

LORIN

Light Bronze ColorIn®

TECHNICAL DATA SHEET

Finish Description: Light Bronze ColorIn® is a 'warm bronze' anodized aluminum finish that utilizes a specialized two-step electrolytic coloring process with excellent fade resistance. Light Bronze ColorIn® has a 6 micron anodic film that can be used for both interior and some exterior applications.

Industry Designations

Aluminum Association

AA-M12-C21-A24

Mil A-8625F Classification

Type II Sulfuric Anodize

Industry Standards

Mil A-8625F Anodizing Standard

Anodic coatings for aluminum and aluminum alloys

Aluminum Properties

Alloy: 5005

Temper: Half Hard

Finish: Mill Finish

Mechanical Properties

UTS: 20-26 ksi [138-179 MPa]

YTS: 15 min [103 MPa]

Elongation: 4% - 5% min

Chemical Properties

Si: 0.30 %

Fe: 0.7 %

Cu: 0.20 %

Mn: 0.20 %

Mg: 0.50—1.1 %

Cr: 0.10 %

Zn: 0.25 %

Other: 0.15 %

Al: Remainder

Gauge Availability

0.025" (0.6 mm)

0.032" (0.8 mm)

0.040" (1.0 mm)

0.050" (1.3 mm)

0.063" (1.6 mm)

0.080" (2.0 mm)

Width Availability ¹

48.0" (1219 mm)

Anodize Film Thickness

Exterior Standard #1:

Anodize Finish Properties ²

Optical: Not Applicable

Gloss: Fine Matte

Color : Light Bronze

Color Target: < Delta E of 5.0

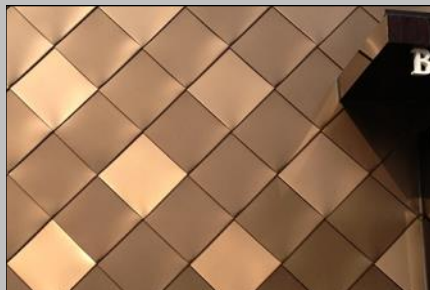
UV Stable: Yes

Environment: Interior and Exterior

Quality Grade: 2

Other: ColorIn®

Footnotes: 1 - Other widths can be custom ordered. 2 - Panel-to-Panel match quality can be custom ordered.



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, 5005 alloy:**
100% recyclable
Recycled Content, 6.6%
Reclaimed-Virgin Material, 93.4%
2012.04.30 Mill6
- 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 limited 20 year 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, Weight | ASTM B137 - Coating Dissolution | | > 1.5 mg/cm ² (9.7 mg/in ²) |
| Color Uniformity | ASTM B2244 - Calculation Δ in Delta E | Lorin, meet the agreed upon color specification | Lorin Color D041, Δ in Delta E ≤ 3.6 |
| Gloss Uniformity | ASTM D523 - 60° Gloss Reflectance | Fine , Matte Finish | Lorin Gloss E1Y, Etched, No Gloss Specified |
| Film Hardness | ASTM D3363 - Pencil Hardness | Based on anodic thickness, 6.4 μm (0.250 mils) | 9H Hardness |
| Corrosion Resistance | ASTM B117 - Neutral Salt Spray | 500 hours, No Visible Pits | Pass, No visible pits |
| Seal Quality | ASTM B136 - Dye Stain | Dye Stain Test | Pass, No Visible Stain |

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