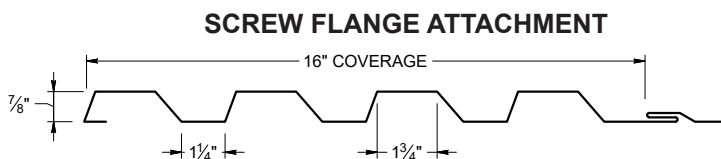
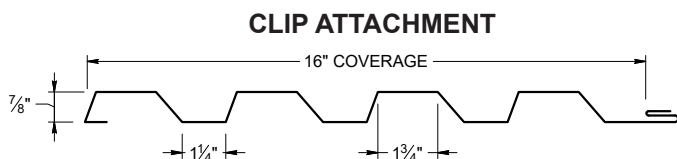




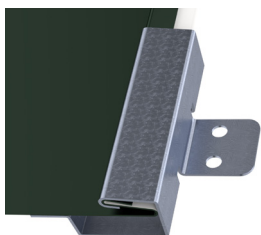
ICC
EVALUATION
SERVICE®

ICC-ES EVALUATION REPORT #5045 with CBC-CRC Supplement

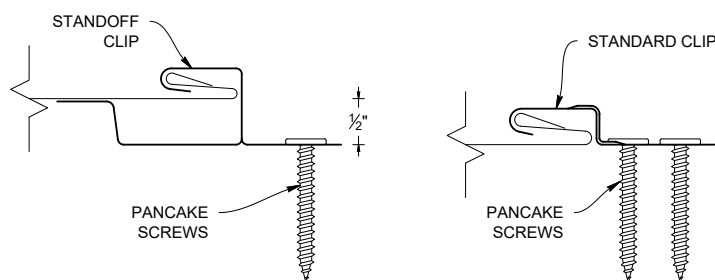
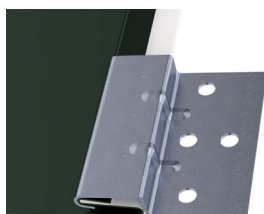


PANEL ATTACHMENT CLIP

STANDOFF CLIP



STANDARD CLIP



KEY FEATURES

- Manufactured in Salem, OR, Sacramento, CA, and Riverside, CA
- 16" panel coverage
- 24 Tru-Gauge™ steel and .032" aluminum are standard and attached with high-performance concealed clips (some profiles may be available with an integrated screw flange option -- *please inquire*)
- Screw flange is not available in heavier gauges:
 - 22 Tru-Gauge™ steel and .040" aluminum
 - Custom 20 & 18 Tru-Gauge™ steel and .050" & .063" aluminum
- Aluminum is recommended within 1000 ft of salt water (*not required*)
- 3' to 32'9" panel lengths (*Inquire for longer or shorter lengths*)
- Custom profiles available
- Vertical or horizontal wall application
- Acceptable for use as a soffit panel
- Interchangeable panel widths and configurations
- Perforated options available (*please inquire*)

TESTING

-  ICC-ESR #5045 with CBC-CRC Supplement
- ASTM A653/A924 - G-90 Galvanized
- ASTM A792 - ZINCALUME®/Galvalume® AZ-50/55
- ASTM B209 - Aluminum Substrate
- ASTM D6578 - Anti-Graffiti
- ASTM E283 - Air infiltration (wall)
- ASTM E330 - Positive structural uniform static air pressure
- ASTM E331 - Water infiltration (wall)
- ASTM E1592 - Negative structural uniform static air pressure
- ASTM E1646 - Water infiltration (roof)
- ASTM E1680 - Air infiltration (roof)

