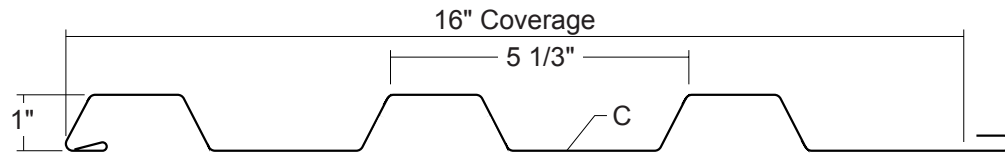


AP1-1653 CF WALL

Condensed
Technical
Reference

APEX SERIES™



ARCHITECTURAL
COMMERCIAL
INDUSTRIAL
PANEL

CONCEALED
FASTENERS

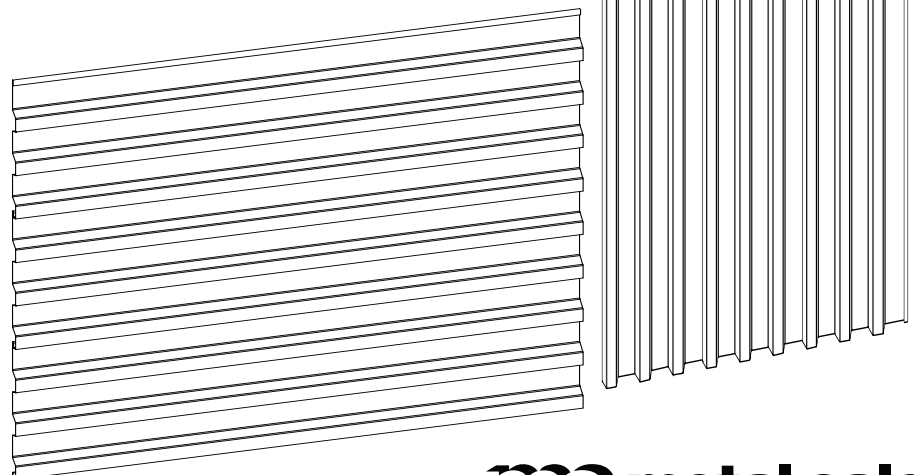
16"
COVERAGE

WALL AND
LINER PANEL

OPEN FRAMING OR
SOLID SUBSTRATE

PANEL OVERVIEW

- ▶ Finish: Standard: PVDF and Acrylic-Coated Galvalume®
Optional: multi-pass Kynar 500® and Fluoropolymer® 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
- ▶ 16" panel coverage, 1" panel height, 5 1/3" 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

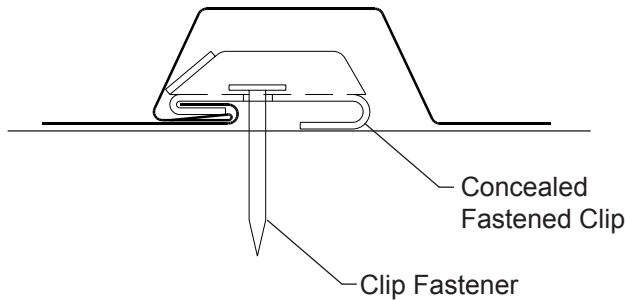
- ▶ ASTM E 283 Air Leakage
- ▶ ASTM E 331 Water Penetration
- ▶ ASTM E 330 Load Test
- ▶ ASTM E 1592 Load Test
- ▶ 2020 FBC Approval - FL 34027.1

ms metal sales™
manufacturing corporation

AP1-1653 CF Wall

**Condensed
Technical
Reference**

PANEL ATTACHMENT



FASTENING INFORMATION

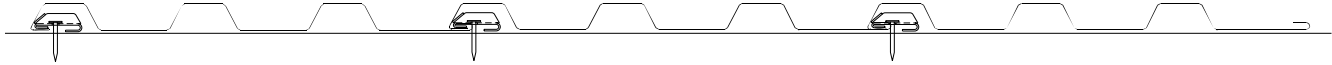
- Concealed Fastened Clip is 3" x 1-3/4" x 3/4", from 16 ga, G90 material with 2 fastener holes.
- Clip Fastener(s) should be driven just to contact between fastener head / clip / panel / support. Beyond contact, the clip can crush the open hem of the panel and make engagement of the next panel difficult.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

INSTALLATION DIRECTION

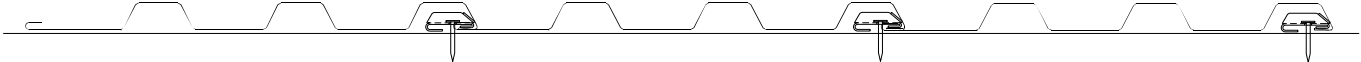
Horizontally-oriented panels must be installed from the bottom to the top.

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				
				Ixx in ⁴ /ft	Sxx in ³ /ft	Ixx in ⁴ /ft	Sxx in ³ /ft	2'	3'	4'	5'	6'	2'	3'	4'	5'	6'
24	16	50	1.29	0.0435	0.0674	0.0383	0.0799	120	95	71	47	23	89	73	57	41	26
22	16	50	1.69	0.0623	0.0992	0.0548	0.1120	120	95	71	47	23	89	73	57	41	26
20	16	33	2.06	0.0998	0.1561	0.0893	0.1544	120	95	71	47	23	89	73	57	41	26

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 load is calculated in accordance with AISI 2016 specifications considering bending, shear, combined bending & shear, deflection and load testing of comparable profiles on 16 ga girls. Allowable load does not address web crippling, fasteners or support material. Allowable load considers 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.

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