



Kynar 500®/Hylar 5000™ Pre-Finished Galvanized Steel Architectural Sheet & Coil

DESCRIPTION:

Firestone UNA-CLAD PVDF Coated Galvanized Steel Architectural Sheet & Coil is AISI-G90 extra smooth, minimum spangle, tension leveled, hot-dipped galvanized steel that is primed and coated on one side with UNA-CLAD full strength Hylar 5000™/Kynar 500® (contains a minimum of 70% Hylar /Kynar polyvinylidene fluoride (PVDF) resins) premium fluoropolymer coating system of 1.0 (±0.1) mil total dry film thickness. For additional protection a wash coat of 0.3 – 0.4 mil dry film thickness is applied to the reverse side. An optional strippable protection film is applied for protection during fabrication and installation. Firestone UNA-CLAD PVDF Coated Galvanized Steel Architectural Sheet & Coil is for general sheet metal use in building applications and can be utilized for fascia panels, soffits, gravel stops, copings, and roofing such as flat seam, standing seam, batten seam, and mansards.

METHOD OF APPLICATION:

1. Install in accordance with recognized sheet metal practices.
2. UNA-CLAD can be cut, formed, and fastened using conventional hand or power tools.
3. For best results cutting tool edges should be kept sharp, clean, properly dressed, and closely aligned.
4. Fabrication and erection can be accomplished with strippable plastic film in place. Film should be removed from areas of concealed or joined pieces.

STORAGE & PACKAGING:

1. Firestone metal sheet and coil should be stored in a well ventilated, dry place where no moisture can contact the sheet. Moisture (from rain, snow, condensation, etc.) trapped between layers of material may cause water stains or white rust, which can affect the service life of the material and will detract from its appearance.
2. If outdoor storage cannot be avoided, protect the sheet and coil with a ventilated canvas or waterproof paper cover. Do not use plastic, which can cause condensation. Keep the material off the ground in an inclined position with an insulator such as wood.
3. Maximum 2,000 lb of sheets per pallet.

PRECAUTIONS & LIMITATIONS:

1. Protective film may degrade or become brittle with exposure to direct sunlight.
2. The performance of this material in the field depends substantially on the integrity of the paint film and on the underlying coating of zinc being intact. Therefore, this UNA-CLAD product should not be used in areas of high abrasion or where it is subject to mechanical damage.
3. Product is pre-finished material; care must be exercised during fabrication and erection to avoid surface damage.
4. Attention should be paid to good house-keeping practices
5. Tools must be clean and properly dressed.
6. Avoid dragging sheets over surfaces which may scratch or mar the finish.
7. For general sheet metal use in building applications.
8. Do not cut with power saws or abrasive blades.

PRODUCT DATA

Color:	31 Standard Colors; See current UNA-CLAD Color Chart	
Finish:	Extra Smooth Matte – Low to Medium Gloss	
Optional Finish:	Extra Low Gloss* High Gloss* Stucco Embossed (Mechanical Finish)*	
Wash Coat:	Polyester	
Weight:		
<u>Gauge:</u>	<u>lb/SF:</u>	<u>kg/SM</u>
26	0.775	4.42
24	1.000	5.64
22	1.406	6.85
Dimensions:		
<u>Gauge:</u>	<u>Slit Coil:</u>	<u>Sheet:</u>
26	4.0" - 48.0"* (0.1 m -1.2 m)	48" x 96" , 120" , & 144"* (1.2 m x 2.4, 3.1, & 3.7 m)
24	4.0" - 48.0"* (0.1 m -1.2 m)	48" x 96" , 120" , & 144"* (1.2 m x 2.4, 3.1, & 3.7 m)
22	4.0" - 48.0"* (0.1 m -1.2 m)	48" x 96" , 120" , & 144"* (1.2 m x 2.4, 3.1, & 3.7 m)

Physical Properties of Fluoropolymer Coating:

