



## ECO-FRIENDLY ANODIZING

Anodizing is the process of electrochemically accelerating and controlling the oxidation of an aluminum substrate, creating an extremely hard, durable, and aesthetically pleasing coating on the aluminum. Architectural anodize finishes are limited to certain colors; however their hardness and scratch-resistance far surpass that of paint coatings.

## QUALITY

Our automated system controls and monitors your product through the entire anodizing process. It tracks all aspects of the process including tank sequencing, voltage, current, time, and temperature, ensuring the most consistent anodize finish available.

## CARE & CLEANING

Anodized material has an extremely hard surface that is colorfast and mar resistant. An anodized finish should be cleaned using mild soap solutions to retain its original beauty. The cleaning solution should be applied with a soft cloth, sponge or brush. Avoid the use of acidic or alkaline cleaners. To avoid damage to the finish, anodized aluminum should be placed into walls after mortar has cured. Any uncured masonry product that is not immediately removed from the anodized aluminum will destroy the finish, sometimes beyond repair.

Linetec anodize finishes meet the AAMA-611 specification.

# LINETEC

**FINISHER OF CHOICE!™**



**Wikk Clear ANO-215R1 or ANO-204R1 AE**



**Wikk Light Bronze (Champagne) ANO-300 AE**



**Non-Stock Light Bronze ANO-301 AE**



**Non-Stock Medium Bronze ANO-302 AE**



**Non-Stock Dark Bronze ANO-303 AE**



**Wikk Extra Dark Bronze ANO-304 AE**



**Wikk Black ANO-305 AE**



## ALUMINUM ASSOCIATION DESIGNATION SYSTEM FOR ALUMINUM FINISHES

The following examples show how the Aluminum Association Designation System for Aluminum Finishes is used (each designation is preceded by the letters AA to identify it as an Aluminum Association designation):

### Example 1 - Architectural Building Panel

If an architect wished to designate a matte anodized finish for a building such as that produced by giving aluminum a matte finish, followed by architectural Class I natural anodizing, he would designate it as follows:

AA - M10C22A41  
 AA - Aluminum Association  
 M10 - Unspecified  
 C22 - Medium Matte Etched  
 A41 - Anodic Coating-architectural, Class I

### Example 2 - Architectural Aluminum with Anodized Electrolytically Deposited Color

If an architect wished to specify a bronze anodized panel with a two-step color for architectural application, the designation would be:

AA - M10C22A44  
 AA - Aluminum Association  
 M10 - Unspecified as fabricated finish  
 C22 - Chemically etched medium matte finish  
 A44 - Anodic Coating-architectural, Class I Electrolytically Deposited Color

### Mechanical Finishes (M)

#### As Fabricated

M10 Unspecified  
 M11 Specular as fabricated  
 M12 Nonspecular as fabricated  
 M1X Other (to be specified)

#### Buffed

M20 Unspecified  
 M21 Smooth specular  
 M22 Specular  
 M2X Other (to be specified)

#### Directional Textured

M30 Unspecified  
 M31 Fine satin  
 M32 Medium satin  
 M33 Coarse satin  
 M34 Hand rubbed  
 M35 Brushed  
 M3X Other (to be specified)

#### Nondirectional Textured

M40 Unspecified  
 M41 Extra fine matte  
 M42 Fine matte  
 M43 Medium matte  
 M44 Coarse matte  
 M45 Fine shot blast  
 M46 Medium shot blast  
 M47 Coarse shot blast  
 M4X Other (to be specified)

### Chemical Finishes (C)

#### Nonetched Cleaned

C10 Unspecified  
 C11 Degreased  
 C12 Inhibited chemical cleaned  
 C1X Other (to be specified)

#### Etched

\* C20 Unspecified  
 \* C21 Fine matte  
 \* C22 Medium matte  
 \* C23 Coarse matte  
 \* C2X Other (to be specified)

