ARCHITECTURAL ANODIZE FINISHES

Natural Coating / UV Resistant / Low Maintenance







ANODIZING Anodizing is the process of electrochemically accelerating and controlling the oxidation of an aluminum substrate, creating an extremely hard, durable and aesthetically pleasing coating on the aluminum. Architectural anodize finishes are limited to certain colors; however their hardness and scratch-resistance far surpass that of paint coatings.

QUALITY Our automated system controls and monitors your product through the entire anodizing process. It tracks all aspects of the process including tank sequencing, voltage, current, time and temperature, ensuring the most consistent anodize finish available.

CARE & CLEANING Anodized material has an extremely hard surface that is colorfast and mar resistant. An anodized finish should be cleaned using mild soap solutions to retain its original beauty. The cleaning solution should be applied with a soft cloth, sponge or brush. Avoid the use of acidic or alkaline cleaners. To avoid damage to the finish, anodized aluminum should be placed into walls after mortar has cured. Any uncured masonry product that is not immediately removed from the anodized aluminum will destroy the finish, sometimes beyond repair.

MATERIAL SIZE GUIDELINES

STANDARD

Length 28' 6" (342") Height 6' 6" (78") Width 13" Weight per load 1800 lbs

CUSTOM / OVERSIZE

Length	30' 6" (366")
Height	6' 6" (78")
Width	3' (36")
Weight per load	1800 lbs

AAMA ANODIZE SPECIFICATIONS

	AAMA	611
South Florida Weathering	CLASS I	CLASS II
End Use	Exterior	Interior or exterior with regular maintenance
Film Thickness	0.7 mils	0.4 mils
Salt Spray Resistance	3000 hours	1000 hours
Color Retention	10 yrs - fade = 5 Delta E	10 yrs - fade = 5 Delta E
Gloss Uniformity	15 unit Variation	15 unit Variation
Hardness	Excellent	Very Good
Gloss Options	4-30	4-30
Effect of Poor Quality Substrate	Significant	Significant
Warranty	5 to 10 years	N/A

THE CARE AND CLEANING OF ANODIZED ALUMINUM

Anodized material has an extremely hard surface that is very colorfast and mar resistant. A Class I clear or color anodized finish applied by a high-quality anodizer specializing in architectural finishing will provide consistent color and long product life in a variety of applications.



Much like painted surfaces, an anodized finish should be cleaned using mild soap solutions to retain its original beauty. Products that are safe for use with bare hands, including most commercial cleaning products, can be safely used. The cleaning solution should be applied with a soft cloth, sponge or brush. Avoid the use of strong acid or alkali cleaners. Severely soiled anodized surfaces can be cleaned a little more aggressively than painted surfaces. For example, slight scuff marks and rub marks on an anodized surface can be removed with a mild abrasive pad such as the 3M Scotch-Brite™ pad. Use the pad to remove the mark, and then clean the surface using the mild soap solution. Rinse the surface thoroughly with clean water and dry with a soft cloth.

As with painted surfaces, in coastal areas where the finish is exposed to salt spray or in areas containing heavy industrial pollutants, the cleaning should take place as part of a regular maintenance program.







The Anodized Process

ANODIZING:

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COLORS:

- Clear ANO-215 AE
- Champagne ANO-300 AE
- Light Bronze
 ANO-301 AE
- Medium Bronze
 ANO-302 AE

- Dark Bronze
 ANO-303 AE
- Extra Dark Bronze ANO-304 AE
- Black ANO-305 AE
- Copper ANO-630 AE

BENEFITS:

- Durability and Abrasion Resistance | Extremely hard and wear-resistance surface
- Anodizing protects and maintains the structural integrity of the aluminum
- Eco-friendly process. Non-hazardous; produces no harmful or dangerous by-products

QUALITY:

Linetec employs a computer-controlled hoist system to guide material through the anodize process eliminating any chance of manual variations in pre-cleaning, etching, anodizing, coloring or sealing. This ensures the most consistent and durable finish on every load. This computer-controlled system tracks all aspects of the process including; tank sequencing, time, temperature, voltage, current, etc. It ensures all material with the same job and process specification is moved through the same solutions for the same amount of time.

WARRANTY:

Standard five (5) year, or optional ten (10) year extended warranty in compliance with AAMA 611 Class 1 Specifications.

VARIATION:

Anodized aluminum is a natural finish, therefore you can and should expect variation from panel to panel. The color obtained in the anodizing process is dependent on many factors such as; aluminum alloy, temper and shape, therefore it is not possible to produce an exact color match from panel to panel. Additional factors that contribute to variation are; multiple batches of aluminum, panel configurations, tempers / heat lots of aluminum, and number of production releases. If finish variation is not accepted, a PVDF or FEVE painted finish should be presented to the design team and/or owner.

Memorandum of Understanding of The Anodized Process

Zeeff Panel Systems will be producing materials with an anodized color which is electrochemically deposited. The purpose of this document is to formally confirm the understanding of Zeeff Panel Systems contracted customer that they are fully aware of anodizing capabilities and accept anodizing industry standards. In accordance with AAMA 611 Class 1 Specifications, there is a normal color variation range, you can and should expect variation from panel to panel. Variation will not be a cause for rejection in anodized materials.

By approving the below, both Zeeff Panel Systems and contractual customer understand and agree that there will be natural variation as outlined in this document as it relates to the anodizing process of materials.