WEIGHT CHART

CI-2-16	TYPE	24 GA STEEL	22 GA STEEL	.032 ALUM	.040 ALUM
THICKNESS		0.0236"	0.0285"	0.032"	0.040"
WEIGHT/LINFT	CLIP ATTACH	1.742 LBS	2.163 LBS	0.826 LBS	1.061 LBS
WEIGHT/LSQFT	CLIP ATTACH	1.307 LBS	1.622 LBS	0.619 LBS	0.795 LBS
WEIGHT/LINFT	SCREW FLANGE	1.920 LBS	2.452 LBS	0.910 LBS	1.202 LBS
WEIGHT/LSQFT	SCREW FLANGE	1.440 LBS	1.839 LBS	0.682 LBS	0.902 LBS

ASTM E 1680/E283 Air Penetration	ASTM E 1646/E331 Water Penetration
12 PSF<0.01 CFM/ft²-PASS	20.5 PSF - Pass
Intertek Test Result L5460.01-901-44 R1	
Intertek Test Result L5461.01-901-44 R1	
STRUCTURAL TESTING ASTM E1592 AND E330	
Intertek Test Result L3671.01-301-44 R0	

NEGATIVE LOAD CHART WITH CLIP ATTACHMENT

				SECTION PROPERTIES						ALLOWABLE UNIFORM LOADS, psf For various clip spacings (i.e. span values)						
Width, in.	Gauge	Yield ksi	Weight psf	Top in Compression			Bottom in Compression			Negative Load						
				I_{xx} in ⁴ /ft.	I_{xx} (eff) in ⁴ /ft.	S_{xx} in ³ /ft.	I_{xx} in ⁴ /ft.	I_{xx} (eff) in ⁴ /ft.	S_{xx} in ³ /ft.	1'	1.5'	2'	2.5'	3'	3.5'	4'
16	24	50	1.67	0.0323	0.0329	0.0692	0.0345	0.0338	0.0731	95.0	87.5	80.0	72.5	65.0	57.5	50.0
16	22	50	1.96	0.0398	0.0406	0.0898	0.0428	0.0419	0.0938	87.5	82.9	78.3	73.8	69.2	64.6	60.0
16	20	33	2.4	0.0541	0.0541	0.1300	0.0541	0.0541	0.1230	87.5	82.9	78.3	73.8	69.2	64.6	60.0
16	18	33	3.11	0.0706	0.0706	0.1710	0.0706	0.0706	0.1662	87.5	82.9	78.3	73.8	69.2	64.6	60.0
16	0.032"	19	0.69	0.0511	0.0511	0.1231	0.0511	0.0511	0.1177	70.0	63.3	56.7	50.0	43.3	36.7	30.0
16	0.040"	19	1.52	0.0631	0.0631	0.1528	0.0631	0.0631	0.1477	70.0	63.3	56.7	50.0	43.3	36.7	30.0

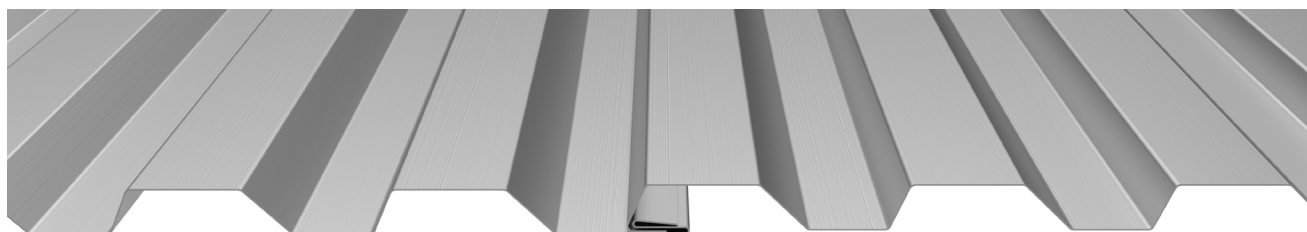
- Theoretical section properties for steel panels have been calculated per AISI S100 Specifications for Design of Cold-Formed Steel Structural Members. Intertek L3671.01-301-44 R0
- Charted Load/Span values are based on ASTM E1592-05, divided by a 2.00 Factor-of-Safety.
- Minimum recommended substrate (structure) recommendations:
 - Open-Framing (i.e. purlins) - 16ga (design thickness = 0.0566")
 - Plywood/OSP - 15/32" or thicker is recommended to assure an effective degree of fastener thread engagement.
 - Metal deck - 22ga (design thickness = 0.0283")

