

Automotive & Transportation Solutions



Transportation Brilliance

Add some sizzle to your car interior, the local bus or perhaps a Boeing interior with coil anodized aluminum from Lorin Industries.

The metal look is popular in the automotive and transportation industry.

In addition, with gas prices climbing, a lighter weight material makes more sense now than ever.



Anodized aluminum is a beautiful, strong, cost-effective material that is transforming the automotive and transportation world from the inside out.

Why Choose Anodized Aluminum for your Next Transportation Project?

Naturally Beautiful

The anodizing process allows the natural beauty of the aluminum surface to shine through, unlike other coating and finishing processes. Our products are naturally protected through the clear anodic film and offer infinite combinations of aluminum finishes, anodized finishes, colors and post anodized embossing.

Tough Performance – Low Maintenance

The durable, low-maintenance anodized surface resists scratches, is dent resistant, will never corrode, flake or peel and cleans up easily with simple soap and water.

Reduced Weight – Enhanced Profitability

Anodized aluminum products weigh approximately sixty percent less than other metals including painted steel, copper, brass and stainless steel – giving you more pieces per pound and reduced inventory and transportation costs.

Environmentally Responsible

Anodizing is an environmentally responsible process and our finished product is 100% recyclable – making anodized aluminum an environmentally responsible decision.

Why Not Anodized?

Dashboard and Control Panel Components
Emblems
Head Light and Brake Light Reflectors
High Pressure Laminate Panel Applications

Interior Decorative and Functional Trim Components
Interior Dome Light Reflectors
Mass Transit Rest Room Partitions
Mass Transit Window Spacer Bar
VIN Tags

Lorin Industries

www.lorin.com – info@lorin.com

Domestic – 1-800-654-1159

International – 1-231-722-2631

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Automotive & Transportation Portfolio

Lorin Product	Aluminum Finish	Anodize Finish	Color	UV Stable
Commercial Gage Product Solutions				
AlumaPlus LL	Long Line Brush	Brightened	Stainless Grey	N
AlumaPlus Matte	Mill Finish	Matte	Stainless Grey	N
AlumaPlus Polished	Mill Finish	Brightened	Stainless Grey	N
AlumaPlus SL	Short Line Brush	Brightened	Stainless Grey	N
Antique Copper	Various	Matte	Lt Antique Copper	Y
BlackBrite	Bright Finish	Brightened	Black	N
ClearBrite	Bright Finish	Brightened	Clear	Y
ClearBrite Brushed SL	Short Line Brush	Brightened	Clear	Y
ClearBrite Ultra	Bright Finish	Brightened	Clear	Y
ClearMatt	Mill Finish	Matte	Clear	Y
ClearMatt Brushed SL	Short Line brush	Matte	Clear	Y
ColorIn – Black	Mill / Brushed	Matte	Black	Y
ColorIn – Dark Bronze	Mill / Brushed	Matte	Dark Bronze	Y
ColorIn – Extra Light Bronze	Mill / Brushed	Matte	Extra Light Bronze	Y
ColorIn – LA Extra Dark Bronze	Mill / Brushed	Matte	Dark Bronze	Y
ColorIn – Light Bronze	Mill / Brushed	Matte	Light Bronze	Y
ColorIn – Medium Bronze	Mill / Brushed	Matte	Medium Bronze	Y
CopperBrite	Bright Finish	Brightened	Copper	N
CopperMatt Brush	Short Line Brush	Matte	Copper	N
GoldBrite	Bright Finish	Brightened	Medium Gold	Y
GoldBrite Brushed SL	Short Line Brush	Brightened	Medium Gold	Y
GoldBrite Ultra	Bright Finish	Brightened	Medium Gold	Y
GoldMatt – Dark Gold	Mill Finish	Matte	Dark Gold	Y
GoldMatt – Medium Gold	Mill Finish	Matte	Medium Gold	Y
GoldMatt Brushed SL	Short Line Brush	Matte	Medium Gold	Y
SmokeBrite	Bright Finish	Brightened	Smoke	N
SmokeMatt Brushed SL	Short Line Brush	Matt	Smoke	N
Lighting Product Solutions				
DuraMatt 3000	Mill Finish	Brightened	Clear	Y
PreMirror 11	Bright Finish	Brightened	Clear	Y
PreMirror 41	Bright Finish	Brightened	Clear	Y
Functional Product Solutions				
AnoGrip	Mill Finish	AnoGrip	Clear	Y
Foil Gage Product Solutions				
Stainless LL	Long Line Brush	Brightened	Stainless Grey	N
Stainless MF	Mill Finish	Matte	Stainless Grey	N
NaturalMatt 50 Gloss	Mill Finish	Matte	Clear	Y
NaturalMatt Butler Brush	Butler Brush	Matte	Clear	Y

