

Supra Flex

Product Bulletin

High Flex Linear Polyester Coil Coating
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System Overview

- Globally Available
- Superior Flexibility and Dry Heat Resistance
- Improved Adhesion and Toughness
- Economic Supply Programs
- Custom Formulations available
- Long Term International Commercial and Industrial experience

Supra Flex coil coating system manufactured and distributed globally by Continental Coatings Inc. and Yung Chi Paint and Varnish Manufacturing Company Ltd., is a **High Flexibility Linear Polyester** coil coating system engineered for interior and exterior applications that require extreme flexibility and formability with good economics. **Supra Flex** system can be applied single coat or as a two coat system depending on end use requirements and is formulated with a proprietary polyester resin polymer which is economical, U.V., moisture, and weather resistant, and has primer like adhesion performance. Unlike many other flexible polyester products **Supra Flex** maintains excellent coating surface hardness and toughness, which greatly improves transit and packaging abrasion resistance.

Application Parameters

Supra Flex 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 High Film products are available for specific and challenging applications. **Supra Flex** was formulated to provide very good stain, scratch, mar and scuff resistance, and zero-T bend performance on heavy and light gauge applications.

Commercial Uses

Supra Flex 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 including textures and metallics. This economic coating does carry limited exterior warranties and can be applied to a variety of adequately cleaned and treated metal substrates including: Cold Rolled Steel (CRS), Hot Dipped Galvanized, ZnAl, Galfan, ZAM, Aluminum, and Stainless Steels. **Supra Flex** is formulated with an exceptional balance of flexibility and hardness and can also be custom modified for specific applications that require significantly improved property performance like special HVAC and office furniture applications. **Supra Flex** is ideal for many general interior and exterior applications like office furniture, cabinets and draws, as well as high flex Zero-T bend applications like screen and door frames, closet hardware, muntin bar, Ceiling grid T-bar, consumer electronics, and specialty appliances.

Flexible Polyester Coil Coating System

APPLICATION		
SPECIFICATIONS	TEST	RESULT
Application Method		Reverse Roll Coat
Primer		Singlecoat, or PU11 HMW PU, PU30 High Build PU
Substrate		Aluminum, CRS, HDG, Galvalume, ZAM, Stainless Steel
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	43 to 50%
ASTM D 2369	Solids Per Weight	50 to 70%
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		862 to 1379 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 2H
ASTM D 4145	T-Bend	0T to 1T 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 < 1/16 inch (2mm), none or 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 E 84	Flame Spread Classification	Class I or A
ASTM D 968	Abrasion Resistance	Total Sand = 35 +/- 5 liters (Dft dependent)
AAMA 2603-20	FGIA Voluntary Specification	Meets or exceeds all performance specifications

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