



Building Systems

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What is Solar Reflectivity (SR)?

Solar reflectivity or reflectance is the ability of a material to reflect solar energy from its surface back into the atmosphere. The SR value is a number from 0 to 1.0. A value of 0 indicates that the material absorbs all solar energy and a value of 1.0 indicates total reflectance. Energy Star requires a SR value of 0.25 or higher for steep slope (above 2:12) roofing and a SR value of 0.65 or higher for low slope (2:12 or less) roofing. For more information, please go to www.energystar.gov.

What is Solar Reflectance Index (SRI)?

The SRI is used to determine compliance with LEED requirements and is calculated according to ASTM E 1980 using values for reflectance and emissivity. Emissivity is a material's ability to release absorbed energy. To meet LEED requirements, a roofing material must have a SRI of 29 or higher for steep slope (above 2:12) roofing and a SRI value of 78 or higher for low slope (2:12 or less) roofing. For more information, please go to www.usgbc.org.

Cool Colors Selection Chart

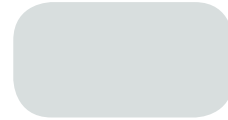
SIGNATURE® 200 | 26-GAUGE SILICONIZED POLYESTER



CHARCOAL GRAY SR.28 SRI 29



FERN GREEN SR.28 SRI 29



POLAR WHITE★ SR.58 SRI 69



KOKO BROWN SR.28 SRI 29



LIGHT STONE SR.50 SRI 58



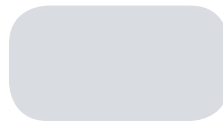
GALLERY BLUE SR.28 SRI 29

SIGNATURE® 300 | 24-GAUGE KYNAR 500® / HYLAR 5000®

Low Gloss Colors



MEDIUM BRONZE SR.33 SRI 36



SNOW WHITE SR.65 SRI 79



SLATE GRAY SR.37 SRI 41



ALMOND SR.63 SRI 76



CLASSIC GREEN SR.28 SRI 29



BROWNSTONE SR.47 SRI 54



SCARLET RED SR.42 SRI 47



HARBOR BLUE SR.28 SRI 29



TUNDRA SR.46 SRI 53

- 25-year limited warranty available upon written request except for Scarlet Red, please inquire
• For warranty information outside the continental United States, please inquire
★ Polar White is a Straight Polyester

Trim available in all colors. Final selection should be made from actual color chips.

For the most current information available, visit us at www.garcobuildings.com.

Signature® 200 Specifications

Product Name

Signature® 200 - A premium coating with proven, proprietary polymer and premium pigments.

Product Description

Uses: Signature® 200 is a factory-applied and oven-baked protective coating used on GALVALUME® or galvanized steel substrate. Signature® 200 combines excellent physical characteristics and aesthetic values for metal panels and components. Its uses in architectural, industrial, commercial, residential and institutional metal construction are numerous. The Signature® 200 coating is formulated for hardness and flexibility, making it a versatile and durable coating system when applied over a proprietary, corrosion-resistant primer.

Limitations: Since Signature® 200 coatings require baking to cure, they cannot be field applied.

Composition and Materials: Signature® 200 is a thermoset coating consisting of a proprietary polyester resin modified by silicone resin intermediate. Signature® 200 uses premium, proven-durability

ceramic pigments which give superior exterior protection and resistance to chemical corrosion and ultraviolet radiation.

Color: Since color is integral to the overall appearance of building design, a full range of popular colors is available. In addition, custom colors can be provided (minimum quantity requirements may apply).

Installation

The Signature® 200 system is factory applied over metal substrates using the coil coating process. Surfaces shall be chemically cleaned and pretreated according to manufacturers' specifications to remove contaminants and provide acceptable corrosion resistance. Total dry film thickness of topcoat (Signature® 200 protective coating and primer) is within the 0.9 - 1.05 mil range for coil coated applications. The pretreated substrate is primed with 0.2 - 0.25 mil of a high performance primer. The Signature® 200 protective coating is applied over the primed substrate at 0.7 - 0.8 mil. The Signature® 200 systems incorporate outstanding exterior durability, while affording superior coil line application and post-forming capabilities.

Warranty

The Signature® 200 warranty is backed by the strictest production specifications and is one of the strongest in the industry. Details and further information are available by contacting the manufacturer.

Maintenance

The factory applied finish of Signature® 200 is a baked-on coating designed to give trouble-free performance for years with little service required. However, mild detergents and/or mineral spirits are recommended for removal of surface dust and airborne chemical deposits. Air-dry touch-up paints are also available for repair of minor scratches.

Technical Assistance

Complete technical information and literature is available from the manufacturer.

Technical Data/Physical Properties	
PROPERTY & VALUE	TEST DESIGNATION
Performance Specification Specular Gloss: Signature® 200 systems are 25-50% at a glossmeter angle of 60°. Pencil Hardness: Minimum Pencil Hardness, using Eagle Turquoise pencils, is F-2H.	ASTM D523-89 ASTM D3363-05
Direct and Reverse Impact Adhesion: No visible paint removal with Scotch #610 cellophane tape after impact of 3x metal thickness inch-lbs. on Gardner Impact Tester. Abrasion Resistance: 40 liters minimum of falling sand. Bend Adhesion: No loss of adhesion with Scotch #610 cellophane tape when subjected to 2T diameter 180° bend test.	ASTM D2794-93 (Not to include Galvalume® coating failure) ASTM D968-93 ASTM D4145-83 (Not to include Galvalume® coating failure)
Accelerated Tests Humidity: No blistering, cracking, peeling, loss of gloss or softening of finish after 1,000 hrs. of exposure to 100 percent humidity at 100°F ± 5°F. Salt Spray Resistance: 1,000 hrs. exposure at 5% neutral salt spray, creep from scribe no more than 1/8" (3mm), few No.8 blisters when applied	ASTM D2247-02 ASTM B117-03

Signature® 300 Specifications

Product Name

Signature® 300 - A premium fluoropolymer low gloss coating, produced with KYNAR 500® or HYLAR 5000® resin.

