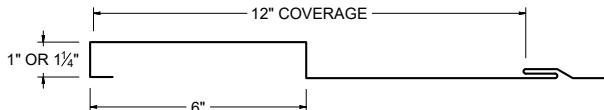




ICC
EVALUATION
SERVICE®

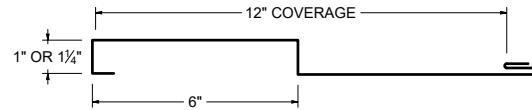
ICC-ES EVALUATION REPORT #5045 with CBC-CRC Supplement

SCREW FLANGE ATTACHMENT

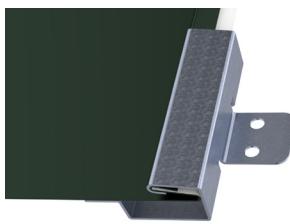


Screw Flange panels in this profile require additional material (drop/waste) and must be slit to a custom size. Inquire for custom pricing and availability.

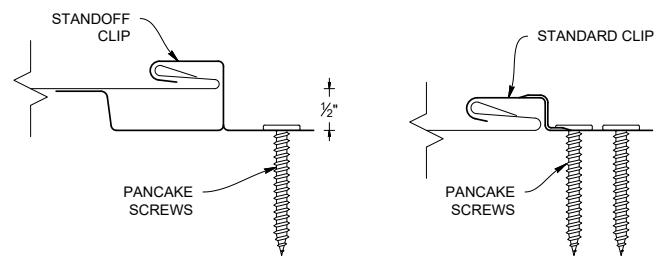
CLIP ATTACHMENT



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)
- Seamless runs, fewer runs and less labor.
- 1" 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 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")

NX-10	TYPE	24 GA STEEL	22 GA STEEL	20 GA STEEL	18 GA STEEL	.063" ALUM	.050" ALUM	.032" ALUM
THICKNESS		0.0236"	0.0285"	0.0356"	0.0466"	0.063"	0.050"	0.032"
WEIGHT/LINFT	CLIP ATTACH	1.444 LBS	1.674 LBS	2.090 LBS	2.736 LBS	1.293 LBS	1.026 LBS	0.684 LBS
WEIGHT/SQFT	CLIP ATTACH	1.444 LBS	1.674 LBS	2.090 LBS	2.736 LBS	1.293 LBS	1.026 LBS	0.684 LBS
WEIGHT/LINFT	SCREW FLANGE	1.589 LBS	2.040 LBS	2.549 LBS	3.336 LBS	1.576 LBS	1.251 LBS	0.753 LBS
WEIGHT/SQFT	SCREW FLANGE	1.589 LBS	2.040 LBS	2.549 LBS	3.336 LBS	1.576 LBS	1.251 LBS	0.753 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: 1" Deep Q2599.13-301-44 R0	
1-1/4" Deep M7269.02-301-44 R1	

1" PANEL DEPTH NEGATIVE LOAD CHARTS 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	1.39	0.0516	0.0573	0.0523	0.0712	0.0655	0.0875	212.5	186.3	160.0	133.8	107.5	81.3	55.0
12	22	50	1.65	0.0657	0.0722	0.0675	0.0882	0.0817	0.1110	187.5	167.9	148.3	128.8	109.2	89.6	70.0
12	20	33	2.01	0.0876	0.0952	0.0921	0.1137	0.1060	0.1472	187.5	167.9	148.3	128.8	109.2	89.6	70.0
12	18	33	2.60	0.1280	0.1367	0.1398	0.1580	0.1493	0.2143	187.5	167.9	148.3	128.8	109.2	89.6	70.0
12	0.032"	19	0.52	0.1720	0.1720	0.2421	0.1720	0.1720	0.3205	137.5	124.6	111.7	98.8	85.8	72.9	60.0
12	0.040"	19	1.14	0.2130	0.2130	0.3954	0.2130	0.2130	0.3440	137.5	124.6	111.7	98.8	85.8	72.9	60.0