Customer	Zeeff Panel Systems	
Approved by:		Issued by:
Date Approved:		Date Issued:
Authorized Signature:		Authorized Signature:



Linetec warrants to its direct customer that Class I Anodize coating applied by Linetec, to aluminum material for a period of five (5) years from the effective date, but the effective date must not be later than six (6) months from Linetec initial date of anodize application, against defective materials or workmanship which could result in:

- a) Will not chip, crack or peel when viewed at a distance of 3 meters; this does not include minute fracturing which may occur in proper fabrication of building parts.
- b) Will not chalk in excess of ASTM D-4214 number eight (8) rating, determined by the procedure outlined in ASTM D-4214 specification test. Excludes all corrosion-related conditions.
- c) Will not change color more than five (5) Delta-E Hunter units (square root of the sum of square Delta L, Delta a, and Delta b) as determined by ASTM method D-2244. It is acknowledged by Customer that fading or color changes may not be uniform if the surfaces are not equally exposed to the sun and elements.

If Linetec anodize coating is found and verified to be defective by Linetec under this Limited Warranty, Linetec will repair or replace the part showing the failure, at its sole discretion.

Linetec assumes no responsibility for and this Limited Warranty and this Limited Warranty does not cover failures arising from:

- o Acts of nature:
- o Fire, floods or other casualty or physical damage;
- o Government restrictions;
- o Acts of aggression or terrorism by an y person or entity;
- o Harmful fumes or foreign substances in the environment;
- o Improper storage or packaging of the part or product before installation (e.g. water damage due to condensation);
- o Product failure due to improper usage and/or application;
- o Failure to provide reasonable routine and documented maintenance, and/or improper maintenance, including, but not limited to, use of chemical cleaning agents not in accordance with AAMA recommendations or failure to use a systematic maintenance cleaning program in areas of high salt concentration;
- o Corrosive atmosphere found in the interior of buildings, which affect the interior surface of material;
- o Standing or ponding water on the metal;
- o Excessive building movements;
- o Work performed or materials supplied by others;
- Post forming or welding of parts; Improper treatment of finished material, such as scratching or abrading during fabrication or installation;
- o Defects in the metal or in the fabrication (e.g. die lines, pitting, travel marks, etc.);
- o Previously painted material unless it has been stripped to bare aluminum by Linetec;
- Material which is used outside the continental U.S. or Canada, unless expressly approved in writing by Linetec;
- o Corrosion of the metal substrate for any reason;
- o Any external contaminant or condition which causes coating degradation or delamination;

- o Finish deterioration originating from unpainted or exposed metal, such as unfinished saw cuts, unfinished joinery edges, punches, weep holes, or drill holes; Incompatibility between materials, including, but not limited to, galvanic corrosion due to contact with adjacent dissimilar metals such as stainless steel, etc;
- o Damage due to the use of adhesive tapes, sealants or mastics:
- o Damage to the painted metal occasioned by moisture or other contamination detrimental to the finish because of improper storage of the finished metal prior to installation as outlined in AAMA Publication 10, "Care and Handling of Architectural Aluminum From Shop to Site."

Customer's exclusive remedy is limited to the legal remedies described in this Limited Warranty. This Limited Warranty shall be void if payment from Customer is not received within the period listed in Customer's contract or PO or in the absence of a specific time period within a commercially reasonable time frame. This Limited Warranty is provided in lieu of any other warranty requirements or obligations, including those of project specifications, general conditions or other documents.

LINETEC MAKES NO OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, REGARDING ITS PRODUCTS, OR ITS SELECTION AND APPLICATION, INCLUDING, BUT NOT LIMITED TO, COMPLIANCE WITH BUILDING CODES, SAFETY CODES, LAWS, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Total liability for Linetec under this Limited Warranty for any reason or origin is limited in total to the original purchase price for finishing the part(s). This Limited Warranty is extended solely to the Customer. It is nontransferable and non-assignable, and the Customer shall not permit or authorize its employees, agents, representatives or customers to claim, represent or imply that this Limited Warranty extends or is available to anyone other than the Customer.

Linetec will not be liable for indirect, incidental or consequential damages of any kind. The warranty of any products replaced or repaired under this Limited Warranty shall be limited to the remainder of the original Warranty period. Linetec reserves the right to reasonable field access to diagnose and repair any product alleged to be defective. This Limited Warranty may not be modified upon written approval of Linetec's president.

Notice of claim under Linetec's Limited Warranty must be provided to Linetec in writing within 30 days of discovery of the facts giving rise to the claim and should be directed to: Linetec, Attn: President, 7500 Stewart Avenue, Wausau, WI 54401.

SAMI	PLE
Jon Close, President	Date
/	
Customer:	
Effective Date:	
Project #:	
Project Name, City & State:	
Anodize Code:	



Linetec warrants to its direct customer that Class I Anodize coating applied by Linetec, to aluminum material for a period of ten (10) years from the effective date, but the effective date must not be later than six (6) months from Linetec initial date of anodize application, against defective materials or workmanship which could result in:

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LINETEC MAKES NO OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, REGARDING ITS PRODUCTS, OR ITS SELECTION AND APPLICATION, INCLUDING, BUT NOT LIMITED TO, COMPLIANCE WITH BUILDING CODES, SAFETY CODES, LAWS, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Total liability for Linetec under this Limited Warranty for any reason or origin is limited in total to the original purchase price for finishing the part(s). This Limited Warranty is extended solely to the Customer. It is nontransferable and non-assignable, and the Customer shall not permit or authorize its employees, agents, representatives or customers to claim, represent or imply that this Limited Warranty extends or is available to anyone other than the Customer.

Linetec will not be liable for indirect, incidental or consequential damages of any kind. The warranty of any products replaced or repaired under this Limited Warranty shall be limited to the remainder of the original Warranty period. Linetec reserves the right to reasonable field access to diagnose and repair any product alleged to be defective. This Limited Warranty may not be modified upon written approval of Linetec's president.

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Jon Close, President	Date
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