

TECHNICAL INFORMATION SHEET



COATED METALS GROUP

Durapon70® Ultra-Clad PVDF 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 70% 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 PVC protection film is applied for protection during fabrication and installation. Coated Metals Group Ultra-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. 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 housekeeping 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:	34 standard colors; 7 ultra low-gloss colors; <i>see current Ultra-Clad Color Chart</i>	
Finish:	Extra Smooth Matte - Low to Medium Gloss	
Optional Finish:	Inquire	
Wash Coat:	Polyester	
Weight:		
Gauge:	lb/SF:	
22ga	1.25	.0285min - .0313max
24ga	1.00	.0225min - .0254max
26ga	0.75	.0172min - .0194max
28ga	0.59	.0142min - .0162max
Dimensions:		
Gauge In:	Slit Coil:	Sheet
22, 24, 26ga	4" - 48" (10.16cm - 121.92cm)	48" x 96", 120, & 144"* (1.2m x 2.4, 3.1, & 3.7m)
28ga	4" - 42" (10.16cm - 106.68cm)	42" x 96", 120, & 144"* (1.2m x 2.4, 3.1, & 3.7m)

Physical Properties of Durapon70® PVDF Coating:

Property	Test Method	Typical
Abrasion Resistance	ASTM D 968	Abrasion Coefficient: 108 80 liters / mil of sand dropped
Accelerated Weathering	ASTM D 4587	10,000 Hours Exposure <u>Chalk</u> : rating of 8 or better per ASTM D4214 method A (ASTM D659) <u>Fade</u> : <5ΔE Hunter units per ASTM D2244, No loss of adhesion, softening Of film or blisters.
UV Exposure 45° South Florida Exposure	ASTM D 2244	<u>Chalk</u> : rating of 8 or better per ASTM D4214, method A (ASTM D 659) Color: <5ΔE Hunter units per ASTM D 4214; no loss of adhesion
Surface Burning	ASTM E 84	Class A Flame spread rating Smoke Development Index = 0

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

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

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PRODUCT DATA (cont.)

Adhesion	ASTM D 3359	No loss of adhesion with removal of tape
Natural Weathering Exterior Durability	ASTM D 4214 ASTM G7	<u>Chalk</u> : Rating of 8 or better per ASTM D 4214 <u>Fade</u> : <5ΔE Color change for non-exotic colors per ASTM D 4214
Chemical/Acid Pollution Resistance	ASTM D 1308	<u>70% Nitric Acid</u> : No more than 5ΔE color change. <u>10% Muriatic Acid</u> No color change, no blistering.
Weatherometer	ASTM G 155	Acceptable film integrity, no blistering and no loss of adhesion
T-Bend Flexibility	ASTM D 4145	180° bend around 1/8" mandrel no cracking No adhesion loss 2T bend
Specular Gloss	ASTM D 523	Good - Gloss readings from 30 +/- 5 at 60° Geometry; 55 +/- 5 at 85° Geometry
Hardness	ASTM D 3363	Good – H Pencil
Humidity Resistance	ASTM D 2247	No loss of adhesion. No discernable color change. Acceptable corrosion. Acceptable blistering per ASTM D 714.
Impact Resistance	ASTM D 2794	Reverse and Direct Impact no cracking, no loss of adhesion
Salt Spray Resistance	ASTM B 117 5% Salt Fog @95°F	2000 hours exposure Scribe and cut edge corrosion rating = 7 per ASTM D 1654. Minimum blisters, rating = 8

PRODUCT DATA (cont.)

Cleveland Condensing	ASTM D 4585 ASTM D 714	No Loss of adhesion, passes blisters, no discernable color change.
Solvent Resistance	ASTM D 5402	100+ MEK double rubs with no breakthrough
Cyclic Salt Fog UV	ASTM D 5894 2016 Hours	Acceptable Corrosion. Field Rating = 8 Scribe Rating: 1/32" Rust 10 per ASTM 610

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 coated steel sheets & coil
Minimum Yield:	50 KSI (310 MPa)
Coefficient of Thermal Expansion:	6.7 x 10 ⁻⁶ in/in/°F. (13.9m/m.K x 106)
Modules of Elasticity:	27,000 KSI (186 GPa)
Specification:	ASTM E111-04

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301 Yard Dr. • Verona, WI 53593
800-784-0356 • 608-826-0356 • FAX 608-826-4264
www.cmgmetals.com