

UNA-CLAD Kynar 500®/Hylar 5000™

Pre-Finished Galvalume® Steel Architectural Sheet & Coil



Product Information

Description:

Firestone UNA-CLAD™ PVDF Coated Galvalume® Steel Architectural Sheet & Coil is extra smooth, tension leveled, hot-dipped 55% Al-Zn coated 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 Galvalume 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 sheets 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:

- Firestone metal sheet and coil should be stored in a well ventilated, dry place where no moisture can contact them. 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.
- 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.
- Maximum 2,000 lb of sheets per pallet.

LEED® Information:

Post Industrial Recycled Content:	36.9%
Post Consumer Recycled Content:	19.8%
Kynar 500/Hylar 5000 Paint Finish:	AAMA 621-02
Manufacturing Location:	Mt. Joy, PA

UNA-CLAD[®] Kynar 500[®]/Hylar 5000[™]

Pre-Finished Galvalume[®] Steel Architectural Sheet & Coil

Precautions:

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

Product Data

Property	Value
Color:	12 Standard Colors; See Current UNA-CLAD color chart
Finish:	Extra Smooth Matte, Low to Medium Gloss
Optional Finish:	Extra Low Gloss*, High Gloss* and Stucco Embossed (Mechanical Finish)*
Wash Coat:	Polyester
Gauge:	Weight 1.000 /lb/ft ² , 4.89 kg/M ²
24 ga	Dimensions <i>Split Coil:</i> 4.0" (0.1 m) - 48" (1.2 m)*
26 ga	<i>Sheet :</i> 48" (1.2 m) x 96" (2.4 m), 120" (3.1 m) & 144" (3.7 m)*

Note: *May not be available in all colors, gauges, or widths. Additional lead times may apply. Contact your Firestone Roof System Advisor for additional information.

Typical Properties of Base Material

Property	Value
Base Metal	AZ50 – Hot dipped Galvalume [®] (55% Aluminum and 43+% zinc) steel sheet, commercial weight, meeting ASTM A792/A792M
Minimum Yield	50 KSI
Coefficient of Thermal: Expansion Modules of Elasticity Specification	06.7 x 10 ⁻⁶ in/in/ °F (13.9 m/m.K x 10 ⁻⁶) 29.0 x 10 ⁶ x KSI (200 GPa) ASTM E111-04

TECHNICAL INFORMATION SHEET

UNA-CLAD[®] Kynar 500[®]/Hylar 5000[™]

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Typical Properties of Fluoropolymer Coating

Property	ASTM Standard	Value
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 ASTM D 4587 Condition B or ASTM G 53, Method 1 or 2, type EH apparatus or ASTM G154 Hours: 5000 ASTM D 4587 Condition B or ASTM G 23, Method 1 or 2, type EH apparatus or ASTM G151 Hours: 2000 ASTM D 3361 Hours: 1000	Chalk: Rating of 8 or better per ASTM D 4214 Color: ≤2ΔE color change per ASTM D 2244 Chalk: Rating of 8 or better per ASTM D 4214 Color: ≤2ΔE color change per ASTM D 2244 Chalk: Rating of 8 or better per ASTM D 4214 Color: ≤2ΔE color change per ASTM D 2244 Acceptable – No cracking, peeling, blistering, loss of adhesion of the protective coating, or corrosion of the base metal Chalk: Rating of 8 or better per ASTM D 4214, Method A (ASTM D 659) Color: <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	Scribe: Rating of 8, 1/32" creepage from scribe per ASTM D 1654, procedure A Field: 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
Impact Resistance:	ASTM D 2794	Reverse & Direct Impact: No cracking & no loss of adhesion
Salt Spray Resistance:	ASTM B 117 Hours: 2000	Scribe: Rating of 7, 4 mm creepage Field: Rating of 8
Tunnel Test:	ASTM E84	Class A Coating Field: Rating of 8
UV Exposure:	ASTM G 154 Hours: 2016	Chalk: Rating of 8 or better per ASTM D 4214, Method A (ASTM D 659), Color: <5ΔE Hunter Units per ASTM D 2244
Wet Adhesion:	Water Immersion Hours: 1500	No loss of adhesion

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 *Hylar 5000 is a registered trademark of Solvay Solexis, Inc.
 *Galvalume is a registered trademark of Bieci International Inc.

Please contact Quality Building Services Technical Department at 1-800-428-4511 for further information.
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