POSITIVE LOAD CHART WITH CLIP ATTACHMENT

				SECTION PROPERTIES						ALLOWABLE UNIFORM LOADS, psf For various clip spacings (i.e. span values)									
Width, in.	Gauge	Yield ksi	Weight psf	Top in Compression			Bottom in Compression			Positive Load									
				I_{xx} in ⁴ /ft.	I_{xx} (eff) in ⁴ /ft.	S_{xx} in ³ /ft.	I_{xx} in ⁴ /ft.	I_{xx} (eff) in ⁴ /ft.	S_{xx} in ³ /ft.	1'	2'	3'	4'	5'	6'	7'	8'	9'	10'
16	24	50	1.67	0.0323	0.0329	0.0692	0.0345	0.0338	0.0731	1473.6	432.5	192.2	108.1	69.2	48.1	35.3	27.0	21.4	17.3
16	22	50	1.96	0.0398	0.0406	0.0898	0.0428	0.0419	0.0938	932.7	466.4	249.4	140.3	89.8	62.4	45.82	35.1	27.7	21.4
16	20	33	2.4	0.0541	0.0541	0.1300	0.0541	0.0541	0.1230	1586.4	512.5	227.8	128.1	82.0	56.9	41.84	32.0	25.3	20.5
16	18	33	3.11	0.0706	0.0706	0.1710	0.0706	0.0706	0.1662	2733.6	692.5	307.8	173.1	110.8	76.94	56.53	43.28	34.2	27.7
16	0.032"	19	0.69	0.0511	0.0511	0.1231	0.0511	0.0511	0.1177	228.2	114.1	76.1	49.8	31.9	22.2	16.27	12.46		
16	0.040"	19	1.52	0.0631	0.0631	0.1528	0.0631	0.0631	0.1477	357.3	178.6	119.1	67.5	43.2	30.0	22.05	16.89	13.3	10.8

- Theoretical section properties for steel panels have been calculated per 2020 AISI S100 North America Specifications for Design of Cold-Formed Steel Structural Members.
- Allowable loads for steel panels are calculated in accordance with 2020 AISI S100 specifications considering bending, shear, combined bending and shear and deflection. Allowable load considers a 3 or more equal span condition.
- When panels are installed over solid or closely fitted sheathing, the capacity is limited to the capacity of the underlying sheathing.

PANEL ATTACHMENT



Fastener Notes:

- When possible, lap panels away from prevailing wind direction.
- 15/32" OSB: #10 Burr Buster fasteners.
- 15/32" Plywood: #10 GP fastener. Screws should be long enough to penetrate through the bottom of the plywood by 3/8".
- Dimensional lumber: #10 GP. Screws should penetrate the lumber 1".
- 16ga (or less) Steel furring: #10 or #12 fastener with DP-1.
- All trim screws used for roof or wall applications should have EPDM sealing washers.

