

TECHNICAL DATA SHEET

AnoZinc™ I with Alcoa Tectur-Al™

Finish Description: AnoZinc™ I with Alcoa Tectur-Al™ was developed by Lorin Industries and designed specifically for exterior applications in which fade resistance is very important to the designer. The soft, natural variegated surface makes this product very unique for aluminum, yet quite similar to the surface finish of natural zinc without the high cost. This inconsistent surface quality makes it very appealing to designers wanting a unique finish that differentiates them from the norm. What makes these products even more appealing, as compared to natural zinc and in addition to lower cost, is that it will not patina when exposed to the environment, it weighs approximately 60% less, and is more forgiving during fabrication.

Reference Part Number (s)

1130-750-001

Industry Designations

Aluminum Association

AA-M12-C23-A43

Mil A-8625F Classification

Type II Sulfuric Anodize

Industry Standards

AAMA 611-12

Voluntary Specification for Anodized Architectural Aluminum

ISO 9001: 2008

Quality management system

Mil A-8625F Anodizing Standard

Anodic Coatings for Aluminum and Aluminum Alloys

Aluminum Properties

Alloy: ZN30

Temper: H25

Finish: Mill Finish

Mechanical Properties

UTS: 22-28 ksi [152-193MPa]

YTS: 19-25 ksi [131-172 MPa]

Elongation: 8% minimum

Bend Radii: Recommended 1t min

Chemical Properties

Si: 1.5—2.0 %

Fe: 0.3—0.7 %

Cu: 0.15—0.30 %

Mn: 0.6—0.9 %

Mg: 0.3—0.6 %

Cr: < 0.2 %

Zn: < 0.4 %

Ti: < 0.1 %

Al: Remainder

Stock Gauge Availability ¹

0.025" (0.6 mm)

Stock Width Availability ²

48.5" (1232 mm)

Anodize Film Thickness

Architectural Class I:

0.700 mils [17.8 μm] Minimum

Anodize Finish Properties

Optical: Not applicable

Gloss: Coarse Matte

Color : D001, AnoZinc I

Color Target: < Δ Delta E of 10.0

UV Stable: Yes

Environment: Exterior

Seal: S1, ADT <1.3 mg/in²

Quality Grade: 5

Other: This alloy has a natural surface variation that can change from coil-to-coil and each lot purchased. This product will have a variegated surface finish and is considered an acceptable attribute for this material. The variegated surface finish can also interfere with color measurement, therefore the color specifications established for this finish is wider than our standard color tolerances.

Footnotes: 1 - Other gauges can be custom ordered. 2 - Other widths can be custom ordered.



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Aluminum Secondary Services

- Shearing, Width Capabilities:**
7" (178mm) - 62" (1575 mm)
- Shearing, Length Capabilities:**
Up to 192" (4876 mm)
- Shearing, Loading Gauge:**
Up to 0.080" (2.0 mm)
- Slitting, Width Capabilities:**
0.75" (19 mm) min
- Slitting, Loading Gauge:**
Up to 0.100" (2.5 mm)
- Other Secondary Services:**
Protective peel-able films
International packaging
Perforating and embossing

Maintenance and Cleaning

The anodized aluminum finish can be washed with mild soap and water followed by a clean water rinse. For more information on cleaning anodized aluminum, please refer to the Aluminum Association Publication 92, Care of Aluminum or AAMA 609 & 610-09, Cleaning and maintenance guide for architecturally finished aluminum.

Sustainability and LEED

- Recycled Content:**
100% recyclable
Reclaimed > 90.0% M11106
- Volatile Organic Compounds:**
The aluminum oxide layer does not contain any VOC's

Availability

The standard lead time for stocked gauges and widths is two weeks for anodizing and one week for any secondary services such as slitting, shearing and applying transparent protective films or paper.

Please check availability of Non-Stocked materials by contacting our sales staff using our toll free number 800.654.1159 or email your request to info@lorin.com. Some raw materials may have extended lead times.

Technical Support

A staff of factory trained personnel are available to offer technical assistance. Please call our toll free number 800.654.1159 or email your question to info@lorin.com.

Product Support Partners

Lorin Industries works very closely with many manufacturers' in multiple markets who specialize in anodized aluminum fabrication. Our support staff can assist you if you are looking for finished components. Please call our toll free number 800.654.1159 or email your request for product and application support to info@lorin.com.

Warranty

A 20-year limited warranty is available upon request. The warranty is issued on a per project basis and can be applied for on line by completing an application for warranty at www.Lorin.com

Anodized Finish Test Data

Characteristic	Test Method	Standard	Test Results
Oxide Layer, Thickness	ASTM B244 - Eddy current method	AAMA 611-12, 18 µm (0.700 mils) min	Nominal Target, 19.1 µm (0.750 mils)
Oxide Layer, Weight	ASTM B137 - Coating Dissolution	AAMA 611-12, 4.18 mg/cm ² (27.0 mg/in ²)	> 4.18 mg/cm ² (27.0 mg/in ²)
Gloss Uniformity	ASTM D523 - 60° Gloss Reflectance	AAMA 611-12, Must meet agreed upon specification	Lorin Gloss E17, Nominal Target 10
Color Uniformity	ASTM B2244 - Calculation Δ Delta E	AAMA 611-12, must meet agreed upon specification	Lorin Color, D001 - Δ Delta E ≤ 7.0
Film Hardness	ASTM D3363 - Pencil Hardness	Based on an anodic film thickness, 18 µm (0.700 mils)	9H Hardness
Corrosion Resistance	ASTM B117 - Neutral Salt Spray	AAMA 611-12, 3,000 hours ≤ 15 pits < 1mm, 381 cm ² (150in ²)	Pass, No visible pits
Weathering	SAE J1960 - ATLAS Accelerated testing using an Xenon Arc light source	AAMA 611-12, 10 year Florida Exposure, max Δ Delta E of 5.0	Delta E 0.68; 3,929 hours equivalent to 2.00 years South Florida Sun (20140602)
Craze Resistance	AAMA 611-12 - Thermal Crazing of the oxide layer	AAMA 611-12, oxide layer shall not craze less than 82°C (120°F)	No visible evidence of Thermal Crazing
Chemical Resistance	ASTM D1308 - Effect of Household Chemicals	10% Reagent grade Muriatic Acid, 15 minute exposure at ambient temp	No blisters, No peeling. Subtle stain
Seal Quality	ASTM B680 - Acid Dissolution	AAMA 611-12, max wgt loss shall be 40mg/dm ² (2.6mg/in ²)	< 20mg/dm ² (1.3mg/in ²)

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