

ALUCOBOND COOL

The Alucobond Cool coating system for metal substrates offers higher solar reflectivity than other cladding materials, especially for medium and dark colors – letting you realize energy savings while enjoying the choice of a color palette that ranges from bold and bright to deep and dark.

In the following chart, stocking colors with this revolutionary coating system have had the word “cool” added to the name.

FINISH SYSTEMS ECONOMICS

Different projects require different finishes. Alucobond is available in a wide array of finishes to meet virtually any budget.

PVDF – 2 Coats

Polyvinylidene Fluoride Finish Systems are the industry standard for metal architectural coatings.

PVDF – 2 or 3 Coats Mica / Pearlescent

Mica/pearlescent pigments are incorporated to achieve a metallic look. When specifying micas, panel directionality must be considered for estimating, fabricating and erection. It is advisable to order all panels at one time for best results.

PVDF – 3 Coats

Metallic flake is incorporated to achieve a metallic look. To protect the metal from oxidizing, a third, clear coat is added. The clear coat also provides increased resistance to graffiti and abrasion. This Finish System is available at a moderate premium over the PVDF – 2 coat finishes. When specifying metallics, panel directionality must be considered for estimating, fabricating and erection. It is advisable to order all panels at one time for best results.

FEVE – 2 or 3 Coats

Fluoroethylene Vinyl Ether Finish Systems are the second generation among fluoropolymer coatings. They provide bright, vivid colors at higher gloss levels. The 2 or 3 coat systems are available at a moderate premium to the PVDF – 2 and 3 Finish Systems. When specifying FEVE metallics, panel directionality must be considered for estimating, fabricating and erection. It is advisable to order all panels at one time for best results.

FINISH SYSTEMS

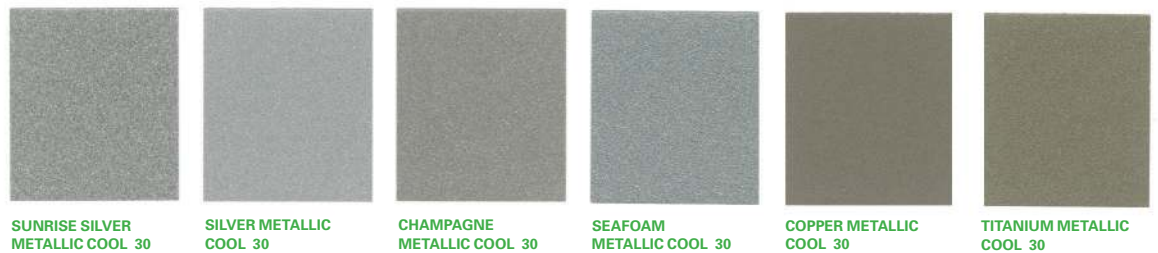
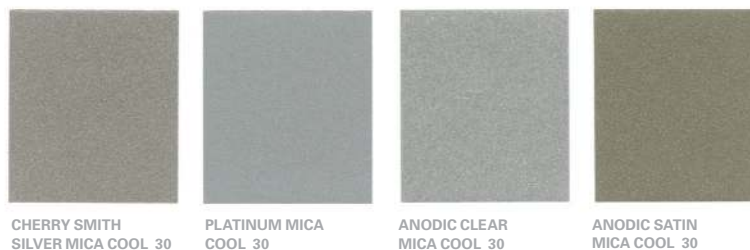
Alucobond Cool Systems are created utilizing a color and a PVDF (Polyvinylidene Fluoride) finish system. FEVE (Fluoroethylene Vinyl Ether) systems are fluoropolymer coatings that provide bright, vivid colors at higher gloss levels but with lower solar reflectivity properties. When selecting a color, we will provide you with the resin type, the number of coats, the color name and the gloss level.

Example

This is a PVDF Finish System that has two coats (denoted by the blue text). The color is Bone White Cool and the gloss level is 30. A gloss level of 30 is less glossy than a 50.

