

TECHNICAL INFORMATION SHEET

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

Item Description

22, 24, and 26 gauge



Product Information

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. This coating is AAMA 621-02 compliant. 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.

NOTE: Vintage, Print Colors and Metallics are batched controlled and could display color variation if mixed.

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-Consumer Recycled Content: 7.3%
Post Industrial Recycled Content: 23%
Kynar 500/Hylar 5000 Paint Finish: AAMA 621-02
Manufacturing Location: Anoka, MN
*NOTE: LEED® is a registered trademark of the U.S. Green Building Council.



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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.
- 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.

NOTE: Vintage, Print Colors and Metallics are batched controlled and could display color variation if mixed.

Product Data

| Property | Value | |
|--|--|---|
| Color | Standard Colors and Premium Print Colors available; 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 lb/ft ² | Weight kg/m ² |
| 26 ga | 0.775 | 3.78 |
| 24 ga | 1.000 | 4.89 |
| 22 ga | 1.406 | 6.87 |
| Gauge | Split Coil Dimensions | Sheet Dimensions |
| 26 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)* |
| 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)* |
| 22 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 Firestone Building System Advisor for additional information. | | |

Typical Properties of Base Material

| Property | Value |
|-----------------------------------|--|
| 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) |
| Co-efficient of Thermal Expansion | 06.7×10^{-6} in/in/F° (13.9 m/m.K x 10^{-6}) |
| Modules of Elasticity | 29.0×10^6 x KSI (200 GPa) |
| Specification | ASTM E111-4 |

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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, 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 |

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

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