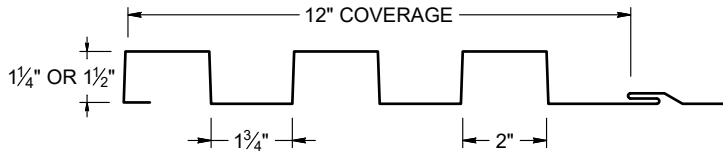




ICC
EVALUATION
SERVICE®

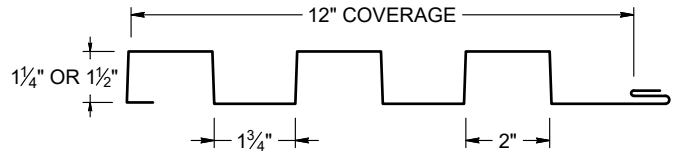
ICC-ES EVALUATION REPORT #5045 with CBC-CRC Supplement

SCREW FLANGE ATTACHMENT



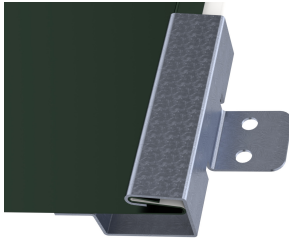
Screw Flange panels in this profile require additional material (drop/waste) and must be slit to a custom size. Inquire for custom pricing and availability.

CLIP ATTACHMENT

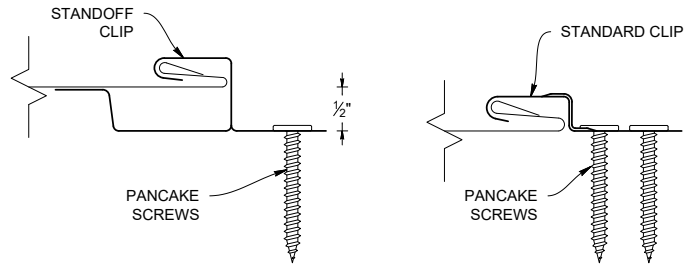
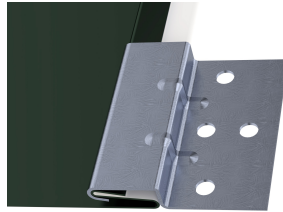


PANEL ATTACHMENT CLIP

STANDOFF CLIP




STANDARD CLIP



KEY FEATURES

- 12" panel coverage
- 24 and 22 Tru-Gauge™ and .032" and .040 Aluminum. Screw Flange and Clip attachment available
- Custom 20 & 18 Tru-Gauge™ and .050" and .063" Aluminum. These require the use of high performance clip. (please inquire)
- 1-1/4" or 1-1/2" deep panel
- 2' to 20'10" panel 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 E331 - Water infiltration (wall)
- ASTM E283 - Air infiltration (wall)
- ASTM E1592 - Negative structural uniform static air pressure
- ASTM E330 - Positive structural uniform static air pressure
- ASTM E1680 - Air infiltration (roof)
- ASTM E1646 - Water infiltration (roof)
- ASTM A653/A924 - G90 Galvanized
- ASTM A792 - Zincalume/Galvalume AZ-50/55
- ASTM B209 - Aluminum Substrate

WEIGHT CHART (Values based on 1-1/2" panels, inquire for 1-1/4")

NX-1	TYPE	24 GA STEEL	22 GA STEEL	20 GA STEEL	18 GA STEEL	.063" ALUM	.050" ALUM	.040" ALUM	.032" ALUM
THICKNESS		0.0236"	0.0285"	0.0356"	0.0466"	0.063"	0.050"	0.040"	0.032"
WEIGHT/LINFT	CLIP ATTACH	1.905 LBS	2.231 LBS	2.787 LBS	3.648 LBS	1.724 LBS	1.368 LBS	1.094 LBS	0.903 LBS
WEIGHT/SQFT	CLIP ATTACH	1.905 LBS	2.231 LBS	2.787 LBS	3.648 LBS	1.724 LBS	1.368 LBS	1.094 LBS	0.903 LBS
WEIGHT/LINFT	SCREW FLANGE	2.015 LBS	2.597 LBS	3.243 LBS	4.246 LBS	2.006 LBS	1.592 LBS	1.274 LBS	0.955 LBS
WEIGHT/SQFT	SCREW FLANGE	2.015 LBS	2.597 LBS	3.243 LBS	4.246 LBS	2.006 LBS	1.592 LBS	1.274 LBS	0.955 LBS