<u>Property</u>	<u>Test Method</u>	<u>Typical</u>
Abrasion Resistance	ASTM D 968, Method A	Coefficient of sand abrasion 65±10 Liters
Accelerated Weathering	ASTM D 4587 Condition B or ASTM G 23 Method 1 or 2, type EH apparatus, Hours: 5000	<u>Chalk:</u> Rating of 8 or better per ASTM D 4214 <u>Color:</u> ≤2ΔE color change per ASTM D 2244
	ASTM D 4587 Condition B or ASTM G 53, Method 1 or 2, type EH apparatus or ASTM G154, Hours: 5000	<u>Chalk:</u> Rating of 8 or better per ASTM D 4214 <u>Color:</u> ≤2ΔE color change per ASTM D 2244
	ASTM D 4587 Condition B or ASTM G 23 Method 1 or 2, type EH apparatus or ASTM G151, Hours: 2000	<u>Chalk:</u> Rating of 8 or better per ASTM D 4214 <u>Color:</u> ≤2ΔE color change per ASTM D 2244

**May not be available in all colors, gauges, or widths. Additional lead times may apply. Contact your Firestone Technical Coordinator for additional information.*



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PRODUCT DATA (cont.)

Accelerated Weathering (Cont.)	ASTM D 3361 Hours: 1000	Acceptable – No cracking, peeling, blistering, loss of adhesion of the protective coating, or corrosion of the base metal <u>Chalk:</u> Rating of 8 or better per ASTM D 4214, Method A (ASTM D 659) <u>Color:</u> <5ΔE Hunter Units per ASTM D 2244
Adhesion	ASTM D 3359, Method B	No loss of adhesion
Chalk Resistance	ASTM D 659	No Chalk; Rating 9-10
Chemical/Acid Pollution Resistance	ASTM D 1308, Procedure 7.2	Pass; No color change
Cyclic Salt Fog	ASTM D 5894 Hours: 3000	<u>Scribe:</u> Rating of 8, 1/32" creepage from scribe per ASTM D 1654, procedure A <u>Field:</u> Rating of 10, no blistering per ASTM D 1654, Procedure B
Formability	ASTM D 522	No cracking, no loss of adhesion to the point of metal rupture
Specular Gloss	ASTM D 523	25-35 at 60 degrees
Hardness	ASTM D 3363	HB to 2H
Humidity Resistance	ASTM D 2247 Hours: 2000 ASTM D 1735 Hours: 1000	Rating of 10; No blistering No blistering, no loss of adhesion

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PRODUCT DATA (cont.)

Impact Resistance	ASTM D 2794	Reverse & Direct Impact: No cracking & no loss of adhesion
Salt Spray Resistance	ASTM B 117, Hours: 2000	<u>Scribe:</u> Rating of 7, 1/16" creepage <u>Field:</u> Rating of 10
Tunnel Test	ASTM E84	Class A Coating
UV Exposure	ASTM G 154 Hours: 2016	<u>Chalk:</u> Rating of 8 or better per ASTM D 4214, Method A (ASTM D 659) <u>Color:</u> <5ΔE Hunter Units per ASTM D 2244
Wet Adhesion	Water Immersion Hours: 1500	No loss of adhesion

Physical Properties of Base Metal:

Base Metal:	AISI G90 – Hot dipped galvanized steel sheet, commercial weight, meeting ASTM A653/A653M-10 CS Type B for Zinc coated (galvanized) steel sheets & coil
Minimum Yield:	33 to 45 KSI (227 to 310 MPa)
Coefficient of Thermal Expansion:	06.7 x 10 ⁻⁶ in/in/F° (13.9 m/m.K x 10 ⁻⁶)
Modules of Elasticity:	29.0 x 10 ⁶ x KSI (200 GPa)
Specification:	ASTM E111-04

Galvanized Steel Recycled Content:

7.3% Post-Industrial; 23.0% Post-Consumer

Manufacturing Locations:

Anoka, MN
College Park, GA
Jackson, MS
Morrisville, PA
Las Vegas, NV
Warren, MI



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TECHNICAL INFORMATION SHEET

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