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AEP SPAN AND ASC BUILDING PRODUCTS: SINGLE SKIN STEEL ROOF AND WALL PANELS WITH CONCEALED FASTENERS

CSI Section:
07 61 00 Sheet Metal Roofing
07 64 00 Sheet Metal Wall Cladding

1.0 RECOGNITION

ASC Profiles, LLC. AEP Span and ASC Building Products Single Skin Steel Roof and Wall Panels with Concealed Fasteners have been evaluated for use as exterior roof and wall covering panels. The structural and fire resistance properties of the panels have been evaluated for compliance with the following codes:

- 2021, 2018, 2015, and 2012 International Building Code® (IBC)
- 2021, 2018, 2015, and 2012 International Residential Code® (IRC)
- 2022, 2019 California Building Code (CBC) – see attached Supplement
- 2022, 2019 California Residential Code (CRC) – see attached Supplement

The roof panels comply with requirements for metal roof panels in Chapter 15 of the IBC, and Section R905 of the IRC. The wall panels comply with requirements for steel exterior wall coverings in Chapter 14 of the IBC, and Section R703 of the IRC.

2.0 LIMITATIONS

The AEP Span and ASC Building Products panels, clips, and fasteners described in this report are in compliance with, or are acceptable alternatives to, what is specified in those codes listed in Section 1.0 of this report subject to the following limitations:

2.1 Metal panels used in roof applications shall be applied to a solid or closely fitted deck, except where the roof covering is specifically designed to be applied to spaced support members. The panel installation tables within this report provide applicable substrate limitations.

2.2 Calculations demonstrating compliance with this report shall be submitted to the building official for approval. The calculations shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.

2.3 The minimum allowable roof panel slopes shall conform to IBC Section 1507.4 or IRC Section R905.10; or as stated within this report.

2.4 Roof panel flashing requirements, when applicable, shall comply with IBC Section 1503.2 and 1503.3 or IRC Sections R903.2 and R903.3. Underlayment shall be installed in accordance with IBC Sections 1507.1 and 1507.4.5 or IRC Section R905.10.5 where applicable wind conditions occur.

2.5 Panels used on exterior walls shall be flashed in accordance with 2021 and 2018 IBC Section 1404.4, (2015 and 2012 IBC Section 1405.4) or IRC Section R905.4.6 and shall be over a water-resistant barrier complying and installed in accordance with 2021 and 2018 IBC Sections 1402.2, 1403.2, and 1404.2 (2015 and 2012 IBC Sections 1403.2, 1404.2, and 1405.2) or IRC Section R703.1, as applicable. Vapor retarders shall be installed, as applicable, in accordance with 2021 and 2018 IBC Section 1404.3 (2015 and 2012 IBC Section 1405.3).

2.6 For load combinations that include wind uplift, the nominal wind load shall be permitted to be multiplied by 0.67 provided the conditions in AISI S100, Appendix A Section I6.3.1a Conditions (a) through (g) are satisfied.

2.6.1 Compliance with Conditions (a) and (d) through (g) shall be satisfied by conformance to the panel installation tables within this report. Compliance with Conditions (b) and (c) shall be the responsibility of the structural design professional. Conditions (b) and (c) are listed here:

Condition (b): The wind load shall be calculated using ASCE/SEI 7 for components and cladding.

Condition (c): The area of the roof being evaluated is in Zone 2 (edge zone) or Zone 3 (corner zone), as defined in ASCE/SEI 7, i.e., the 0.67 factor does not apply to the field of the roof (Zone 1). The nominal wind load applied to Zone 2 or zone 3, after the 0.67 multiplier is applied, shall not be less than the nominal wind load applied to filed of the roof (Zone1).

2.7 For modifications of panel installations, design of partial panels, panel penetrations, and other panel discontinuities shall consider effects on strength and stiffness and be the responsibility of the design professional in accordance with IBC Section 1604.4, using rational engineering mechanics or in accordance with the manufacturer's installation instructions as approved by the building official.

2.8 Product Performance

2.8.1 Fire Resistance: Roof assemblies complying with the requirements of IBC Section 1505.2 Exception 2, or IRC Section R902.1 Exception 2 are considered Class A roof assemblies. For other conditions, roof assemblies shall be listed as Class A, B, or C in accordance with ASTM E108 or UL 790 by an approved testing agency or shall be considered as non-classified roofing. ASC Profiles shall be contacted for information on specific listed assemblies.

2.8.2 Structural: The tables provided in this report specify the gross and effective section properties, inward (positive) uniform allowable loads, allowable reactions at supports, and outward (negative) uniform allowable loads for each of the panels described in Section 4.1 of this report. Use as a diaphragm or shear wall for resisting in-plane loads is beyond the scope of this report.

2.8.3 Wall Assembly Fire-Resistance: Wall panels are limited to installations where non-fire-resistance-rated construction is permitted by the IBC or IRC. Wall panels may be permitted in fire-resistance-rated wall assemblies based on successful testing in accordance with the requirements prescribed in IBC Section 703.

2.9 The AEP Span and ASC Building Products Single Skin Steel Roof and Wall Panels with Concealed Fasteners recognized in this report are produced by ASC Profiles, LLC in West Sacramento, California, Salem Oregon, and Tacoma, Washington**.**

3.0 PRODUCT USE

General design and installation shall be in accordance with the referenced codes in Section 1.0 of this report, this report, ASC Profile's product installation guides, and ASC Profile's *Concealed Fastener Steel Roof and Wall Panel Structural Design Guide*. Where conflicts occur, the more restrictive shall govern.

4.0 PRODUCT DESCRIPTION

4.1 Panels: The panels are available in the profiles as illustrated in the figures accompanying the tables in this report. All panels are provided with a painted finish. The panel profiles are available in various lengths and widths and thickness gauges as follows:

Products evaluated within this report:	Width(s) (inches):	Gauge No.(s):
Design Span® hp	12, 16, 17, 18	22 ga., 24 ga.
Flex Series: 1.2FX10-12 1.2FX20-12 1.2FX30-12 1.2FX40-12	12	20 ga, 22 ga, 24 ga
Flush Panel	12	20 ga, 22 ga, 24 ga, 26 ga
Perception Collection®: PC10-12, PC20-12, PC30-12, PC40-12, PC50-12	12	20 ga, 22 ga, 24 ga
Prestige Series®	12	18 ga., 20 ga., 22 ga., 24 ga.
Select Seam®	12, 16	22 ga., 24 ga.
Skyline Roofing® Skyline Roofing® hp	12, 16 16	26 ga. 24 ga.
Span-lok hp	12, 16	22 ga., 24 ga.
SpanSeam	12, 16	22 ga., 24 ga.

Note: 1 inch = 25.4 mm

4.2 Base Material: All No. 18 and No. 20 gauge panels are manufactured from steel sheets with G90 galvanized coatings conforming to ASTM A653 SS Grade 40.

All No. 22 and No. 24 gauge panels are manufactured from steel sheets with AZ50 aluminum-zinc alloy coatings conforming to ASTM A792 SS Grade 50, or from steel sheets with G90 galvanized coatings conforming to ASTM A653 SS Grade 50.

All No. 26 gauge Skyline Roofing® panels are manufactured from steel sheet AZ50 aluminum-zinc alloy coatings conforming to ASTM A792 SS minimum Grade 33.

