

## Signage Solutions

Bring attention to your store front with an anodized channel letter.  
 Direct visitors to your place of business with an anodized interior company sign or plaque.  
 Set yourself apart from the crowd with anodized business cards, identification badges and luggage tags.

### Showcase your products and services with anodized aluminum!

Continuous-coil anodized aluminum adds excitement to every project while drawing attention to YOU. The Lorin portfolio features bold colors, fresh finishes and long-lasting durable coil anodized aluminum products for your architectural projects.

### Create something brilliant with anodized aluminum!

#### Why Not Anodized?

- Business Cards
- Channel Letters
- Identification Tags & Badges
- Interior Signage
- License Plates
- Luggage Tags
- Name Plates
- Plaques
- Road Signs



## Product Solutions

| Product  | UV Stable | Product                        | UV Stable |
|--|-----------|--------------------------------|-----------|
| <b>Interior Grade Product Suggestions</b>            |           |                                |           |
| AlumaPlus Long Line Brush                            | N         | BlackBrite                     | N         |
| AlumaPlus Matte Mill Finish                          | N         |                                |           |
| AlumaPlus Short Line Brush                           | N         | CopperBrite                    | N         |
| AlumaPlus Micro                                      | N         | CopperMatt Brush               | N         |
| AlumaPlus Polished Mill Finish                       | N         | CopperMatt Micro               | N         |
|  |           |                                |           |
| SmokeBrite   | N         | SmokeMatt Brushed Short Line   | N         |
| SmokeMatt Micro                                      | N         |                                |           |
|  |           |                                |           |
| <b>Interior / Exterior Grade Product Suggestions</b> |           |                                |           |
| ClearBrite   | Y         | ColorIn – Black                | Y         |
| ClearBrite Ultra                                     | Y         | ColorIn – Extra Light Bronze   | Y         |
| ClearBrite Brushed Short Line                        | Y         | ColorIn – Light Bronze         | Y         |
| ClearMatt  | Y         | ColorIn – Medium Bronze        | Y         |
| ClearMatt Brushed Short Line                         | Y         | ColorIn – Dark Bronze          | Y         |
| ClearMatt Micro                                      | Y         | ColorIn – LA Extra Dark Bronze | Y         |
|  |           |                                |           |

| Product  | UV Stable | Product                     | UV Stable |
|--|-----------|-----------------------------|-----------|
| <b>Interior / Exterior Grade Product Suggestions</b> |           |                             |           |
| GoldBrite  | Y         | GoldMatt – Medium Gold      | Y         |
| GoldBrite Ultra                                      | Y         | GoldMatt – Dark Gold        | Y         |
| GoldBrite Brushed Short Line                         | Y         | GoldMatt Micro              | Y         |
|  |           | GoldMatt Brushed Short Line | Y         |
| <b>Foil Gauge Products (Lamina)</b>                  |           |                             |           |
| AlumaPlus Long Line Brush                            | N         | NaturalMatt 50 Gloss        | Y         |
| AlumaPlus Polished Mill Finish                       | N         | NaturalMatt 90 Gloss        | Y         |
|  |           | NaturalMatt Butler Brush    | Y         |
| GoldMatt Butler Brush                                | Y         | NaturalBrite Butler Brush   | Y         |
| GoldBrite Butler Brush                               | Y         |                             |           |
| <b>Functional Product Solutions</b>                  |           |                             |           |
| AnoGrip  | Y         | Adhere                      | Y         |
| <b>High Strength Anodized Solutions</b>              |           |                             |           |
| MacPac-S Products                                    |           |                             |           |

## Product Enhancements, Standards & General Information

### Adhere

Most interior grade products are available with Adhere on the backside. Additional charges and minimum order quantities apply to all products with Adhere.

### Anodic Film Standards

#### Interior Commercial Standard

- Suitable for applications requiring reasonable abrasion and corrosion resistance for parts not directly exposed to the elements.
- Suitable Anodic Film Range – 0.0001" – 0.0002" (5.08-7.62 microns.)

#### Exterior Standard 1

- Suitable for applications requiring reasonable abrasion and corrosion resistance with limited exposure to the elements.
- Suitable Anodic Film Range – 0.0002"-0.0003" (5.08-7.62 microns.)

#### Exterior Standard 2

- Suitable for applications requiring reasonable heavy abrasion and corrosion resistance with normal exposure to the elements.
- Suitable Anodic Film Range – 0.0003"-0.0004" (7.62-10.16 microns)

## Product Enhancements, Standards & General Information

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|---|---|
| <b>Anodic Film Standards</b>                    | <b>Architectural Class I</b> <ul style="list-style-type: none"><li>• Suitable Anodic Film Range – 0.0007" and Greater (17.78 microns and greater.)</li></ul> <b>Architectural Class II</b> <ul style="list-style-type: none"><li>• Suitable Anodic Film Range – 0.0004"-0.0007" (10.16-17.78 microns)</li></ul>   |
| <b>Color Stability</b>                          | 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.  |
| <b>High Pressure Laminate Applications</b>      | Lorin products have successfully performed within High Pressure Laminate (HPL) process under the following conditions: <ul style="list-style-type: none"><li>• 320 Degree Fahrenheit heat</li><li>• High Pressure / High Heat – 1 hour</li><li>• Bonded with a phenolic resin soaked core sheet.</li></ul> <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> |
| <b>High Strength Aluminum Options</b>           | Lorin now features MacPac-S products featuring a high strength aluminum anodized to your specifications. Not all gauges and widths are stocked. Inquiry through Sales / Inside Sales.   |
| <b>Material Inspection</b>                      | 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.   |
| <b>Screen Printing / Powder Coated Finishes</b> | For signage products that will be screen printed or powder coated we recommend our AnoGrip product with an open pore structure that will easily adhere to inks, dyes and paints. We can also offer an unsealed anodized product if you require a higher visual quality material.  |
| <b>Surface Protection</b>                       | 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.   |

## Product Enhancements, Standards & General Information

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### 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

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### 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.

## Fabrication Characteristics

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### 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.

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Lorin Industries has enjoyed a rich history since 1943. Our world leadership in metal finishing continues through innovation and creativity, keeping us at the leading edge of technology.

Our success can be attributed to Lorin's people – our greatest asset. We strive to meet our customer requirements without fail and to identify new ways that we can work together to enhance our customers success.

