Contempra-Apex-Empire - CF Wall - Technical Sheets

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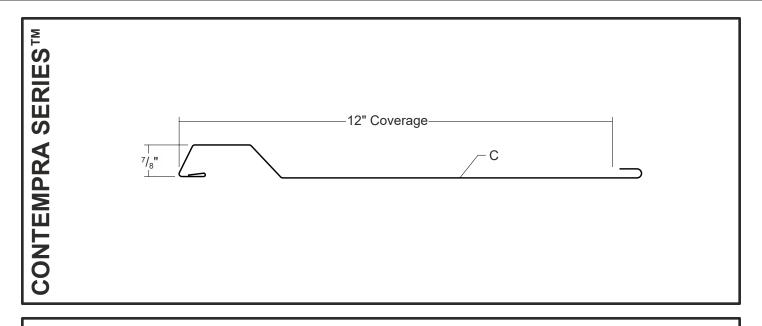
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CN88-1212 CF Wall - Technical Sheet



ARCHITECTURAL COMMERCIAL INDUSTRIAL PANEL

CONCEALED FASTENERS

12" COVERAGE WALL AND LINER PANEL

OPEN FRAMING OR SOLID SUBSTRATE

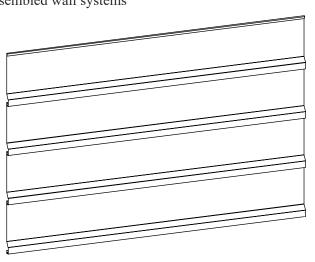
PANEL OVERVIEW

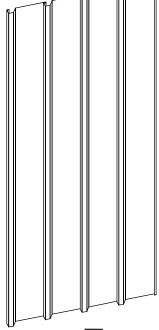
- ► Finish: Standard: PVDF and Acrylic-Coated Galvalume®
 - Optional: multi-pass Kynar $500^{\tiny{\circledR}}$ and Fluropon $^{\tiny{\thickspace}}$ PURE
- ► Corrosion Protection: AZ50 per ASTM A 792 for painted Galvalume®

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
- ▶ 12" panel coverage, ⁷/₈" panel height, 12" 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



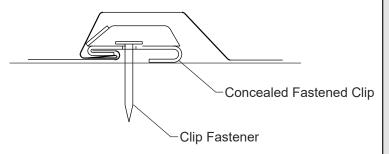


- ► ASTM E 283 Air Leakage
- ► ASTM E 331 Water Penetration
- ► ASTM E 330 Load Test
- ASTM E 1592 Load Test



CN88-1212 CF Wall - Technical Sheet

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 Fasteners 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 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

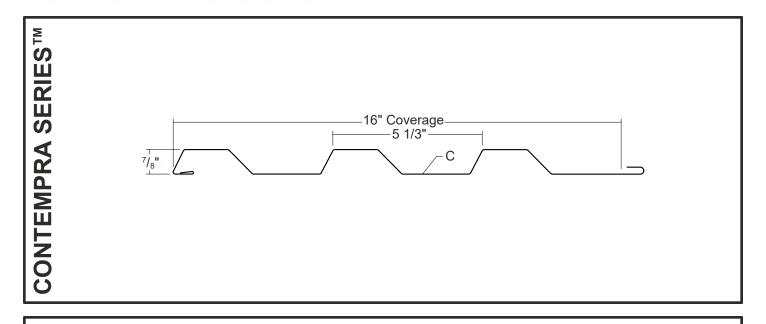


			SECT	ION PR	OPERTI	ES		,					FOR tene			′ •	f
	Width Yield Weight Top In Compression Bottom In Compre								Inw	ard L	nad			Outs	ward	l oad	
Ga	in	ksi	psf	lxx	Sxx	lxx	Sxx			u.u	Juu			- Out	, ara		
			P	in⁴/ft	in³/ft	in⁴/ft	in³/ft	2'	3'	4'	5'	6'	2'	3'	4'	5'	6'
24	12	50	1.20	0.0240	0.0321	0.0190	0.0376	120	97	71	47	23	103	84	66	48	30
22	12	50	1.57	0.0348	0.0469	0.0267	0.0500	120	97	71	47	23	103	84	66	48	30

- 1. Theoretical section properties have been calculated per AISI 2012 '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 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.



CN88-1653 CF Wall - Technical Sheet



ARCHITECTURAL COMMERCIAL INDUSTRIAL PANEL

CONCEALED FASTENERS

16" COVERAGE WALL AND LINER PANEL

OPEN FRAMING OR SOLID SUBSTRATE

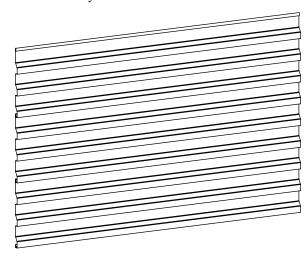
PANEL OVERVIEW

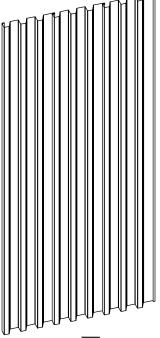
- ► Finish: Standard: PVDF and Acrylic-Coated Galvalume®
 - Optional: multi-pass Kynar $500^{\text{\tiny \$}}$ and Fluropon $^{\text{\tiny \$}}$ PURE
- ► Corrosion Protection: AZ50 per ASTM A 792 for painted Galvalume®

