

# LORIN

## ClearMatt® Exterior Standard #1

## TECHNICAL DATA SHEET

**Finish Description:** ClearMatt® Exterior Standard #1 is a product developed by Lorin Industries and designed for both interior and exterior uses to support multiple applications. ClearMatt® Exterior Standard #1 product has an anodize film thickness that makes it quite versatile for applications requiring reasonable abrasion resistance and corrosion protection with limited exposure to the elements where the anodic layer is periodically cleaned and maintained. If the designer is looking for an anodized aluminum product with natural metallic beauty and formable for multiple exterior applications, then Lorin's ClearMatt® Exterior Standard #1 is the right choice.

### Reference Part Number (s)

0605-250-075      0605-250-062  
0605-250-067      0605-250-065  
0605-250-068

### Industry Designations

#### Aluminum Association

AA-M12-C22-A21

#### 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:** H34

**Finish:** Mill Finish

### Mechanical Properties

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

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

**Elongation:** 4% to 5% min

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

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

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)

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

48.0" (1219 mm)

### Anodize Film Thickness

**Exterior Standard #1:**

0.250 mils [6.4 μm]

### Anodize Finish Properties

**Optical:** Not Applicable

**Gloss:** Medium Matte

**Color:** Natural Aluminum

**Color Target:** Not Applicable

**UV Stable:** Yes

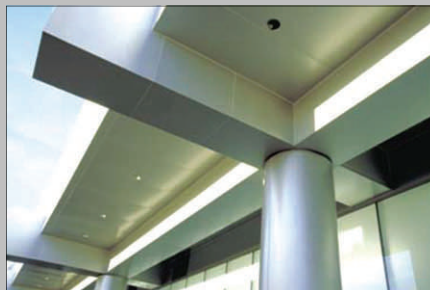
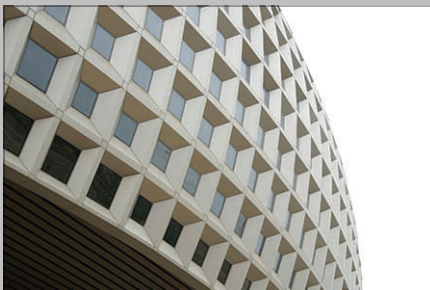
**Environment:** Interior and Exterior

**Seal:** S3, Duplex Seal III

**Quality Grade:** 2

**Other:** None

**Footnotes:** 1 - Other gauges can be custom ordered. 2 - Other widths 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 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 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](http://www.Lorin.com)

### Anodized Finish Test Data

Characteristic	Test Method	Standard	Test Results
<b>Oxide Layer, Thickness</b>	ASTM B244 - Eddy current method	AA Protective & Decorative coatings less than 10.2 µm (0.400 mils) maximum	Nominal Target, 6.4 µm (0.250 mils)
<b>Oxide Layer, Weight</b>	ASTM B137 - Coating Dissolution		> 1.5 mg/cm <sup>2</sup> (9.7 mg/in <sup>2</sup> )
<b>Gloss Uniformity</b>	ASTM D523 - 60° Gloss Reflectance	Medium Coarse, Matte Finish	Lorin Gloss E7H, Nominal Target 50
<b>Film Hardness</b>	ASTM D3363 - Pencil Hardness	Based on a anodic film thickness, 6.4 µm (0.250 mils)	9H Hardness
<b>Corrosion Resistance</b>	ASTM B117 - Neutral Salt Spray	500 hours, No Visible Pits	Pass, No visible pits
<b>Seal Quality</b>	ASTM B136 - Dye Stain	Dye Stain Test, No Stain Visible	Pass, No Visible Stain

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