

2022 Architectural Support Data



Beauty.
Durability.
Functionality.
Security.





From backyard pools to industrial applications,
we have your protection solution.

Why Alumi-Guard®

Alumi-Guard Brand has been providing innovative, high-quality aluminum fencing, railing and gate systems to professional contractors, architects, builders and homeowners for decades. We have a wide variety of elegant, durable and low-maintenance products — available in several different grades, designed to protect homes, businesses, municipalities and proudly securing some of our nation's military facilities. Our engineered systems help to reduce labor costs, while maintaining the highest quality finishes available within our market — all at a great value.

Through out superior testing and procedures, we have earned the approved applicator distinction by some of the industry's top powder-coating manufacturers due to our superior testing and procedures. Alumi-Guard has been named one of the "Top 50 Powder-Coat Shops in the U.S." for over six years running by *Products Finishing* magazine. No other fence manufacturer has been named to this list.

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Architects

Alumi-Guard® is a leader in the Aluminum Fence and Gate industry. Our large selection of maintenance-free aluminum fence, railing, and gates are built in state-of-the-art manufacturing facilities throughout the United States. Expert craftsmanship, short lead times and unparalleled customer service have become the hallmarks of the Alumi-Guard brand.

Alumi-Guard's powder coating process has been rigorously tested and certified by AkzoNobel. All of our colors meet or exceed the harsh requirements established by the AAMA 2604-21 performance specifications. Available in seven classic colors, Alumi-Guard aluminum fence, railing and gates are available in all fifty states and Canada. All Alumi-Guard products are protected by a Limited Lifetime Warranty.

Alumi-Guard's Architectural Services Department is a trusted resource for the architectural and spec-writing community. The department helps bridge the gap between Architects, the manufacturing facility and the sales staff. If your firm is working on a project that requires job specific drawings or custom specifications, we would appreciate the opportunity to assist you with drawings and specifications for your project.

We offer additional information and support for Alumi-Guard powder coating and sealed drawings from our team of professional engineers who can provide load capacities and more. If you have questions regarding Alumi-Guard Aluminum Fence, Gates, Guardrail (balcony type), or ADA Handrail — or if you have questions about whether or not our products are right for your project, we are here to help guide you to the right product for your job.

Best regards,

Taylor Coley

Taylor Coley, CSI

ManagerArchitect Services

352-458-5568 | tcoley@alumi-guard.com



Recycled Aluminum



The Sustainable Choice

As an environmentally aware company, we take great pride in our recycling efforts. In addition to recycling 100% of all aluminum, paper, and plastic scrap, we have installed energy efficient lighting and we've moved to paperless where we can. Our new high efficiency coating booths produce less than 1% of powder waste annually and we recycle 90% of evaporate coolant water. We care about our impact on the environment and will continue to incorporate new processes and ideas in order to reduce, recycle, or eliminate any and all waste products – now and in the future.

Education & Live Learning
Free Continuing Education Course
AECDaily.com

Course Title: Coating of Aluminum Extrusions

Our HSW certified program provides an overview of aluminum extrusion coatings.

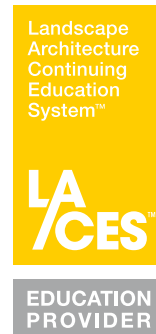
Discussions include:

- The aluminum extrusion process, a comparison of powder and liquid coatings.
- An overview of the chrome and the chrome-free pretreatment processes.
- Performance objectives of Fenestration and Glazing Industry Alliance or AAMA, testing standards and their contribution towards LEED points.

At the end of this program, participants will be able to:

- List the steps in extrusion manufacturing and describe the benefits of extrusion and an aluminum forming process.
- Compare powder coating to liquid coating and list the environmental, performance, and cost advantages of powder coating.
- Describe the powder coating process and identify steps that ensure an environmentally sound process. Describe the performance objectives of AAMA 2603, AAMA 2604, and AAMA 2605.

*“One of the
Top Finishing Shops in
North America
for the Seventh
consecutive year.”*



Environmental and Green Initiatives

We partner with local foundries that produce our extrusions with 80% recycled materials from local sources. Aluminum is the most abundant metal on earth and is one of the most recycled products. Recycling aluminum uses about 5% of the energy required to create aluminum from bauxite. Additionally, recycled aluminum saves 95% of the greenhouse gas emission from primary aluminum production and can be recycled indefinitely with no loss in quality. The installation of Alumi-Guard products contributes towards obtaining LEED points within the USGBC System.

