Product specifications of

ALUM*A*Escent® 50

2-coat mica color liquid spray exterior metal finish for architectural extrusion applications

AkzoNobel
Tomorrow's Answers Today

ALUM*A*Escent® 50 is a unique 2-coat process that offers a wonderful alternative to both metallic and anodized finishes, meeting the AAMA 2604 specification.

ALUM*A*Escent® 50's blend of mica and ceramic/ inorganic pigments creates subtle yet dazzling design characteristics.

A unique richness of color is achieved that goes beyond the capabilities of standard metallic colors.

As the name suggests, this product contains 50% polyvinylidene fluoride (PVDF) resin as opposed to the 70% requirement of the AAMA 2605 specification. This very dynamic resin, produced by the same companies that make KYNAR® and HYLAR®, provides the strongest molecular bond found in the building and construction coatings market. The carbon/ fluorine bond is the key to ALUM*A*Escent® 50's excellent thermal, chemical and ultraviolet resistance properties.

This system is superior to anodized finishes in a number of different ways. ALUM*A*Escent® 50 is more chemical resistant than an anodized finish, can be field repaired, and also has a tighter color range. By combining the concept of barrier coat and primer into one, our technical team has unlocked the secret to minimization of "metallic flop." This combination also eliminates a step in the application process required by metallic colors, while improving the quality and appearance of the finish.

When specifying ALUM*A*Escent® 50, refer to the code number of the color desired. The last two digits of the code will designate which basecoat/primer is to be used for that specific topcoat color.

Whether your color design requirements call for a bold statement or a soft and subtle appearance, AkzoNobel's wide array of ALUM*A*Escent® 50 colors should provide the desired effects. Should you wish to match a color provided by another manufacturer, our computer-aided technicians will be happy to provide you with a corresponding match. Or, if you want something not found on a color card, we will assist you in the creation of a brand new color.

To assure proper application, AkzoNobel utilizes a process of Applicator Certification. Only after meeting stringent repeatable quality standards is an applicator granted this approval. This helps protect the integrity of the finish for all parties concerned.

Disclaimer

ALUM*A*Escent® 50 product specifications

Product Type	50% KYNAR® or HYLAR® coating.
Specification	Meets or exceeds all AAMA 2604 specifications.
Primer	KY1C17839A
Percent Solids (Package)	Weight solids 47-52%, Volume solids 30-35%.
Percent Solids (Reduced)	Weight solids 37-42%, Volume solids 23-26%.
Reduction	Primer: 1-1 with Xylene. Topcoat: 15-25% by volume of Xylene/Butyl Carbitol blend then add Butyl Carbitol as needed for flow.
Viscosity	Primer: 20-23 seconds #4 Zahn @ 77° F (package), 16-18 seconds on Zahn #2 (reduced). Topcoat: 20-23 seconds #4 Zahn @ 77° F (package), 22-25 seconds on Zahn #2 (reduced).
Film Thickness	Primer: 01.5-2.5 wet mils, 0.3-0.5 mils dry. Topcoat: 3.0-4.5 wet mils, 1.1-1.3 mils dry. Total system: 1.4-1.8 mils dry.
Gloss Range	15 to 25% @ 60° angle.
Cure Schedule	Lab bake cycle 10 minutes @ 450° F. Production cure varies with line speed and oven temperature. Metal temperature must achieve 450° F and be maintained for 2 minutes minimum.
Cure	H+ pencil hardness and 50 MEK double rubs.

AAMA 2604 specification

Test	Description	Coating Requirements	ALUM*A*Escent® 50 Performance
7.1	**Color Uniformity**	Visual Control	Instrument and visually controlled
7.2	**Specular gloss at 60º, ASTM D 523**	Medium and low gloss ranges	Controlled to custom spec ±5 units
7.3	**Dry film hardness**	F minimum	H+
7.4	**Film adhesion (dry, wet and boiling water), crosshatch 1/16 inch squares**	No removal between scribed times	No removal
7.5	**Impact resistance (direct) 0.10 inch distortion**	No removal of film	No removal
7.6	**Abrasion resistance, ASTM D 968**	Abrasion coefficient value, 20 minimum	Exceeds spec
7.7.1	**Chemical resistance (10% muriatic acid)**	15 minutes, no visual changes	Meets or exceeds spec
7.7.2	**Chemical resistance (mortar, alkali)**	24 hours, no visual changes	Meets or exceeds spec
7.7.3	**Resistance to acid pollutants (70% nitric acid)**	30 minutes, maximum 5ΔE NBS units color change	Meets or exceeds spec
7.7.4	**Detergent resistance**	72 hours, no effect	Meets or exceeds spec
7.7.5	**Window cleaner resistance**	24 hours, no visual change	Meets or exceeds spec
7.8.1	**Humidity resistance, ASTM D 2247**	3,000 hours, few #8 blisters (maximum)	Meets or exceeds spec
7.8.2	**Salt spray resistance, ASTM B 117**	3,000 hours, minimum 7 rating on scribe and minimum blister rating of 8 in field	Meets or exceeds spec
7.9.1.2	**Weathering, color retention, ASTM D 2244**	5 years, 45º S. South Florida, max 5ΔE NBS units color change	Meets or exceeds spec
7.9.1.3	**Weathering, chalk resistance, ASTM D 659**	5 years, 45º S. South Florida, max 8 rating for colors, 6 rating for whites	Meets or exceeds spec
7.9.1.5	**Weathering, erosion resistance**	5 years, 45º S. South Florida, maximum 20% loss	Meets or exceeds spec

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