4.3 Clips: All panels within this report shall be installed with a concealed fastening system (not visible from the panel exterior). Panels shall be attached to supports with either fasteners, or clips and fasteners. All clips are formed from steel with either AZ50 aluminum-zinc alloy or G90 galvanized coatings conforming to ASTM A792 or ASTM A653 SS minimum Grade 33 respectively. Clips shall be supplied by ASC Profiles LLC. Clip types are identified in the panel installation tables within this report.

4.4 Fasteners: The fastener size and type requirements are identified in the panel installation tables within this report. All fasteners shall be zinc-plated with an added corrosion-resistant coating, or of a 300 series stainless steel construction. Self-tapping metal-to-metal fasteners shall comply with ASTM C1513. Fasteners installed into preservative- or fire-retardant-treated wood complying with the IBC shall be 300 series stainless steel or designed specifically for use with treated wood.

4.5 Substrates: ASC Profiles roof and wall panels may be installed over numerous substrates including, but not limited to, the following:

- Cold-formed steel in accordance with AISI S100
- Hot rolled steel in accordance with AISC 360
- Concrete in accordance with ACI 318
- Plywood and OSB in accordance with DOC PS-1 and DOC PS-2
- Dimensional lumber in accordance with ANSI/AWS National Design Specification (NDS)®

The panel installation tables within this report provide applicable substrate limitations. For other support conditions, structural calculations complying with the applicable code shall be submitted to the building official for approval.

5.0 IDENTIFICATION

A permanent label or a die-stamp label bearing the name and address of the manufacturers, the model number, and this evaluation report number (Evaluation Report ER-309) identifies the products listed in this report. The identification labels also include the IAPMO Uniform Evaluation Service Mark of Conformity, and either one of the following Marks of Conformity may be used:

or

IAPMO UES ER-309

6.0 SUBSTANTIATING DATA

Data submitted in conformance with IAPMO-UES Evaluation Criteria EC011, adopted January 2022. Test reports are from laboratories in compliance with ISO/IEC 17025.

7.0 REFERENCE CODE SECTIONS

The following reference code sections are for the 2021 IBC and 2021 IRC. Reference code section numbers in older editions that differ from the 2021 edition are noted in parenthesis.

7.1 International Building Code®:

7.1.1 Section 104.11 - Alternative materials, design and methods of construction and equipment.

7.1.2 Section 1402.2 - Weather protection. (2015 and 2012 IBC Section 1403.2)

7.1.3 Section 1404.2 - Weather protection. (2015 and 2012 IBC Section 1405.2)

7.1.4 Section 1404.11 - Metal veneers. (2015 and 2012 IBC Section 1405.11)

7.1.5 Section 1503 - WEATHER PROTECTION.

7.1.6 Section 1504.1 - Wind resistance of roofs.

7.1.7 Section 1506 - MATERIALS.

7.1.8 Section 1507.4 - Metal roof panels.

7.1.9 Section 2210.1- General (Cold-Formed Steel).

7.2 International Residential Code®:

7.2.1 Section R104.11-Alternative materials, design and methods of construction and equipment.

7.2.2 Section R703.1 - General (Exterior Covering).

7.2.3 Section R703.3 - Wall covering nominal thickness and attachments. (2012 IRC Section R703.4)

7.2.4 Section R903.1 - General (Weather Protection).

7.2.5 Section R904 - Materials.

7.2.6 Section R905.10 - Metal roof panels.

8.0 STATEMENT OF RECOGNITION

This evaluation report describes the results of research completed by IAPMO Uniform Evaluation Service on ASC Profiles, LLC. AEP Span and ASC Building Products Single Skin Steel Roof and Wall Panels with Concealed Fasteners to assess conformance to the codes listed in Section 1.0 of this report and serves as documentation of product certification. Products are manufactured at locations noted in Section 2.9 of this report under a quality control program with periodic inspection under the supervision of IAPMO UES.

For additional information about this evaluation report please visit www.uniform-es.org or email us at info@uniform-es.org

Contents

General Notes:

The tables provided within this report will assist the user in determining which AEP Span or ASC Building Products' single skin, steel roof, or wall panel with concealed fastener attachment is appropriate for resisting the specified project loads. For additional information and assistance in using this information, the *Concealed Fastener Steel Roof and Wall Panel Structural Design Guide* is available via the AEP Span or ASC Building Products' website, or the appropriate AEP Span or ASC Building Products' representative may be contacted for assistance.

The following information applies to all product tables within this report unless otherwise noted.

For SI: 1 inch = 25.4 mm; 1 foot = 305 mm; 1 lbf = 4.448 N; 1 psi = 6.895 MPa

1. **Panel and clip summary charts:**

   Product information is provided in these charts to assist the user in specifying the correct panel and attachment method.
   - Bearing plates referenced in clip tables are for installing clips over rigid insulation, or similar, where a larger clip bearing surface is required.
   - Fastener load adjustment equations are provided to assist the user in understanding what adjustments need to be made to the fastener loads due to the eccentricity of the fasteners relative to the panel seam (load path).

2. **Panel section properties:**

   Panel section properties provided within this report have been calculated in accordance with AISI S100.

3. **Inward (positive/ gravity) uniform load capacities:**

   For uniform loading conditions, the appropriate support spacing is identified by referring to the inward load tables included in this report. For conditions not defined by these tables, support spacing shall be derived from standard engineering mechanics set forth in AISI S100 using the panel's section properties provided within this report.
   - Information provided in these tables applies to uniform loads only.
   - The upper values, W /Ω (ASD) and ϕW (LRFD), are based on allowable panel strength and have been evaluated for bending, shear, combined bending and shear, web crippling (reactions at supports), and combined bending and web crippling.
   - The L/60 and L/180 limiting values are based on allowable service load deflections.
   - Tables are not presented for Select Seam and Skyline Roofing as these products require installation over solid or closely fitted deck where inward loads are limited by the capacity of the underlying substrate.

4. **Reactions at supports:**

   Panel reactions at supports are governed by the capacity of the panel ribs on the supporting member. These capacities are based on the provisions of AISI S100, or web crippling testing in accordance with AISI S909. The end and interior reactions listed in the tables are for a uniformly distributed out-of-plane load applied to the panels. The capacities provided are for a minimum support bearing width specified below each table. Both ASD and LRFD capacities are listed.

5. **Outward (negative/uplift) uniform load capacities:**

   Outward panel/clip capacities were determined in accordance with IAPMO Uniform ES EC011 and the referenced AISI S100 and ASTM E1592 standards. These loads are based on a specific fastener and substrate combination. Project-specific fastener-to-substrate capacities shall be evaluated by the structural design professional to determine if this report's published outward load capacities need to be reduced accordingly. Any ncreases in fastener loading due to the eccentricity of the fasteners relative to the panel seam shall also be taken into account. Fastener load adjustments are provided within the clip summary charts to assist with those calculations.

   Common panel attachment combinations and associated outward wind load capacities are provided within this report. Using the project's defined wind loads, the appropriate outward uniform load capacity table shall be reviewed to determine the panel attachment that meets or exceeds these wind loads. Not all possible fastener and substrate combinations are listed within these tables. Alternative combinations are acceptable (i.e. attaching a panel assembly with fasteners into a concrete substrate). The structural design professional may rationally design other fastener and substrate combinations based on engineering mechanics and the maximum panel/clip capacities stated within this report.

