



**LORIN'S PREMIRROR®
41 OPTIMA FINISH WAS
DEVELOPED TO PROVIDE
LIGHTING ENGINEERS WITH
A HIGH QUALITY SPECULAR
FINISH.**

Lorin's PreMirror® 41 Optima finish has also been used for interior decorative applications such as a furniture trim, hotel lobby accents and wall panels.

INDUSTRY DESIGNATIONS

Aluminum Association

AA-M11-C31-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 1090
Temper Full Hard
Finish BMF

MECHANICAL PROPERTIES

UTS 20—25 ksi [172 MPa]max
YTS 17—23 ksi [158 MPa]max
Elongation 1-3%
Bend Radil Recommended 3t min

CHEMICAL PROPERTIES

Si 0.10 %
Fe 0.12 %
Cu 0.04 - 0.06 %
Zn 0.03 %
Ti 0.04 %
Ga 0.03 %
Other 0.01 %
Al Remainder

ANODIZE FILM THICKNESS

Decorative Anodic Layer:

ANODIZE FINISH PROPERTIES

Optical N/A
Rs 60-100
D/I 90-100
15 degree 0-0.03
60° with Grain 710-880
60° against Grain 570-890
Gloss N/A
Color Natural Aluminium
Color Target N/A
UV Stable Yes
Environment Interior
Quality Grade 1
Other None

This product is available for exterior use; a minimum film thickness of 0.025 mils (6.4 µm) required - PreMirror® 11.

WIDTH AVAILABILITY

48.5" (1232 mm)

Other gauges can be custom ordered.

GAUGE AVAILABILITY

0.012" (0.3 mm)
0.020" (0.5 mm)
0.025" (0.6 mm)
0.032" (0.8 mm)

ANODIZED FINISH TEST DATA

CHARACTERISTIC	TEST METHOD	STANDARD	TEST RESULTS
Oxide Layer, Weight	ASTM B137 - Coating Dissolution		>0.4 mg/cm ² (2.3 mg/in ²)
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:

100% recyclable

Recycled Content = 0 %

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. 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 Lorin.com.