

## Preparing Alumanate ACM Panels For Use

Pay close attention to the direction of the material during installation and field fabrication. Alumanate ACM (aluminum composite material) is directional; that is, during the manufacturing process, paint is applied to the composite material in one consistent direction. In order to maintain color and finish consistency across panels, each panel's material must course in the same direction. Alumanate ACM has arrows on the protective film that show which direction the finish was applied. Alumanate takes this into consideration during panel fabrication and notes should be made on the drawings to verify the direction in which to install the panels. Remember, all panels need to be installed in the same direction throughout a project unless intentionally noted otherwise.

To avoid scratching the panel finish, all cutting, routing, and drilling should be performed from the backside of the ACM material. ACM consists of two layers of aluminum sandwiching a polyethylene (PE) core, or in some cases a fire-rated (FR) core. Both materials are fairly easy to cut and route.

For straight cutting: use a circular saw with a fine-carbide tooth blade. For arches, holes, fine precision cuts, and other detailed areas: use a jig saw with a fine-tooth metal blade. For routing: use a standard router with a 110 Degree "V" type router bit or a 3/8 inch "Core-Box" type bit. For drilling: use a standard metal drill bit.

### Inspecting the Building

The building substrate must be plumb and square. A panel system installed out of plumb will result in inconsistent grid lines, as well as improper alignment at windows, doors, corners, and other transitional areas. Panels installed on an inconsistent substrate will most likely need to be re-installed. Please make sure to verify the condition of the substrate to receive the panels before proceeding.

### Installing the panels

**Vertical Conditions** Start by running plumb lines or a laser at all panel transitions. This is done to determine the proper distance for shims before installing the panel system. Also locate a base control line (starting elevation and angle benchmark) to help keep the panel system square & level.

### Horizontal Conditions

Install the first panel in a critical transition area like a corner. Proper mounting of the first panel helps with the alignment of adjacent panels. Install the panel at the lowest point to meet your control line with the backside of the system slightly proud of the plumb line. This will establish a critical, and accurate, starting point. It is essential to the installation process that the first panel be positioned correctly, and installed square and plumb.



# Alumanate

## Aluminum Composite Material

### **Alignment & Consistency**

Alumanate ACM on Seattle Building After the first panel is installed, continue with adjacent panels in the same manner along the control line(s). Verify the panels' spacing often. Alumanate recommends using the proper sized shims between panel faces to ensure accurate spacing between panels. If panels are installed with incorrect spacing, they will likely need to be re-adjusted to align properly.

### **Seam Splines**

When installing splines in the seams, run the longer splines vertically and the shorter splines horizontally. This makes replacing a panel less difficult if one becomes damaged in the future.

### **Panel Clips**

When installing the panel clips, verify they are in line with the building's stud framing or furring. The clips attach to the building's framing and clip spacing may vary depending on your project's engineering requirements. Alumanate recommends doing a panel mock up by marking the film on the edge of the panel at locations coinciding with building framing members, then attaching the panel clips to the panel extrusion at these markings. Once the panel clips are attached, the panel is ready to install. Leave the protective film in place until the adjacent panels are installed, however, note that exposure to sunlight is not recommended as the protective film may cause color variation.

### **Fastening**

Fasten the clip firmly to the wall, tightening the fasteners no more than a half turn beyond snug. Be careful not to over-torque the fasteners, as this may result in the fastener shearing and can strip the framing. Always make sure fastener size and spacing is in accordance with the engineering requirements for the specific project.

### **Panel Sequencing**

Due to the nature of most panel systems, certain panels are installed prior to others; This is particularly true around doors, windows, penetrations, and other openings. Develop a written plan or sketch that takes panel installation sequence into consideration, and periodically evaluate the panel placement plan to avoid unforeseen circumstances.

### **Panel Protective Film**

It is important to remove the protective film for each section of adjacent panels immediately after the installation is complete for that section. Extra attention is required in areas receiving a large amount of sunlight. Too much exposure, may cause panel color variation. In addition, removing the film regularly allows for further inspection of the panels condition before moving to the next section.

For more information please email us at [sales@alusignpanel.us](mailto:sales@alusignpanel.us)