- Although nominal fastener sizes are provided in the tables, the appropriate fastener thread and point type shall still be properly specified for the selected substrate.
- Clip-to-support connection strengths shall be reduced due to the eccentricity of the fasteners relative to the panel seam using equations of mechanics. The panel clip summary charts provide the fastener load adjustment factors to be used.
- The following fastener pull-out capacities were used in the outward uniform load capacity tables:

Cold Formed Steel, 50ksi min

Screw / Diameter D (in)			#10 0.190	#12 0.216	1/4" 0.25
Ga (nom.)	BMT		Pull Out Capacities (lbs)		
12	0.1050	P_a	367	418	483
		P_f	551	627	725
14	0.0700	P_a	245	278	322
		P_f	367	418	483
16	0.0590	P_a	206	235	272
		P_f	310	352	407
18	0.0459	P_a	161	183	211
		P_f	241	274	317
20	0.0354	P_a	124	141	163
		P_f	186	211	244

Cold Formed Steel, 33ksi min

Screw / Diameter D (in)			#10 0.190	#12 0.216	1/4" 0.25
Ga (nom.)	BMT		Pull Out Capacities (lbs)		
12	0.1050	P_a	254	289	335
		P_f	382	434	502
16	0.0590	P_a	143	162	188
		P_f	214	244	282
18	0.0459	P_a	111	126	146
		P_f	167	190	219
20	0.0354	P_a	86	97	113
		P_f	129	146	169
22	0.0294	P_a	71	81	94
		P_f	107	121	141

Plywood & OSB

Screw / Diameter D (in)			#8 0.164	#10 0.190	#12 0.216	#14 0.238
Thickness			Pull Out Capacities (lb)			
15/32"	0.47	P_a	71	82	93	103
		P_f	96	111	126	139
19/32"	0.59	P_a	90	104	118	130
		P_f	121	141	160	176
23/32"	0.72	P_a	109	126	143	158
		P_f	147	170	194	213

Douglas Fir-Larch (DFL)

Screw / Diameter D (in)			#8 0.164	#10 0.190	#12 0.216	#14 0.238
Fastener Penetration			Pull Out Capacities (lb)			
1" Min.	1.00	P_a	180	208	236	261
(usable thread length)		P_f	242	281	319	352

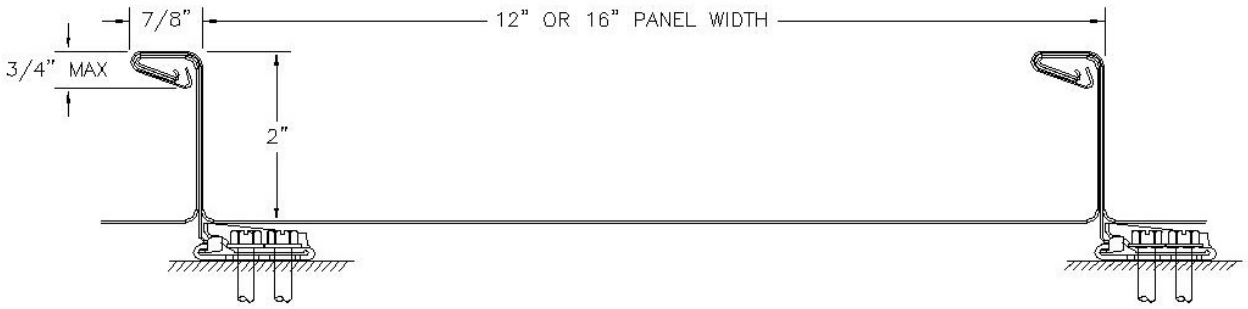
Fastener capacity table notes:

- P_a = ASD Capacities (P/Ω) P_f = LRFD Capacities (ϕP)
- Capacities in cold-formed steel based on requirements in AISI S100.
- Capacities in wood products based on NDS using a combined adjustment factor of 1.6 (C_D x C_M x C_t x C_{eg} x C_{tn}) for ASD, and 2.16 for LRFD.
- The 1 inch (25.4 mm) minimum fastener penetration specified for the Douglas Fir-Larch values applies to the usable thread length and this minimum depth does not include the tapered portion of the fastener. For fastener penetrations above 1 inch (25.4 mm) the pullout values may be proportionally adjusted in accordance with the NDS.

For additional information and guidance regarding the use of the data contained within this report, the ASC Profile's *Concealed Fastener Steel Roof and Wall Panel Structural Design Guide* is available.

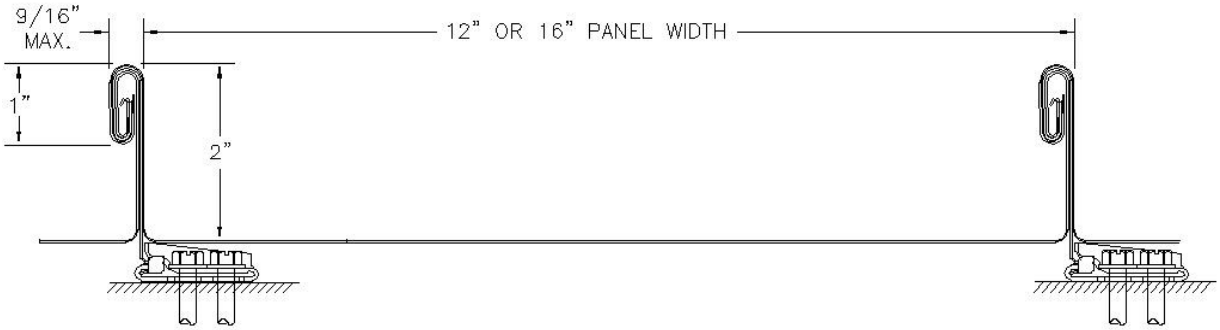
1.0 Span-lok hp & SpanSeam

FIGURE 1.1 - Span-lok hp Profile:



As-installed (mechanically seamed) view shown.

FIGURE 1.2 - SpanSeam Profile:



As-installed (mechanically seamed) view shown.

TABLE 1.1 - Span-lok hp & SpanSeam Profiles:

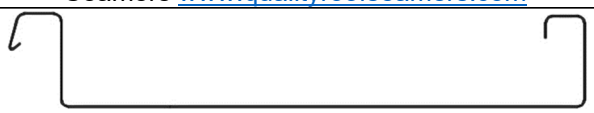
Panel Use:	Roof (primary use), wall, fascia
Substrates:	Over spaced supports or solid substrate
Available Gauges:	No. 22, 24
Minimum Slope:	1/4:12 (2.083 percent)
Load Combination Reduction Available (Ref. Section 5.6)	Yes
Mechanical Seaming:	90° Seam (Span-lok hp) 180° Seam (SpanSeam). Hand seam crimpers and powered seamers shall be from ASC Profiles, Developmental Industries Inc. www.diseamers.com, or Quality Roof Seamers www.qualityroofseamers.com
Uninstalled Panel View (Span-lok hp):	
Uninstalled Panel View (SpanSeam):	

