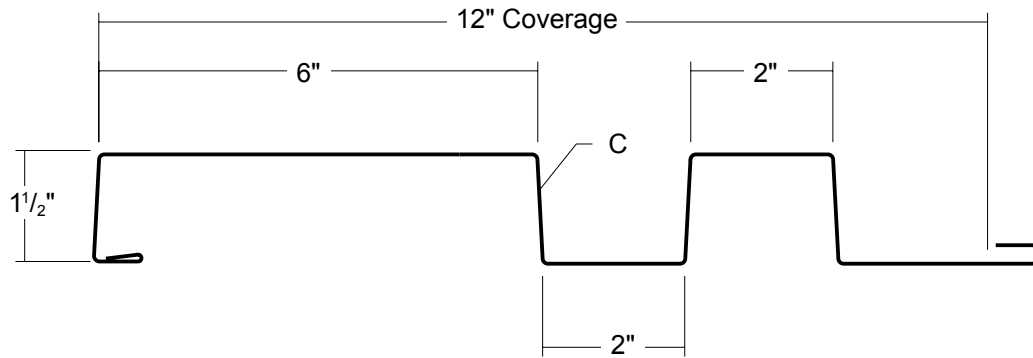


EM15-1226 CF WALL

Condensed
Technical
Reference

EMPIRE SERIES™



ARCHITECTURAL
COMMERCIAL
INDUSTRIAL
PANEL

CONCEALED
FASTENED

12"
COVERAGE

WALL AND
LINER PANEL

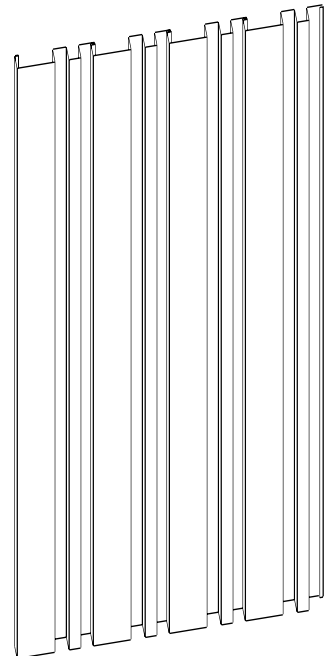
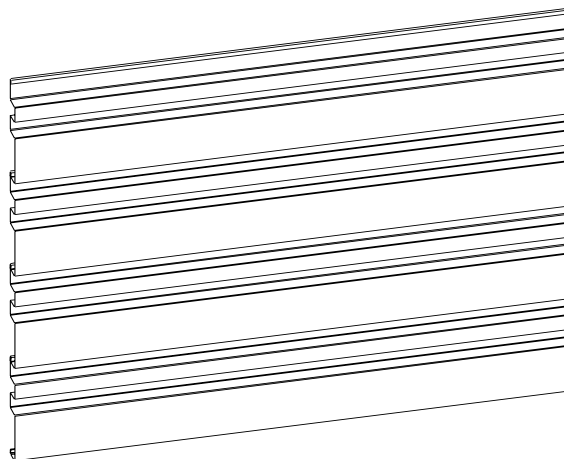
OPEN FRAMING OR
SOLID SUBSTRATE

PANEL OVERVIEW

- ▶ Finish: Standard: PVDF and Acrylic-Coated Galvalume®
Optional: multi-pass Kynar 500® and Fluoropon® PURE
- ▶ Corrosion Protection: AZ50 per ASTM A 792 for Painted Galvalume®
AZ55 per ASTM A 792 for Acrylic-Coated Galvalume®
G90 per ASTM A 653 for Painted Galvanized
- ▶ Gauges: 24 ga standard; 22 ga and 20 ga optional
- ▶ 12" panel coverage, 1 1/2" panel height, unequal rib sizes
- ▶ Clip-attached, concealed-fastened panel system
- ▶ Panel Length: 6' minimum, 30' maximum
- ▶ Use on single-skin or field-assembled wall systems

4 PANEL MOCKUP

- ▶ Horizontal or vertical application
- ▶ Concealed fastener



TESTING

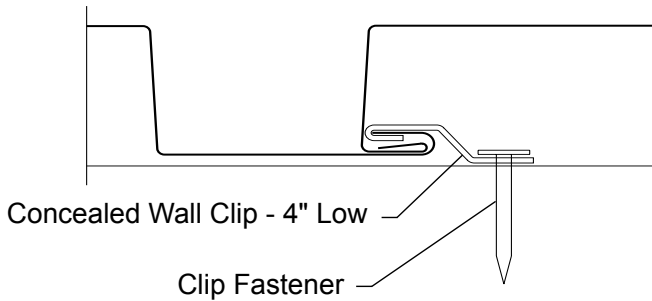
- ▶ ASTM E 283 Air Leakage, with building wrap
- ▶ ASTM E 331 Water Penetration, with building wrap
- ▶ ASTM E 330 Load Test
- ▶ ASTM E 1592 Load Test

