

Product Data Sheet

PAC-4000 (Zinc)



PRODUCT NAME:

PAC-4000
Engineered Architectural Wall System

MANUFACTURER:

Petersen Aluminum Corporation
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Elk Grove Village, IL 60007
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PANEL & SYSTEM DESCRIPTION

OVERVIEW:

PAC-4000 is a fabricated wall system utilizing a composite panel made by laminating a zinc 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.

PAC-4000 is fabricated and then attached to the substrate with a series of aluminum extrusions.

The three basic attachment methods for PAC-4000 are the Reveal System (RV) utilizing one piece extruded aluminum moldings, the Rout & Return System (RR) with formed 'pans' and attachment extrusions and the RainScreen System (RS) utilizing formed 'pans', attachment extrusions and featuring 'dry' joints.

BASIC USES & APPLICATIONS:

As a high end fabricated system, 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...

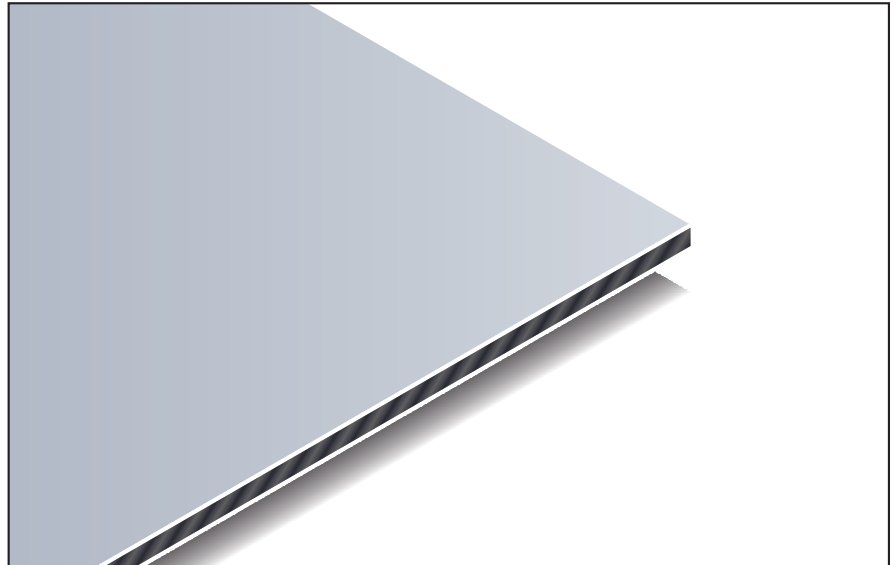


TABLE 1. COMPOSITION & MATERIALS¹:

COMPONENT	STANDARD (IN)	METRIC (MM)
Zinc (39.25" wide) (or)	.027" (min)	.700mm
Quartz-Zinc (48" wide)	.031"	.800mm
Thermoset Phenolic Resin Core ²	.105"	2.67mm
Primed Smooth Aluminum Backer	.010"	.254mm

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

► Curvable

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

► Thermal Stability

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

► Durable

An innovative thermoset phenolic resin core provides these panels with superior impact and dent resistance.

► Low Maintenance

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

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.

INSTALLATION OVERVIEW

ROUT & RETURN SYSTEM (RR):

Barrier system in which panels are fabricated and formed into 'pans' and then 'hung' on the substrate using aluminum extrusions. All fasteners are concealed and panel joints (1/2" reveal typical) are finished with an approved sealant.

RAINSCREEN SYSTEM (RS):

Based on the 'rainscreen principle', this system allows incidental water to enter the cladding cavity, but then be drained through the system via weepholes. Also utilizing formed panels, this system is attached using aluminum extrusions. Panel joints are finished using color matched or complementary accent strips that 'float' in the extrusions providing a reveal from 1/2" to 12".

MATERIAL TOLERANCES:

Thickness: $\pm 1/32"$ ($\pm 0.79\text{mm}$)
 Length Dim: +0, -1/16" (+0, -1.59mm)
 Width Dim: +0, -1/16" (+0, -1.59mm)
 Squareness: 1/64" (0.4mm) per lineal foot

PAC-4000 is supplied with clean, machine trimmed edges.

TABLE 2. PANEL WEIGHT & THICKNESS:

COMPONENT	STANDARD	METRIC
Panel Weight	2.4 lbs/ft ²	11.71 kg/m ²
Nominal Thickness ¹	1/8"	4mm

TABLE 3. PANEL PERFORMANCE:

PROPERTY	TEST	VALUE	UNIT
R-Value	---	0.05	°F ft ² /BTU
Flame Spread	ASTM E84	Class A	---
Peel Strength	ASTM D1781	34.5	lb-in/lb
Stiffness (EI) ¹	ASTM E72	1.27E+03	lb-in ² /ft width
Allowable Bending Moment ¹	ASTM E72	1.82E+01	lb-ft/ft width
Tensile Yield ¹	ASTM E72	7.34E+03	lb/ft width
Ultimate Tensile ¹		1.04E+04	lb/ft width
Coefficient Of Thermal Expansion	ASTM D1237	1.11E-05	in/in/°F
Ignition Temperature	ASTM D1929	900	°F

1. Weight and testing based upon panels using an .024" smooth face skin and an .010" smooth back skin.

SIZES AVAILABLE:

39-1/4" x 96" (1219mm x 2438mm)
 39-1/4" x 120" (1219mm x 3048mm)
 39-1/4" x 144" (1219mm x 3658mm)

Cut-to-size panels are also available in virtually any size up to 39-1/4" x 144".

Quartz-Zinc is available in 48" width.)

STANDARD WARRANTY:

Panel Warranty: 10 Years
 Zinc Finish: 20 Years

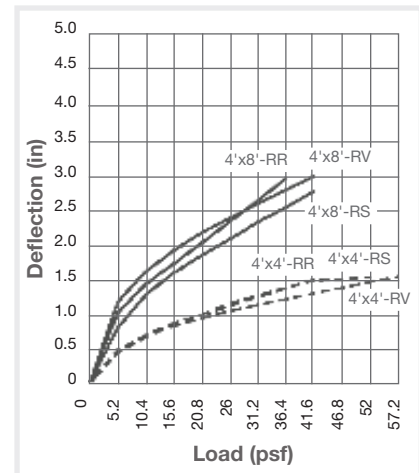
CODE CERTIFICATION¹:

ICBO (International Conference Of Building Officials) - #PFC-5792

BOCA (Building Officials Code Administrators) - #21 • 08

SBCCI PST & ESI (Southern Building Code Congress International, Public Safety Testing & Evaluation Services Inc.) - #2046

LOAD DEFLECTION¹:



¹ Panel tested while supported on four sides.

