Product Data Sheet

PAC-4000 (MCM)



PRODUCT NAME:

PAC-4000: Metal Composite Material (MCM)

MANUFACTURER:

Petersen Aluminum Corporation 1005 Tonne Road Elk Grove Village, IL 60007 phone: (800) 446-8828 web: www.pac-clad.com email: info@pac-clad.com

OVERVIEW:

PAC-4000 is a composite panel made by laminating a prefinished aluminum skin to a substrate of thermoset phenolic resin. A second aluminum skin is added as a backer and provides thermal stability and panel balance.

Panels are furnished with a strippable film on the painted surfaces to protect the finish during shipment and installation.

BASIC USES & APPLICATIONS:

PAC-4000 is designed for use as an exterior cladding on walls, canopies, fascia, and accent bands.

PAC-4000 is typically used on medium to high rise buildings, such as office towers, retail complexes, educational buildings, medical facilities, etc...

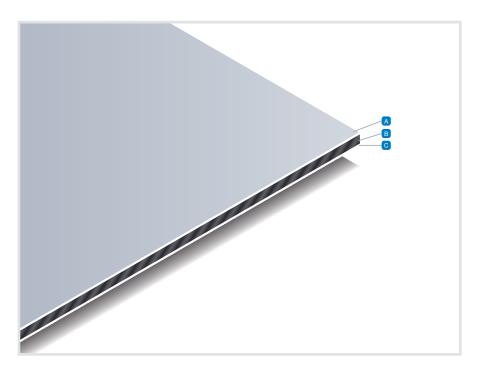


TABLE 1. COMPOSITION & MATERIALS¹:

COMPONENT	STANDARD (IN)	METRIC (MM)
A. Prefinished Smooth Aluminum Face	.024" (min)	.609mm
B. Thermoset Phenolic Resin Core ²	.105"	2.67mm
C. Primed Smooth Aluminum Backer	.010"	.254mm

- Technical Properties (see back) are based upon the Typical Composition. Selecting optional components may alter these properties.
- 2. 4mm is the most common thickness for Envelope 2000. 3mm and 6mm (nominal) are also available.

FEATURES & BENEFITS:

As a complete exterior cladding system, PAC-4000 offers a number of benefits to the building owner, architect, and installer including:

▶ High-Tech Appearance

Smooth aluminum skins and clean lines make PAC-4000 an excellent choice for high profile projects where a progressive aesthetic detail is desired.

▶ Fire, Water & Impact Resistant

The phenolic core is fire resistant to meet (or exceed) code requirements and offers extra protection against incidental moisture, dents, and dings.

▶ Curvable

Along with various shadow lines, PAC-4000 can also add interest to your project with long sweeping curves or tight, crisp column covers.

▶ Cut-To-Size

These panels can be easily cut to the correct dimension on site using standard tools.

▶ Thermal Stability

Unlike other cladding solutions, PAC-4000 remain rigid and stable even during seasonal heating and cooling thermal cycles.

▶ Tested

Designed for performance, tested by ASTM E84, ASTM D1781, ASTM D1929, and ASTM D5420.

▶ Low Maintenance

Most foreign matter can be cleaned from surface with mild detergents; can be incorporated into yearly building washing schedule.

▶ Quick Lead TIme

Available nationwide, these panels can be found locally or shipped within 2 weeks..

GENERAL LIMITATIONS:

PAC-4000 is intended for use as an exterior cladding. It is not eligible for use as a structural element of a wall assembly. PAC-4000 should not be used in applications where the slope exceeds 25° from vertical.

FINISHES:

PAC-4000 comes standard with a smooth aluminum skin. Standard and metallic colors are furnished with a durable Kynar 500® coating. Anodized finishes are available as a standard finish. Custom colors are also available to match customer's standard.

STANDARD SMOOTH:

Coil Coated Kynar 500

CUSTOM SMOOTH:

Spray Applied Kynar 500

SIZES AVAILABLE:

48" x 96" (1219mm x 2438mm) 48" x 120" (1219mm x 3048mm) 48" x 144" (1219mm x 3658mm) 60" x 96" (1524mm x 2438mm) 60" x 120" (1524mm x 3048mm) 60" x 144" (1524mm x 3658mm)

Cut-to-size panels are also available in virtually any size up to 60" x 144"

MATERIAL TOLERANCES:

Thickness: ±1/32" (±0.79mm) Length Dim: +0, -1/16" (+0, -1.59mm) Width Dim: +0, -1/16" (+0, -1.59mm) Squareness: 1/64" (0.4mm) per lineal foot

STANDARD WARRANTY:

Panel Warranty: 10 Years Anodized Finish: 20 Years

Kynar 500 Finish: 20 Years (spray-applied) Kynar 500 Finish: 30 Years (coil-coated)

TABLE 2. PANEL WEIGHT & THICKNESS:

COMPONENT	STANDARD	METRIC
Panel Weight ¹	1.25 lbs/ft²	6.47 kg/m²
Nominal Thickness ²	1/8"	4mm

- 1. Weight and testing based upon panels using an .024" smooth face skin and an .010" smooth back skin.
- 2. 4mm is the most common thickness for Envelope 2000. 3mm and 6mm (nominal) are also available.

TABLE 3. PANEL PERFORMANCE:

PROPERTY	TEST	VALUE	UNIT
Flame Spread	ASTM E84	Class A	
Peel Strength	ASTM D1781	34.5	in-lb/in
Ignition Temperature	ASTM D1929	900	°F
Impact Resistance	ASTM D5420	on request	