MSS Metal Sales™

EM15-1226 CF WALL

**Condensed
Technical
Reference**

PANEL ATTACHMENT



FASTENING INFORMATION

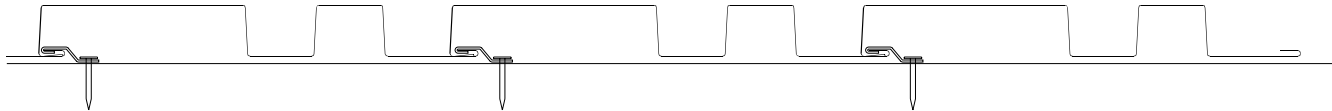
- Concealed Wall Clip - 4" Low is 1-3/4" x 4" x 3/8", from 16 ga, G90 material with 2 fastener holes.
- Clip Fastener(s) should be driven just to contact between fastener head / clip / support. Over-driven fasteners can cause panel distortions.
- Fasteners should extend 1/2" or more past the inside face of the support material for steel and wood sheathing support materials.
- Clip Fasteners:
 - Attaching to Wood:
 - #12-11 Low Profile Wood Screw
 - Attaching to Steel:
 - < 18 ga: 1/4"-13 Deck Screw
 - ≥ 18 ga, ≤ 12 ga: #10-16 Pancake Head Driller
 - > 12 ga: 1/4"-14 Self Driller, No Washer

INSTALLATION DIRECTION

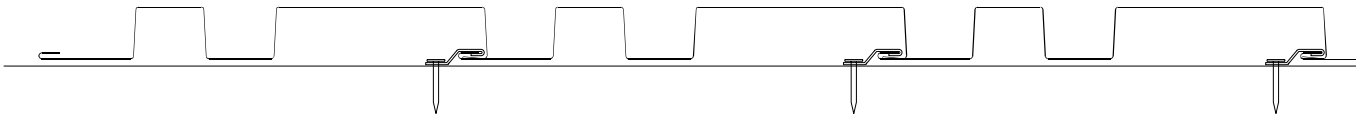
Horizontally-oriented panels must be installed from the bottom to the top.

Vertically-oriented panels may be installed from the right-to-left or left-to-right.

Left-to-Right Installation of Vertically-Oriented Panels



Right-to-Left Installation of Vertically-Oriented Panels



SECTION PROPERTIES

ALLOWABLE UNIFORM LOADS, psf For various clip spacings

Ga	Width in	Yield ksi	Weight psf	Top In Compression		Bottom In Compression		Inward Load					Outward Load				
				I _{xx} in ⁴ /ft	S _{xx} in ³ /ft	I _{xx} in ⁴ /ft	S _{xx} in ³ /ft	2'	3'	4'	5'	6'	2'	3'	4'	5'	6'
24	12	50	1.54	0.1069	0.1114	0.1459	0.1574	117	60	38	27	21	78	43	29	21	17
22	12	50	2.01	0.1523	0.1647	0.2031	0.2266	117	60	38	27	21	78	43	29	21	17
20	12	33	2.43	0.2100	0.2422	0.2690	0.3164	117	60	38	27	21	78	43	29	21	17

1. Theoretical section properties have been calculated per AISI 2016 'North American Specification for the Design of Cold-Formed Steel Structural Members'. I_{xx} and S_{xx} 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 load testing on 16 ga girts of comparable profiles. Panel weight is not considered. Allowable loads do not consider other support conditions including web crippling, fasteners or support materials.
3. Allowable loads consider the 3 or more equal spans condition.
4. Deflection consideration is limited by a maximum deflection ratio of L/180 of span.
5. Allowable loads do not include a 1/3 stress increase for wind.

MS Metal Sales™

metalsales.us.com

Anchorage, AK 866.640.7663
 Bay City, MI 888.777.7640
 Deer Lake, PA 800.544.2577
 Denver, CO 800.289.7663

Detroit Lakes, MN 888.594.1394
 Fontana, CA 800.782.7953
 Fort Smith, AR 877.452.3915
 Independence, MO 800.747.0012

Jacksonville, FL 800.394.4419
 Jefferson, OH 800.321.5833
 Mocksville, NC 800.228.6119
 Nashville, TN 800.251.8508
 Rock Island, IL 800.747.1206
 Rogers, MN 800.328.9316

Seattle, WA 800.431.3470
 Sellersburg, IN 800.999.7777
 Sioux Falls, SD 888.299.0024
 Spokane, WA 800.572.6565
 Temple, TX 800.543.4415
 Woodland, CA 800.759.6019