NEGATIVE LOAD CHART WITH SCREW FLANGE

				SECTION PROPERTIES						ALLOWABLE UNIFORM LOADS, psf For various clip spacings (i.e. span values)						
Width, in.	Gauge	Yield ksi	Weight psf	Top in Compression			Bottom in Compression			Negative Load						
				I_{xx} in ⁴ /ft.	I_{xx} (eff) in ⁴ /ft.	S_{xx} in ³ /ft.	I_{xx} in ⁴ /ft.	I_{xx} (eff) in ⁴ /ft.	S_{xx} in ³ /ft.	1'	1.5'	2'	2.5'	3'	3.5'	4'
16	24	50	1.67	0.0345	0.0431	0.0706	0.0361	0.0389	0.0797	100.0	92.5	85.0	77.5	70.0	62.5	55.0
16	22	50	1.96	0.0421	0.0427	0.0912	0.0444	0.0437	0.1000	200.0	179.2	158.3	137.5	116.7	95.8	75.0
16	20	33	2.4	0.0570	0.0567	0.1312	0.0560	0.0563	0.1325	200.0	179.2	158.3	137.5	116.7	95.8	75.0
16	18	33	3.11	0.0750	0.0747	0.1735	0.0740	0.0743	0.1811	200.0	179.2	158.3	137.5	116.7	95.8	75.0
16	0.032"	19	0.69	0.0534	0.0534	0.1246	0.0543	0.0543	0.1274	65.0	59.2	53.3	47.5	41.7	35.8	30.0
16	0.040"	19	1.52	0.0669	0.0669	0.1546	0.0669	0.0669	0.1616	65.0	59.2	53.3	47.5	41.7	35.8	30.0

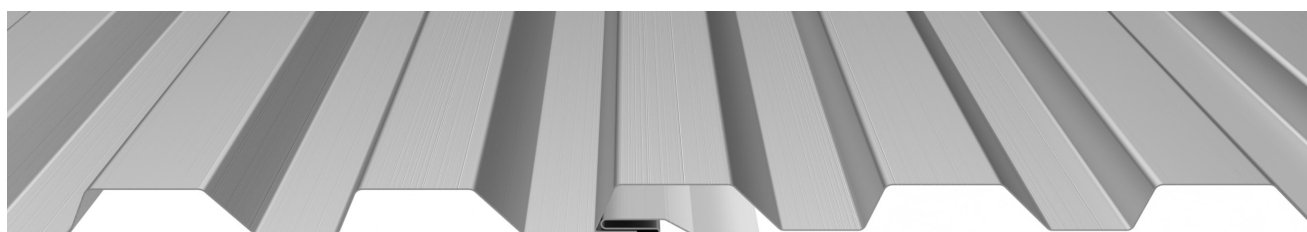
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POSITIVE LOAD CHART WITH SCREW FLANGE

				SECTION PROPERTIES						ALLOWABLE UNIFORM LOADS, psf For various clip spacings (i.e. span values)									
Width, in.	Gauge	Yield ksi	Weight psf	Top in Compression			Bottom in Compression			Positive Load									
				I_{xx} in ⁴ /ft.	I_{xx} (eff) in ⁴ /ft.	S_{xx} in ³ /ft.	I_{xx} in ⁴ /ft.	I_{xx} (eff) in ⁴ /ft.	S_{xx} in ³ /ft.	1'	2'	3'	4'	5'	6'	7'	8'	9'	10'
16	24	50	1.67	0.0345	0.0431	0.0706	0.0361	0.0389	0.0797	1473.6	441.3	196.1	110.3	70.6	49.0	36.0	27.6	21.8	17.7
16	22	50	1.96	0.0421	0.0427	0.0912	0.0444	0.0437	0.1000	932.7	466.4	253.3	142.5	91.2	63.33	46.53	35.6	28.2	22.5
16	20	33	2.4	0.0570	0.0567	0.1312	0.0560	0.0563	0.1325	1586.4	546.7	243	136.7	87.5	60.7	44.63	34.2	27.0	21.9
16	18	33	3.11	0.0750	0.0747	0.1735	0.0740	0.0743	0.1811	2733.6	722.9	321.3	180.7	115.7	80.32	59.01	45.18	35.7	28.9
16	0.032"	19	0.69	0.0534	0.0534	0.1246	0.0543	0.0543	0.1274	228.2	114.1	76.1	52.8	33.8	23.5	17.23	13.19	10.4	
16	0.040"	19	1.52	0.0669	0.0669	0.1546	0.0669	0.0669	0.1616	357.3	178.6	119.1	70.7	45.3	31.4	23.08	17.67	14.0	11.3

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