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Product Enhancements, Standards & General Information

Adhere	Most Lorin products are available with Adhere on the backside. Additional charges and minimum order quantities apply to all products with Adhere.
Color Stability	Not all products in our portfolio are UV stable and will fade with direct exposure to sunlight over time. These products are identified in the Product Solutions section of this file as well as on their respective SpecData sheets. If additional coatings will be applied to your finished product, consider utilizing an UV stable coating to maintain the anodized color.
High Pressure Laminate Applications	<p>Lorin products have successfully performed within High Pressure Laminate (HPL) process under the following conditions:</p> <ul style="list-style-type: none">• 320 Degree Fahrenheit heat• High Pressure / High Heat – 1 hour• Bonded with a phenolic resin soaked core sheet. <p>If you are using a process outside of the HPL process outlined above, we encourage you to purchase a small quantity of anodized aluminum to confirm product performance within your own process prior to ordering full production quantities.</p>
Material Inspection	Material is reviewed for visual consistency from edge to edge at a distance of 5 feet or 1.5 meters looking straight at the material hanging from a vertical surface.
Surface Protection	Lorin recommends that surface protection be applied to all specular / high reflective finish products as well as any anodized product with a thin anodic film to reduce surface scratching during the production process.
Visual Standards & Limitations	Due to deviations which are inherent to the raw aluminum surface, anodized aluminum products may display a range of color shades which do not indicate a product defect. Please confirm with your Inside Sales / Sales Manager if your order is for standard inventory stock or a specific product that requires consistency throughout. Aluminum finishes are directional by nature and may show a color shift or shift in visual appearance when viewed at different angles. Please communicate running direction at time of assembly or finished product production.

Fabrication Characteristics

Bending (Brake Press)

- Handling pre-anodized stock has been found to be similar to handling other metals.
- Half hard tempers are most often used because of their formability and structural integrity.
- Where possible, use scrap material to adjust the depth of stroke required to accomplish the desired bend.
- Gradual bending of the material will help to minimize crazing of the anodic film.
- Strippable surface protection will protect the anodized surface during the bending process.

Laminating

- Polyfilm surface protection is helpful and can be left on throughout the production process.
- Clean the substrate with a clean brush prior to laminating.
- Cut the sheet to size using sharp shears or a saw.
- Consider experimenting with saw and feed speed on scrap material prior to full production runs.
- Cut into the sheet so that the rough edges are on the back-side.
- Spray-guide contact adhesives work best. Apply them on the anodized aluminum first, then on the core material.

Roll Forming

- In many cases, no tooling changes are required when transitioning from other metals to anodized aluminum.
- Pre-anodized aluminum will take all minimum bend-radii as specified by the Aluminum Association.
- As with other metals, tooling should be kept polished.
- Chrome-plated rolls typically perform the best.
- Using surface protection will sometimes eliminate the need for lubricants.

Stamping & Blanking

- No major modifications in tool design are necessary.
- Consider reducing male-female die clearance to 2%-8%.
- Keep dies sharp.
- Consider adding a looping pit ahead of the press allows for smooth coil feeding.
- Synthetic grippers on feed work best.
- Lubricants may be eliminated, depending on the process.
- Use lint-less gloves when handling pre-anodized stock.
- Anodized blanks are protected and stackable.