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, ⁷/₈" panel height, 5¹/₃" 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



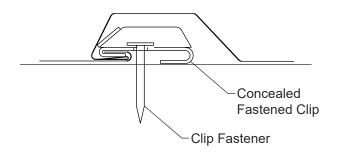


- ► ASTM E 283 Air Leakage
- ► ASTM E 331 Water Penetration
- ► ASTM E 330 Load Test
- ► ASTM E 1592 Load Test



CN88-1653 CF Wall - Technical Sheet

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 Fasteners 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 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.

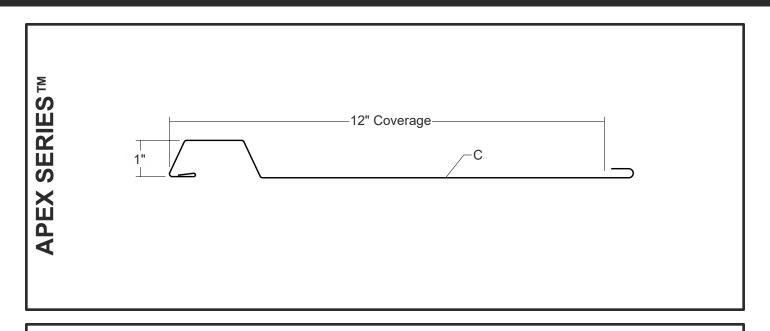


			SECT	ION PR	OPERTI	ES								M LC		s, psi gs	f
	Width	Yield	Weight		mpression	Bottom In C	ompression		Inw	ard I	nad			Outs	ward l	oad	
Ga	in	ksi	psf	lxx	Sxx	lxx	Sxx	Inward Load						- Out	, ara		
				in⁴/ft	in³/ft	in⁴/ft	in³/ft	2' 3' 4' 5'				6'	2'	3'	4'	5'	6'
24	16	50	1.22	0.0383	0.0638	0.0353	0.0749	120	97	71	47	23	89	73	57	41	26
22	16	50	1.59	0.0548	0.0936	0.0495	0.1062	120	97	71	47	23	89	73	57	41	26

- 1. Theoretical section properties have been calculated per AISI 2012 '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 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.



AP1-1212 CF Wall - Technical Sheet



ARCHITECTURAL COMMERCIAL INDUSTRIAL PANEL

CONCEALED FASTENERS

12" COVERAGE WALL AND LINER PANEL

OPEN FRAMING OR SOLID SUBSTRATE

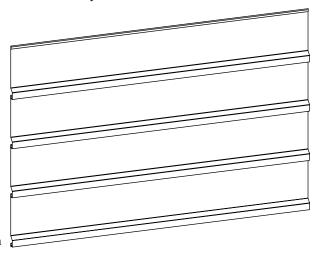
PANEL OVERVIEW

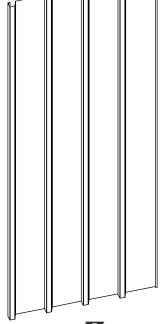
- ► Finish: Standard: PVDF and Acrylic-Coated Galvalume®
 - Optional: multi-pass Kynar $500^{\tiny{\circledR}}$ and Fluropon $^{\tiny{\circledR}}$ PURE
- ► Corrosion Protection: AZ50 per ASTM A 792 for painted Galvalume®

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
- ▶ 12" panel coverage, 1" panel height, 12" 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



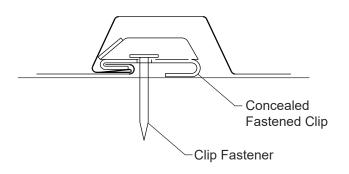


- ► ASTM E 283 Air Leakage
- ► ASTM E 331 Water Penetration
- ► ASTM E 330 Load Test
- ASTM E 1592 Load Test



AP1-1212 CF Wall - Technical Sheet

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 Fasteners 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

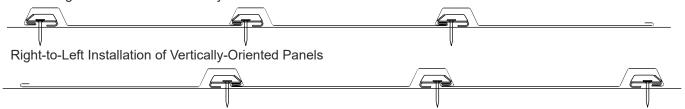
≥ 18 ga, ≤ 12 ga: #10-16 Pancake Head Driller

> 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.

