

Crazing: What It Means & How To Work With It

Lorin Industries receives a number of inquiries from customers around the world asking about crazing of the anodic film, what causes it and what impact it will have on the finished product. We felt that a brief explanation and recommendations for working with pre-anodized aluminum would be helpful.

What Causes Crazing?

The anodic film is a hard crystalline layer of aluminum oxide that does not stretch or bend with the base aluminum. Because of this, crazing occurs when pre-anodized aluminum is severely bent or formed.

Crazing – Fine hairline cracks that appear in the anodized aluminum surface due to extreme bending or forming.

Visual Impact:

Crazing can impact the visual appearance of your finished product. To minimize the impact, consider the following:

1. Modify the shape of the finished part:
 - By slightly modifying the shape of your finished product, you can significantly reduce the amount of visual crazing. The less that the metal is bent or formed, the less crazing will occur.
2. Explore other Lorin product options:
 - Thinner anodic films will show less crazing than thicker anodic films. If your end product does not have a specific film requirement and will not be exposed to exterior elements, salt spray or corrosive chemicals, consider an alternative product with a thinner anodic film.
 - Products with a matte or brushed aluminum base will show less crazing than a bright, reflective base material. Consider standard matte and brushed matte anodized aluminum products – or request a chemically brightened matte aluminum product for a touch of brightness with less visible crazing.

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Impact on Corrosion Resistance:

Anodized aluminum is successfully used within a number of exterior applications including roofing, flashing, signage and exterior architectural panels. With proper anodic film and minimal bending or forming, anodized aluminum will stand up to the elements for years.

Corrosion problems are typically only an issue for parts with exposure to salt spray or other corrosive chemicals and are typically limited to areas where the metal has been bent or stretched. An additional benefit of anodized aluminum is its natural resistance to filiform corrosion, often seen with painted metals.

For additional information, or to ask more detailed questions about crazing, please contact Lorin Industries at 1-800-654-1159 domestically, 1-231-722-1631 internationally, or email us at info@lorin.com.

All of us at Lorin Worldwide are dedicated to bringing our customers the best possible value in aluminum and anodized aluminum solutions. We know that you have choices, and we remain committed to making Lorin Industries your choice for your aluminum needs.

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