The powder coating used on all Alumi-Guard products offers an environmentally friendly solution for architectural environments. With no solvents and virtually no VOCs, the powder coating process results in a cleaner, safer finishing operation. High transfer efficiencies (up to 98 percent), achieved through reclamation, and fewer rejects, make it one of the most efficient coating solutions on the market. These powders are formulated to meet the rigorous 2604-21 specifications of the Fenestration and Glazing Industry Alliance or AAMA and also qualify for LEED Green Building credits. There is only 1% ± of waste from our coating line.



The recycling possibilities are endless

LEED v4 Contribution

When specifying a fencing material, bear in mind that the use of aluminum extrusions in building projects can contribute to LEED points earned on a project in the following areas:

- Building Product Disclosure and Optimization - EPDs
 - Option 1: EPD 1 point and/or
 - Option 2: Multi-attribute Optimization 1 point
- Building Product Disclosure and Optimization — Material Ingredients
 - Option 1: Material Ingredient Reporting 1 point and/or
 - Option 2: Material Ingredient Optimization 1 point and/or
 - Option 3: Product Manufacturer Supply Chain Optimization 1 point
- Building Product Disclosure and Optimization - Sourcing of Raw Materials Requirements
 - Option 1. Raw Material Source and Extraction Reporting 1 point
 - Option 2. Leadership Extraction Practices 1 point

Source: USGBC. "LEED Credit Library" www.usgbc.org/credits Accessed February 2020.

MI Metals, Inc.



To Whom It May Concern:

MI Metals Florida supplies its customers with extrusions made from 75% recycled (secondary) 6XXX series of aluminum alloys. This material is received and recycled from local suppliers. The remaining 20% of our production is from primary billet which typically contains 3 – 5% recycled aluminum. All of MI Metals' end aluminum products are 100% recyclable with no downgrading of the material qualities. Over 30% of the aluminum produced worldwide now comes from secondary sources (recycled material). The re-melting of aluminum requires little energy as well; only about 5 percent of the energy required to produce the primary metal initially is needed in the recycling process.

MI Metals Florida supplies Alumi-Guard with 6XXX alloy that is produced from secondary billet extruded in our Oldsmar Florida facility and shipped via truck.

Brook Massey

Brook Massey
Plant Manager
MI Metals, Inc.

Arizona

7555 East State Rt. 69 • Prescott Valley, AZ
P: 928-772-7000 • F: 928-772-6040

Pennsylvania

1517 Route 209 • Millersburg, PA 17061
P: 717-692-4851 • F: 717-692-5264

Florida

PO Box 1128 • 301 Commerce Blvd.
Oldsmar, FL 34677
P: 813-855-5695 • F: 813-855-6677

Tennessee

704 12th Ave. • Smyrna, TN 37167
P: 615-459-4161 • F: 615-223-2380

Hydro Extrusion, North America

RE: Recycle Content of Aluminum Billet



To Whom It May Concern:

The extrusion billet produced by Hydro Extrusion North America St. Augustine Operation's from 1/1/2019 through 12/31/2021 was produced utilizing re-melted aluminum scrap, prime ingot, and alloying elements. This billet consists of approximately 23.7% virgin metal units from primary smelters with the remaining 76.3% consisting of reclaimed or scrap material; 3.9% of the reclaimed scrap consumed is post-consumer with the remaining 72.4% being pre-consumer.

Cast #	Finish Casting	Dia	IMS	Pre-Consumer Scrap	Post Consumer Scrap	New Content Total
All	12/31/2018	7, 8, 9, & 10	All	72.4%	3.9%	23.7%
			6061	83.9%	2.8%	13.3%
			6063	67.2%	4.2%	28.6%
			6005	67.8%	5.2%	27.0%

These values are based on the average for all billet produced over the listed time frame.

Aluminum is a virtually infinitely recyclable material. The re-melting process produces very little waste; generally less than 2% of the total volume re-melted by weight is lost due to oxidation. All extrusion billet produced by Hydro Extrusion St. Augustine Remelt is produced via the re-melting process.

Scrap availability and type can fluctuate drastically; recycled content in the future may differ from previous values.

Should you require any further information for a specific cast, alloy, or have a desire in Leeds certified billet, please contact me directly.

