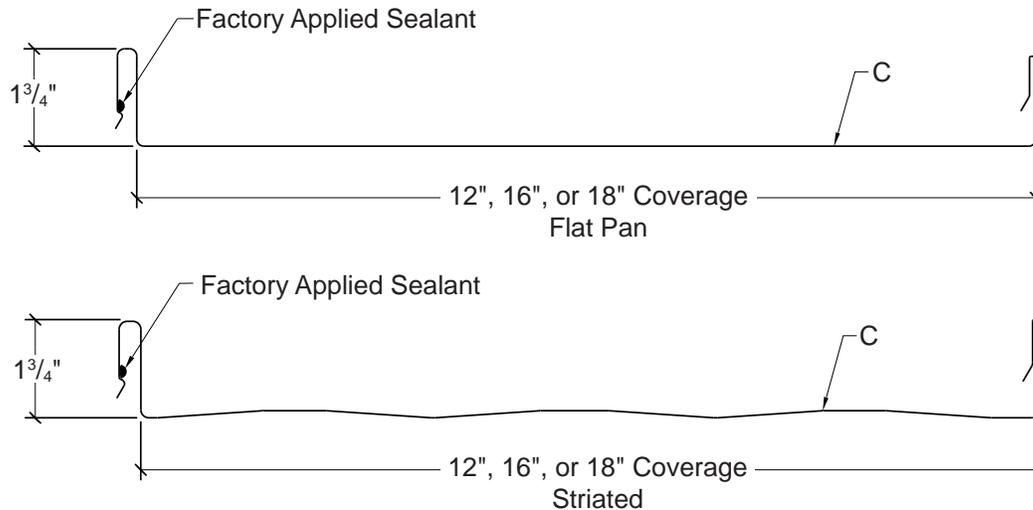


VERTICAL SEAM

CONDENSED
TECHNICAL
REFERENCE



ARCHITECTURAL
COMMERCIAL
PANEL

CONCEALED
FASTENERS

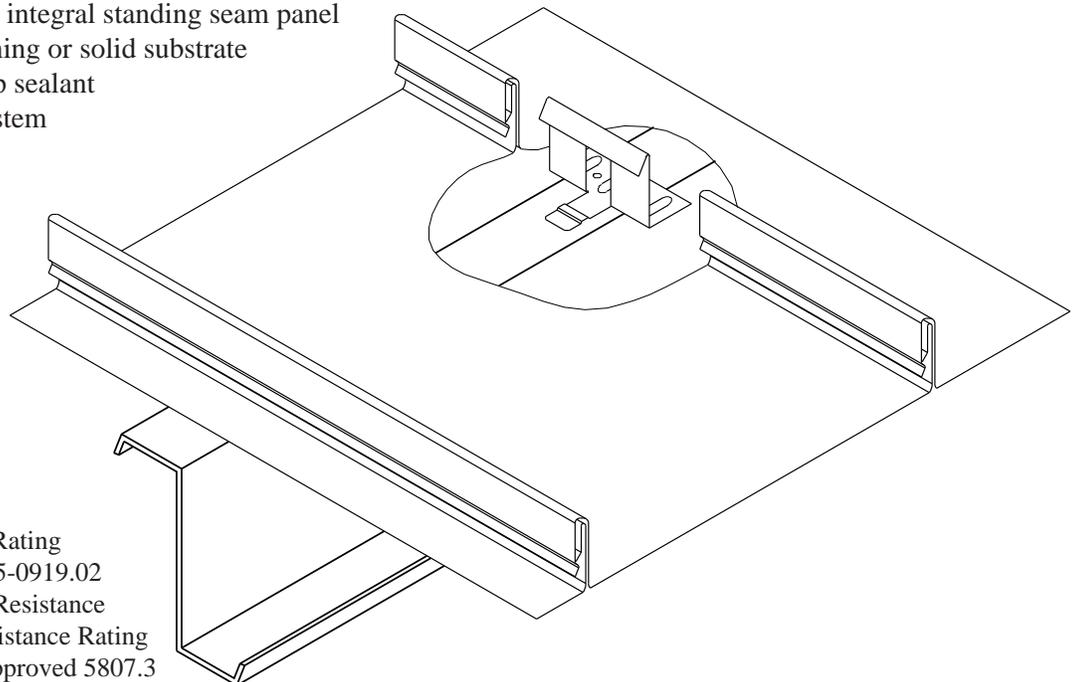
12", 16", OR 18"
COVERAGE

MINIMUM
3:12 SLOPE

OPEN FRAMING OR
SOLID SUBSTRATE

PANEL OVERVIEW

- ▶ Finishes: Kynar 500 (PVDF), MS Colorfast45®, and Acrylic Coated Galvalume®
- ▶ Gauges: 24ga standard, 22ga optional
- ▶ 12", 16", or 18" panel coverage, 1³/₄" rib height
- ▶ Concealed clip designed to accommodate thermal movement
- ▶ Architectural/structural integral standing seam panel
- ▶ Applies over open framing or solid substrate
- ▶ Factory applied side lap sealant
- ▶ Snap together panel system



TESTING

- ▶ UL 263, Fire Resistance Rating
- ▶ Miami-Dade Approved 05-0919.02
- ▶ UL 2218 Class 4 Impact Resistance
- ▶ UL 790, Class A Fire Resistance Rating
- ▶ Florida Building Code Approved 5807.3
- ▶ ASTM E-283 Air Infiltration Approved
- ▶ ASTM E-331 Water Penetration Approved
- ▶ CEGS-07416 US Army Corps of Engineers Rated-ASTM E-1592
- ▶ UL 580, Class 90 Wind Uplift, Construction Numbers 254, 255, 261, 303, 342, 343, 435

