

Supra HD

Product Bulletin

High Durability Polyester Coil Coating
Tech Bulletin: 02-200A
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System Overview

- Globally Available
- Economic Supply Programs
- U.S. WARRANTY Coverage and Support
- Custom Formulations available
- Long Term International Commercial and Industrial experience

Supra HD coil coating system manufactured and distributed globally by Continental Coatings Inc. and Yung Chi Paint and Varnish Manufacturing Company Ltd., is a **High Durability Polyester (HD)** coil coating system engineered for interior and exterior applications that require long lasting performance and excellent economics. **Supra HD** system can be applied single coat or as a two coat system depending on end use requirements and application specifics. **Supra HD** system is formulated with a proprietary polyester resin polymer, which is economical, U.V. and weather resistant, and has primer like adhesion performance and a tough scratch resistant surface. **Supra HD** may be applied singlecoat or over the Universal **PU-11 High Molecular Weight Urethane Primer or PU-30 High-build Urethane primer systems** for extreme environment and long service life product applications.

Application Parameters

Supra HD system is designed for trouble free high line speed coil coating line application and has been run worldwide under a very wide range of application parameters and substrate conditions. Standard topcoat DFT is .60-.70 mils, however, custom low film and low temperature cure systems are available. **Supra HD** was formulated to provide improved overall performance over regular polyester systems and very good stain, scratch, mar and scuff resistance, and is flexible enough for most tough fabrication applications.

Commercial Uses

Supra HD system can be formulated in standard, medium, textured, and low gloss / low sheen finishes and supplied in a very wide range of colors and effects. This economic coating is warranted for exterior use and can be applied to a variety of adequately cleaned and treated metal substrates including: Hot Dipped Galvanized, ZnAl, Galfan, ZAM, Aluminum, and Stainless Steels. **Supra HD** is formulated with an excellent balance of flexibility and hardness but can be custom modified for specific applications that require above average physical property performance. **Supra HD** system is ideal for many residential building product polyester applications when improved performance is required. Typical end uses include: high performance rainwear, valleys, soffit, door product accessories, high-end door products, and light gauge agricultural sheeting and transportation products.

High Durability Polyester Coil Coating System

APPLICATION		
SPECIFICATIONS	TEST	RESULT
Primer		Singlecoat, or PU11 HMW PU, PU30 High Build PU
Substrate		Aluminum, HDG, Galvalume, ZAM
Pretreatment	Standard clean and treat	Chrome or non-Chrome
ASTM D 4138	Dry Film Thickness	Top coat: 0.5 to 0.8 mils Primer: 0.0 to 0.3 mils Total system: 0.5 to 1.1 mils
ASTM D 4212	Viscosity (No. 4 Zahn cup)	25 to 35 seconds
ASTM D 1475	Weight Per Gallon	9.0 to 12.0 Pounds Per Gallon
ASTM D 2697	Solids Per Volume	48 to 58%
ASTM D 2369	Solids Per Weight	55 to 79%
Reducing Thinner	Reducing Solvent	Aromatic
ASTM D 3960	VOC (Theoretical)	3.0 to 4.0 Pounds Per Gallon
Clean-up Solvent		Aromatic/Ketone
Coating Mileage		1069 to 1176 Sq. Ft. / Gallon
Peak Metal Temperature		420 F to 465 F
TECHNICAL DATA		
SPECIFICATIONS	TEST	RESULT
ASTM D 523	Specular Gloss at 60	6 to 85
ASTM D 3363	Pencil Hardness	F TO 3H
ASTM D 4145	T-Bend	0T to 4T with no loss of adhesion
ASTM D 5402	Solvent Resistance (MEK Rubs)	100 +
ASTM D 3359	Cross Hatch Adhesion	No loss of adhesion
ASTM D 2794	Reverse Impact	Galvalume or HDG: 3x metal thickness inch-pounds, no loss of adhesion Aluminum: 1.5x metal thickness inch-pounds, no loss of adhesion
ASTM B 117	Salt Spray Resistance 1,000 hrs. Salt Spray Resistance 2,000 hrs.	Galvalume or HDG: Creep from scribe < 1/8 inch (3mm), none or few #8 blisters Aluminum: Creep from scribe < Creep from scribe < 1/8 inch (3mm), few #8 blisters
ASTM D 2244 ASTM D 4214	South Florida Exposure	Color: No more than 5 (E) Hunter units at 90 vertical angle and 7 (E) units non vertical Chalk: Rating no less than 8 at 90 angle and 6 at non vertical angle Film Integrity: 15 years, no blisters, peeling or cracking
ASTM D 870	Water Immersion 100 F 168 hrs.	No field blisters with minimal color change
ASTM D 1308	Chemical Resistance (15 mins.)	No significant color change (color dependent)
ASTM E 84	Flame Spread Classification	Class I or A
ASTM D 968	Abrasion Resistance	Total Sand = 35 +/- 5 liters (Dft dependent)

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