

COLORIN® DARK BRONZE MILL FINISH IS A 'SOFT BRONZE' ANODIZED ALUMINUM TEXTURED FINISH THAT UTILIZES A SPECIALIZED TWO-STEP ELECTROLYTIC COLORING PROCESS WITH EXCELLENT FADE RESISTANCE.

ColorIn® Dark Bronze Mill Finish can be used for both interior and exterior applications as it has a 0.250 mils anodic film thickness.

#### **INDUSTRY DESIGNATIONS**

Aluminum Association
AA-M12-C20-A24
MII 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	27 ksi min [186 MPa]
YTS	Not specified
Elongation	1% min

## **CHEMICAL PROPERTIES**

Si 0.30 %
Fe 0.7 %
Cu 0.20 %
Mn 0.20 %
Mg 0.5 - 1.1 %
Cr 0.10 %
Zn 0.25 %
Other 0.15 %
Al Remainder

### **ANODIZE FILM THICKNESS**

Decorative Anodic Layer:  $0.250 \text{ mils } [6.4 \ \mu\text{m}]$ 

#### **ANODIZE FINISH PROPERTIES**

OpticalN/A	
GlossUns	specified
Color Dar	k Bronze
Color Target < D	elta E of 5.0
UV Stable Yes	
Environment Inte	rior
Quality Grade 2	
Other Nor	ne

This product is available for exterior use; a minimum film thickness of 0.250 mils (6  $\mu$ m) is required.

#### WIDTH AVAILABILITY

48.0" (1219 mm)

Other widths can be custom ordered.

# **GAUGE AVAILABILITY**

0.020" (0.5 mm) 0.024" (0.6 mm) 0.025" (0.63 mm) 0.032" (0.8 mm) 0.040" (1.0 mm) 0.060" (1.5 mm) 0.063" (1.6 mm)







### **ANODIZED FINISH TEST DATA**

CHARACTERISTIC	TEST METHOD	STANDARD	TEST RESULTS
Oxide Layer, Weight	ASTM B137 - Coating Dissolution		> 1.5 mg/cm² (9.7 mg/in²)
Color Uniformity	ASTM B2244 - Calculation $\Delta$ in Delta E	Meet the agreed upon color specification	Lorin Color D043, $\Delta$ in Delta E < 5.0
Seal Quality	ASTM B136 - Dye Stain	Dye Stain Test	Pass, No Visible Stain

## **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 <a href="info@lorin.com">info@lorin.com</a>. 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 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 <a href="Lorin.com">Lorin.com</a>.





