



### PRODUCT DESCRIPTION

DURANAR XL fluoropolymer coil coatings are three- or four-coat systems that not only offer excellent abrasion resistance, flexibility, chemical resistance, and barrier corrosion protection, but provide reliable architectural finishes in bright, exotic accent colors and true metallics not possible with other formulations. Like other DURANAR coatings, DURANAR XL coil coatings combine PPG proprietary resin and pigment technologies with 70% of the resin system being fluoropolymer base resins. The coatings are exceptionally flexible and highly resistant to abrasion, chalking, fading, chipping, and peeling when properly applied by an approved applicator. DURANAR XL coil coatings meet or exceed AAMA 620/621 and the performance requirements (section 7) of American Architectural Manufacturers Association (AAMA) 2605-05 Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels. They are approved for use on aluminum and properly cleaned and coated steel substrates such as G90 hot dip galvanized, Galfan®, Galvalume®, and Zinalume®\*. They are not intended for use on hot or cold rolled steel substrates for exterior exposure applications.

DURANAR LG, a low luster, matte clear coat finish for DURANAR XL coil coating formulations, is also available for use where non-reflectance is required or desired, such as for airport, government, and military applications. DURANAR LG provides a unique appearance that is functional and aesthetically appealing. Its low-luster reflectance provides a smoother appearance to walls or roof panels, and it is available in any color in which DURANAR XL coil coatings are offered.

### SYSTEM OVERVIEW

The DURANAR XL four-coat system consists of a nominal 0.2 mil primer, 0.75 mil barrier coat, 0.75 mil color coat, and a 0.5 mil clear topcoat. The three-coat system does not include the barrier coat. The clear topcoat protects the DURANAR XL color coat

from atmospheric pollutants and enhances its durability. The barrier coat provides excellent UV protection for the primer. The film thickness creates a system with outstanding barrier protection, corrosion resistance, chemical resistance, and toughness.

### COMMERCIAL USES

DURANAR XL coil coatings provide outstanding performance against weathering in normal and aggressive environments. DURANAR XL three- or four-coat systems are an excellent choice for architectural applications such as storefronts, building panels, curtainwalls, and roof panels where aesthetics and maximum durability are desired.

Two passes on a tandem coating line are required to apply the DURANAR XL system to properly cleaned and treated steel and aluminum substrates. Due to the orientation of the aluminum pigment during application and curing of any metallic coating, the finished sheet will have a directional appearance. Care and planning

must be taken in erection of the finished pieces because panels or trim pieces turned in different directions relative to the direction of the roll coating process may appear to be of a slightly different color.

Similarly, color variations from different production runs may occur. Color match problems can be minimized by placing orders so they can be processed in one production lot. When a different production lot must be used, individual building elevations should be clad with material from a single production lot. Or, color variations can be minimized by inserting elevation changes or breaks in the building's external profile.

### DURABILITY

DURANAR XL coil coatings are chemically inert and provide excellent resistance to abrasion, color and gloss fade, and environmental stress including acid rain, corrosive chemicals, and ultraviolet attack. The coatings require very little maintenance, and most surface contaminants may be removed by conventional detergents or cleaning solvents. (Harsh chemicals or solvents should not be

used on DURANAR XL coated surfaces.) All pigments are tested for a minimum of ten years in south Florida prior to approval for use in any DURANAR XL coil coating system. Additionally, DURANAR XL coil 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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\* Galfan is a registered trademark of ILZRO

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.



DURANAR XL SPECIFICATIONS		
	Aluminum Substrate	Coated Steel <sup>1</sup> Substrate
<b>Dry Film Thickness (nominal)</b> ASTM D1400	0.20-0.30 mil primer 0.70-0.80 mil color/metallic 0.30-0.40 mil clear topcoat	0.20 mil primer 0.75 mil barrier 0.75 mil color/metallic 0.50 mil clear topcoat
<b>Gloss</b> ASTM D523 Standard @ 60° DURANAR LG @ 85°	25 - 35 <10	25 - 35 <10
<b>Pencil Hardness</b> ASTM D3363	HB - H	HB - H
<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 Reverse impact 1/16" crosshatch	No adhesion loss	No adhesion loss
<b>Reverse Impact</b> ASTM D2794 1500 x metal thickness (aluminum) 3000 x metal thickness (coated steel)	No cracking or adhesion loss No cracking or adhesion loss	No cracking or adhesion loss No cracking or adhesion loss
<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	Passes 4000 hrs. Less than 1/16" avg. creepage from scribe; None or few #8 blisters	Passes 1000 hrs. Less than 1/8" avg. creepage from scribe; No or few #8 blisters
<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, Galfan, 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 XL coatings are generally flexible beyond the point of substrate rupture.

### DURANAR XL WARRANTY INFORMATION

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

