



**COLORIN® MEDIUM BRONZE IS AN ANODIZED ALUMINUM FINISH THAT UTILIZES A SPECIALIZED TWO-STEP ELECTROLYTIC COLORING PROCESS WITH EXCELLENT FADE RESISTANCE.**

ColorIn® Medium Bronze has a 6 micron anodic film that can be used for both interior and some exterior applications.

## INDUSTRY DESIGNATIONS

**Aluminum Association**  
AA-M12-C22-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

## ANODIZE FILM THICKNESS

**Exterior Standard #1:**

## ANODIZE FINISH PROPERTIES

Optical ..... N/A  
Gloss ..... Coarse Matte  
Color ..... Medium Bronze  
Color Target ..... < Delta E of 5.0  
UV Stable ..... Yes  
Environment ..... Interior and Exterior  
Quality Grade ..... 2  
Other ..... ColorIn®

*Panel-to-Panel match quality can be custom ordered.*

## WIDTH AVAILABILITY

48.0" (1219 mm)

*Other widths can be custom ordered.*

## GAUGE AVAILABILITY

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)

## ANODIZED FINISH TEST DATA

CHARACTERISTIC	TEST METHOD	STANDARD	TEST RESULTS
Oxide Layer, Weight	ASTM B137 - Coating Dissolution		> 1.0 mg/cm <sup>2</sup> (6.8 mg/in <sup>2</sup> )
Color Uniformity	ASTM B2244 - Calculation Δ in Delta E	Meet the agreed upon color specification	Lorin Color D042, Δ in Delta E ≤ 5.0
Gloss Uniformity	ASTM D523 - 60° Gloss Reflectance	Coarse, Matte Finish	Lorin Gloss E1D, Nominal Target 30
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 Stain
Seal Quality	ASTM B680 - Acid Dissolution		< 20mg/dm <sup>2</sup> (1.3mg/in <sup>2</sup> )

### 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 Mill#6

#### 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](mailto: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](mailto: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](mailto:info@lorin.com).

### WARRANTY

A 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 [Lorin.com](http://Lorin.com).