# **ALPOLIC**<sup>®</sup>

# TECHNICAL BULLETIN MCM VISUAL APPEARANCE PARAMETERS

Each of our products has special characteristics that can affect the visual consistency from lot to lot and even from sheet to sheet. It is important that these characteristics be considered when planning how to us and how to install ALPOLIC sheets.

For painted finishes a zero / 45 geometry should be used for colorimetric measurements.

#### SOLID

Solid colors present the best case for sheet to sheet and lot to lot consistency. The industry standard for allowable variation is Delta E (DE) 1.0 or less in a Hunter color space. Brighter colors such as reds, yellows, blues, etc. which tend to be less opaque and which depend somewhat on film build (paint thickness) to achieve their appearance will be more likely to exhibit greater variation than subdued colors. Sheets of this finish should be installed with the directional arrows aligned in the same direction.

### METALLIC

The industry standard for color variation with metallic finishes is DE 2.5 or less. When coating, the flakes will tend to align in one direction (flop). This greatly increases the directionality of the sheet's appearance. Sheets of this finish must be installed with the directional arrows aligned in the same direction and lots should not be mixed on a building face without first contacting ALPOLIC for a confirmation that the lots are visually similar enough to be used together.

### MICA

The MICA finishes provide a metallic like appearance with a two pass paint system. MICAs utilize flakes to provide the flashy appearance; therefore, as with the metallic finishes, MICA finishes are held to an industry standard for color variation of a DE 2.5 or less. Sheets of this finish must be installed with the directional arrows aligned in the same direction and lots should not be mixed on a building face without first contacting ALPOLIC for a confirmation that the lots are visually similar enough to be used together.

#### **EFFECTS**

The industry standard for color variation with effects finishes is DE 2.5 or less. Orientation of the measured samples must be consistent when measuring DE. The process of creating the Effects finishes greatly increases the directionality of the sheet's appearance. Sheets of this finish must be installed with the directional arrows aligned in the same direction and lots should not be mixed on a building face without first contacting ALPOLIC for a confirmation that the lots are visually similar enough to be used together.

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### ANODIZED

The American Architectural Manufacturer's Association (AAMA) has issued the "Voluntary Specification for Anodized Architectural Aluminum" – AAMA 61 I-98. In this specification, the maximum allowable color variation is established as DE CMC 5.0 or less for anodized materials produced **from one coil**. DE CMC is a corrected color space and has been selected by AAMA to better correlate with the visual appearance. The specification does not provide a limit for variation seen between materials of different coils. In anodized finishes, especially with clear anodized, the makeup of the metal can greatly affect the visual appearance. Small variations in the alloy's constituents can have a large visual impact. Sheets of this finish must be installed with the directional arrows aligned in the same direction and lots should not be mixed on a building face.

## HPA POLISHED ALUMINUM / HLZ BRUSHED ALUMINUM

HPA is composed of a Lumiflon clear coat applied over a thin anodized layer over a polished aluminum surface.

HLZ has a Lumiflon clear coat applied over a brushed aluminum surface.

HPA and HLZ are each held to an industry standard for color variation of a DE 2.5 or less. Sheets of these finishes must be installed with the directional arrows aligned in the same direction and lots should not be mixed on a building face without first contacting ALPOLIC for a confirmation that the lots are visually similar enough to be used together

## NATURAL METALS

ALPOLIC offers sheets with natural metal skins: Copper, Stainless Steel, Titanium and Zinc. As there is no coating nor surface treatment, the appearance of the sheets is totally reliant upon the metal used. The aging characteristics and visual appearance may vary from coil to coil due to slight differences in the metal, the location, the orientation of the installed sheets and the local environment. Sheets of this finish must be installed with the directional arrows aligned in the same direction and lots should not be mixed on a building face.

The surface appearance of some metals such as Copper, Titanium and Zinc will change with time; the pace of this chance is dependent upon the metal and the environment in which it is installed.

## PATTERNS

ALPOLIC offers a number of different patterned finishes which simulate the appearance of various wood and stone surfaces. These patterns are made up of multiple layers of different colors.

Due to the multi-colored field, color measurements are difficult to obtain and it is recognized that different colors will exhibit differing rates of color change over time.

DE comparisons between sheets are not possible.

Sheets of this finish must be installed with the directional arrows aligned in the same direction and lots should not be mixed on a building face.