#### Brightened

C30 Unspecified  
 C31 Highly specular  
 C32 Diffuse bright  
 C3X Other (to be specified)

#### Chemical Coatings

C40 Unspecified  
 C41 Acid chromate-fluoride  
 C42 Acid chromate-fluoride-phosphate

C43 Alkaline chromate  
 C44 Non-chromate  
 C45 Non-rinsed chromate  
 C4X Other (to be specified)

### Anodic Coatings General

A10 Unspecified  
 A11 Preparation for other applied coatings  
 A12 Chromic acid anodic coatings  
 A13 Hard, wear and abrasion resistant coatings  
 A1X Other (to be specified)

### Protective and Decorative Coating less than 10um (.04 mil)

A21 Clear  
 A22 Integral color  
 A23 Impregnated color  
 A24 Electrolytically deposited color  
 A2X Other (to be specified)

### Architectural Class II<sup>1</sup> 10-18 um (0.4-0.7 mil) coating

\* A31 Clear  
 A32 Integral color  
 A33 Impregnated color  
 A34 Electrolytically deposited color  
 A3X Other (to be specified)

### Architectural Class I<sup>1</sup> 18 um (0.7 mil) and thicker anodic coatings

\* A41 Clear  
 A42 Integral color  
 A43 Impregnated color  
 A44 Electrolytically deposited color  
 A4X Other (to be specified)  
<sup>1</sup>Aluminum Association Standards for Anodized Architectural Aluminum

### Resinous and Other Organic Coatings (R)<sup>2</sup>

R10 Unspecified  
 R1X Other (to be specified)  
<sup>2</sup>These designations may be used until more complete series of designations are developed for these coatings.

\*Provided by Linetec Anodizing

## GUIDE SPECIFICATIONS

- Exposed surfaces of all aluminum windows, framing, and trim shall receive an anodized color finish conforming to the Aluminum Association Designation, Architectural Class I, AA-M10C22A44.

Comment: Architectural Class I should always be specified for high rise curtain wall construction and for monumental construction, high rise or low rise, where excellent appearance with little maintenance is desired for the life of the building. The AA-M10C22A44 indicated extrusions with a mill finish (M10) which receive a medium matte etch (C22) and are colored by the electrolytic deposition of stable metal compounds (A44).

- The anodic coating shall be continuous, fully sealed and free from powdery surfaces.

Comment: A uniform, continuous coating, fully sealed, is essential to good appearance and satisfactory performance.

- Coating thickness shall be a minimum of 0.7 mil when tested in accordance with ASTM B 244.

Comment: A minimum of 0.7 mil thickness is required to meet the Architectural Class 1 designation and to provide the desired resistance to weathering and corrosion.

- Coating weight shall be a minimum of 27.0 mg/in<sup>2</sup> with an apparent density of 38.0 g/in<sup>3</sup> when tested in accordance with ASTM B 137-89.

Comment: This minimum weight, which is a measure of the density is necessary to assure that the coating has the desired hardness, abrasion resistance and durability.

- There shall be no noticeable change in the color of the coating when subjected to a 200 hour UVIARC test.

Comment: Where severe exposure to sunlight will be encountered and where long finish life is desired, the UVIARC test may be used to determine resistance to ultra violet radiation. This test is much more severe than the salty spray and weatherometer tests on the coloring agents in the coating.

- Maximum acid dissolution weight loss shall be 2.6 mg/in<sup>2</sup> when tested in accordance with International Standard (ISO) 3210 to ensure a high quality seal.

Comment: This test determines the ability of the sealed coating to resist acid attack. It is a rigorous test, but one which should be used if the coating is to be exposed to severe conditions.

Linetec specifications meet AAMA - 611.

725 South 75th Avenue  
 P.O. Box 1767  
 Wausau, WI 54402-1767



Phone: 715-843-4100  
 FAX: 715-843-4107  
 sales@linetec.com