Regards,

Will Staller
Remelt Manager

Hydro
Extrusion North America 200 Riviera Blvd.
Saint Augustine, FL 32086 | USA
904-794-1500 | www.hydro.com

February 8, 2021

Barrette Outdoor Living Brooksville, FL Facility Provides High Performance Coatings For Their Guardrail and Aluminum Fencing Product Lines

Barrette Outdoor Living's Alumi-Guard Division in Brooksville, FL is a leading manufacturer of fence and guardrail in the residential and commercial market. This facility has recently completed testing and has been certified as an Approved Architectural Applicator for the Interpon[®] D2000 powders to the architectural market. The certification and continuous auditing of the Barrette Outdoor Living Brooksville, FL production facility insures that the coating process meets the stringent AAMA 2604 specification requirements for aluminum products supplied in the architectural market. (The AAMA specification is a voluntary test protocol to assess durability performance of coatings on aluminum products in the architectural market.)

Barrette Outdoor Living, Brooksville, Florida uses Bulk Chemical E-CLPS[®]2100 chrome-free pretreatment system designed specifically for aluminum substrate and AkzoNobel supplies powder coatings that meet the AAMA 2604 performance criteria. AkzoNobel in partnership with Bulk Chemical and Barrette Outdoor Living routinely perform auditing testing to verify that the coating system is meeting these AAMA 2604 specification requirements. ASTM B117 Neutral Salt Spray Testing which measures the accelerated corrosion performance of the coating system is a critical test for AAMA 2604 performance specification.

AAMA 2604 testing specifies that the aluminum substrate must pass 3000 hours per ASTM B117 procedure. AkzoNobel has done extended ASTM B117 testing of 10,000 hours on the coating system Brooksville, Florida facility. At 10,000 hours, the substrate panels had passing results as defined by AAMA 2604. This testing confirms that the Barrette Outdoor Living Brooksville, Florida facility coating system far exceeds the corrosion performance requirements of AAMA 2604 by a factor of 3X. Barrette Outdoor Living's customers can be reassured that they are getting a very high-quality coating performance on the guardrail and aluminum fence products coming off the manufacturing lines at the Brooksville, Florida facility.

Bryan Martin
Account Manager

AkzoNobel Powder Coatings
150 Columbia Street | Reading, PA 19601
610-685-7600 | www.interpon.com

City Utilities

RE: Letter of Recommendation



July 8, 2022

To Whom It May Concern:

I was first introduced to Alumi-Guard in 2012 during the design of the City Utilities Bus Storage/Fuel Wash Facility located in Springfield, Missouri. At that time I was the project architect with the architectural design firm that contracted with City Utilities to design this project. The five acre project site required a complete perimeter security fencing along with seven automatic gates. During the design phase of the project I worked with Matt Nemnich (Midwest Territory Manager) and Taylor Coley (Manager, Architect Services) of Alumi-Guard. Both Matt and Taylor were extremely effective in helping me select the correct fence system and gate operators for this project. Taylor's expert knowledge of the fence systems and components insured our plans and specifications were highly detailed and complete prior to bidding project for construction. Alumi-Guard provided an excellent service in regard to providing architectural cad drawings, specifications and technical assistance to both the engineers and myself for the project. In 2014 I worked with Alumi-Guard again on the Saint Charles Public Works Maintenance Facility located in Saint Charles, Missouri. The same quality of customer service was found during the construction drawing process of this project as well.

After coming to work for City Utilities of Springfield in 2015 I again called upon Alumi-Guard to help assist me with some issues we were having with some large industrial sliding cantilever gates. Matt with Alumi-Guard met me onsite to review and discuss the options for correcting the issues. Alumi-Guard followed up by sending detailed information for making corrections to gates.

During my 20 years of practicing architecture I have worked with many manufactures representatives and found Alumi-Guard's service/support to be one of the best. I would highly recommend Alumi-Guard to assist you on your next project.

Tyler J. Peck, AIA
Supervisor-Facility Services

301 East Central Street
Springfield, MO 65802
417-863-9300 | cityutilities.net

Alumi-Guard Is One Of Top Finishing Shops In U.S.

Products Finishing magazine names Alumi-Guard to the ‘Top Shops’ list for the Seventh consecutive year! CINCINNATI, Ohio – Alumi-Guard, a division of Barrette Outdoor Living, has been named one of the best finishing shops in the U.S., according to an industry benchmarking survey conducted by Products Finishing magazine, a trade publication which has covered the industry since 1938.

The magazine conducted an extensive benchmarking survey that analyzed a company in several different areas, including Current Finishing Technology, Finishing Practices and Performances, Business Strategies and Performances, and Training and Human Resources.

