VERTICAL SEAM

**Panel Overview**

- Finishes: PVDF, MS Colorfast45® and Acrylic-Coated Galvalume®
- Corrosion Protection: AZ55 per ASTM A 792 for unpainted Galvalume®
  AZ50 per ASTM A 792 for painted Galvalume®
  G90 per ASTM A 653 for Galvanized
- Gauges: 24 ga standard; 26 ga and 22 ga optional
- 12", 16" or 18" panel coverage, 1 3/4" rib height
- Panel Length: Minimum: 5'; Maximum: 45' recommended
- Architectural, structural integral standing seam roof system
- Alternate materials include 16 and 20 oz copper and 0.032" aluminum
- Snap-together side lap with factory-applied sealant
- * Minimum roof slope is 1:12 for solid substrates and 3:12 for open framing

**Testing and Approvals**

- UL 2218 Impact Resistance - Class 4
- UL 790 Fire Resistance Rating - Class A, per building code
- UL 263 Fire Resistance Rating - per assembly
- ASTM E 283 Air Leakage - 0.035 cfm/ft² at 1.57 psf
- ASTM E 331 Water Penetration - none at 12 psf
- ASTM E 1646 Water Penetration - none at 6.24 psf
- ASTM E 1592 Structural Performance
- UL 580 Uplift Resistance - Class 90 Constructions: #436, #446 and #448
- Texas Windstorm - Evaluation RC-412
- 2020 FBC Approvals - FL11560.8, FL11560.9, FL 11560.10, FL11560.11 and FL11560.12
- Miami-Dade County, Florida - NOA 18-1227.01, expires 3/8/2024
- ICC Evaluation Report - ESR-2385
VERTICAL SEAM

ATTACHMENT DETAIL

Factory-Applied Sealant

Vertical Seam Panel

FASTENING INFORMATION

▲ Clips
1. Clip spacing is based upon the design loads, the spanning capacity of the panels, the fasteners and the support members.
2. Clips are 0.050" thick. G90 is standard, 304 stainless is optional. 2 fastener holes is standard, 3 holes is optional.
3. Clips can accommodate practically unlimited thermal movement.

▲ Fasteners
1. Overdriven fasteners will cause panel distortions.
2. Fasteners to wood and steel should extend 1/2" or more past the inside face of the support material.

Clip Fasteners and Concealed End Fasteners:
- Attaching to Wood:
  #10-12 Pancake Head Wood Screw
- Attaching to Steel:
  <18 ga: 1/4"-14 Deck Screw
  >=18 ga, <=12 ga: #10-16 Pancake Head Driller
- Attaching to Concrete:
  3/16" or 1/4" TapCon, Phillips Flat Head

Exposed End Fasteners:
- Attaching to Wood:
  #10-14 XL Wood Screw
- Attaching to Steel:
  #12-14 XL Driller

Trim Fasteners:
- 1/4"-14 x 7/8" XL Stitch Screw
- 1/8" x 3/16" Pop Rivet

SECTION PROPERTIES

<table>
<thead>
<tr>
<th>Ga</th>
<th>Width</th>
<th>Yield ksi</th>
<th>Weight psf</th>
<th>Top In Compression</th>
<th>Bottom In Compression</th>
<th>ALLOWABLE UNIFORM LOADS, psf</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ixx in^4/ft</td>
<td>Sxx in^3/ft</td>
<td>Inward Load</td>
</tr>
<tr>
<td>----</td>
<td>-------</td>
<td>-----------</td>
<td>------------</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.5' 3' 3.5'</td>
<td>4' 4.5' 5'</td>
<td>2.5' 3' 3.5' 4' 4.5' 5'</td>
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<tr>
<td>26</td>
<td>12</td>
<td>50</td>
<td>1.06</td>
<td>0.0783</td>
<td>0.05320</td>
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<tr>
<td>26</td>
<td>16</td>
<td>50</td>
<td>0.97</td>
<td>0.0617</td>
<td>0.0403</td>
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<tr>
<td>26</td>
<td>18</td>
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<td>50</td>
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<td>0.0777</td>
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<td>50</td>
<td>1.60</td>
<td>0.1113</td>
<td>0.0737</td>
<td>270</td>
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</tbody>
</table>

1. Theoretical section properties have been calculated per AISI 2016 'North American Specification for the Design of Cold-Formed Steel Structural Members'. Ixx and Sxx are effective section properties for deflection and bending.
2. Allowable loads are calculated in accordance with AISI 2016 specifications considering bending, shear, combined bending & shear, deflection and ASTM E 1592 uplift testing for 24 ga and 22 ga and UL 580 uplift testing for 26 ga. Allowable loads do not address web crippling, fasteners or support material. Allowable loads consider the three or more equal spans condition. Panel weight is not considered.
3. Deflection consideration is limited by a maximum deflection ratio of L/180 of span.
4. Allowable loads do not include a 1/3 stress increase for wind.
- Indicates that no testing is available for the application.

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