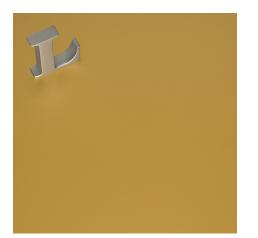
# GOLDMATT® DARK Technical Data Sheet



GOLDMATT® DARK IS A RICH COLOR DEVELOPED BY LORIN INDUSTRIES AND DESIGNED SPECIFICALLY FOR EXTERIOR APPLICATIONS WHERE FADE RESISTANCE IS IMPORTANT TO THE DESIGNER.

GoldMatt<sup>®</sup> Dark has an Architectural Class II anodize film thickness that provides excellent corrosion resistance and will maintain color consistency under harsh weathering conditions.

LORIN

### INDUSTRY DESIGNATIONS

Aluminum Association AA-M12-C22-A33 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..... Half Hard Finish..... Mill Finish

# MECHANICAL PROPERTIES

UTS	20-26 ksi [138-179 MPa]
YTS	15 min [103 MPa]
Elongation	4% to 5% min

### CHEMICAL PROPERTIES

Si 0.30 %
Fe 0.70 %
Cu 0.20 %
Mn 0.20 %
Mg 0.50 - 1.1 %
Cr 0.10 %
Zn 0.25 %
Other 0.15 %
Al Remainder

#### **ANODIZE FILM THICKNESS**

Architectural Class II:

### **ANODIZE FINISH PROPERTIES**

Optical	N/A
Gloss	Medium Matte
Color	Medium Gold
Color Target	< Delta E of 8.0
UV Stable	Yes
Environment	Interior and Exterior
Quality Grade	2
Other	None

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

### WIDTH AVAILABILITY

48.0" (1219 mm)

Other widths can be custom ordered.

### GAUGE AVAILABILITY

0.015" (0.4 mm) 0.020" (0.5 mm) 0.025" (0.6 mm) 0.032" (0.8 mm) 0.040" (1.0 mm) 0.050" (1.3 mm) 0.063" (1.6 mm)



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# ANODIZED FINISH TEST DATA

CHARACTERISTIC	TEST METHOD	STANDARD	TEST RESULTS
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 $\Delta$ in Delta E	AAMA 611-12, Must meet agreed upon specification	Lorin Color D0093, $\Delta$ in Delta E $\leq$ 4.0
Gloss Uniformity	ASTM D523 - 60° Gloss Reflectance	AAMA 611-12, Must meet agreed upon specification	Lorin Gloss E1D, Nominal Target 30
Abrasion Resistance	ASTM D4060 - Taber abrasive wheel	Based on a anodic film thickness, 10 $\mu m$ (0.400 mils)	5,000 cycles; 8.2 mg / wgt loss; 1.6 wear index
Film Harness	ASTM B136 - Dye Stain	Based on a anodic film thickness, 10 $\mu m$ (0.400 mils)	9H Hardness
Corrosion Resistance	ASTM B117 - Neutral Salt Spray	AAMA 611-12, 1,000 hours ≤ 15 pits less than 1mm 381 cm² (150in²)	Pass, No visible pits
Weathering	SAE J1960 - ATLAS Accelerated testing using an Xenon Arc light source	AAMA 611-12, 10 year Florida Exposure with max $\Delta$ Delta E of 5.0	Currently in Test Chamber
Craze Resistance	AAMA 611-12 - Thermal Crazing of the oxide layer	AAMA 611-12, oxide layer shall not craze less than $82^{\circ}C$ ( $120^{\circ}F$ )	No visible evidence of Thermal Crazing
Seal Quality	ASTM B680 - Acid Dissolution	AAMA 611-12, max weight loss shall be 40mg/dm <sup>2</sup> (2.6mg/in <sup>2</sup> )	< 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%

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.

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