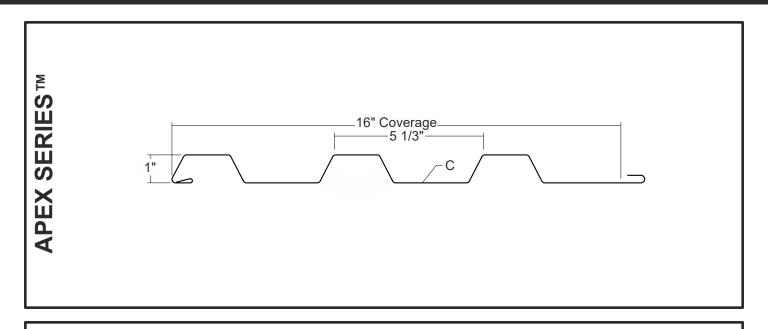


			SECT	ION PR	OPERTI	ES							FORI				f
	Width	Yield	Weight		mpression	Bottom In C	ompression		Inw	ard I	oad			Out	ward	l oad	
Ga	in	ksi	psf	lxx	Sxx	lxx	Sxx	Inward Load									
			'	in⁴/ft	in³/ft	in⁴/ft	in³/ft	2'	3'	4'	5'	6'	2'	3'	4'	5'	6'
24	12	50	1.21	0.0259	0.0329	0.0207	0.0388	120	95	71	47	23	103	84	66	48	30
22	12	50	1.58	0.0375	0.0481	0.0290	0.0516	120	95	71	47	23	103	84	66	48	30

- 1. Theoretical section properties have been calculated per AISI 2012 'North American Specification for the Design of Cold-Formed Steel Structural Members'. Ixx and Sxx are effective section properties for deflection and bending.
- 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.



AP1-1653 CF Wall - Technical Sheet



ARCHITECTURAL COMMERCIAL INDUSTRIAL PANEL

CONCEALED FASTENERS

16" COVERAGE WALL AND LINER PANEL

OPEN FRAMING OR SOLID SUBSTRATE

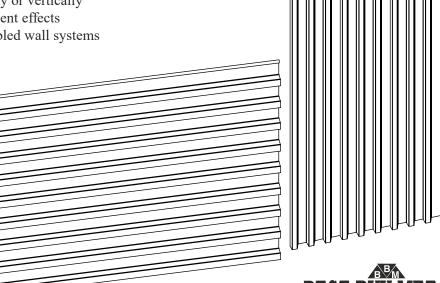
PANEL OVERVIEW

- ► Finish: Standard: PVDF and Acrylic-Coated Galvalume®
 - Optional: multi-pass Kynar 500® and Fluropon® 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" panel height, 5¹/₃" 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

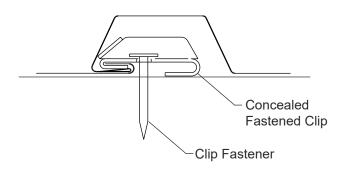


- ► ASTM E 283 Air Leakage
- ► ASTM E 331 Water Penetration
- ► ASTM E 330 Load Test
- ► ASTM E 1592 Load Test



AP1-1653 CF Wall - Technical Sheet

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 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

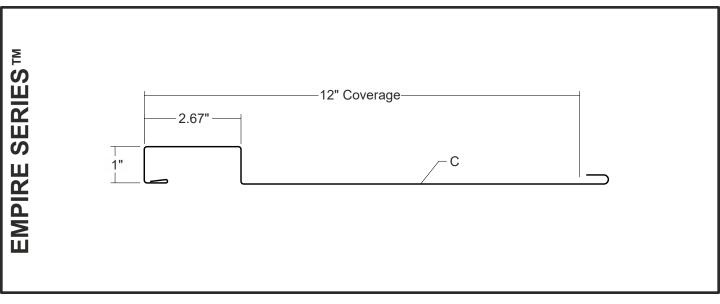


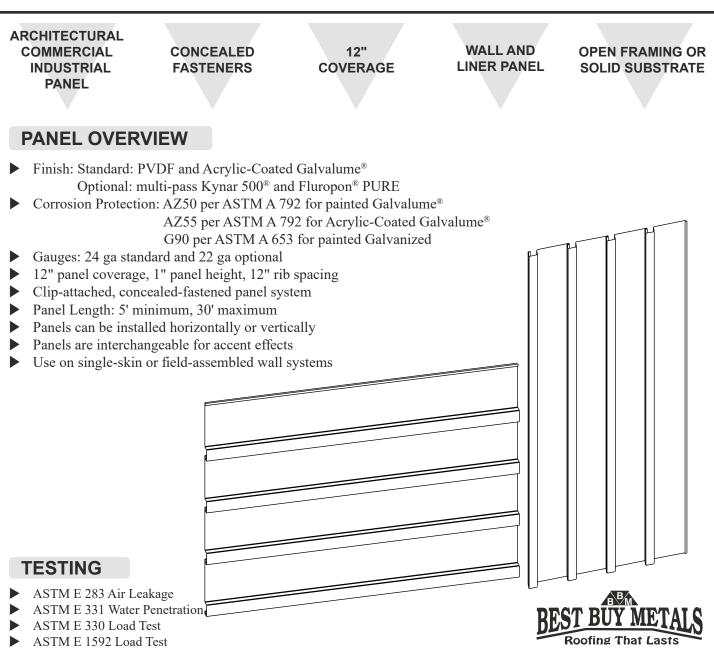
			SECT	ION PR	OPERTI	ES							FORI tene			, psf js	
Ca	Ga Width Yield Weight Top In Compression Bottom In Compres								Inw	ard L	oad			Outv	vard L	_oad	
Ga	in	ksi	psf	in ⁴ /ft	in³/ft	lxx in⁴/ft	Sxx in³/ft	Inward Load 2' 3' 4' 5'				6'	2'	3'	4'	5'	6'
24	16	50	1.29	0.0435	0.0674	0.0383	0.0799	120	95	71	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

- 1. Theoretical section properties have been calculated per AISI 2012 '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 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.



