

Adhere® Brand Information Sheet

General Description

Adhere is a post-anodizing process applied to the back side of decorative coil-anodized aluminum that leaves the backside of the sheet with an adhesive-friendly open pre structure – perfect for panel or edge banding applications.

Targeted End Applications

- Aluminum Composite Panels
- Appliance Panels & Trim Applications
- Automotive Interior Trim Components
- High Pressure Laminate Applications
- Point of Purchase Displays

Key Product Benefits

- **Cost Savings** – Lorin anodized products with Adhere on the back side arrive clean and ready for immediate production – no need to clean, prime or coat the material surface to maximize adhesion prior to production.
- **Superior Bonding** – The bond between Adhere and the adhesive or coating is at a molecular level rather than a typical surface level meaning that the bond will not de-laminate or peel over time, not is it effected by weather or water elements that can cause delimitation over time.

Adhere Production Capabilities

Imperial	Metric
0.004" – 0.032" x 50.0"	0.1mm – 0.8mm x 1270 mm
0.004" – 0.050" x 48.0"	0.1mm – 1.3mm x 1220 mm
0.051" – 0.060" x 24.0"	1.3mm – 1.5mm x 610 mm

Adhere Product Notes:

- Adhere requires a minimum anodic film of 0.175 mils and a maximum anodic film of 0.250 mils. Requirements outside of these stated standards will be reviewed to development on an inquiry by inquiry basis.

Performance Standards

- **Adhesion**
 - Foil Gauges = Minimum 8 pounds per inch.
 - Standard Gauges = Minimum 10 pounds per inch.
- **Shelf Life** – Adhere is guaranteed to maintain the same pull strength as outlined above for a minimum of 6-months from date of manufacture.

Performance Standards – cont.:

- **Visual Quality** – Lorin products with Adhere are subject to standard visual quality review and disposition. The Adhere side of the product is the backside of the coil and does not have any visual standards. If you are used to purchasing material with a standard 0.125 mil anodic film, please request sample material with Adhere to confirm acceptability as Adhere products are produced with a minimum 0.175 mil anodic film and there will be slight visual differences.

Additional Miscellaneous Information

Adhere Visual Appearance

The Adhere process is on the backside of the anodized aluminum sheet and will have a milky appearance. Variations in the appearance of the Adhere side do not indicate a greater or lesser level of adhesion or product performance.

High Pressure Laminate Applications

Lorin products with Adhere on the backside have successfully performed within a High Pressure Laminate (HPL) process under the following standard conditions:

- 320 degree Fahrenheit heat
- High Pressure / High Heat – 1 Hour
- Bonded with a phenolic resin soaked core sheet.

Lorin always recommends that a customer qualify our material within their own production process prior to ordering full production quantities.

Improving Adhere Adhesion

Adhere forms such a strong bond with adhesives that in many cases it pulls the adhesive off of the backer. In working with various adhesion and backer material manufacturers, we have found that implementing tighter process controls and increasing / controlling the amount of phenolic resin used significantly increases the bond between the Adhere, adhesive and backer material.

Lorin Product Appearance

Standard Lorin products produced with a 0.125 mil anodic film will look different if purchased with Adhere on the backside due to slightly higher 0.175 mil film requirements for the Adhere process. Please request visual samples for end customer approval prior to placing an order.

Recommended Adhesives for Use With Adhere

Adhesives are dependent on the production process conditions and core material with which the anodized aluminum with Adhere will be bonded. Lorin does not recommend any specific adhesives for use with Adhere