



### PRODUCT DESCRIPTION

DURANAR ULTRA-Cool fluoropolymer coil coatings are designed to provide outstanding aesthetics, durability, and long term IR reflectivity in a wide range of architectural uses under normal environmental conditions. More than 25 years of Duranar field use, combined with chemistry that improves the IR reflectivity while not diminishing your options in color, creates a new standard of excellence in architectural fluoropolymer finishes. DURANAR ULTRA-Cool coil coatings combine IR reflective pigment technologies and PPG proprietary resin, with 70% of the resin system being fluoropolymer-based. The coatings are highly resistant to chalking, fading, chipping, and peeling when properly applied by an approved applicator. DURANAR ULTRA-Cool coil coatings meet Cool Roof requirements of LEED, ENERGY STAR<sup>®</sup>, Title 24 and ASHRAE 90.1. PPG has numerous colors registered with the Cool Roof Rating Council and ENERGY STAR. The coatings exceed the requirements of AAMA 620/621 specifications, and are approved for use on properly cleaned and treated aluminum and coated steel substrates such as G90 hot dip galvanized, Galvalume<sup>®</sup>, and Zinalume<sup>®</sup>\*. They are not intended for use on hot or cold rolled steel substrates for exterior exposure applications.



PPG Glass, Coatings and Paint for Sustainable Design

DURANAR ULTRA-Cool coatings are just one of the EcoLogical Building Solutions<sup>SM</sup> from PPG.

### SYSTEM OVERVIEW

DURANAR ULTRA-Cool IR reflective coatings are multi-coat systems consisting of a nominal 0.2 mil corrosion inhibitive primer, a 0.75 mil fluoropolymer topcoat, and a 0.5 mil clearcoat, when applicable. They are available in a wide range of consistent, stable colors that meet ENERGY STAR<sup>®</sup> requirements for IR reflective roof products. They are extremely

durable, providing long-term solar reflectivity as well as resistance to chemical attack and surface damage caused by acid rain, salt spray, and humidity encountered under normal environmental conditions. DURANAR ULTRA-Cool coil coatings require minimal maintenance and minor scratches can be easily repaired in the field.

### COMMERCIAL USES

Cool-roof technology has never been so easy. The DURANAR ULTRA-Cool coatings system offers more heat reflectivity than virtually any other roofing material available –letting you realize significant energy savings while enjoying the choice of a color palette that ranges from bold and bright to deep and dark.

The effects of DURANAR ULTRA-Cool coatings will offer potential benefits such as lower building air conditioning costs, less product expansion and contraction, and improved comfort levels for building occupants. This coating system is an excellent choice for roof and wall panels.

### DURABILITY

DURANAR ULTRA-Cool coil coatings are chemically inert, providing excellent resistance to color and gloss fade as well as environmental stress including acid rain and ultraviolet attack. The coatings require very little maintenance, and most surface contaminants may be removed by conventional detergents or cleaning solvents. (Harsh chemicals, abrasives or solvents must not be used on DURANAR

coated surfaces.) All coatings are fully tested in south Florida for sustainable solar reflectance prior to approval for use in any DURANAR ULTRA-Cool coil coating system. Additionally, DURANAR ULTRA-Cool coatings are tested at exposure sites throughout the world in all types of climatic and industrial conditions to ensure the coatings' performance and durability.

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\*Galvalume is a registered trademark of BIEC International, Inc. Zinalume is a registered trademark of BlueScope Steel Limited. Steelscape, Inc. holds exclusive rights to the Zinalume trademark within the U.S.



PRODUCT DATA

DURANAR ULTRA-Cool SPECIFICATIONS		
	Aluminum Substrate	Coated Steel <sup>1</sup> Substrate
<b>Dry Film Thickness (nominal)</b> ASTM D1400	0.15 - 0.30 mil primer 0.7 - 0.9 mil topcoat	0.15 - 0.30 mil primer 0.7 - 0.9 mil topcoat
<b>Gloss</b> ASTM D523 @ 60°	25 - 35	25 - 35
<b>Solar Reflectance</b> ASTM E903 Steep Slope: Low Slope:	>25% Initial; >15% after 3 years >65% Initial; >50% after 3 years	>25% Initial; >15% after 3 years >65% Initial; >50% after 3 years
<b>Emissivity</b> ASTM C1371 E408	0.80 (80%) min.	0.80 (80%) min.
<b>Pencil Hardness</b> ASTM D3363	F-2H	F-2H
<b>Flexibility<sup>2</sup></b> T-bend, ASTM D4145	0-2 T-bend; No pick-off	2 T-bend; No pick-off
<b>Adhesion</b> ASTM D3359	No adhesion loss	No adhesion loss
<b>Reverse Impact</b> ASTM D2794	No cracking or adhesion loss	No cracking or adhesion loss
<b>Abrasion, Falling Sand</b> ASTM D968	65-85 l/mil	65-85 l/mil
<b>Mortar Resistance</b> ASTM C267	No effect	No effect
<b>Detergent Resistance</b> ASTM D2248 3% detergent @ 100°F (72 hrs.)	No effect	No effect
<b>Acid Resistance</b> ASTM D1308 10% muriatic acid - 24 hrs. 20% sulfuric acid - 18 hrs.	No effect No effect	No effect No effect
<b>Acid Rain Test</b> Kesternich SO <sub>2</sub> , DIN 50018	15 cycles min. No objectionable color change	15 cycles min. No objectionable color change
<b>Alkali Resistance</b> ASTM D1308 10%, 25% NaOH, 1 hr.	No effect	No effect
<b>Salt Spray Resistance</b> ASTM B117 5% salt fog @ 95°F	No face blistering; Max. average 1/16" scribe creep. Passes 4000 hrs.	None or few #8 blisters; Max. average 1/8" scribe creep. Passes 1000 hrs.
<b>Humidity Resistance</b> ASTM D714, ASTM D2247 100% relative humidity @ 95°F	Passes 4000 hrs. No #8 blisters	Passes 1500 hrs. No #8 blisters
<b>Exterior Exposure</b> 10 yrs. @ 45°, south Florida ASTM D2244 ASTM D4214	Max. 5 fade Max. 8 chalk	Max. 5 fade Max. 8 chalk

<sup>1</sup> Coated Steel includes the following types of steel: G90 hot dip galvanized, Galvalume, and Zinalume.

<sup>2</sup> Fracturing or rupturing of substrate will rupture coatings. Heavy gauge and clad steel substrates impose limitations on formability.

**DURANAR ULTRA-Cool WARRANTY INFORMATION**

PPG offers a comprehensive warranty on DURANAR ULTRA-Cool coil coatings. For complete warranty information and a copy of the DURANAR ULTRA-Cool coil coatings warranty, please call PPG at **1-800-258-6398**.

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