TABLE 1.2 – Attachment

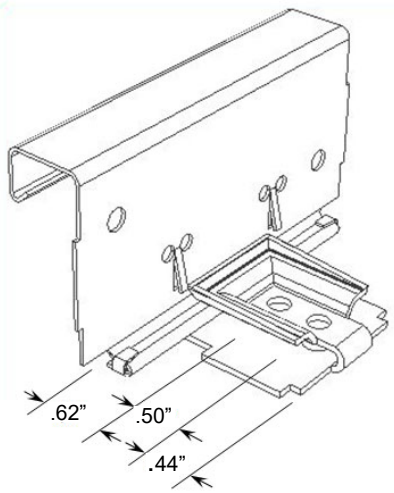
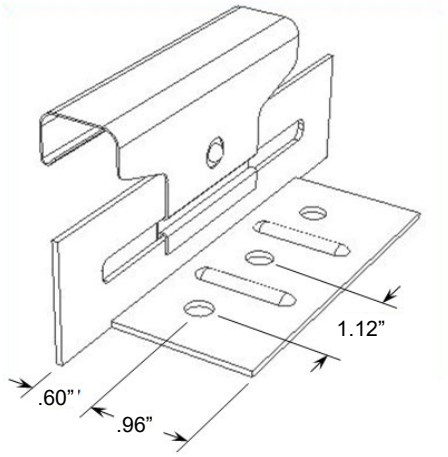
Clip Name:	Standard (Purlin) Clip	Low Profile Clip
Clip View:		
Clip Usage:	Over spaced framing or solid substrates	Over solid substrates
Part #:	#SLCLP2.5 or #SLCLP3	#SLCLP2LOW
Panel/ Substrate Gap:	½ inch or 1 inch	3/16 inch
Thermal Movement:	1 inch each direction	1 inch each direction
Fastener Limitations:	Nom. size: ¼ inch max. Head height: 3/8 inch max. Head dia.: ½ inch max.	Nom. size: ¼ inch max. Head height: 0.130-inch max. Head dia.: 5/8 inch max.
Recommended Fastener(s):	#12 or ¼ inch dia. hex washer head	#10 or #12 pancake head
Fastener Load Adjustments (due to eccentricity of fasteners relative to panel seam)**:**	2 fasteners: 2.00 $\Sigma M = 0$ $1.56P = .94R_1 + .44R_2$ 1 fastener: 1.66* (* - use mtg. hole closest to panel seam) $\Sigma M = 0$ $1.56P = .94R_1$	Per fastener: 1.625 $\Sigma M = 0$ $1.56P = .96R$
Associated Bearing Plate:	#SLBP	#BP3HOLE

TABLE 1.3 - Section properties (12" Span-lok hp / SpanSeam panel):

Gauge	Weight	Base Metal Thickness	Yield Strength	Tensile Strength	Gross Section Properties				
					Area	Moment of Inertia	Distance to N.A. from Bottom	Positive Section Modulus	Negative Section Modulus
	w	t	Fy	Fu	A_g	I_g	y_b	S_g+	S_g-
	psf	in	ksi	ksi	in^2/ft	in^4/ft	in	in^3/ft	in^3/ft
24	1.49	0.0232	50	65	0.4373	0.2430	0.51	0.1636	0.4746
22	1.86	0.0294	50	65	0.5519	0.3040	0.51	0.2044	0.5953

Gauge	Effective Section Properties							Uniform Load Only	
	Area	Positive			Negative				
		Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	$I_d = (2I_e+I_g)/3$	
	A_e/ft	I_e+	y_b	S_e+	I_e-	y_b	S_e-	I+	I-
	in^2	in^4/ft	in	in^3/ft	in^4/ft	in	in^3/ft	in^4/ft	in^4/ft
24	0.1460	0.2220	0.47	0.1449	0.1022	1.16	0.0884	0.2290	0.1491
22	0.2078	0.2918	0.49	0.1937	0.1386	1.12	0.1242	0.2959	0.1937

TABLE 1.4 - Allowable reactions at supports (12" Span-lok hp / SpanSeam panel):

Gauge	Condition	Allowable (lbs/ft-width)	Factored (lbs/ft-width)
24	End	354	567
	Interior	530	848
22	End	534	855
	Interior	645	1031
Reaction capacities based on a minimum 1.5" support bearing width.			

TABLE 1.5 - Inward (positive) uniform load capacities (12" Span-lok hp / SpanSeam panel):

12in Span Lok hp & SpanSeam									
			Positive (Inward) Uniform Load Capacity (lbs/ft^2) / Span (ft. - in.)						
Gauge	Span	Condition	2' - 0"	2' - 6"	3' - 0"	3' - 6"	4' - 0"	4' - 6"	5' - 0"
24	Single Span	ASD, W/Ω	354	283	236	202	177	143	116
		LRFD, ϕW	567	454	378	324	283	227	184
		L/180	*2502*	*1281*	*741*	*467*	*313*	*220*	*160*
		L/60	*>5k*	*3843*	*2224*	*1401*	*938*	*659*	*480*
	Double Span	ASD, W/Ω	212	169	141	121	103	83	68
		LRFD, ϕW	339	271	226	194	156	125	102
		L/180	*>5k*	*3086*	*1786*	*1125*	*753*	*529*	*386*
		L/60	*>5k*	*>5k*	*>5k*	*3374*	*2260*	*1587*	*1157*
	Triple Span	ASD, W/Ω	241	193	160	138	120	102	83
		LRFD, ϕW	385	308	257	220	192	154	126
		L/180	*4722*	*2417*	*1399*	*881*	*590*	*415*	*302*
		L/60	*>5k*	*>5k*	*4197*	*2643*	*1771*	*1244*	*907*
22	Single Span	ASD, W/Ω	534	427	356	305	242	191	155
		LRFD, ϕW	855	684	570	489	383	303	245
		L/180	*3233*	*1655*	*958*	*603*	*404*	*284*	*207*
		L/60	*>5k*	*4965*	*2873*	*1810*	*1212*	*851*	*621*
	Double Span	ASD, W/Ω	258	206	172	147	129	115	95
		LRFD, ϕW	412	330	275	236	206	177	144
		L/180	*>5k*	*3987*	*2307*	*1453*	*973*	*684*	*498*
		L/60	*>5k*	*>5k*	*>5k*	*4359*	*2920*	*2051*	*1495*
	Triple Span	ASD, W/Ω	293	234	195	167	147	130	117
		LRFD, ϕW	469	375	312	268	234	208	179
		L/180	*>5k*	*3123*	*1807*	*1138*	*763*	*536*	*390*
		L/60	*>5k*	*>5k*	*>5k*	*3415*	*2288*	*1607*	*1171*

TABLE 1.6 – Outward (negative) uniform load capacities (12", No. 22 and 24 gauge Span-lok hp / SpanSeam with Standard Clip)

