



**ALUMAPLUS® LONG LINE BRUSH IS A PRODUCT DEVELOPED BY LORIN INDUSTRIES SPECIFICALLY FOR GENERAL USE AND INTERIOR APPLICATIONS.**

AlumaPlus® Long Line Brush has a thin anodize film thickness that make it quite versatile for many applications while providing the designer with an attractive alternative to stainless steel. The continuous brushed surface with a touch of gray provides an elegant finish that simulates the appearance of a brushed stainless steel without the huge price tag.

## INDUSTRY DESIGNATIONS

**Aluminum Association**  
AA-M12-C30-A23  
**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 ..... 5205  
Temper ..... Full Hard  
Finish ..... Long Line (LL) Brushed

## MECHANICAL PROPERTIES

UTS ..... 27 ksi min [186MPa]  
YTS ..... Not specified  
Elongation ..... 1% minimum

## 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

## ANODIZE FILM THICKNESS

**Decorative Anodic Layer:**

## ANODIZE FINISH PROPERTIES

Optical ..... Chemically Brightened  
Gloss ..... Not applicable  
Color ..... AlumaPlus  
Color Target ..... < Delta E of 5.0  
UV Stable ..... No  
Environment ..... Interior  
Quality Grade ..... 2  
Other ..... None

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

## WIDTH AVAILABILITY

48.5" (1232 mm)

*Other widths can be custom ordered.*

## GAUGE AVAILABILITY

0.0040" (0.10 mm)  
0.0050" (0.12 mm)  
0.0157" (0.39 mm)  
0.0240" (0.6 mm)  
0.036" (0.9 mm)  
0.040" (1.0 mm)  
0.048" (1.21 mm)  
0.050" (1.27 mm)  
0.063" (1.3 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 D385, Δ in Delta E ≤ 3.0
Film Hardness	ASTM D3363 - Pencil Hardness	Based on anodic thickness, 3 μm (0.125 mils)	4H Hardness
Seal Quality	ASTM B680 - Acid Dissolution shall be 40mg/dm <sup>2</sup> (2.6mg/in <sup>2</sup> )	AAMA 611-12, max weight loss	< 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%

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**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).