunlight resistance of these pigments has been field-proven for many years in real world at 45° South Florida exposures. This proprietary reliable combination of resins and pigments is available in a wide range of long-life finishes able to resist changes in colour and general appearance while preserving film integrity and coating properties.

Specification

PRETREATMENT	Corrosion resistance proprietary conversion coating each side.
PRIMER COAT	Universal corrosion inhibitive primer Nominal thickness - 5 microns each side
FINISH COAT	Custom formulated system. Nominal thickness - 20 microns on the top or weather side. The finish coat is available in 9 standard specially selected colours. Other colours may be available on request. The finish coat can, if required be applied to both the sides to provide double sided colour coating.
BACKING COAT	Custom formulated backer - 5 microns Special backer suitable for foam application can also be provided.
GLOSS	Nominal 25% (60°)

Specified Parameters

Test	Performance
Specular Gloss (ASTM D523)	20 - 30%
Hardness (ASTM D3363)	F minimum
Bend Adhesion (ASTM D4145)	4 T max
Reverse Impact (ASTM D2794)	10 Joules minimum
Humidity Resistance (ASTM D2247)	2000 hours: Pass
Chemical Resistance (ASTM D1308)	No significant colour change
Salt Spray Resistance (ASTM B117)	2000 hours: Pass

Test	Performance
Weatherometer Test (ASTM D822)	2000 hours: No checking, blistering or adhesion loss
Colour Change (ASTM D2244)	For period of 20 years delta E not exceed: <input type="checkbox"/> 6 units - light colour <input type="checkbox"/> 7 units - intermediate colour <input type="checkbox"/> 10 units - dark colour
Chalking Resistance (ASTM D4214)	No chalking greater than # 8
Exterior Weathering (ASTM D4214)	Ultimate exterior performance in South Florida test exposures
Abrasion Resistance (ASTM D968)	60 liters/mil minimum
Solar Reflectance (ASTM E1980)	ENERGY STAR Qualified Contributes points under LEEDS, Green Building Index (GBI)