

Storage & Prefabrication

Fabrication, Storage, and handling of panels: Panels must be stored in a cool, dry area. We recommend storing the panels in the workshop at approximately 65 °F for at least 24 hours before processing operations begin.

The handling of Alumanate ACM: Panels requires a certain amount of care and it is therefore recommended that they be supported at several points along their length (the number of support points depending on the length of the panel). When storing panels temporarily between different phases of fabrication, use polystyrene or foam wedges.

Thermal expansion of Alumanate ACM: Panels should be only be used at temperatures between -122°F and +176 °F and will thermally expand or contract in exactly the same way as solid aluminum plate or sheet. This thermal expansion must be born in mind when choosing the fastening system and calculating dimensions and joint widths. Alumanate has a coefficient of expansion of 2.36×10^{-5} m/°C (0.0236 mm/m/°C).

Example: For a panel exposed to weather conditions with temperatures varying between -20 °F in winter and +80°F in summer, we have a temperature difference of 100 °F.

Remarks: Keep in mind the ambient temperature during fabrication*. Panels with outer coatings in darker colors absorb more heat than lighter colors. Account must be taken of this when calculating the temperature difference (about 68 °F more for a black panel compared to a white or metallic panel). Expansion is not the only tolerance factor to be taken into consideration during design calculations: account must also be taken of the tolerances of the support (masonry, structural steel) and the installation tolerances (joinery, wall openings, etc.).

Essential precautions: Fabricated elements will be packaged in identical fashion in closed crates with blocks between the elements. The latter will be placed so as to avoid the elements coming into contact with each other and moving inside the crate.

Individual protective equipment should be worn in accordance with the safety regulations in force in the workshops. We recommend that you wear gloves for handling the panels at all stages. Goggles for the fabrication operations. Ear protection when operating or near noisy machinery (panel saw...).

For more information please email us at sales@alusignpanel.us