

# TECHNICAL DATA SHEET

## Medium Bronze ColorIn® Short Line Brush

**Finish Description:** Medium Bronze ColorIn® Short Line Brush is a 'soft bronze' anodized aluminum textured finish that utilizes a specialized two-step electrolytic coloring process with excellent fade resistance. Medium Bronze ColorIn® Short Line Brush can be used for both interior and exterior applications.

### Reference Part Number (s)

1512-250-001

### Industry Designations

#### Aluminum Association

AA-M12-C23-A24

#### Mil A-8625F Classification

Type II Sulfuric Anodize

### Industry Standards

#### ISO 9001: 2008

Quality management system

#### Mil A-8625F Anodizing Standard

Anodic coatings for aluminum and aluminum alloys

### Aluminum Properties

**Alloy:** 5205

**Temper:** H34

**Finish:** Short Line (SL) Brushed

### Mechanical Properties

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

**YTS:** 15 min [103 MPa]

**Elongation:** 4% - 5% min

**T Bend:** Recommended 1t - 2t, min

### Chemical Properties

**Si:** 0.15 %

**Fe:** 0.7 %

**Cu:** 0.03 - 0.10 %

**Mn:** 0.10 %

**Mg:** 0.6 - 1.0 %

**Cr:** 0.10 %

**Zn:** 0.05 %

**Other:** 0.15 %

**Al:** Remainder

### Stock Gauge Availability <sup>1</sup>

0.032" (0.8 mm)

0.040" (1.0 mm)

### Stock Width Availability <sup>2</sup>

48.0" (1219 mm)

### Anodize Film Thickness

**Decorative Anodic Layer:**

0.250 mils [6.4 μm]

### Anodize Finish Properties

**Optical:** Not applicable

**Gloss:** Coarse Matte

**Color :** D042, Medium Bronze

**Color Target:** < Delta E of 5.0

**UV Stable:** Yes

**Environment:** Exterior

**Seal:** S3, Duplex Seal III

**Quality Grade:** 2

**Other:**

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



# TECHNICAL DATA SHEET

## Medium Bronze ColorIn® Short Line Brush

### 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 Mills
- 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 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](http://www.Lorin.com)

### Anodized Finish Test Data

Characteristic	Test Method	Standard	Test Results
Oxide Layer, Thickness	ASTM B244 - Eddy current method	AA Protective & Decorative coating less than 10.2 µm (0.400 mils) maximum	Nominal Target, 6.4 µm (0.250 mils)
Oxide Layer, Weight	ASTM B137 - Coating Dissolution		> 1.5 mg/cm <sup>2</sup> (9.7 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 ≤ 2.6
Gloss Uniformity	ASTM D523 - 60° Gloss Reflectance	Coarse, Matte Finish	Lorin Gloss E19, Nominal Target 15
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

**Copyright and Disclaimer:** The information described in this document is proprietary to Lorin Industries Inc. and is made available for information only. The test data contained in this document is the most current test data available at the time of printing. If you have any questions about the content or updated information, please contact us by email at [info@lorin.com](mailto:info@lorin.com) or call our toll-free number listed below.

◆ Toll Free 800.654.1159 ◆ International 231.722.1631 ◆ [www.Lorin.com](http://www.Lorin.com) ◆ [info@lorin.com](mailto:info@lorin.com) ◆

