Technical Information Sheet

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

Item Description
24-Gauge

Description

UNA-CLAD PVDF (polyvinylidene fluoride) 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. 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 Galvalume 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.

NOTE: Laser masking is available for laser fabrication. If you require this service, please specify this at time of order entry.

Storage and Packaging

- Elevate 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 panels 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.

Storage and Packaging Continued

- Storage of end-use materials with protective film applied to the surface should be:
  - Less than six months with masking applied (warehouse storage and outdoor exposure combined).
  - Stored in an enclosed building or holding facility.
  - Wrapped/packaged to prevent exposure to direct UV, water, oils, or other contaminants.
  - Protective film may become brittle with long term UV exposure.
  - Maintained in an environment within a temperature range of 45 to 90 °F (7 to 32 °C) and 20 to 80% relative humidity.
  - Maximum 2,000 lb of sheets per pallet.

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 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.
- Elevate 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.
- Refer to Safety Data Sheets (SDS) for safety information.

LEED® Information

Post -Consumer Recycled Content: 79%
Pre-Consumer Recycled Content: 7 %
Kynar 500/Hylar 5000 Paint Finish: AAMA 621-02
Manufacturing Locations: Anoka, MN; Corsicana, TX; Jacksonville, FL; Salt Lake City, UT

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

Product Data

Property	Value
Color	14 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

Product Size

Gauge	Weight lb/ft^2	Weight kg/m^2
24 ga	1.000	4.89
Gauge	**Slit Coil Dimensions**	**Sheet Dimensions**
24 ga	4.0" (0.1 m) – 48" (1.2 m)*	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 local Elevate Representative 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
Co-efficient 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 E111-4

Typical Properties of Fluropolymer Coating

Property	Test Method	Typical Performance
Industry Specifications Compliance	AAMA 2605-17	**Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels**
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

Typical Properties of Fluropolymer Coating Continued		
Property	**Test Method**	**Typical Performance**
Hardness	ASTM D 3363	HB to 2H
Specular Gloss	ASTM D 523	25-35 at 60 degrees
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, 1/16" creepage Field: Rating of 10
Tunnel Test	ASTM E84	Class A Coating
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

**Kynar 500 is a registered trademark of Arkema, Inc.*
**Hylar 5000 is a registered trademark of Solvay Solexis, Inc.*
**Galvalume is a registered trademark of Biec International Inc.*

Please contact Holcim Technical Services at 800-428-4511 for further information.