12" Span-lok hp & SpanSeam, 22-24ga, with Std. Clip																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	1' - 0"		1' - 6"		2' - 0"		2' - 6"		3' - 0"		3' - 6"		4' - 0"		4' - 6"		5' - 0"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				217	345	200	318	183	291	166	263	149	236	132	209	115	182	98	155	81	128
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga (.1050")	2	#10	217	345	200	318	183	276	147	220	122	184	105	157	92	138	82	122	73	110
		2	#12	217	345	200	318	183	291	166	251	139	209	119	179	104	157	93	139	81	125
		2	1/4"	217	345	200	318	183	291	166	263	149	236	132	207	115	181	98	155	81	128
	14ga (.0700")	2	#10	217	345	163	245	122	184	98	147	82	122	70	105	61	92	54	82	49	73
		2	#12	217	345	186	278	139	209	111	167	93	139	80	119	70	104	62	93	56	84
		2	1/4"	217	345	200	318	161	242	129	193	107	161	92	138	81	121	72	107	64	97
	16ga (.0590")	2	#10	206	310	138	206	103	155	83	124	69	103	59	88	52	77	46	69	41	62
		2	#12	217	345	156	235	117	176	94	141	78	117	67	101	59	88	52	78	47	70
		2	1/4"	217	345	181	272	136	204	109	163	91	136	78	116	68	102	60	91	54	81
	18ga (.0459")	2	#10	161	241	107	161	80	120	64	96	54	80	46	69	40	60	36	54	32	48
		2	#12	183	274	122	183	91	137	73	110	61	91	52	78	46	68	41	61	37	55
		2	1/4"	211	317	141	211	106	158	85	127	70	106	60	91	53	79	47	70	42	63
	20ga (.0354")	2	#10	124	186	83	124	62	93	50	74	41	62	35	53	31	46	28	41	25	37
		2	#12	141	211	94	141	70	106	56	84	47	70	40	60	35	53	31	47	28	42
		2	1/4"	163	244	109	163	81	122	65	98	54	81	47	70	41	61	36	54	33	49
Cold Formed Steel (Gr 33 min.)	≥12ga (.1050")	2	#10	217	345	170	254	127	191	102	153	85	127	73	109	64	95	57	85	51	76
		2	#12	217	345	193	289	145	217	116	174	96	145	83	124	72	108	64	96	58	87
		2	1/4"	217	345	200	318	167	251	134	201	112	167	96	143	84	126	74	112	67	100
	16ga (.0590")	2	#10	143	214	95	143	71	107	57	86	48	71	41	61	36	54	32	48	29	43
		2	#12	162	244	108	162	81	122	65	97	54	81	46	70	41	61	36	54	32	49
		2	1/4"	188	282	125	188	94	141	75	113	63	94	54	81	47	71	42	63	38	56
	18ga (.0459")	2	#10	111	167	74	111	56	83	44	67	37	56	32	48	28	42	25	37	22	33
		2	#12	126	190	84	126	63	95	51	76	42	63	36	54	32	47	28	42	25	38
		2	1/4"	146	219	98	146	73	110	59	88	49	73	42	63	37	55	33	49	29	44
	20ga (.0354")	2	#10	86	129	57	86	43	64	34	51	29	43	25	37	21	32	19	29	17	26
		2	#12	97	146	65	97	49	73	39	58	32	49	28	42	24	37	22	32	19	29
		2	1/4"	113	169	75	113	56	85	45	68	38	56	32	48	28	42	25	38	23	34
	22ga (.0294")	2	#10	71	107	47	71	36	53	28	43	24	36	20	31	18	27	16	24	14	21
		2	#12	81	121	54	81	40	61	32	49	27	40	23	35	20	30	18	27	16	24
		2	1/4"	94	141	62	94	47	70	37	56	31	47	27	40	23	35	21	31	19	28
Plywood & OSB	15/32" (& 1/2")	2	#10	82	111	55	74	41	56	33	44	27	37	23	32	21	28	18	25	16	22
		2	#12	93	126	62	84	47	63	37	50	31	42	27	36	23	32	21	28	19	25
		2	#14	103	139	69	93	52	70	41	56	34	46	29	40	26	35	23	31	21	28
	19/32" (& 5/8")	2	#10	104	141	69	94	52	70	42	56	35	47	30	40	26	35	23	31	21	28
		2	#12	118	160	79	107	59	80	47	64	39	53	34	46	30	40	26	36	24	32
		2	#14	130	176	87	117	65	88	52	70	43	59	37	50	33	44	29	39	26	35
	23/32" (& 3/4")	2	#10	126	170	84	113	63	85	50	68	42	57	36	49	32	43	28	38	25	34
		2	#12	143	194	96	129	72	97	57	77	48	65	41	55	36	48	32	43	29	39
		2	#14	158	213	105	142	79	107	63	85	53	71	45	61	39	53	35	47	32	43
Lumber (DFL)	1" min	2	#10	208	281	139	187	104	140	83	112	69	94	59	80	52	70	46	62	42	56
		2	#12	217	319	158	213	118	160	95	128	79	106	68	91	59	80	53	71	47	64
		2	#14	217	345	174	235	130	176	104	141	87	117	74	101	65	88	58	78	52	70

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Table accounts for increased loads on fasteners due to the eccentricity of the fasteners relative to the panel seam. The Span-lok hp & SpanSeam panel summary chart at the front of this section provides for development of these fastener load adjustments.
2. Number of clip fasteners can be reduced to (1) if project load requirements can still be met. The tabulated panel system capacities shall be reduced by 40%. The fastener hole closest to the panel seam must be used. The Span-lok hp & SpanSeam panel summary chart at the front of this section provides for development of these fastener load adjustments.

Outward (negative) uniform load capacities (12" Span-lok hp / SpanSeam with low clip):

Table 1.12 applies

TABLE 1.7 - Section properties (16" Span-lok hp / SpanSeam):

Gauge	Weight	Base Metal Thickness	Yield Strength	Tensile Strength	Gross Section Properties				
					Area	Moment of Inertia	Distance to N.A. from Bottom	Positive Section Modulus	Negative Section Modulus
	w	t	Fy	Fu	A_g	I_g	y_b	S_g+	S_g-
	psf	in	ksi	ksi	in^2/ft	in^4/ft	in	in^3/ft	in^3/ft
24	1.36	0.0232	50	65	0.3976	0.1965	0.43	0.1250	0.4634
22	1.71	0.0294	50	65	0.5021	0.2460	0.42	0.1562	0.5806

Gauge	Effective Section Properties							Uniform Load Only	
	Area	Positive			Negative				
		Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	$I_d = (2I_e+I_g)/3$	
	A_e/ft	I_e+	y_b	S_e+	I_e-	y_b	S_e-	I+	I-
	in^2	in^4/ft	in	in^3/ft	in^4/ft	in	in^3/ft	in^4/ft	in^4/ft
24	0.1096	0.1815	0.39	0.1132	0.0765	1.15	0.0665	0.1865	0.1165
22	0.1560	0.2363	0.41	0.1485	0.1043	1.12	0.0935	0.2395	0.1515

TABLE 1.8 - Allowable reactions at supports (16" Span-lok hp / SpanSeam):

Gauge	Condition	Allowable *(lbs/ft width)*	Factored *(lbs/ft width)*
24	1- End	266	425
	2- Interior	397	636
22	1- End	401	642
	2- Interior	483	773
Reaction capacities based on a minimum 1.5" web bearing length			

TABLE 1.9 - Inward (positive) uniform load capacities (16" Span-lok hp / SpanSeam panel):

