

Insulated Metal Panels SP Cool Coatings



Metl-Span's insulated metal panels are finished with cool coating systems that features vivid, fade-resistant color, incredible durability and environmentally friendly cool technology. Our cool silicone-polyester (SP) paint system utilizes a two-coat process that offers superior quality and durability.

Exterior Colors (SP)

IR: Initial Reflectance SRI: Solar Reflectance Index



Polar White

IR .60 SRI 71



Sandstone

IR .54 SRI 63



Fox Gray

IR .46 SRI 52



Sagebrush Tan

IR .46 SRI 52



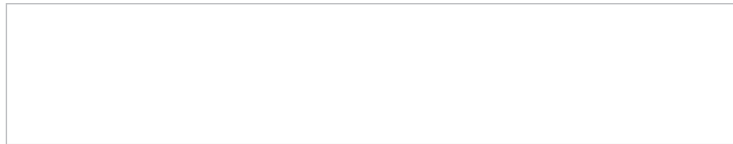
Brick Red

IR .31 SRI 31



Aztec Blue

IR .29 SRI 29



Igloo White* INTERIOR COLOR (POLYESTER)

★ When using field applied coatings always order Igloo White Polyester for the exterior coating. Colors shown closely approximate actual coating colors. The term "TBK" on the Order Document refers to "To Be Selected" from standard colors as shown on this chart.

Insulated Metal Panels SP Cool Coatings



Product Specifications

This cool silicone-polyester paint system utilizes a two-coat process that offers superior quality and durability.

Solar Reflectance, Thermal Emittance and Solar Reflectance Index (SRI)

Solar Reflectance

To be considered “cool,” products must have a Solar Reflectance of at least .25. Solar Reflectance is the fraction of the total solar energy that is reflected away from a surface.

Thermal Emittance

Thermal Emittance is the measure of a panel’s ability to release heat that it has absorbed.

Solar Reflectance Index (SRI)

Put Solar Reflectance and Thermal Emittance together and you get the Solar Reflectance Index (SRI). SRI is calculated by using the values of solar reflectance, thermal emittance and a medium wind coefficient. The higher the SRI value, the lower its surface temperature and consequently, the heat gain into the building. Metal roofs coated with SP Cool Coatings achieve an SRI of 25-81, depending on the color.

Conventional roof surfaces have low reflectance (0.05 to 0.25) and high thermal emittance (typically over .85). Roof panels with both high reflectance and high emittance can reduce the surface temperature by as much as 30-50% based on color and geographic location, which will result in a reduced heat gain to the building, therefore reducing the energy demand.

WARRANTIES



At NBG, we proudly stand behind every product we make. That’s why we offer a 25-year warranty on our SP insulated metal panels. It offers protection against:

Fading | Chipping | Peeling | And more

SP COOL PANEL COLORS

| SP Cool Color | Initial Solar Reflectance (IR) | Initial Thermal Emittance | Solar Reflectance Index (SRI) |
|---------------|--------------------------------|---------------------------|-------------------------------|
| Polar White | .60 | 0.87 | 71 |
| Sandstone | .54 | 0.86 | 63 |
| Fox Gray | .46 | 0.87 | 52 |
| Sagebrush Tan | .46 | 0.87 | 52 |
| Brick Red | .31 | 0.86 | 31 |
| Aztec Blue | .29 | 0.86 | 29 |

SP COOL TECHNICAL INFORMATION

| SP Performance Testing | | |
|------------------------------------|--|--|
| Industry Specifications Compliance | AAMA' 2604-17A Requirements | Voluntary Specification, Performance Requirements and Test Procedures for High-Performing Organic Coatings on Architectural Aluminum Extrusions and Panels |
| Substrates | Pretreated substrates: Galvalume®, Hot-Dipped Galvanized (HDG) steel and Aluminum. | |
| Dry Film Thickness | 0.2 - 0.3 mil primer / 0.7 - 0.8 mil topcoat | |

| Physical Testing | Test Methods ² | Test Result |
|---------------------------------|---|--|
| Falling Sand Abrasion | ASTM D 968 | 35 ± 10 liters |
| Film Adhesion | ASTM D 3359 | No removal of film under tape in the cross-hatched area. (Dry, Wet, Boiling Water) |
| Surface Burning Characteristics | ASTM E 84 | Flame Spread Index: Class A. Smoke Developed Index: Class A |
| Graffiti Resistance | ASTM D 6578/D 6578M | Meets and exceeds |
| Humidity Resistance | ASTM D2247 100% RH @ 100°F for 2000 hrs. | No field blisters |
| Impact Resistance (Direct) | ASTM D 2794 | 3x metal thickness inch-pounds, no loss of adhesion |
| Pencil Hardness | ASTM D 3363 | HB to 2H |
| Salt Spray Resistance | ASTM B 117: 1,000 hrs. | Creep from scribe ≤ 1/8" (3mm), none or few #8 blisters. |
| Specular Gloss 60° | ASTM D 523 | 20-80 |
| T-Bends | ASTM D 4145 ³ | 2T-4T, no loss of adhesion. |

| South Florida Testing | Test Methods | Test Result |
|-----------------------|--------------|---|
| Color | ASTM D 2244 | >5Δ Hunter units @ 90° vertical angle and 6Δ E non-vertical @ 20 yrs. |
| Chalk | ASTM D 4214 | No less than 8 at 90° angle; 7 at non-vertical angle @ 20 years. |
| Film Integrity | ASTM G7 | 25 yrs. no blisters, peeling or cracking |

¹American Architectural Manufacturers Association. ²American Society for Testing and Materials. ³WeatherXL is not designed to bridge cracks in the substrate. WeatherXL coatings will generally meet the requirements for most post-painted fabrication processes. However, variations in metal quality, thickness or cleaning/pre-treatment applications can lead to diminished flexibility.