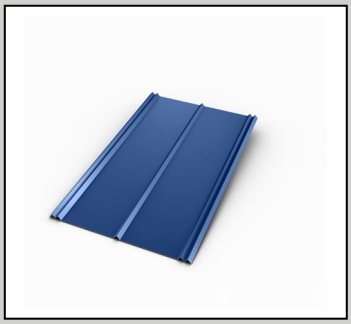
Product Data Sheet



DefendEX™ 5V Crimp

Metal Paneling

Panel for Commercial-Industrial Metal
Wall and Roofing Cladding

Description

The DefendEX™ 5V Crimp Wall Panel (5V panel) is a factory-formed commercial-industrial wall panel which provides a traditional metal panel appearance. The 5V panel is mechanically fastened with exposed fasteners.

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. 5V panels should be installed over a solid substrate or open framing.
2. Prior to panel installation, application of an approved underlayment is recommended.

NOTE: Follow approved installation details.

Storage

- DefendEX metal panels should be stored in a well-ventilated, dry place 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 for 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

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Product Data

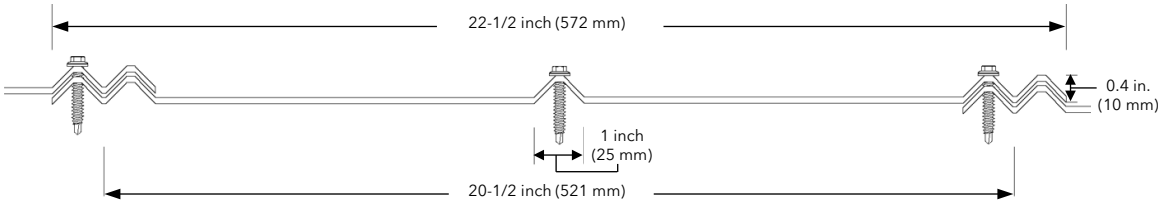
Property	Value
Panel Type	Commercial-Industrial
Panel Interlock	Overlapping
Tapered Panels	No
Radiused	No
Substrate	Solid Substrate or Open Framing
Standard Panel Surface	Smooth
Optional Panel Surface	Stucco Embossed

Product Size

Property	Value
Panel Width	22.50 in. (571.50 mm) 20.50 in. (520.70 mm) Net Coverage
Minimum Panel Length	36 in. (914.40 mm)
Maximum Panel Length	600 in. (15,240.00 mm)

Technical Information

Property	Value
Air Uplift Pressure	UL 580, Class 90 & UL 1897
Structural Infiltration	ASTM E283 & E1680
Performance	ASTM E330 & E1592
Static Water Penetration	ASTM E331 & E1646
Dynamic Water Penetration	AAMA 501
Fire Rating	UL Class A Rated Assemblies UL 263 & UL 790
Hail Impact Rating	UL 2218, Class 4



Typical Properties

Material and Thickness	Metal Specification	Available Finishes
Aluminum 0.032 in. (0.81 mm)	**Base Metal**: Aluminum **Minimum Yield**: 21 KSI (145 MPa) **Thermal Expansion**: 12.6 x 10^{-6} in/in/ °F (22.68 x 10^{-6} mm/mm/°C) **Modulus of Elasticity**: 10.0 x 10^{3} x KSI (68.9 MPa)	Anodized Kynar 500®/Hylar 5000® Unpainted/Mill-Finished
Zincalume®/Galvalume® Steel 24 ga (0.64 mm) 22 ga (0.79 mm)	**Base Metal**: AZ-50 Hot Dipped Galvalume **Minimum Yield**: 50 KSI (345 MPa) **Thermal Expansion**: 6.7 x 10^{-6} in/in/ °F (12.06 x 10^{-6} mm/mm/°C) **Modulus of Elasticity**: 29.0 x 10^{6} x KSI (200 GPa)	Zincalume Plus/ Galvalume Plus/ Acrylume® – Clear Acrylic Coated Kynar 500®/Hylar 5000®
AGSC Copper 16 oz (0.56 mm) 20 oz (0.69 mm)	**Minimum Content**: 99.9% copper, silver counting as copper, cold rolled from ingots of 122 alloy. **Thermal Expansion**: 9.3 x 10^{-6} in/in/ °F (1.674 x 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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