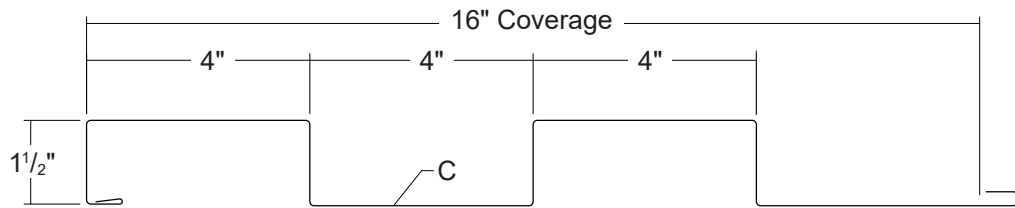


EM15-168 CF WALL

Condensed
Technical
Reference

EMPIRE SERIES™



ARCHITECTURAL
COMMERCIAL
INDUSTRIAL
PANEL

CONCEALED
FASTENERS

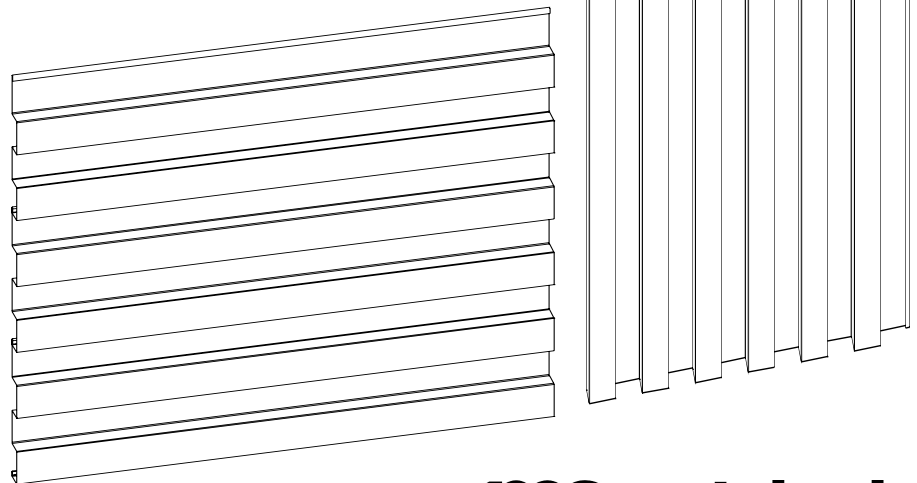
16"
COVERAGE

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 and 22 ga optional
- ▶ 16" panel coverage, 1 1/2" panel height, 8" rib spacing
- ▶ Clip-attached, concealed-fastened panel system
- ▶ Panel Length: 5' minimum, 30' maximum
- ▶ Panels can be installed horizontally or vertically
- ▶ Panels are interchangeable for accent effects
- ▶ Use on single-skin or field-assembled wall systems



TESTING

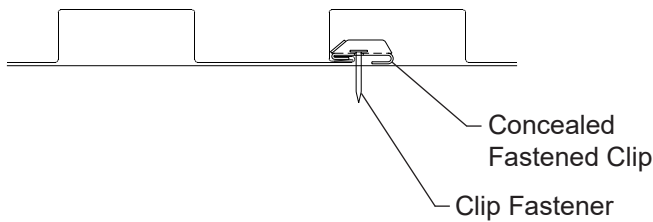
- ▶ ASTM E 283 Air Leakage
- ▶ ASTM E 331 Water Penetration
- ▶ ASTM E 330 Load Test
- ▶ ASTM E 1592 Load Test

ms metal sales™
manufacturing corporation

EM15-168 CF WALL

**Condensed
Technical
Reference**

PANEL ATTACHMENT



FASTENING INFORMATION

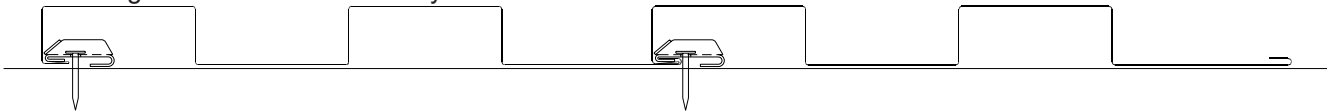
- Concealed Fastened Clip is 3" x 1-3/4" x 3/4", from 16 ga, G90 material with 2 fastener holes.
- Clip Fastener(s) should be driven just to contact between fastener head / clip / panel / support. Beyond contact, the clip can crush the open hem of the panel and make engagement of the next panel difficult. Overdriven fasteners will 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 Drill
 - > 12 ga: 1/4"-14 Self Driller, No Washer

INSTALLATION DIRECTION

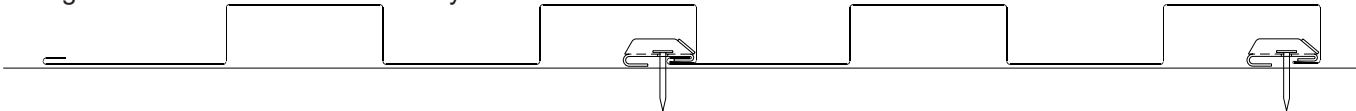
Horizontally-oriented panels must be installed from the bottom to the top.

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 fastener spacings

Ga	Width in	Yield ksi	Weight psf	SECTION PROPERTIES				ALLOWABLE UNIFORM LOADS, psf For various fastener spacings									
				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	16	50	1.40	0.0960	0.0896	0.1118	0.1208	120	97	71	47	23	40	35	30	25	20
22	16	50	1.83	0.1388	0.1332	0.1568	0.1759	120	97	71	47	23	40	35	30	25	20

1. Theoretical section properties have been calculated per AISI 2012 '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 2012 specifications considering bending, shear, combined bending and shear and deflection. Allowable loads include load testing over 16 ga girts. Allowable loads consider the 3 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.

ms metal sales™
manufacturing corporation

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