

Product Data Sheet

PRODUCT NAME:

Panel 20®
Prefinished Architectural Panels

MANUFACTURER:

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PANEL & SYSTEM DESCRIPTION

OVERVIEW:

Panel 20® is a composite panel for exterior use made by laminating an 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.

Panel 20® is attached to the substrate using construction adhesive in the field of the panel and mechanical fasteners around the perimeter. The system is completed using two piece (plastic receiver and extruded aluminum cover) trim moldings available in both batten and reveal (1/2") profiles.

BASIC USES & APPLICATIONS:

As an alternative/complement to other building materials such as brick or stucco, Panel 20® is designed for general use as an exterior cladding on walls, canopies, fascias and accent bands.

Panel 20® is typically used on low and medium rise buildings such as schools, banks, office parks, medical facilities, retail identity programs, etc... However, with a durable thermoset phenolic core and a smooth finish, Panel 20® is also ideal for other applications where a high end system look is desired.

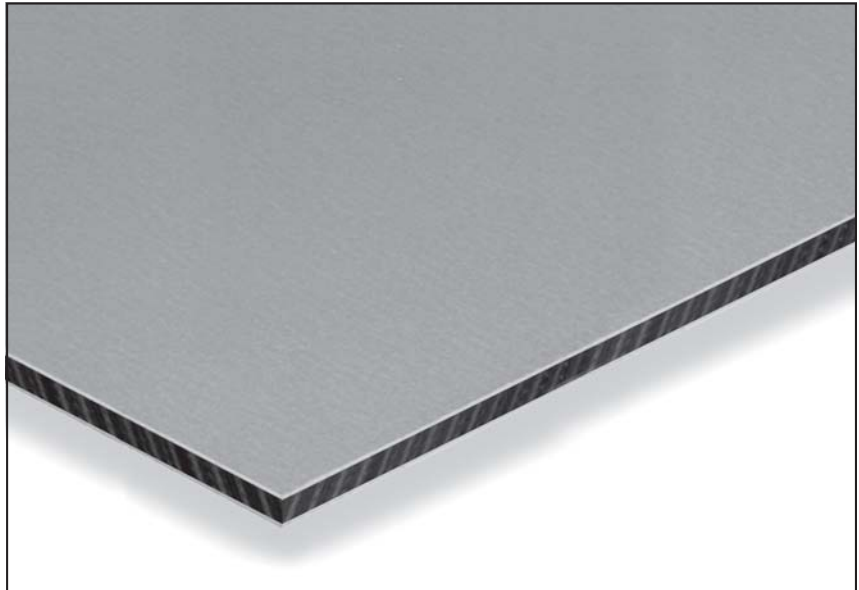


TABLE 1. COMPOSITION & MATERIALS¹:

Component	Standard (in)	Metric (mm)
• Prefinished Smooth Aluminum Face	.024" (min)	.609mm
• Thermoset Phenolic Resin Core	.075"	1.90mm
• Primed Smooth Aluminum Backer	.024"	.609mm

¹ Technical Properties (see back) are based upon the Typical Composition. Selecting optional components may alter these properties.

FEATURES & BENEFITS:

As a complete exterior cladding system, Panel 20® offers a number of benefits to the building owner, architect, and installer including:

- **System Look w/o Fabrication**
Panel 20® offers a high-end appearance without the additional costs associated with fabrication by using trim moldings (with flat batten or reveal profiles) and concealed fasteners.
- **Color Matched Moldings**
Several different profiles (including reveal and batten) to complete the system look. Moldings can be matched or painted a complementary color for emphasis.
- **Low Maintenance**
Most foreign matter can be cleaned from surface with mild detergents; can be incorporated into yearly building washing schedule.
- **Economical**
With material and installation savings, Panel 20® provides a high-end appearance and an economical solution when compared to fabricated systems.
- **Curveable**
With a durable and thermally stable core, Panel 20® (and moldings) can be formed to form graceful, clean curves.
- **Easy Installation**
Simple sheets/trim concept easy to understand. Non-progressive sequence also allows for removal or replacement of panels which may become damaged.

GENERAL LIMITATIONS:

Panel 20® is intended for use as exterior cladding. It is not eligible for use as a structural element of a wall assembly. Panel 20® should not be used in applications where the slope exceeds 25° from vertical.

SYSTEM FINISHES:

Panel 20® comes standard with a smooth aluminum skin. Textured skins are not available.

Standard and metallic colors are furnished with a durable Kynar 500® coating. Anodized finishes are available as a standard finish. Panels can also be ordered with premium and custom colors to match customer's standard.

Moldings are coated using a Kynar 500® paint system and can be painted to match any standard or custom color.

INSTALLATION OVERVIEW

CONCEALED FASTENERS:

Attached to the substrate with concealed screws, Panel 20® offers two piece aluminum moldings to complete the panel joints. These moldings (available in batten and reveal profiles) consist of a plastic receiver attached prior to the panel, then finished with a prepainted cover to match or complement the panel.

In addition to perimeter fastening, Panel 20® should be adhered to the substrate in the field of the panel.

Installation is non-progressive when using these moldings allowing panels to be removed and replaced should damage occur.

TABLE 2. PANEL WEIGHT & THICKNESS:

Component	Standard	Metric
Panel Weight ¹	1.29 lbs/ft ²	6.30 kg/m ²
Nominal Thickness	1/8"	3mm

TABLE 3. PANEL PERFORMANCE:

Property	Test	Value	Unit
R-Value	---	0.09	°F ft ² /BTU
Flame Spread	ASTM E84	Class A	---
Peel Strength	ASTM D1781	34.5	lb-in/lb
Stiffness (EI) ¹	ASTM E72	1.42 ^{E+4}	lb-in ² /ft width
Allowable Bending Moment ¹	ASTM E72	2.09 ^{E+1}	lb-ft/ft width
Tensile Yield ¹	ASTM E72	1.03 ^{E+4}	lb/ft width
Ultimate Tensile ¹	ASTM E72	1.27 ^{E+4}	lb/ft width
Coefficient Of Thermal Expansion	ASTM D1237	1.13 ^{E-5}	in/in/°F
Ignition Temperature	ASTM D1929	900	°F

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

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

Panel 20® is supplied with clean, machine trimmed edges.

PANEL FINISH SYSTEMS:

Standard Smooth: Coil Coated Kynar 500®
 Custom Smooth: Spray Applied Kynar 500®

STANDARD WARRANTY:

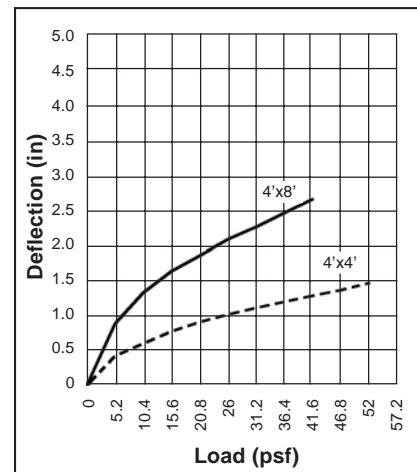
Panel Warranty: 5 Years
 Kynar 500® Finish: 20 Years
 No change greater than 8 for chalk, 5 E units for fade
 Anodized Finish: 20 Years (prorated)

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".

LOAD DEFLECTION:



¹ Panel tested while supported on four sides.