

TECHNICAL INFORMATION SHEET

UNA-CLAD Kynar 500®/Hylar 5000™ Pre-Finished Aluminum Architectural Sheet & Coil

Item Description

0.032" (.81 mm) , 0.040" (1 mm), 0.050" (1.3 mm) and 0.063" (1.6 mm) gauge



Product Information

Description:

Firestone UNA-CLAD PVDF Coated Aluminum Architectural Sheet & Coil is aluminum sheet conforming to ASTM B209 standards with H14 temper that is primed and coated on one side with UNA-CLAD full strength Kynar 500/Hylar 5000 (contains a minimum of 70% Kynar/Hylar 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 Aluminum Architectural Sheet & Coil is for general sheet metal use in building applications, including fascia, soffits, gravel stops, copings, store fronts, and roofing.

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 appropriate power tools.
3. For best results cutting edges should be kept sharp, clean, properly dressed, and closely aligned.
4. Fabrication and erection can be accomplished with strippable plastic film in place. Equipment adjustments may need to be made for the film thickness. Film should be removed from areas of concealed or joined pieces.

NOTE: Metallics are batched controlled and could display color variation if mixed.

Storage and Packaging:

- 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.
- 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.

Precautions:

- Protective film may degrade or become brittle with exposure to direct sunlight.
- 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 for .032" (.81 mm) and .040" (1 mm) materials and a 3T bend radius for any material .050" (1.3 mm) or greater. Anything less than these minimum bend radiuses 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 blade.

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LEED® Information:

3105 Alloy

Post-Consumer Recycled Content: 50 - 65%

Post Industrial Recycled Content: 18 – 38%

Manufacturing Location: Anoka, MN

*NOTE: LEED® is a registered trademark of the U.S. Green Building Council.



Product Data

Property	Value	Typical Performance
Color	Standard Colors available: See current UNA Clad Color Chart	---
Finish	Extra Smooth Matte – Low to Medium Gloss	---
Optional Finish	Extra Low Gloss: Extra High Gloss, Stucco Embossed (mechanical finish)	---
Hardness	ASTM D 3363	HB to 2H
Humidity Resistance	ASTM D 1735, Hours: 2000	No blistering, no loss of adhesion
Impact Resistance	ASTM D 2794	Reverse Impact: No loss of adhesion
Salt Spray Resistance	ASTM B 117, Hours: 3000	No creepage from scribe and no field blisters
Tunnel Test	ASTM E 84	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
Dimensions		
Gauge In	Slit Coil	Sheet
0.032, 0.040, 0.050, 0.060	0.4" – 48.0"* (0.1 m – 1.2 m)	48" x 96", 120", & 144"* (1.2 m x 2.4, 3.1 & 3.7 m)
NOTE: *May not be available in all gauges, or widths. Additional lead times may apply. Contact your Firestone Technical Coordinator for additional information.		

Weight		
Gauge In	lb/sf	Kg/m²
0.032	0.456	2.20
0.040	0.576	2.75
0.050	0.720	3.50
0.063	0.907	4.40

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Typical Properties

Base Metal		
Property	Value	
Standard	ASTM B209, Aluminum Association, Standard for Specification, Sheets and Coils	
Base Metal	Aluminum	
Minimum Yield	21 KSI (1245 MPa)	
Co-efficient of Thermal Expansion	12.6 x 10 ⁻⁶ in/in/ °F (22.2 m/m.K x 10 ⁻⁶)	
Modules of Elasticity	10.0 x 10 ³ x KSI (68.9 MPa)	
Fluoropolymer Coating		
Property	Test Method	Typical Performance
Abrasion Resistance	ASTM D 968, Method A	Co-Efficient of sand abrasion 65±10
Accelerated Weathering	ASTM D 4587 Condition B or ASTM G 23 Method 1 or 2, Type EH apparatus Hours: 5000	Chalk: Rating of 8 or better per ASTM D 4214 Color: ≤ΔE Color change per ASTM D 2244
	ASTM D 4587 Condition B or ASTM G 53 Method 1 or 2, Type EH apparatus or ASTM G 154 Hours: 5000	
	ASTM D 4587 Condition B or ASTM G 23 Method 1 or 2, Type EH apparatus or ASTM G 151 Hours: 2000	
	ASTM D 3361 Hours: 1000	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 Color: ≤ΔE Color change 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
Formability	NCCA 4.2.8	2T to 4T No loss of adhesion
Gloss	ASTM D 523	25-35 at 60 degrees

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

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