

# TECHNICAL INFORMATION SHEET



## COATED METALS GROUP Kynar 500/Hylar 5000 Pre-Finished Galvanized Steel Architectural Sheet & Coil

### DESCRIPTION:

CMG Ultra-Clad PVDF Coated Steel Architectural Sheet & Coil is extra smooth, tension leveled, hot-dipped G90 coated steel that is primed and coated on one side with Ultra-Clad full strength Hylar 5000/Kynar 5000® (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 .03 - .04 mil dry film thickness is applied to the reverse side. An optional strippable protection film is applied for protection during fabrication and installation. Coated Metals Group Ultra-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. CMG Ultra-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 AND PACKAGING:

1. CMG 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 lbs 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 zinc-aluminum coating being intact. Therefore, this Ultra-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 use with power saws or abrasive blade.

## PRODUCT DATA

**Color:** 32 standard colors; see current Ultra-Clad Color Chart  
**Finish:** Extra Smooth Matte - Low to Medium Gloss  
**Optional Finish:** Inquire

**Wash Coat:** Polyester

**Weight:**

| <u>Gauge:</u> | <u>lb/SF:</u> |                     |
|---------------|---------------|---------------------|
| 22ga          | 1.25          | .0285min - .0313max |
| 24ga          | 1.00          | .0225min - .0254max |
| 26ga          | 0.75          | .0172min - .0194max |

**Dimensions:**

| <u>Gauge In:</u> | <u>Slit Coil:</u>                | <u>Sheet</u>   |
|------------------|----------------------------------|--|
| 22, 24, 26ga     | 4" - 48"<br>(10.16cm - 121.92cm) | 48" x 96", 120, & 144"*<br>(1.2m x 2.4, 3.1, & 3.7m) |

### Physical Properties of Fluoropolymer Coating:

| <u>Property</u>        | <u>Test Method</u>  | <u>Typical</u>   |
|------------------------|---|--|
| Abrasion Resistance    | ASTM D968   | Coefficient of sand abrasion 65±10 liters  |
| Accelerated Weathering | ASTM D4587<br>Condition B or ASTM G23, Method 1 or 2, Type EH apparatus or ASTM G151 for 5000 hours exposure  | <u>Chalk:</u> rating of 8 or better per ASTM D4214 method A (ASTM D659)<br><u>Color:</u> <2ΔE Hunter units per ASTM D2244, No loss of adhesion |
|                        | ASTM D4587<br>Condition B or ASTM G53, Method 1 or 2, Type EH apparatus or ASTM G154 for 5000 hours exposure  | <u>Chalk:</u> rating of 8 or better per ASTM D4214 method A (ASTM D659)<br><u>Color:</u> <2ΔE Hunter units per ASTM D2244, No loss of adhesion |
|                        | ASTM D4587,<br>Condition B or ASTM G23, Method 1 or 2, Type EH apparatus or ASTM G151 for 2000 hours exposure | <u>Chalk:</u> rating of 8 or better per ASTM D4214 method A (ASTM D659)<br><u>Color:</u> <2ΔE Hunter units per ASTM D2244, No loss of adhesion |

\*May not be available in all colors, gauges, or widths.

Additional lead times may apply. Contact Coated Metals Group for additional information

### Compliance:

Kynar 500/Hylar 500 Paint Finish: AAMA 621-02

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**COATED METALS GROUP**  
**Kynar 500/Hylar 5000**  
**Pre-Finished Galvanized Steel**  
**Architectural Sheet & Coil**

## PRODUCT DATA (cont.)

|                                    |                                   |  |
|------------------------------------|-----------------------------------|--|
| Adhesion                           | ASTM D3359                        | No adhesion loss   |
| Chalk Resistance                   | ASTM D4214 Method A and ASTM D659 | Maximum Chalk rating of B  |
| Chemical/Acid Pollution Resistance | ASTM D1308                        | 20% sulfuric acid, 18 hours No effect<br>10% muriatic acid 15 minutes No effect  |
| Cyclic Salt Fog                    | ASTM B5894                        | 2016 hours Passes<br>Scribe: Rating of 8 (1/8" creepage) per ASTM D1654 procedure A<br>Field: rating of 10 (no blistering) per ASTM D1654 procedure B    |
| Formability                        | ASTM D522<br>ASTM D4145           | 180° bend around 1/8" mandrel no cracking<br>No adhesion loss 1-2T bend  |
| Specular Gloss                     | ASTM D523<br>Measured at 60'      | 25-35 at 60 degrees  |
| Hardness                           | ASTM D3363                        | HB-2H eagle turquoise  |
| Humidity Resistance                | ASTM D2247                        | Rating of 10; no blistering, no loss of adhesion   |
| Impact Resistance                  | ASTM D2794                        | Reverse and Direct Impact no cracing, no loss of adhesion  |
| Salt Spray Resistance              | ASTM B117 5% Salt Fog @95'F       | 1000 hours exposure<br>Scribe: Rating of 7 (1/16" creepage) per ASTM D1654 procedure A<br>Field: rating of 10 (no blistering) per ASTM D1654 procedure B |

## PRODUCT DATA (cont.)

|              |            |   |
|--------------|------------|---|
| Tunnel Test  | ASTM E84   | Class A coating   |
| UV Exposure  | ASTM D2244 | <u>Chalk</u> : rating of 8 or better per ASTM D4214, method A (ASTM D659)<br>Color: <5ΔE Hunter units per ASTM D2244; no loss of adhesion |
| Wet Adhesion | ASTM D     | 1500 hours of water immersion, no loss of adhesion, no blistering   |

## Physical Properties of Base Metal:

|                                   |  |
|-----------------------------------|--|
| Base Metal:                       | G90 coated hot-dipped Galvanized steel sheet; commercial weight, meeting ASTM A 653 CS Type B for hot-dipped Galvanized coat steel sheets & coil |
| Minimum Yield:                    | 33 to 50 KSI (227 to 310 MPa)  |
| Coefficient of Thermal Expansion: | 06.7 x 10 <sup>-6</sup> in/in/F° (13.9m/m.K x 10 <sup>-6</sup> )   |
| Modules of Elasticity:            | 29.0 x 10 <sup>6</sup> x KSI (200 GPa)   |
| Specification:                    | ASTM E111-04   |

## COATED METALS GROUP

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