TECHNICAL BULLETIN

ALPOLIC™

Anodized ACM Finishes

When considering an anodized finish for Aluminum composite panels it is important to recognize that here are significant differences between the Anodic finishes and the more common and familiar painted finishes. The purpose of this bulletin is to address the advantages and disadvantages of the anodic finishes when compared to the fluoropolymer (FEVE and PVDF) paint finishes commonly used for architectural aluminum.

Advantages of Anodized Finishes:

- Anodizing is harder than fluoropolymer paint finishes providing an advantage in high-traffic areas.
- The anodizing layer cannot be peeled or scraped off as it is an integral part of the metal.
- The anodized finish is not sensitive to sunlight. Ultra-violet light has an impact on all organic coatings.

Advantages of Fluoropolymer Painted Finishes:

- The fluoropolymer finishes are relatively chemically inert and will perform better than Anodized finishes in corrosive environments.
- Painted finishes can be curved in fabrication. The anodic layer on the anodized panel is comparable in hardness with sapphire. The surface will show crazing if the panels are curved.
- Color consistency is better with a painted finish compared to an anodized finish. For painted finishes the lot to lot variation of solid colors is typically Delta E 1.0 or less (Hunter). For metallic and mica finishes the lot to lot variation for painted panels is less than Delta E 2.5 (Hunter). If lots are not mixed on a building elevation and directionality of the panels is observed, a painted finish will provide a uniform visual appearance. AAMA 611, The Voluntary Specification for Anodized Architectural Aluminum, section 8.3 calls out a maximum of Delta E 5.0 (CMC 2:1) within one lot or coil and provides no limit for lot to lot variation. For clear anodized finishes this variation is predominantly due to slight variations in the metal's chemical makeup and cannot be controlled by the anodizer. For this reason AAMA 611 notes that range samples are not applicable to clear anodized finishes.

  Attached are pictures showing color variation of anodized finishes which are within the Delta E 5.0 (CMC 2:1) standard for variation within a single lot.

It is important that these attributes are clearly presented to the design architect/owner to avoid any misunderstandings regarding the characteristics of anodized finishes.

Need assistance?
Contact our on-staff Technical Support Team by calling 800.422.7270 or by emailing them at technicalservices@alpolic.com

Anodized Finish Visual Variation Example 1

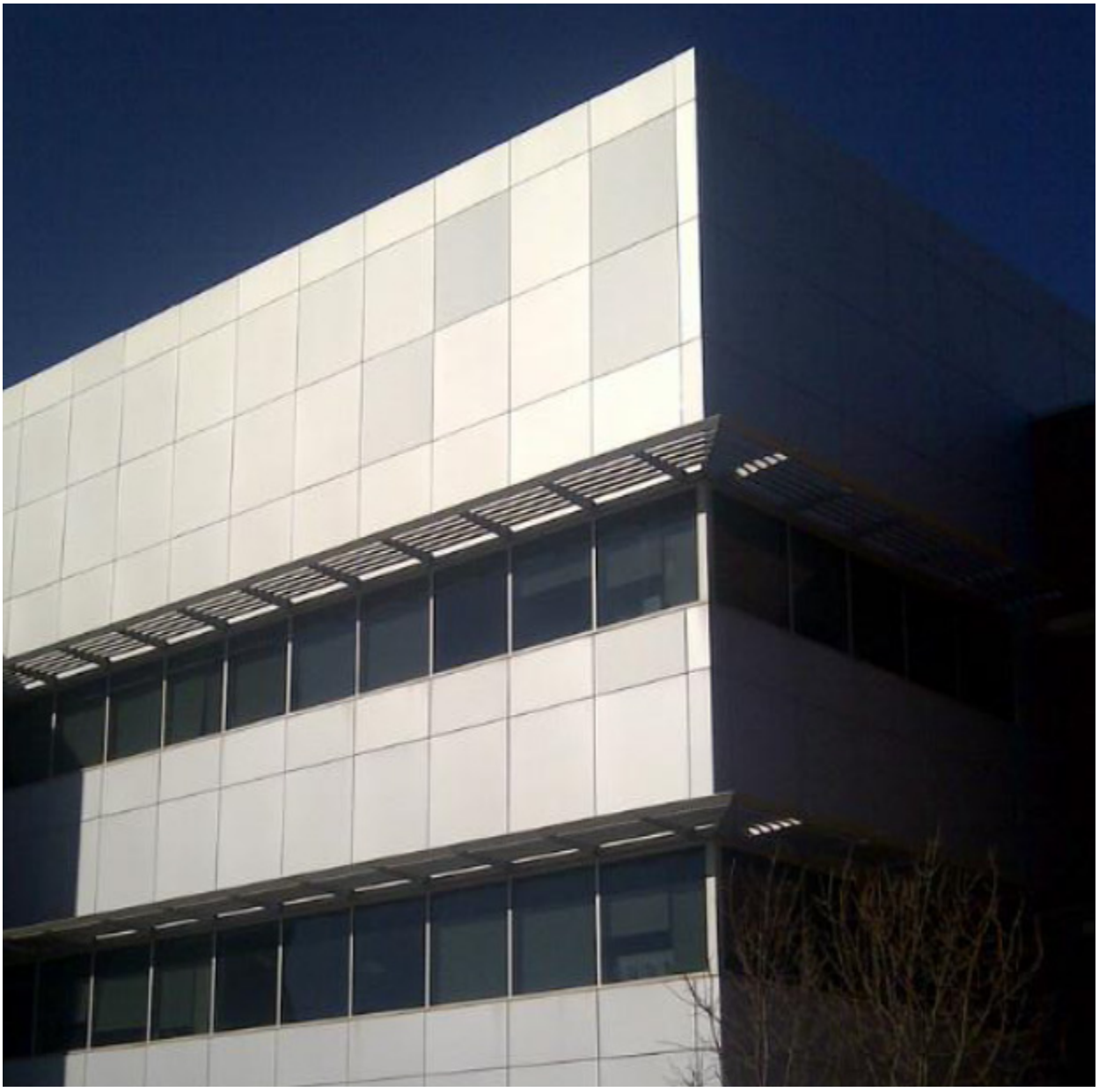
Anodized Finish Visual Variation Example 2

Anodized Finish Visual Variation Example 3

info@alpolic.com I www.alpolic-americas.com

TECHNICAL BULLETIN

Anodized Finish Visual Variation Example 4



info@alpolic.com I www.alpolic-americas.com