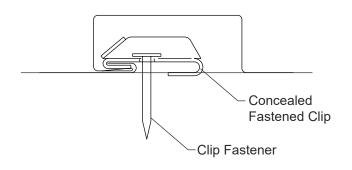
EM1-1212 CF Wall - Technical Sheet





EM1-1212 CF Wall - Technical Sheet

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 Fasteners 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

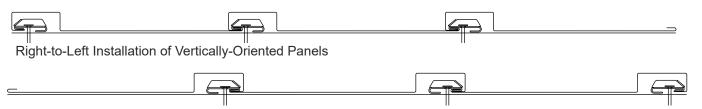
Attaching to Steel:

- < 18 ga: 1/4"-13 Deck Screw
- ≥ 18 ga, ≤ 12 ga: #10-16 Pancake Head 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.



			SECT	ION PR	OPERTI	ES				OWA or va						′ •	f
	Width Yield Weight Top In Compression Bottom In Compres						ompression		Inw	ard L	oad			Outv	ward	oad	
Ga	in	ksi	psf	lxx	Sxx	lxx	Sxx			u. u							
			'	in⁴/ft	in³/ft	in⁴/ft	in³/ft	2'	3'	4'	5'	6'	2'	3'	4'	5'	6'
24	12	50	1.25	0.0297	0.0355	0.0291	0.0574	120	97	71	47	23	70	58	45	33	21
22	12	50	1.66	0.0442	0.0538	0.0410	0.0783	120	97	71	47	23	70	58	45	33	21

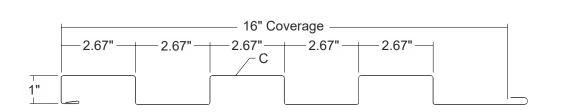
- 1. Theoretical section properties have been calculated per AISI 2012 'North American Specification for the Design of Cold-Formed Steel Structural Members'. Ixx and Sxx are effective section properties for deflection and bending.
- 2. Allowable loads are calculated in accordance with AISI 2012 specifications considering bending, shear, combined bending and shear and deflection.

 Allowable loads include load testing of a comparable profile over16 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.



EM1-1653 CF Wall - Technical Sheet

EMPIRE SERIES™



ARCHITECTURAL COMMERCIAL INDUSTRIAL PANEL

CONCEALED FASTENERS

16" COVERAGE WALL AND LINER PANEL

OPEN FRAMING OR SOLID SUBSTRATE

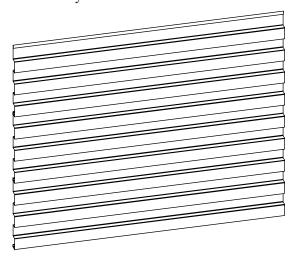
PANEL OVERVIEW

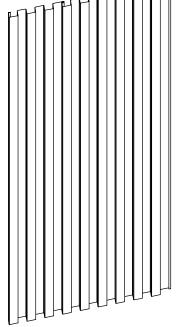
- ► Finish: Standard: PVDF and Acrylic-Coated Galvalume®
 - Optional: multi-pass Kynar $500^{\text{\tiny \$}}$ and Fluropon $^{\text{\tiny \$}}$ PURE
- ► Corrosion Protection: AZ50 per ASTM A 792 for painted Galvalume®

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" panel height, 5¹/₃" 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





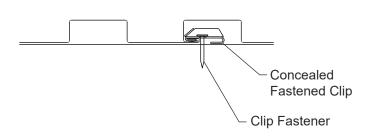


- ► ASTM E 283 Air Leakage
- ► ASTM E 331 Water Penetration
- ► ASTM E 330 Load Test
- ► ASTM E 1592 Load Test



EM1-1653 CF Wall - Technical Sheet

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

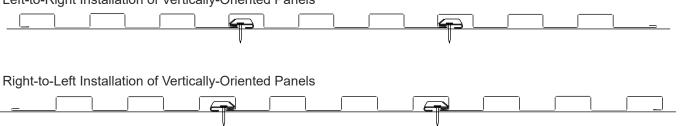
Attaching to Steel:

- < 18 ga: 1/4"-13 Deck Screw
- ≥ 18 ga, ≤ 12 ga: #10-16 Pancake Head 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.



			SECT	ION PR	OPERTI	ES								M LC		s, psi gs	f
	Width	Yield	Weight		mpression	ompression		Inw	ard I	oad			Outv	ward I	oad		
Ga	in	ksi	psf	lxx	Sxx	lxx	Sxx	Inward Load									
			'	in⁴/ft	in³/ft	in⁴/ft	in³/ft	2'	3'	4'	5'	6'	2'	3'	4'	5'	6'
24	16	50	1.39	0.0495	0.0729	0.0533	0.0911	120	97	71	47	23	70	58	45	33	21
22	16	50	1.81	0.0713	0.1094	0.0750	0.1340	120	97	71	47	23	70	58	45	33	21

- 1. Theoretical section properties have been calculated per AISI 2012 '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 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.