16 in Span Lok hp & SpanSeam									
			Positive (Inward) Uniform Load Capacity (lbs/ft^2) / Span (ft. - in.)						
Gauge	Span	Condition	2' - 0"	2' - 6"	3' - 0"	3' - 6"	4' - 0"	4' - 6"	5' - 0"
24	Single Span	ASD, W/Ω	266	212	177	152	133	112	90
		LRFD, ϕW	425	340	283	243	213	177	143
		L/180	*2038*	*1043*	*604*	*380*	*255*	*179*	*130*
		L/60	*>5k*	*3130*	*1811*	*1141*	*764*	*537*	*391*
	Double Span	ASD, W/Ω	159	127	106	91	78	62	51
		LRFD, ϕW	254	203	170	145	117	93	77
		L/180	*4908*	*2513*	*1454*	*916*	*614*	*431*	*314*
		L/60	*>5k*	*>5k*	*4363*	*2748*	*1841*	*1293*	*942*
	Triple Span	ASD, W/Ω	181	144	120	103	90	76	63
		LRFD, ϕW	289	231	193	165	143	115	94
		L/180	*3845*	*1969*	*1139*	*717*	*481*	*338*	*246*
		L/60	*>5k*	*>5k*	*3418*	*2152*	*1442*	*1013*	*738*
22	Single Span	ASD, W/Ω	401	321	267	229	185	146	119
		LRFD, ϕW	642	513	428	367	294	232	188
		L/180	*2617*	*1340*	*775*	*488*	*327*	*230*	*167*
		L/60	*>5k*	*4019*	*2326*	*1465*	*981*	*689*	*502*
	Double Span	ASD, W/Ω	193	155	129	111	97	86	72
		LRFD, ϕW	309	247	206	177	155	133	109
		L/180	*>5k*	*3227*	*1868*	*1176*	*788*	*553*	*403*
		L/60	*>5k*	*>5k*	*>5k*	*3528*	*2364*	*1660*	*1210*
	Triple Span	ASD, W/Ω	220	176	147	126	110	98	88
		LRFD, ϕW	351	281	234	201	176	156	134
		L/180	*4938*	*2528*	*1463*	*921*	*617*	*434*	*316*
		L/60	*>5k*	*>5k*	*4389*	*2764*	*1852*	*1301*	*948*

TABLE 1.10 - Outward (negative) uniform load capacities (16", No. 22 gauge Span-lok hp / SpanSeam with Standard Clip)

16" Span-lok hp & SpanSeam, 22ga, with Std. Clip																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	1' - 0"		1' - 6"		2' - 0"		2' - 6"		3' - 0"		3' - 6"		4' - 0"		4' - 6"		5' - 0"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				241	381	220	348	199	315	178	282	158	249	137	216	116	183	95	150	74	116
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga (.1050")	2	#10	241	381	184	276	138	207	110	165	92	138	79	118	69	103	61	92	55	83
		2	#12	241	381	209	313	157	235	125	188	104	157	90	134	78	117	70	104	63	94
		2	1/4"	241	381	220	348	181	272	145	218	121	181	104	155	91	136	81	121	73	109
	14ga (.0700")	2	#10	184	276	122	184	92	138	73	110	61	92	52	79	46	69	41	61	37	55
		2	#12	209	313	139	209	104	157	84	125	70	104	60	90	52	78	46	70	42	63
		2	1/4"	241	363	161	242	121	181	97	145	81	121	69	104	60	91	54	81	48	73
	16ga (.0590")	2	#10	155	232	103	155	77	116	62	93	52	77	44	66	39	58	34	52	31	46
		2	#12	176	264	117	176	88	132	70	106	59	88	50	75	44	66	39	59	35	53
		2	1/4"	204	306	136	204	102	153	81	122	68	102	58	87	51	76	45	68	41	61
	18ga (.0459")	2	#10	120	181	80	120	60	90	48	72	40	60	34	52	30	45	27	40	24	36
		2	#12	137	205	91	137	68	103	55	82	46	68	39	59	34	51	30	46	27	41
		2	1/4"	158	238	106	158	79	119	63	95	53	79	45	68	40	59	35	53	32	48
	20ga (.0354")	2	#10	93	139	62	93	46	70	37	56	31	46	27	40	23	35	21	31	19	28
		2	#12	106	158	70	106	53	79	42	63	35	53	30	45	26	40	23	35	21	32
		2	1/4"	122	183	81	122	61	92	49	73	41	61	35	52	31	46	27	41	24	37
Cold Formed Steel (Gr 33 min.)	≥12ga (.1050")	2	#10	191	286	127	191	95	143	76	114	64	95	55	82	48	72	42	64	38	57
		2	#12	217	325	145	217	108	163	87	130	72	108	62	93	54	81	48	72	43	65
		2	1/4"	241	377	167	251	126	188	100	151	84	126	72	108	63	94	56	84	50	75
	16ga (.0590")	2	#10	107	161	71	107	54	80	43	64	36	54	31	46	27	40	24	36	21	32
		2	#12	122	183	81	122	61	91	49	73	41	61	35	52	30	46	27	41	24	37
		2	1/4"	141	212	94	141	71	106	56	85	47	71	40	60	35	53	31	47	28	42
	18ga (.0459")	2	#10	83	125	56	83	42	63	33	50	28	42	24	36	21	31	19	28	17	25
		2	#12	95	142	63	95	47	71	38	57	32	47	27	41	24	36	21	32	19	28
		2	1/4"	110	165	73	110	55	82	44	66	37	55	31	47	27	41	24	37	22	33
	20ga (.0354")	2	#10	64	96	43	64	32	48	26	39	21	32	18	28	16	24	14	21	13	19
		2	#12	73	110	49	73	37	55	29	44	24	37	21	31	18	27	16	24	15	22
		2	1/4"	85	127	56	85	42	63	34	51	28	42	24	36	21	32	19	28	17	25
	22ga (.0294")	2	#10	53	80	36	53	27	40	21	32	18	27	15	23	13	20	12	18	11	16
		2	#12	61	91	40	61	30	46	24	36	20	30	17	26	15	23	13	20	12	18
		2	1/4"	70	105	47	70	35	53	28	42	23	35	20	30	18	26	16	23	14	21
Plywood & OSB	15/32" (& 1/2")	2	#10	62	83	41	56	31	42	25	33	21	28	18	24	15	21	14	19	12	17
		2	#12	70	95	47	63	35	47	28	38	23	32	20	27	18	24	16	21	14	19
		2	#14	77	104	52	70	39	52	31	42	26	35	22	30	19	26	17	23	15	21
	19/32" (& 5/8")	2	#10	78	105	52	70	39	53	31	42	26	35	22	30	20	26	17	23	16	21
		2	#12	89	120	59	80	44	60	36	48	30	40	25	34	22	30	20	27	18	24
		2	#14	98	132	65	88	49	66	39	53	33	44	28	38	24	33	22	29	20	26
	23/32" (& 3/4")	2	#10	95	128	63	85	47	64	38	51	32	43	27	36	24	32	21	28	19	26
		2	#12	108	145	72	97	54	73	43	58	36	48	31	41	27	36	24	32	22	29
		2	#14	118	160	79	107	59	80	47	64	39	53	34	46	30	40	26	36	24	32
Lumber (DFL)	1" min	2	#10	156	211	104	140	78	105	62	84	52	70	45	60	39	53	35	47	31	42
		2	#12	177	239	118	160	89	120	71	96	59	80	51	68	44	60	39	53	35	48
		2	#14	195	264	130	176	98	132	78	106	65	88	56	75	49	66	43	59	39	53

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Table accounts for increased loads on fasteners due to the eccentricity of the fasteners relative to the panel seam. The Span-lok hp & SpanSeam panel summary chart at the front of this section provides for development of these fastener load adjustments.
2. Number of clip fasteners can be reduced to (1) if project load requirements can still be met. The tabulated panel system capacities shall be reduced by 40%. The fastener hole closest to the panel seam must be used. The Span-lok hp & SpanSeam panel summary chart at the front of this section provides for development of these fastener load adjustments.

