



Powder Coating

Barrette
OUTDOOR LIVING 



Oldcastle APG
A CRH COMPANY

BOL Aluminum Fence



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ALUMINUM POWDER COATING PROCESS

What is Powder Coating?

Powder coating is a dry finishing process used to coat a metal substrate. It utilizes a polymer resin system combined with curatives, pigments, leveling agents, flow modifiers and other additives. These ingredients are melted, mixed, cooled and ground into a powder similar in consistency to baking flour.

Once the metal part that is being coated completes a multi-step cleaning and rinse process, it enters a powder coating chamber where a process called electrostatic spray deposition (ESD) is used to apply the powder coating to the metal. This application process uses multiple spray guns to apply an electrostatic charge to the powder particles which are then attracted to the grounded metal part.

After the powder is applied, the parts enter a curing oven where the heat creates a chemical reaction that produces long molecular chains in the coating — permanently adhering the coating to the part. The end result is a finish that is similar to liquid paint, but one that is extremely durable.

Powder coating is used for many different applications — from products like children's toys and office furniture — to automobiles, heavy machinery and the aluminum products that are manufactured at Barrette Outdoor Living.



What Makes Powder Coating an Environmentally Friendly Process?

Since powder coating does not use solvents or chemicals like liquid paints, the process releases less pollutants into the air and leaves a smaller carbon footprint.

Through the ability to reclaim and reuse over-sprayed material — unlike excess liquid paint that needs to be disposed — the powder coating process generates no hazardous waste. Powder coating reduces CO2 emissions by up to 60% compared to liquid paint.



BOL achieves 10,000 hrs + salt spray which means the coating is highly secured to the alum substrate

AAMA SPECIFICATION COMPARISON CHART FOR SPRAY COATING ON EXTRUSIONS

PERFORMANCE TEST	AAMA 2603	AAMA 2604	AAMA 2605	
ADHESION	Dry Film Hardness	No coating rupture	No coating rupture	No coating rupture
	Dry Adhesion	10% coating removal	No coating removal	No coating removal
	Wet Adhesion	10% coating removal	No coating removal	No coating removal
	Boiling Water Adhesion	Not applicable	No coating removal	No coating removal
	Impact Resistance	No coating removal	No coating removal	No coating removal
	Abrasion Resistance	Not applicable	ACV 20 minimum	ACV 40 minimum
CHEMICAL	Muriatic Acid Resistance	No blistering, no visual change	No blistering, no visual change	No blistering, no visual change
	Mortar Resistance	No loss of film adhesion or visual change	No loss of film adhesion or visual change	No loss of film adhesion or visual change
	Nitric Acid Resistance	Not applicable	Color change Delta E < 5	Color change Delta E < 5
	Detergent Resistance	No loss of adhesion	No loss of adhesion	No loss of adhesion
	Window Cleaner Resistance	Not applicable	No blistering or change in appearance	No blistering or change in appearance
WEATHER	Humidity Resistance	1,500 hours formation of blisters Size No. 8	3,000 hours formation of blisters Size No. 8	4,000 hours formation of blisters Size No. 8
	Salt Spray Resistance	1,500 hours 1-2mm creepage, formation of blisters Size No. 8	3,000 hours 1-2mm creepage, formation of blisters Size No. 8	4,000 hours 1-2mm creepage, formation of blisters Size No. 8
	Erosion Resistance	Not applicable	10% loss max	10% loss max
UV EXPOSURE	45° Florida Exposure	1 year	5 years	10 years
	Color Retention	Not applicable	Color change Delta E < 5	Color change Delta E < 5
	Chalk Resistance	Not applicable	No more than No. 8 rating	No more than No. 8 rating for colors and No. 6 for whites
	Glass Retention	Not applicable	Minimum 30%	Minimum 50%

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Salt spray testing is used to test the corrosion resistance of finishes on various aluminum fence samples.

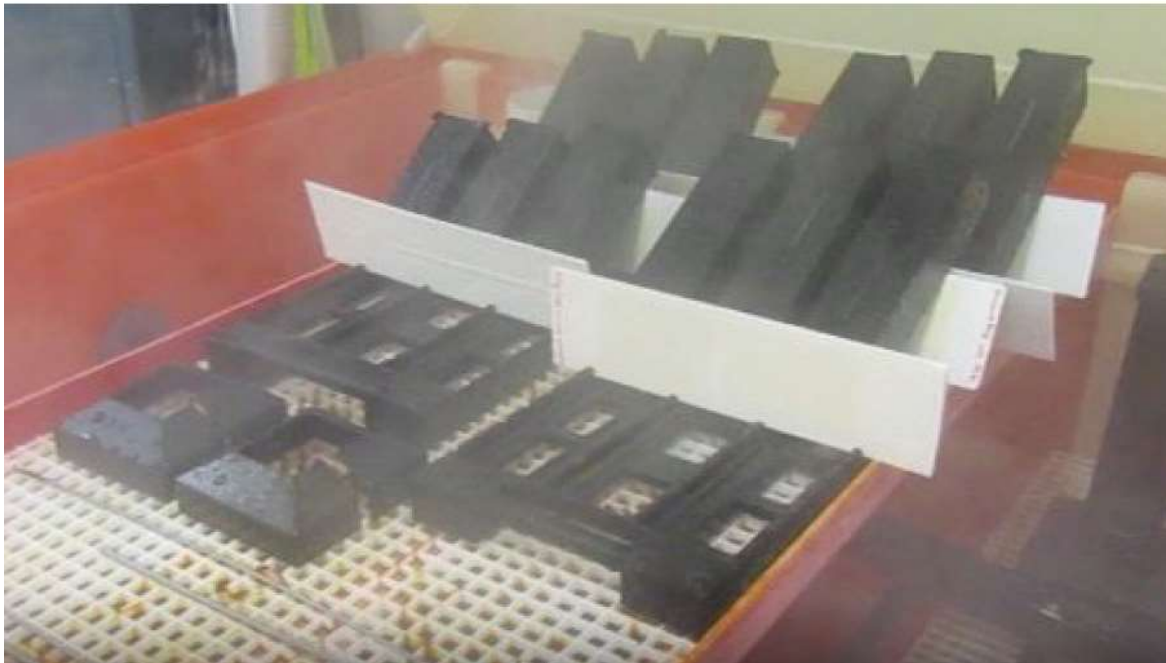


Barrette Outdoor Living has been named one of the "Top 50 Powder Coat Shops in the US."



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Barrette Outdoor Living samples exceed the industry standard 3,000 hour salt spray testing, showing no effects after 10,000 hours!



Aluminum Fence post samples after only 1,000 hour salt spray testing.

Barrette Outdoor Living sample no effect



Low-priced manufacturer sample bubbling.

Thanks!

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