EM15-126 CF Wall - Technical Sheet

EMPIRE SERIES™ 12" Coverage 3" -11/2"

ARCHITECTURAL COMMERCIAL **INDUSTRIAL** PANEL

CONCEALED **FASTENERS**

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 Fluropon® 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

12" panel coverage, 11/2" panel height, 6" rib spacing

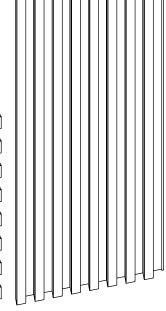
Clip-attached, concealed-fastened panel system

Panel Length: 5' minimum, 30' maximum

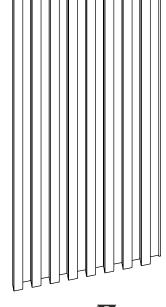
Panels can be installed horizontally or vertically

Panels are interchangeable for accent effects

Use on single-skin or field-assembled wall systems



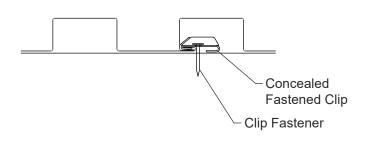
- ASTM E 283 Air Leakage
- ASTM E 331 Water Penetration
- ASTM E 330 Load Test
- ASTM E 1592 Load Test





EM15-126 CF Wall - Technical Sheet

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

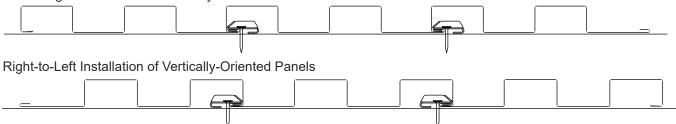
Attaching to Steel:

- < 18 ga: 1/4"-13 Deck Screw
- ≥ 18 ga, ≤ 12 ga: #10-16 Pancake Head 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.



			SECT	ION PR	OPERTI	ES		,		OWA or va						s, psi js	
	Width	Viold	Majaht		mpression	Bottom In C	ompression		Inw	ard I	nad			Outs	vard l	nad	
Ga	in	ksi	Weight psf	lxx	Sxx	lxx	Sxx	Inward Load						- Outi	vara i	-044	
				in⁴/ft	in³/ft	in⁴/ft	in³/ft	2'	3'	4'	5'	6'	2'	3'	4'	5'	6'
24	12	50	1.56	0.1189	0.1156	0.1324	0.1549	120	97	71	47	23	40	35	30	25	20
22	12	50	2.04	0.1702	0.1710	0.1845	0.2248	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'. Ixx and Sxx 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.



EM15-168 CF Wall - Technical Sheet

ARCHITECTURAL COMMERCIAL INDUSTRIAL PANEL

CONCEALED FASTENERS

16" COVERAGE WALL AND LINER PANEL

OPEN FRAMING OR SOLID SUBSTRATE

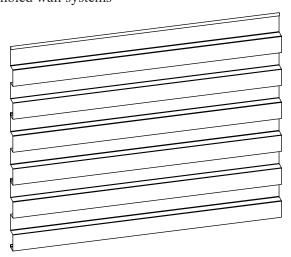
PANEL OVERVIEW

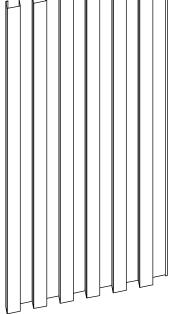
- ► Finish: Standard: PVDF and Acrylic-Coated Galvalume®
 - Optional: multi-pass Kynar $500^{\text{\tiny \$}}$ and Fluropon $^{\text{\tiny \$}}$ PURE
- ► Corrosion Protection: AZ50 per ASTM A 792 for painted Galvalume®

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, 1¹/₂" 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



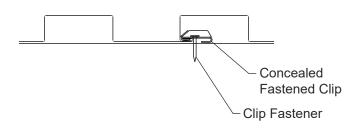


- ASTM E 283 Air Leakage
- ► ASTM E 331 Water Penetration
- ► ASTM E 330 Load Test
- ► ASTM E 1592 Load Test



EM15-168 CF Wall - Technical Sheet

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

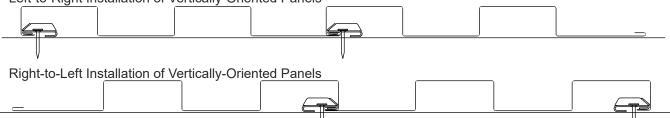
Attaching to Steel:

- < 18 ga: 1/4"-13 Deck Screw
- ≥ 18 ga, ≤ 12 ga: #10-16 Pancake Head 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.

