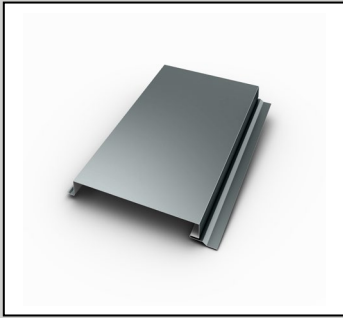


# Product Data Sheet



## DefendEX™ SP1000

### Metal Paneling

Flush Soffit And Fascia Panel

#### Description

DefendEX™ SP1000 metal flush panel (SP1000) is a factory-formed, interlocking, architectural metal panel designed for soffit and fascia applications. SP1000 offers the design professional a flush or flat appearance by utilizing an interlocking leg and concealed fastening system. The panel is available in a wide variety of materials and finishes including Kynar®-/Hylar®-coated Galvanized Steel, Zincalume®/Galvalume® Steel, and Aluminum.

For standard color selection, consult the current *EXCEPTIONAL Metals Color Chart*. Custom color services are available upon request.

Material only warranty available.

#### Method of Application

1. SP1000 must be installed in a sequential order.
2. A smooth, solid substrate of plywood, OSB, or a substructure of min 22 ga (0.79 mm), 7/8-in. (22.22 mm) hat channels is recommended for the SP1000 metal flush panel.
3. Prior to panel installation, application of an approved underlayment is recommended

#### Storage

- DefendEX metal panels should be stored in a well-ventilated, dry location, where no moisture can contact them. Moisture (From rain, snow, condensation, etc.) trapped between layers of material may cause water stains or white rust, which can affect the service life of the material and will detract from the appearance.
- If outdoor storage cannot be avoided, protect the panels with a ventilated canvas or waterproof paper cover. Do not use plastic, which can cause condensation. Keep the material off the ground in an inclined position with an insulator such as wood, or keep panels crated.
- Storage of end-use materials with protective film applied to the surface should be:
  - Wrapped/packaged to prevent exposure to direct UV, water, oils, or other contaminants.
  - Stored in an enclosed building or holding facility.
  - Within a temperature range of 45° - 90° F (7° - 32° C) and 20 - 80% relative humidity.
  - Less than six months with masking applied (warehouse storage and outdoor exposure combined).
  - Protective film may become brittle with long-term UV exposure.

## Precautions

- Oil canning is not a cause for rejection. Heavier gauges, narrower widths, striations, and embossing minimize oil canning.
- Sealant for end laps and lap joints shall be non-drying, non-toxic, and non-shrinking with a serviceable temperature of -60° - 212° F (-51° - 100° C).
- Quality, long-life butyl sealants work best as a gasket sandwiched between two pieces of metal. Non-acetic cured, silicone, color-matching sealants are recommended when voids must be filled. Sealants are not a substitute for proper assembly and workmanship.
- Exercise caution when handling to avoid injury or product damage.
- Refer to Safety Data Sheets (SDS) for safety information, including PPE.
- Immediately remove protective film after installation.**

Manufacturing Location: Anoka, MN

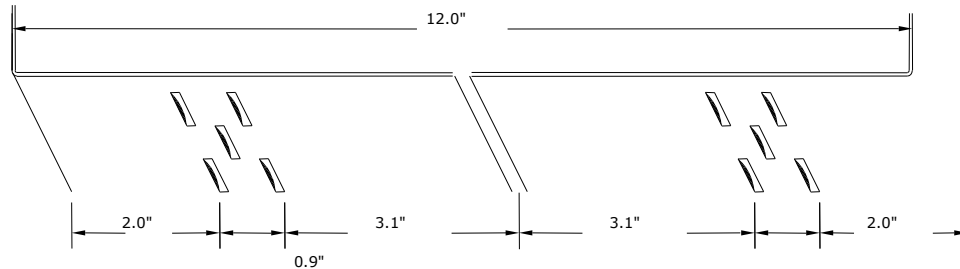


Product Data	
Property	Value
Panel Type	Flush
Panel Interlock	Interlocking Joint
Taper Panels	No
Net Free Area	2.75 in. <sup>2</sup> /ft (5,820.83 mm <sup>2</sup> /m) on 12-in. (304.80-mm) panels
Radius Panels	No
Stiffening Ribs	Optional
Striations	Optional as SP1000
Sealant	No
Standard Panel Surface	Smooth
Optional Panel Surface	Stucco Embossed
Substrate	Solid Substrate or Hat Channels

Product Size	
Property	Value
Panel Width	8 - 20 in. (203.20 - 508.00 mm)
Optimal Panel Width	18 in. (457.20 mm)
	12 in. (304.80 mm)
	16 in. (406.40 mm)
	20 in. (508.00 mm)
Panel Depth	1 in. (25.4 mm)
Seam Height	1.14 in. (29 mm)
Minimum Panel Length	36 in. (914.4 mm)
Maximum Panel Length	600 in. (15.24 m)

Technical Information	
Property	Value
Water Penetration	ASTM E283
Air Infiltration	ASTM E283
Structural Performance	ASTM E330
Water Penetration	ASTM E1646
Fire Rating	UL Class A Rated Assemblies, UL 263, and UL 790
Hail Impact Rating	UL 2218, Class 4

## Optional Venting Pattern



## Typical Properties

Material and Thickness	Metal Specification	Available Finishes
<u>Aluminum</u> 0.032 in. (0.81 mm) 0.040 in. (1.02 mm)	<b>Base Metal:</b> Aluminum <b>Minimum Yield:</b> 21 KSI (145 MPa) <b>Thermal Expansion:</b> $12.6 \times 10^{-6}$ in/in/°F ( $22.68 \times 10^{-6}$ mm/mm/°C) <b>Modulus of Elasticity:</b> $10.0 \times 10^3$ x KSI (68.9 MPa)	Anodized Kynar 500/Hylar 5000 Unpainted/Mill Finish
<u>Galvalume Steel</u> 26 ga (0.48 mm) 24 ga (0.64 mm) 22 ga (0.79 mm)	<b>Base Metal:</b> AZ-50 Hot Dipped Galvalume <b>Minimum Yield:</b> 50 KSI (345 MPa) <b>Thermal Expansion:</b> $6.7 \times 10^{-6}$ in/in/°F ( $12.06 \times 10^{-6}$ mm/mm/°C) <b>Modulus of Elasticity:</b> $29.0 \times 10^6$ x KSI (200 GPa)	Zinalume Plus/ Galvalume Plus/ Acrylume® - Clear Acrylic Coated Kynar 500/Hylar 5000
<u>AGSC Copper</u> 16 oz (0.56 mm) 20 oz (0.69 mm)	<b>Minimum Content:</b> 99.9% copper, silver counting as copper, cold rolled from ingots of 122 alloy <b>Thermal Expansion:</b> $9.3 \times 10^{-6}$ in/in/°F ( $1.674 \times 10^{-5}$ mm/mm/°C) Meets and/or exceeds ASTM B370 specification	Natural

**NOTE:** Consult the appropriate base metal sheet and coil product data sheet for additional information on the base metal and coating. Not all materials and thicknesses are available from all locations.

Contact Exceptional Metals Technical Services at (866) 337-4599 for further information.

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