



# **ANTIQUE BRASS BRUSH LL** IS A FINISH DEVELOPED FOR INTERIOR / EXTERIOR APPLICATIONS WHERE UV FADE **RESISTANCE IS IMPORTANT TO** THE DESIGNER.

Available with a .250 film thickness for interior use, or with an Architectural Class II finish utilizing a .425 film thickness for exterior use. This anodizing process is a 'modified' two-step electrolytic coloring system. The combination of an Architectural Class II film thickness with the inorganic coloring chemistry provides excellent corrosion resistance while maintaining color consistency under harsh weathering conditions.

#### **INDUSTRY DESIGNATIONS**

Aluminum Association AA-M12-C22-A34 Mil A-8625F Classification Type II Sulfuric Anodize

# **INDUSTRY STANDARDS**

#### AAMA 611-12

Voluntary Specification for Anodized Architectural Aluminum

Mil A-8625F Anodizing Standard

Anodic Coatings for Aluminum and Aluminum Alloys

# **ALUMINUM PROPERTIES**

Alloy	5205
Temper	Full Hard
Finish	Brush LL

## MECHANICAL PROPERTIES

UTS	27 ksi min [186 MPa]
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 %
AI	Remainder

#### **ANODIZE FILM THICKNESS**

Architectural Class II:

#### **ANODIZE FINISH PROPERTIES**

Optical..... N/A Gloss ..... N/A Color..... Antique Brass Color Target ...... < ∆ Delta E of 5.0 UV Stable..... Yes Environment...... Interior or Exterior 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**

0.015" (0.3 mm) 0.024" (0.6 mm)







# **ANODIZED FINISH TEST DATA**

CHARACTERISTIC	TEST METHOD	STANDARD	TEST RESULTS
Oxide Layer, Weight	ASTM B137 - Coating Dissolution	AAMA 611-12, 2.4mg/cm² (15.5mg/in²)	> 2.4mg/cm²(15.5mg/in²) (0.425 mils)
Abrasion Resistance	ASTM D4060 - Taber abrasive wheel	Based on a anodic film thickness, 11 $\mu m$ (0.400 mils)	5,000 cycles; 8.2 mg/weight loss 1.6 wear index (0.425 mils)
Film Hardness	ASTM D3363 - Pencil Hardness	Based on a anodic film thickness, 11 $\mu m$ (0.400 mils)	9H Hardness (0.425 mils)
Corrosion Resistance	ASTM B117 - Neutral Salt Spray	AAMA 611-12, 1,000 hours $\leq$ 15 pits $<$ 1mm, 381 cm <sup>2</sup> (150in <sup>2</sup> )	Pass, No visible pits
Weathering	SAE J1960 - ATLAS Accelerated testing using an Xenon Arc light source	AAMA 611-12, 10 year Florida Exposure max $\Delta$ Delta E of 5.0	$\Delta$ Delta E of 2.33; 23,326 hrs [equivalent 11.8 years South Florida Exposure and 9.4 Arizona (0.250 mils)
Craze Resistance	AAMA 611-12 - Thermal Crazing of the oxide layer	AAMA 611-12, oxide layer shall not craze less than 82°C (120°F)	No visible evidence of Thermal Crazing
Seal Quality	ASTM B680 - Acid Dissolution	AAMA 611-12, max wgt loss shall be 40mg/dm² (2.6mg/in²)	< 20mg/dm <sup>2</sup> (1.3mg/in <sup>2</sup> ) (0.425 mils)

# **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, 5205 alloy:

100% recyclable

Recycled Content, 6.6%

Reclaimed-Virgin Material, 93.4%

2012.04.30 Mill6

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 <a href="info@lorin.com">info@lorin.com</a>. 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 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 Lorin.com.