TABLE 1.11 - Outward (negative) uniform load capacities (16", No. 24 gauge Span-lok hp / SpanSeam with Standard Clip)

16" Span-lok hp & SpanSeam, 24ga, with Std. Clip																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	1' - 0"		1' - 6"		2' - 0"		2' - 6"		3' - 0"		3' - 6"		4' - 0"		4' - 6"		5' - 0"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				190	298	174	273	158	248	142	223	126	198	110	173	94	148	77	123	61	98
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga (.1050")	2	#10	190	298	174	273	138	207	110	165	92	138	79	118	69	103	61	92	55	83
		2	#12	190	298	174	273	157	235	125	188	104	157	90	134	78	117	70	104	61	94
		2	1/4"	190	298	174	273	158	248	142	218	121	181	104	155	91	136	77	121	61	98
	14ga (.0700")	2	#10	184	276	122	184	92	138	73	110	61	92	52	79	46	69	41	61	37	55
		2	#12	190	298	139	209	104	157	84	125	70	104	60	90	52	78	46	70	42	63
		2	1/4"	190	298	161	242	121	181	97	145	81	121	69	104	60	91	54	81	48	73
	16ga (.0590")	2	#10	155	232	103	155	77	116	62	93	52	77	44	66	39	58	34	52	31	46
		2	#12	176	264	117	176	88	132	70	106	59	88	50	75	44	66	39	59	35	53
		2	1/4"	190	298	136	204	102	153	81	122	68	102	58	87	51	76	45	68	41	61
	18ga (.0459")	2	#10	120	181	80	120	60	90	48	72	40	60	34	52	30	45	27	40	24	36
		2	#12	137	205	91	137	68	103	55	82	46	68	39	59	34	51	30	46	27	41
		2	1/4"	158	238	106	158	79	119	63	95	53	79	45	68	40	59	35	53	32	48
	20ga (.0354")	2	#10	93	139	62	93	46	70	37	56	31	46	27	40	23	35	21	31	19	28
		2	#12	106	158	70	106	53	79	42	63	35	53	30	45	26	40	23	35	21	32
		2	1/4"	122	183	81	122	61	92	49	73	41	61	35	52	31	46	27	41	24	37
Cold Formed Steel (Gr 33 min.)	≥12ga (.1050")	2	#10	190	286	127	191	95	143	76	114	64	95	55	82	48	72	42	64	38	57
		2	#12	190	298	145	217	108	163	87	130	72	108	62	93	54	81	48	72	43	65
		2	1/4"	190	298	167	251	126	188	100	151	84	126	72	108	63	94	56	84	50	75
	16ga (.0590")	2	#10	107	161	71	107	54	80	43	64	36	54	31	46	27	40	24	36	21	32
		2	#12	122	183	81	122	61	91	49	73	41	61	35	52	30	46	27	41	24	37
		2	1/4"	141	212	94	141	71	106	56	85	47	71	40	60	35	53	31	47	28	42
	18ga (.0459")	2	#10	83	125	56	83	42	63	33	50	28	42	24	36	21	31	19	28	17	25
		2	#12	95	142	63	95	47	71	38	57	32	47	27	41	24	36	21	32	19	28
		2	1/4"	110	165	73	110	55	82	44	66	37	55	31	47	27	41	24	37	22	33
	20ga (.0354")	2	#10	64	96	43	64	32	48	26	39	21	32	18	28	16	24	14	21	13	19
		2	#12	73	110	49	73	37	55	29	44	24	37	21	31	18	27	16	24	15	22
		2	1/4"	85	127	56	85	42	63	34	51	28	42	24	36	21	32	19	28	17	25
	22ga (.0294")	2	#10	53	80	36	53	27	40	21	32	18	27	15	23	13	20	12	18	11	16
		2	#12	61	91	40	61	30	46	24	36	20	30	17	26	15	23	13	20	12	18
		2	1/4"	70	105	47	70	35	53	28	42	23	35	20	30	18	26	16	23	14	21
Plywood & OSB	15/32" (& 1/2")	2	#10	62	83	41	56	31	42	25	33	21	28	18	24	15	21	14	19	12	17
		2	#12	70	95	47	63	35	47	28	38	23	32	20	27	18	24	16	21	14	19
		2	#14	77	104	52	70	39	52	31	42	26	35	22	30	19	26	17	23	15	21
	19/32" (& 5/8")	2	#10	78	105	52	70	39	53	31	42	26	35	22	30	20	26	17	23	16	21
		2	#12	89	120	59	80	44	60	36	48	30	40	25	34	22	30	20	27	18	24
		2	#14	98	132	65	88	49	66	39	53	33	44	28	38	24	33	22	29	20	26
	23/32" (& 3/4")	2	#10	95	128	63	85	47	64	38	51	32	43	27	36	24	32	21	28	19	26
		2	#12	108	145	72	97	54	73	43	58	36	48	31	41	27	36	24	32	22	29
		2	#14	118	160	79	107	59	80	47	64	39	53	34	46	30	40	26	36	24	32
Lumber (DFL)	1" min	2	#10	156	211	104	140	78	105	62	84	52	70	45	60	39	53	35	47	31	42
		2	#12	177	239	118	160	89	120	71	96	59	80	51	68	44	60	39	53	35	48
		2	#14	190	264	130	176	98	132	78	106	65	88	56	75	49	66	43	59	39	53

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Table accounts for increased loads on fasteners due to the eccentricity of the fasteners relative to the panel seam. The Span-lok hp & SpanSeam panel summary chart at the front of this section provides for development of these fastener load adjustments.
2. Number of clip fasteners can be reduced to (1) if project load requirements can still be met. The tabulated panel system capacities shall be reduced by 40%. The fastener hole closest to the panel seam must be used. The Span-lok hp & SpanSeam panel summary chart at the front of this section provides for development of these fastener load adjustments.