Only the top 50 shops were given the honor of being a Products Finishing magazine ‘Top Shop’ based on a scoring matrix of those four criteria.

Alumi-Guard has established itself as one of the best finishing operations in the industry,” said Tim Pennington, editor of Products Finishing magazine. “The criteria we used was very stringent, and only the finishing shops that excelled in all four areas made the list. Alumi-Guard is in rare air when it comes to finishing operations.”

Alumi-Guard is located at 2401 Corporate Blvd. in Brooksville, FL. Alumi-Guard manufactures Powder Coated Ornamental Aluminum fence, gates and guardrail products. The powder coating meets or exceeds the stringent FGMA 2604-21 requirements.

“We are extremely excited and pleased to be named one of Products Finishing magazine’s ‘Top Shops’,” said Chip Howison, Vice President of Operations at Alumi-Guard. “Our employees and management team have worked very hard to be the best in the industry, and to provide our customers with quality service.”

Contact:

Chip Howison
Vice President - Operations

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Brooksville, FL 34604
352-754-2529 | Chowison@alumi-guard.com

PF Products Finishing
6915 Valley Avenue
Cincinnati, OH 45244-3029
513-527-8800 | www.pfonline.com

AAMA Standards Comparison

Organic Coatings on Aluminum Extrusions and Panels

Attribute	AAMA 2603-21 (Pigmented Coatings)	AAMA 2604-21 (High Performance Coatings)	AAMA 2605-21 (Superior Coatings)
Minimum Initial Dry Film Thickness	> 20 microns (0.8 mil) for 80% of measurements, >17 microns (0.68 mil) or 85% of film thickness specified.	> 30 microns (1.2 mil) for 80% of measurements, >25 microns (0.68 mil) or 85% of film thickness specified.	> 30 microns (1.2 mil) for 80% of measurements, > 25 microns (1.0 mil) or 85% of film thickness specified.
Specular Gloss (per ASTM D 523)	Within + 5 units of manufacturer's recommended values		
Outdoor Weathering Exposure Time	1 year, South Florida	5 years, South Florida	10 years, South Florida
Chalking Resistance (After Weather Exposure) (ASTM D 4214, Met. A)	Slight Change Allowed	5 years: Chalk < 8 rating	10 years: Chalk < 8 rating for colors, <6 rating for white
Color Retention(After Weather Exposure)	Slight Change Allowed	5 year fade: delta E <=5	10 year fade: delta E <= 5
Gloss Retention (After Weathering)	Slight Change Allowed	5 years >= 30% retention	10 years >= 50% retention
Erosion Resistance (After Weathering)	No Specification	5 years < 10% loss	10 years < 10% loss
Impact Resistance	No film removal from Substrate at initial test (not subject to weathering exposure)		
Humidity Resistance (per ASTM D 2247 or D 4585)-no visually apparent change and few" blisters < size 8 per ASTM D 968)"	1500 hr at 100°F & 100% humidity	3000 hr at 100°F & 100% humidity	4000 hr at 100°F & 100% humidity
Chrome Pretreatment	No Specification	If used, >= 30 mg/ft2 by weight	If used, >= 40 mg/ft2 by weight
Abrasion Resistance (per ASTM D 968)	No Specification	Abrasion Coefficient >=20	Abrasion Coefficient >= 40
Salt Spray Corrosion Resistance (per ASTM B117)	1500 hr < 8 blisters, > 7 scribe	3000 hr < 8 blisters, > 7 scribe	N/A
Salt Spray Corrosion Resistance (per ASTM G85, Annex A5)	N/A	N/A	2000 hr < 8 blisters, > 7 scribe
Chemical Resistance	No loss of adhesion, blistering or visually apparent change after exposure to muriatic acid, mortar and detergent	No loss of adhesion, blistering or visually apparent change after exposure to muriatic acid, mortar, detergent, window cleaner and nitric acid	
Sealant Compatibility	Sealant must meet AAMA 800 and have no effect on coating		
Boiling Water Film Adhesion	No Specification	No loss of adhesion after 20 minutes in 212°F water	
Color Uniformity	No variation outside of limits established by color range sample approval		
Dry Film Hardness	"H" Minimum. No rupture when tested per ASTM D 3363	"F" Minimum. No rupture when tested per ASTM D 3363.	
Dry & Wet Film Adhesion	Meet requirements of ASTM D 3359		
T-Bend Test for Coating Flexibility	No Specification	Minimum of 2-T flexibility with no pick-off at the area of the bend.	



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