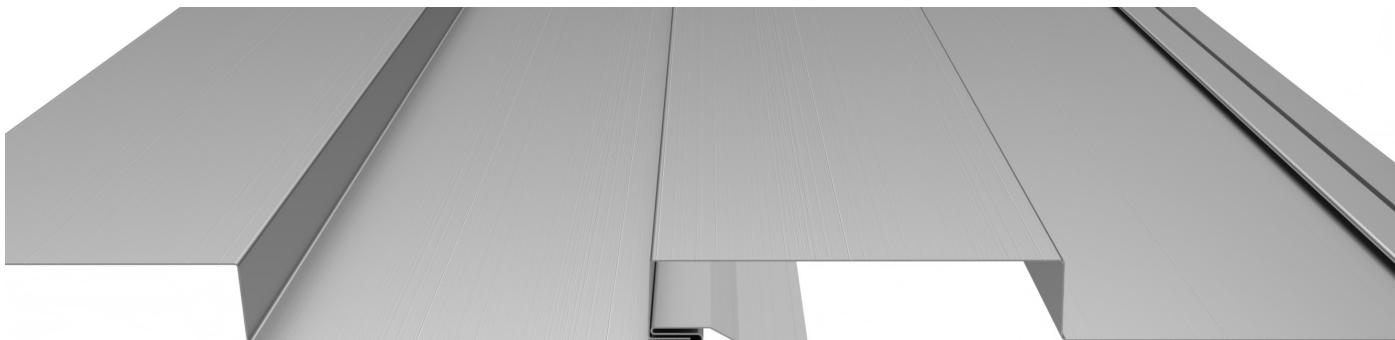
- Theoretical section properties for still panels have been calculated per AISI S100 Specifications for Design of Cold-Formed Steel Structural Members. Intertek Q2599.13-301-44 R0
- Charted Load/Span values are based on ASTM E1592-05, divided by a 2.00 Factor-of-Safety.
- Minimum recommended substrate (structure) recommendations:
 - Open-Framing (i.e. purlins)-16ga (design thickness -0.0566")
 - Plywood/OSB-15/32" or thicker is recommended to assure an effective degree of fastener thread engagement.
 - METAL DECK - 22ga (design thickness= 0.283")

1" PANEL DEPTH POSITIVE LOAD CHARTS 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	1.39	0.0516	0.0573	0.0523	0.0712	0.0655	0.0875	354.6	177.3	118.2	81.7	52.3	36.3	26.7	20.4	16.1	13.1
12	22	50	1.65	0.0657	0.0722	0.0675	0.0882	0.0817	0.1110	488.2	244.1	162.7	105.5	67.5	46.88	34.44	26.37	20.8	16.9
12	20	33	2.01	0.0876	0.0952	0.0921	0.1137	0.1060	0.1472	470.9	235.5	157.0	95.9	61.4	42.6	31.33	24.0	19.0	15.4
12	18	33	2.60	0.1280	0.1367	0.1398	0.1580	0.1493	0.2143	675.5	337.7	225.2	145.6	93.2	64.72	47.55	36.41	28.8	23.3
12	0.032"	19	0.52	0.1720	0.1720	0.2421	0.1720	0.1720	0.3205	54.6	27.3	18.2	13.6	10.9					
12	0.040"	19	1.14	0.2130	0.2130	0.3954	0.2130	0.2130	0.3440	86.4	43.2	28.8	21.6	17.3	14.4	11.35			

- Theoretical section properties for Steel panel shave 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.

1.25" PANEL DEPTH 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'	4.5'	5'	
12	24	50	1.34	0.0316	0.0345	0.0407	0.0415	0.0386	0.0626	205.0	186.9	168.8	150.6	132.5	114.4	96.3	78.1	60.0	
12	22	50	1.58	0.0402	0.0434	0.0526	0.0513	0.0481	0.0792	190.0	173.1	156.3	139.4	122.5	105.6	88.8	71.9	55.0	
12	20	33	1.93	0.0591	0.0624	0.0814	0.0704	0.0671	0.1151	190.0	173.1	156.3	139.4	122.5	105.6	88.8	71.9	55.0	
12	18	33	2.51	0.0860	0.0892	0.1237	0.0970	0.0938	0.1657	190.0	173.1	156.3	139.4	122.5	105.6	88.8	71.9	55.0	

- Theoretical section properties for still panels have been calculated per AISI S100 Specifications for Design of Cold-Formed Steel Structural Members. Intertek M7269.02-301-44 R1
- 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")

1.25" PANEL DEPTH 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	1.34	0.0316	0.0345	0.0407	0.0415	0.0386	0.0626	270.0	135.0	90.0	63.6	40.7	28.3	20.8	15.9	12.6	10.2
12	22	50	1.58	0.0402	0.0434	0.0526	0.0513	0.0481	0.0792	383.6	191.82	127.88	82.2	52.6	36.5	26.84	20.6	16.2	13.2
12	20	33	1.93	0.0591	0.0624	0.0814	0.0704	0.0671	0.1151	385.5	192.73	128.48	83.9	53.7	37.3	27.41	21.0	16.6	13.4
12	18	33	2.51	0.0860	0.0892	0.1237	0.0970	0.0938	0.1657	664.6	332.3	221.5	127.57	81.64	56.7	41.65	31.89	25.2	20.4

- Theoretical section properties for Steel panel shave 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.