BONE WHITE COOL 30

↑ color name ↑ gloss level



Warranties

For warranty information please contact your Alucobond representative.

naturAL Series and Spectra Colors

Please ask your Alucobond representative about our stocking naturAL series and Spectra colors.



ALUCOBOND COOL COIL COATING PRODUCT DATA

TEST	ASTM†	PERFORMANCE
Physical Properties and Durability		
Film Thickness	D-1005, D4138, D1400	0.15 – 0.30 mil primer 0.7 – 0.9 mil topcoat
60° Specular Gloss	D-523	25 – 35
IR Reflectivity	E-903-96 E-1918-97 (Standard test method using portable Reflectometer)	0.25 (25%) minimum
Emissivity	C-1371-98 E-408-71	0.80 (80%) minimum
Pencil Hardness	D-3363	HB minimum
Flexibility, T-Bend	D-4145	1 – T aluminum 2 – T coated steel
Adhesion	D-3359	No adhesion loss
Reverse Impact	D-2794	No cracking or loss of adhesion
Abrasion, Falling Sand	D-968	65 – 85 l/mil
Mortar Resistance	C-267	No effect
Detergent Resistance, 3% Detergent, 100°F (72 hrs.)	D-2248	No effect
Atmospheric and Pollutant Resistance		
Acid Pollutants	D-1308 10% Muriatic Acid, (15 min.) 20% Muriatic Acid, (15 min.) AAMA 621 / AAMA 2605	No effect No effect <5 units color change
Acid Rain Test	Kesternich	15 cycles minimum, no objectionable color change
Alkali Resistance, 5% @ (72 hrs.)	20% Sodium Hydroxide (1 hr.)	No effect
Salt Spray Resistance 5% @ 95°F	B-117	Passes 3,000 hrs. – aluminum Passes 1,000 hrs. – coated steel
Humidity Resistance 100% @ 100°F	D-2247	Passes 3,000 hrs. – aluminum Passes 1,000 hrs. – coated steel
Weathering		
South Florida Exposure	D-2244	Less than 5 units color change
UV Exposure	D-4587	Passes 3,000 hrs.
Chalk Resistance	D-4214	Rating of 8 min.
Weatherometer	D-6695	

SOLAR REFLECTANCE INDEX (SRI)

The Solar Reflectance Index is a measure of a finish's ability to reject solar heat, as shown by a small temperature rise. It is defined so that a standard black (reflectance 0.05, emittance 0.90) is zero and a standard white (reflectance 0.80, emittance 0.90) is 100.

For example, the standard black has a temperature rise of 90° Fahrenheit (50° Celsius) in full sunlight, and the standard white has a temperature rise of 14.6° Fahrenheit (8.1° Celsius). Once the maximum temperature rise of a given material has been determined, the SRI can be computed by interpolating between the values for white and black.

Materials with the highest SRI values are the coolest choices for cladding. Due to the way SRI is defined, particularly hot materials can even take slightly negative values, and particularly cool materials can exceed 100.

PVDF – 2 Coats	SRI	PVDF – 2 or 3 Coat Micas	SRI	PVDF – 3 Coats	SRI	FEVE – 2 or 3 Coats	SRI
Bone White Cool	89	Cherry Smith Silver Mica Cool	47	Sunrise Silver Metallic Cool	74.4	Cosmos Black	0
Alabaster Cool	87	Platinum Mica Cool	48	Silver Metallic Cool	60	Flag Red	53
Oyster Cool	83	Anodic Clear Mica Cool	64	Champagne Metallic Cool	59.4	Lapis Blue	15
Castle Gray Cool	56	Anodic Satin Mica Cool	47	Seafoam Metallic Cool	58		
Cadet Gray Cool	53			Copper Metallic Cool	36		
Statuary Bronze	7			Titanium Metallic Cool	35		