ASTM E 1680/E283 Air Penetration	ASTM E 1646/E331 Water Penetration
12 PSF<0.01 CFM/ft ² -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 M1352.01-301-44 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'
12	24	50	1.89	0.1064	0.1062	0.1362	0.1056	0.1058	0.1513	150.0	136.6	123.3	110.0	96.6	83.3	70.0
12	22	50	2.21	0.1323	0.1321	0.1766	0.1316	0.1318	0.1986	219.0	194.1	169.3	144.5	119.6	94.8	70.0
12	20	33	2.69	0.1804	0.1800	0.2562	0.1790	0.1794	0.2938	219.0	194.1	169.3	144.5	119.6	94.8	70.0
12	18	33	3.48	0.2460	0.2450	0.3635	0.2410	0.2420	0.4126	219.0	194.1	169.3	144.5	119.6	94.8	70.0
12	0.032"	19	0.52	0.1802	0.1802	0.2665	0.1802	0.1802	0.3148	110.0	101.6	93.3	85.0	76.6	68.3	60.0
12	0.040"	19	1.14	0.2210	0.2210	0.3270	0.2210	0.2210	0.3860	110.0	101.6	93.3	85.0	76.6	68.3	60.0

- Theoretical section properties for still panels have been calculated per AISI S100 Specifications for Design of Cold-Formed Steel Structural Members. Intertek M1352.01-301-44 RO
- 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/OSB-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'
12	24	50	1.89	0.1064	0.1062	0.1362	0.1056	0.1058	0.1513	1776.4	851.3	378.3	212.8	136.2	94.6	69.5	53.2	42.0	34.1
12	22	50	2.21	0.1323	0.1321	0.1766	0.1316	0.1318	0.1986	1904.6	952.27	490.56	275.9	176.6	122.6	90.1	68.98	54.5	44.2
12	20	33	2.69	0.1804	0.1800	0.2562	0.1790	0.1794	0.2938	1916.4	958.18	474.44	266.9	170.8	118.6	87.14	66.7	52.7	42.7
12	18	33	3.48	0.2460	0.2450	0.3635	0.2410	0.2420	0.4126	3306.4	1514.6	673.2	378.7	242.3	168.3	123.6	94.66	74.8	60.6
12	0.032"	19	0.52	0.1802	0.1802	0.2665	0.1802	0.1802	0.3148	248.2	124.1	82.7	62.1	49.6	34.8	25.56	19.57	15.5	12.5
12	0.040"	19	1.14	0.2210	0.2210	0.3270	0.2210	0.2210	0.3860	380.9	190.5	127.0	95.2	73.6	51.1	37.54	28.74	22.7	18.4

- Theoretical section properties for Steel panel have been calculated per 2020 AISI S100 North America Specifications for the Design of Cold-Formed Steel Structural Member.
- 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'
12	24	50	1.89	0.1137	0.1153	0.1382	0.1191	0.1175	0.1804	177.5	161.2	145.0	128.7	112.5	96.2	80.0
12	22	50	2.21	0.1361	0.1370	0.1757	0.1391	0.1382	0.2805	190.0	176.6	163.3	150.0	136.6	123.3	110.0
12	20	33	2.69	0.1860	0.1868	0.2545	0.1890	0.1881	0.2790	190.0	176.6	163.3	150.0	136.6	123.3	110.0
12	18	33	3.48	0.2550	0.2538	0.3610	0.2510	0.2522	0.3600	190.0	176.6	163.3	150.0	136.6	123.3	110.0
12	0.032"	19	0.52	0.1860	0.2642	0.3492	0.1860	0.1860	0.3414	140.0	122.5	105.0	87.5	70.0	52.5	35.0
12	0.040"	19	1.14	0.2290	0.2290	0.3246	0.2290	0.2290	0.4206	140.0	122.5	105.0	87.5	70.0	52.5	35.0

- Theoretical section properties for still panels have been calculated per AISI S100 Specifications for Design of Cold-Formed Steel Structural Members. Intertek L3671.01-301-44 RO
- 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/OSB-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 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'
12	24	50	1.89	0.1137	0.1153	0.1382	0.1191	0.1175	0.1804	1776.4	863.8	383.9	215.6	138.2	96.0	70.5	54.0	42.7	34.6
12	22	50	2.21	0.1361	0.1370	0.1757	0.1391	0.1382	0.2805	1904.6	952.27	488.1	274.5	175.7	122.0	89.64	68.63	54.2	43.9
12	20	33	2.69	0.1860	0.1868	0.2545	0.1890	0.1881	0.2790	1916.4	958.18	471.3	265.1	169.7	117.8	86.56	66.3	52.4	42.4
12	18	33	3.48	0.2550	0.2538	0.3610	0.2510	0.2522	0.3600	3306.4	1500.0	666.7	375.0	240.0	166.7	122.5	93.8	74.1	60.0
12	0.032"	19	0.52	0.1860	0.2642	0.3492	0.1860	0.1860	0.3414	248.2	124.1	82.7	62.1	49.6	34.5	25.34	19.4	15.3	12.4
12	0.040"	19	1.14	0.2290	0.2290	0.3246	0.2290	0.2290	0.4206	380.9	190.5	127.0	95.2	73.0	50.7	37.26	28.53	22.5	18.3

- Theoretical section properties for Steel panel have been calculated per 2020 AISI S100 North America Specifications for the Design of Cold-Formed Steel Structural Member.
- 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.
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PANEL ATTACHMENT



Fastener Notes:

- When possible, lap panels away from prevailing wind direction.
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