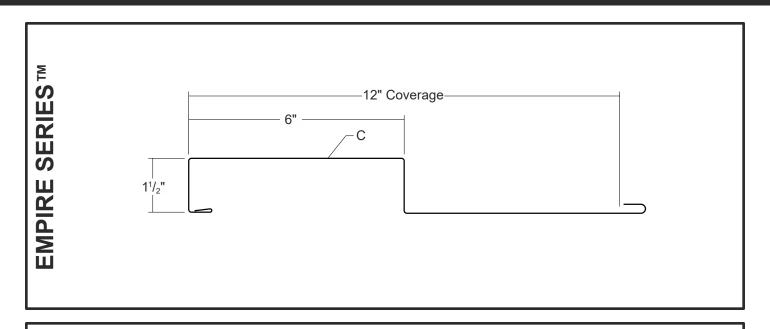


			SECT	ION PR	OPERTI	ES		,						M LC		· •	
	Ga Width Yield Weight Top In Compression Bottom In Compression								Inw	ard L	nad			Outs	ward I	oad	
Ga	in	ksi	psf	Sxx			u. u	ouu			Juli	vara i	-044				
			'	in⁴/ft	in³/ft	in⁴/ft	in³/ft	2'	3'	4'	5'	6'	2'	3'	4'	5'	6'
24	16	50	1.40	0.0960	0.0896	0.1118	0.1208	120 97 71 47			23	40	35	30	25	20	
22	16	50	1.83						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'. Ixx and Sxx 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.



EM15-1266 CF Wall - Technical Sheet



ARCHITECTURAL COMMERCIAL INDUSTRIAL PANEL

CONCEALED FASTENERS

12" COVERAGE WALL AND LINER PANEL

OPEN FRAMING OR SOLID SUBSTRATE

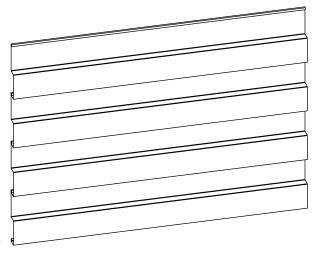
PANEL OVERVIEW

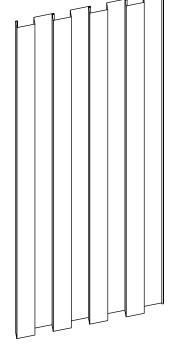
- ► Finish: Standard: PVDF and Acrylic-Coated Galvalume®
 - Optional: multi-pass Kynar $500^{\tiny{\circledR}}$ and Fluropon $^{\tiny{\circledR}}$ PURE
- ► Corrosion Protection: AZ50 per ASTM A 792 for painted Galvalume®

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
- ▶ 12" panel coverage, 1¹/₂" panel height, 12" 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



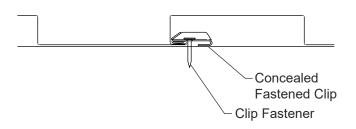


- ► ASTM E 283 Air Leakage
- ► ASTM E 331 Water Penetration
- ► ASTM E 330 Load Test
- ASTM E 1592 Load Test



EM15-1266 CF Wall - Technical Sheet

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

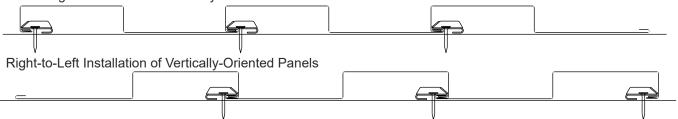
Attaching to Steel:

- < 18 ga: 1/4"-13 Deck Screw
- ≥ 18 ga, ≤ 12 ga: #10-16 Pancake Head 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.