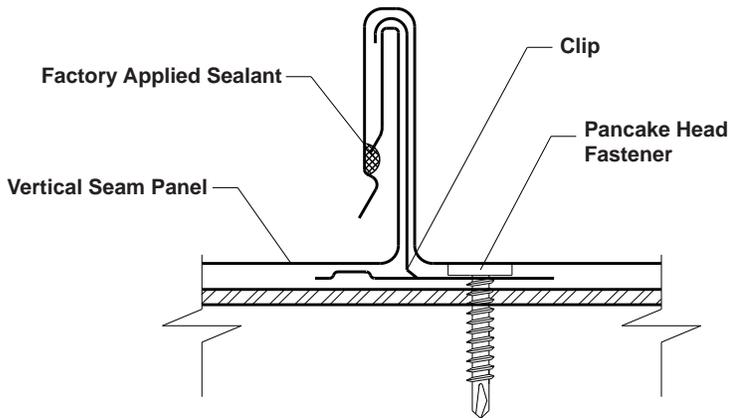
metal sales
manufacturing corporation



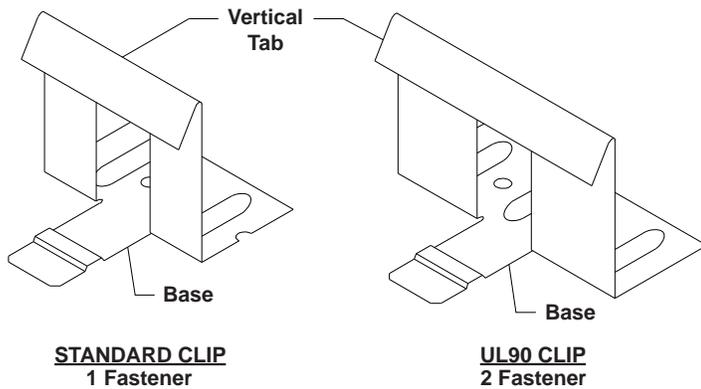
VERTICAL SEAM

**CONDENSED
TECHNICAL
REFERENCE**

ATTACHMENT DETAIL



PANEL CLIPS



GENERAL INFORMATION

► Slope

The minimum recommended slope for the Vertical Seam roof panel is 3:12.

► Substructure

Vertical Seam is designed to be utilized over open structural framing or a solid substrate.

► Clips

Clip spacing is based upon the spacing of structural framing members and loading requirements.

► Coverage

Vertical Seam panels are available in a 1³/₄" seam height with a 12", 16", or 18" width coverage.

► Lengths

Minimum factory cut length is 5'-0". Maximum recommended panel length is 45'-0". Longer panels require additional consideration in packaging, shipping, and erection. Please consult Metal Sales for recommendations.

► Fasteners

The fastener selection guide should be consulted for choosing the proper fastener for specific applications. Quantity and type of fastener must meet necessary loading and code requirements.

NOTE: All panels are subject to surface distortion due to improperly applied fasteners. Overdriven fasteners will cause stress and induce oil canning across the face of the panel at or near the point of attachment.

► Availability

Finishes: in Acrylic Coated Galvalume®, MS Colorfast45®, or various Kynar 500 (PVDF) colors.

Gauges: 24ga standard, or 22ga optional

SECTION PROPERTIES

ALLOWABLE UNIFORM LIVE LOADS PSF (3 or More Equal Spans)

Ga.	Width (in.)	Yield KSI	Weight PSF	Top in Compression				Bottom in Compression				Inward (Gravity / Deflection) Load						Outward Uplift (Stress) Load					
				Ixx		Sxx		Ixx		Sxx		2.5'		3'		3.5'		4'		4.5'		5'	
				In ⁴ /ft	In ³ /ft	In ⁴ /ft	In ³ /ft	In ⁴ /ft	In ³ /ft	2.5'	3'	3.5'	4'	4.5'	5'	2.5'	3'	3.5'	4'	4.5'	5'		
24	12"	50	1.38	0.1118	0.0774	0.0533	0.0557	155	118	93	75	62	52	44	43	42	41	40	39				
24	16"	50	1.26	0.0885	0.0589	0.0398	0.0419	117	88	70	56	46	39	26	26	25	25	24	24				
24	18"	50	1.22	0.0800	0.0526	0.0353	0.0372	104	79	62	50	41	35	23	22	21	21	20	19				
22	12"	50	1.80	0.1527	0.1067	0.0770	0.0768	242	181	141	111	88	71	69	67	65	62	60	58				
22	16"	50	1.67	0.1222	0.0819	0.0578	0.0577	181	136	106	84	66	54	41	40	39	37	36	35				
22	18"	50	1.60	0.1113	0.0740	0.0513	0.0513	161	121	94	74	59	48	31	30	29	29	28	27				

- Theoretical section properties have been calculated per AISI 2001 "Specification for the Design of Cold-formed Steel Structural Members." Ixx and Sxx are effective section properties for deflection and bending.
- Allowable load is calculated in accordance with AISI 2001 specifications considering bending, shear, combined bending and shear, deflection, and ASTM E 1592 testing when available. Allowable load considers the worst case of 3 and 4 equal span conditions. Allowable load does not address web crippling or fasteners/support connection and panel weight is not considered.
- Deflection consideration is limited by a maximum deflection ratio of L/180.
- Allowable loads do not include a 1/3 stress increase in uplift.

metal sales
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