Product Description

Basic Uses: Signature® 300 coatings are specified by leading architects and used by manufacturers of metal curtain wall and other building products as a long-life exterior finish for aluminum, galvanized steel and Galvalume®. The liquid coating is factory applied and oven baked on properly prepared and primed substrates. Signature® 300 coatings typically are used as exterior finishes for metal roofing, siding, louvers, fascia, curtain wall, spandrel paneling and column covers. The building components can be post-formed from pre-coated coil stock.

Limitations: Since Signature® 300 coatings require baking to cure, they cannot be field applied. Signature® 300 coatings are not approved for use on hot or cold rolled bare steel substrates intended for exterior exposure.

Composition and Materials: Signature® 300 coatings are based on 70% KYNAR 500® or HYLAR 5000® PVDF fluoropolymer resin. They also are formulated with highly durable pigments and solvents blended for optimum application properties.

Color: Signature® 300 coatings are available in a wide range of standard, field-proven colors. Special colors are available (minimum quantity requirements may apply) if approved by manufacturer.

Technical Data

(See Chart below.)

Installation

Signature® 300 coatings may be coil coated on HDG steel, Aluminum or Galvalume® substrates that have been pretreated and primed according to manufacturer specifications. The entire system is applied in the factory and oven baked. Topcoat dry film thicknesses are within the 0.9 - 1.1 mil range (Note: which refers to the combination of primer and the Signature® 300 protective coating) for coil coated applications. The pretreated substrate is primed with 0.2 - 0.30 mil of a high performance primer. The Signature® 300 protective coating is applied over the primed substrate at 0.7 - 0.8 mil. The flexibility of the system permits coil-coated stock to be post-formed by either a roll former or press brake. All applicators of Signature® 300 coatings must have the approval of manufacturer. A list of approved applicators is available upon request.

Warranty

The Signature® 300 warranty is backed by the strictest production

specifications and is one of the strongest in the industry. Details and further information are available by contacting the manufacturer.

Maintenance

Signature® 300 coatings are virtually maintenance free and non-staining. If necessary, surface residue may be removed by conventional cleaning solvents or detergents. Minor scratches may be touched up with a specially formulated, field-applied coating of the same color. Signature® 300 coatings can be used in conjunction with conventional sealants and caulking compounds. Mortar, plaster, etc. will neither adhere to nor stain the surface.

Technical Assistance

Complete technical information and literature is available from the manufacturer. Signature® is a registered trademark of NCI Group, Inc. KYNAR 500® is a registered trademark of Arkema, Inc. HYLAR 5000® is a registered trademark of Solvay Solexis. GALVALUME® is a registered trademark of BIEC International Inc.

Technical Data/Physical Properties of Signature® 300		
PROPERTY	VALUE	TEST DESIGNATION
Gloss @ 60°	8 - 15	ASTM D523
Pencil Hardness	HB-Min. (Eagle Turq.)	ASTM D3363-05 (NCCA II-12) (2)
Post-Formability, 180° bend around 1/8" mandrel	(1) Acceptable	ASTM D522-93a
Adhesion	(2) Acceptable	ASTM D3359-02 (NCCA II-5)
Abrasion Resistance, Falling Sand	67 liters	ASTM D968-93
Accelerated Tests		
Weatherometer: 1,000 hr. exposure	(3) Acceptable	ASTM D3361
Humidity: 2,000 hrs. exposure @ 100% relative humidity	(4) Acceptable	ASTM D2247-92
Salt Spray: 1,000 hrs. in 5% salt fog @ 95°F	(5) Acceptable	ASTM D714-02 (NCCA III-2) ASTM B117
Cyclic Salt Fog/UV exposure:	(6) Acceptable	ASTM D5894
Chemical Spot Test:	(7) Acceptable	ASTM D1308

NOTES:

- (1) Flexible to point of metal rupture without coating rupture.
- (2) No removal of finish after 1/16-inch cross-hatching to bare metal, to impact limits or point of metal rupture.
- (3) No adhesion loss. Chalk rating of 8. Color change less than 5ΔE.
- (4) Rating of 10, no blistering, cracking per ASTM 1654.
- (5) No more than 1/16-inch average creepage or loss of adhesion from scribed line rating of 7, no blistering rating of 10.
- (6) No more than 1/32-inch creepage or loss of adhesion from scribed line, rating of 8, no blistering rating of 10.
- (7) 10% Hydrochloric acid solution 24 hrs. no visible changes. 25% Sodium Hydroxide 1 hr. test no color change, no blistering.

Descriptions and specifications contained herein were in effect at the time this publication was approved for printing.

We reserve the right to discontinue products at any time or change specifications and/or designs without notice and without incurring obligation.