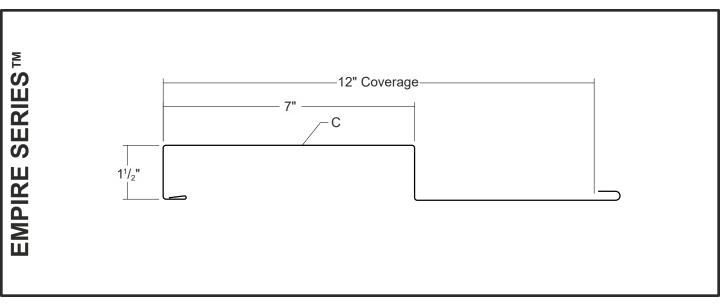


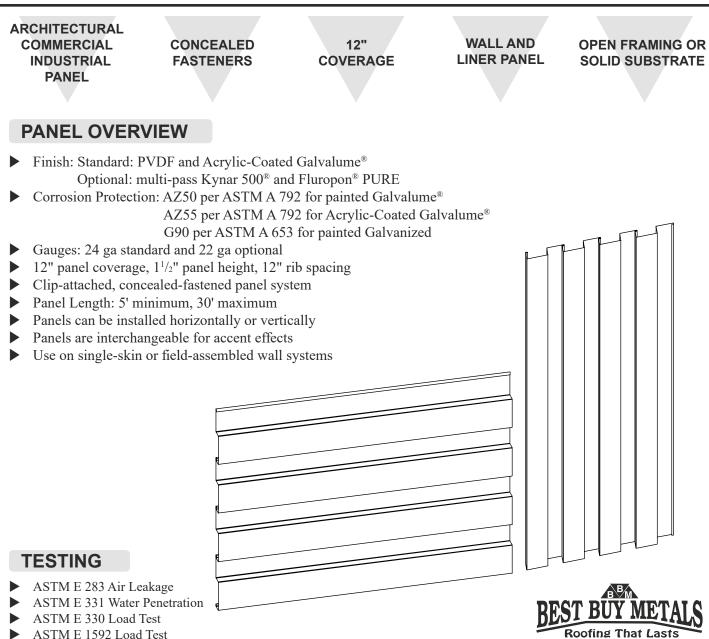
			SECT	ION PR	OPERTI	ES							FORI tene			′ •	7
	Ga Width Yield Weight Top In Compression Bottom In Compres								Inw	ard L	oad			Out	ward l	Load	
Ga	in	ksi	psf	lxx in⁴/ft	Sxx in³/ft	lxx in⁴/ft	Sxx in³/ft	Inward Load				6'	2'	3'	4'	5'	6'
24	12	50	1.33	0.0726	0.0623	0.1015	0.1061				23	103	83	64	44	25	
22									97	71	47	23	103	83	64	44	25

- 1. Theoretical section properties have been calculated per AISI 2012 'North American Specification for the Design of Cold-Formed Steel Structural Members'. Ixx and Sxx are effective section properties for deflection and bending.
- 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.



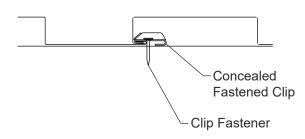
EM15-1275 CF Wall - Technical Sheet





EM15-1275 CF Wall - Technical Sheet

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

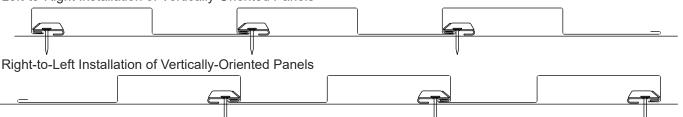
Attaching to Steel:

- < 18 ga: 1/4"-13 Deck Screw
- ≥ 18 ga, ≤ 12 ga: #10-16 Pancake Head 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.

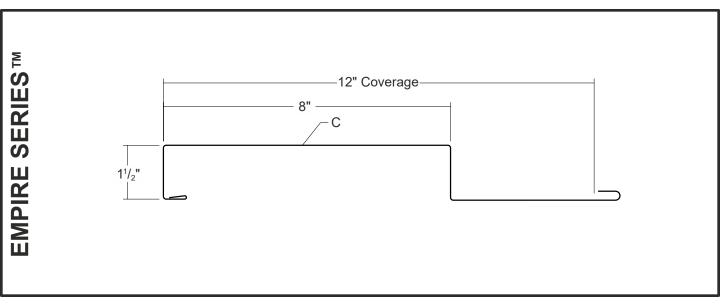


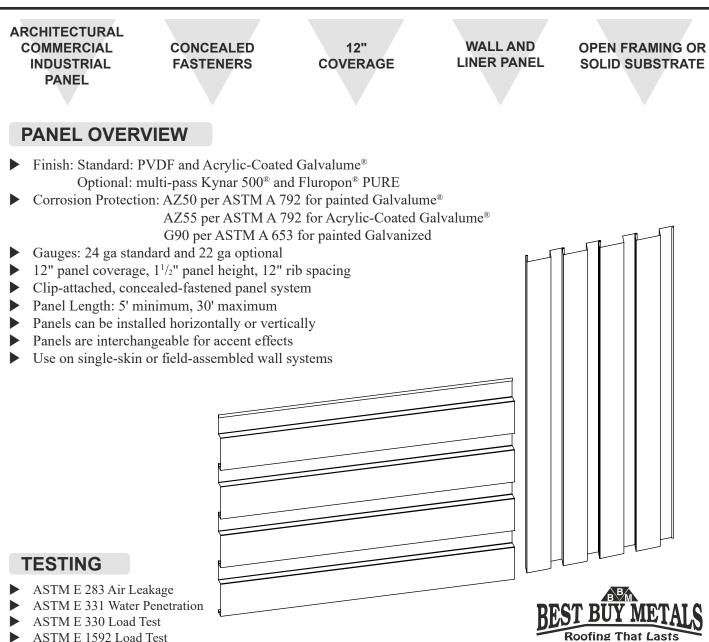
			SECT	ION PR	OPERTI	ES		,		OWA or va						· •	
	Width Yield Weight Top In Compression Bottom In Compression								Inw	ard L	oad			Outv	ward	Load	
Ga	in	ksi	psf	lxx	Sxx	lxx	Sxx	2/5									
			·	in⁴/ft	in³/ft	in⁴/ft	in³/ft	2'	3'	4'	5'	6'	2'	3'	4'	5'	6'
24	12	50	1.33	0.0690	0.0602	0.1071	0.1071	120	97	71	47	23	103	83	64	44	25
22	12	50	1.74	0.1024	0.0924	0.1497	0.1544	120	97	71	47	23	103	83	64	44	25

- 1. Theoretical section properties have been calculated per AISI 2012 '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 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.



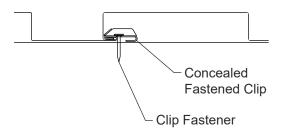
EM15-1284 CF Wall - Technical Sheet





EM15-1284 CF Wall - Technical Sheet

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

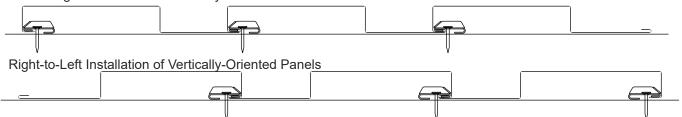
≥ 18 ga, ≤ 12 ga: #10-16 Pancake Head Driller

> 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.

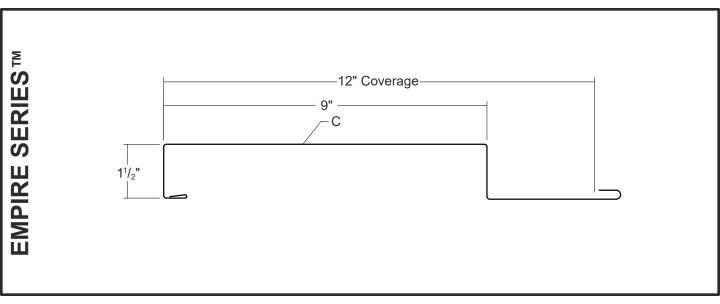


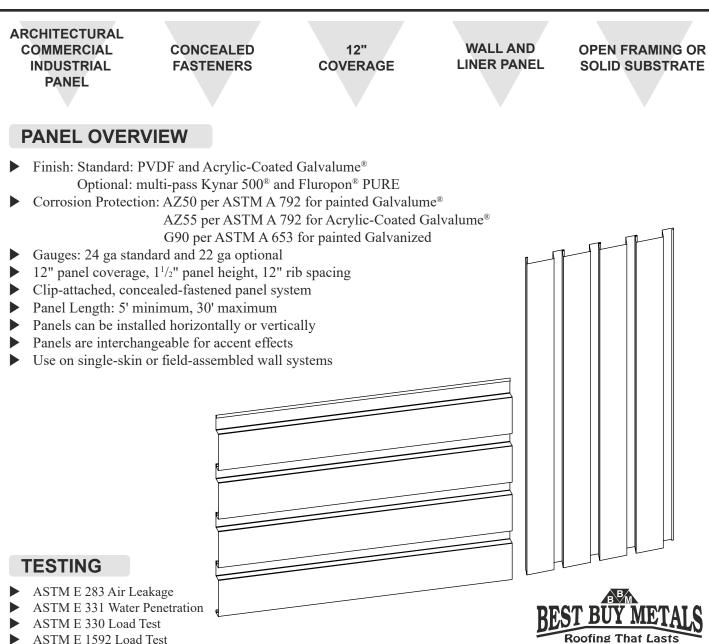
			SECT	ION PR	OPERTI	ES							FORI tene			· •	i
	Ga Width Yield Weight Incompression Bottom In Compression Incompression								lnw	ard L	oad			Out	ward	Load	
Ga	in	ksi	psf	in ⁴ /ft	in ³ /ft	in⁴/ft	in³/ft	2' 3' 4' 5' 6			6'	2'	3'	4'	5'	6'	
24	12	50	1.33	0.0671	0.0605	0.1118	0.1079				23	103	83	64	44	25	
22									97	71	47	23	103	83	64	44	25

- 1. Theoretical section properties have been calculated per AISI 2012 'North American Specification for the Design of Cold-Formed Steel Structural Members'. Ixx and Sxx are effective section properties for deflection and bending.
- 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.



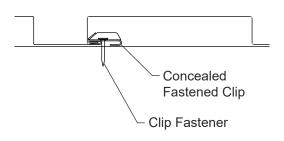
EM15-1293 CF Wall - Technical Sheet





EM15-1293 CF Wall - Technical Sheet

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

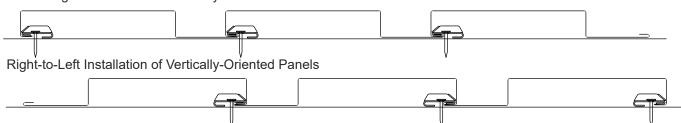
Attaching to Steel:

- < 18 ga: 1/4"-13 Deck Screw
- ≥ 18 ga, ≤ 12 ga: #10-16 Pancake Head 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.



			SECT	ION PR	OPERTI	ES							FORI				f
	Width	Vidth Yield Weight Top In Compression Bottom In Compres							Inw	ard L	oad			Outv	ward	Load	
Ga	in	ksi	psf	lxx	Sxx	lxx	Sxx	Inward Load									
			·	in⁴/ft	in³/ft	in⁴/ft	in³/ft	2'	3'	4'	5'	6'	2'	3'	4'	5'	6'
24	12	50	1.33	0.0640	0.0600	0.1156	0.1082	120	97	71	47	23	106	86	67	47	27
22	12	50	1.74	0.0929	0.0901	0.1617	0.1554	120	97	71	47	23	106	86	67	47	27

- 1. Theoretical section properties have been calculated per AISI 2012 '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 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.