TABLE 1.12 - Outward (negative) uniform load capacities (16"&12", 22&24 gauge Span-lok hp / SpanSeam with LOW CLIP)

12" & 16" Span-lok hp & SpanSeam, 22-24ga, with Low Clip

Substrate		Fastener # per clip	Fastener Size	Attachment Spacing, (ft-in)																	
				1' - 0"		1' - 6"		2' - 0"		2' - 6"		3' - 0"		3' - 6"		4' - 0"		4' - 6"		5' - 0"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				114	182	99	158	86	137	73	117	62	99	52	83	43	68	35	56	28	45
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga *(.1050")*	2	#10	114	182	99	158	86	137	73	117	62	99	52	83	43	68	35	56	28	45
		2	#12	114	182	99	158	86	137	73	117	62	99	52	83	43	68	35	56	28	45
	14ga *(.0700")*	2	#10	114	182	99	158	86	137	73	117	62	99	52	83	43	68	35	56	28	45
		2	#12	114	182	99	158	86	137	73	117	62	99	52	83	43	68	35	56	28	45
	16ga *(.0590")*	2	#10	114	182	99	158	86	137	73	114	62	95	52	82	43	68	35	56	28	45
		2	#12	114	182	99	158	86	137	73	117	62	99	52	83	43	68	35	56	28	45
	18ga *(.0459")*	2	#10	114	182	99	148	74	111	59	89	49	74	42	64	37	56	33	49	28	44
		2	#12	114	182	99	158	84	126	67	101	56	84	48	72	42	63	35	56	28	45
	20ga *(.0354")*	2	#10	114	172	76	114	57	86	46	69	38	57	33	49	29	43	25	38	23	34
		2	#12	114	182	87	130	65	97	52	78	43	65	37	56	32	49	29	43	26	39
Cold Formed Steel (Gr 33 min.)	≥12ga *(.1050")*	2	#10	114	182	99	158	86	137	73	117	62	99	52	83	43	68	35	56	28	45
		2	#12	114	182	99	158	86	137	73	117	62	99	52	83	43	68	35	56	28	45
	16ga *(.0590")*	2	#10	114	182	88	132	66	99	53	79	44	66	38	57	33	49	29	44	26	40
		2	#12	114	182	99	150	75	112	60	90	50	75	43	64	37	56	33	50	28	45
	18ga *(.0459")*	2	#10	103	154	68	103	51	77	41	62	34	51	29	44	26	38	23	34	21	31
		2	#12	114	175	78	117	58	88	47	70	39	58	33	50	29	44	26	39	23	35
	20ga *(.0354")*	2	#10	79	119	53	79	40	59	32	47	26	40	23	34	20	30	18	26	16	24
		2	#12	90	135	60	90	45	67	36	54	30	45	26	39	22	34	20	30	18	27
	22ga *(.0294")*	2	#10	66	99	44	66	33	49	26	39	22	33	19	28	16	25	15	22	13	20
		2	#12	75	112	50	75	37	56	30	45	25	37	21	32	19	28	17	25	15	22
Plywood & OSB	15/32" (& 1/2")	2	#10	76	102	51	68	38	51	30	41	25	34	22	29	19	26	17	23	15	20
		2	#12	86	117	58	78	43	58	35	47	29	39	25	33	22	29	19	26	17	23
	19/32" (& 5/8")	2	#10	96	130	64	87	48	65	38	52	32	43	27	37	24	32	21	29	19	26
		2	#12	109	148	73	98	55	74	44	59	36	49	31	42	27	37	24	33	22	30
	23/32" (& 3/4")	2	#10	114	157	78	105	58	79	47	63	39	52	33	45	29	39	26	35	23	31
		2	#12	114	179	88	119	66	89	53	71	44	60	38	51	33	45	29	40	26	36
Lumber (DFL)	1" min	2	#10	114	182	99	158	86	130	73	104	62	86	52	74	43	65	35	56	28	45
		2	#12	114	182	99	158	86	137	73	117	62	98	52	83	43	68	35	56	28	45

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Table accounts for increased loads on fasteners due to the eccentricity of the fasteners relative to the panel seam. The Span-lok hp & SpanSeam panel summary chart at the front of this section provides for development of these fastener load adjustments.
2. Number of clip fasteners can be reduced to (1) if project load requirements can still be met. The tabulated panel system capacities shall be reduced by 1/2.
3. Number of clip fasteners can be increased to (3), and tabulated capacity increased by 50%, with the final capacity not to exceed max Panel/Clip Capacity stated at the top of the chart.

2.0 - Design Span® hp

FIGURE 2.1 - Profile: As installed view shown.

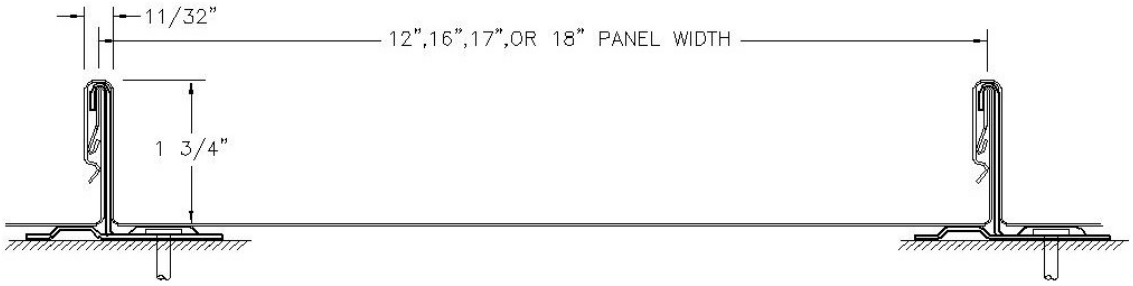


TABLE 2.1 – Profile

Panel Use:	Roof (primary use), wall, fascia
Substrates:	Over spaced supports or solid substrate
Available Gauges:	No. 22, 24
Minimum Slope:	2:12 (16.7 percent)
Load Combination Reduction Available (Ref. Section 5.6)	No
Uninstalled Panel View	

TABLE 2.2 - Attachment:

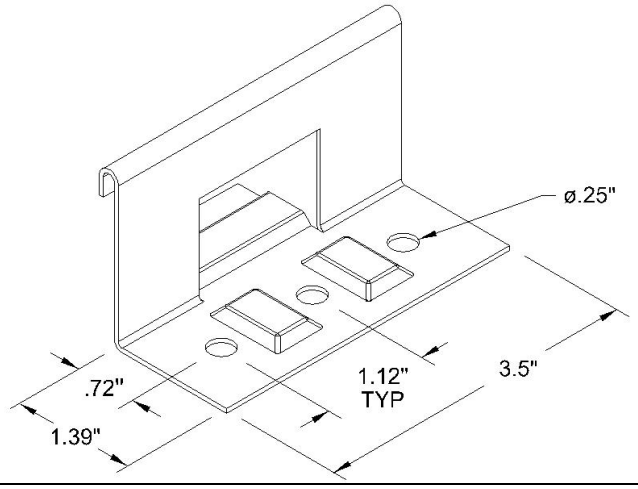
Clip Name:	Design Span Clip
Clip View:	
Clip Usage:	Over spaced framing or solid substrates
Part #:	#DSPCLP3.5
Panel/ Substrate Gap:	3/16 inch
Thermal Movement:	Unlimited
Fastener Limitations:	Nom. size: ¼ inch max. Head height: 0.120-inch max. Head dia.: ½ inch max.
Recommended Fastener(s):	#10 or #12 pancake head
Fastener Load Adjustments (due to eccentricity of fasteners relative to panel seam)**:**	Per fastener: 2.07 ΣM = 0 1.39P = .67R
Associated Bearing Plate:	#BP3HOLE

TABLE 2.3 - Section properties (12" Design Span® hp panel)

Gauge	Weight	Base Metal Thickness	Yield Strength	Tensile Strength	Gross Section Properties				
					Area	Moment of Inertia	Distance to N.A. from Bottom	Positive Section Modulus	Negative Section Modulus
	w	t	Fy	Fu	A_g	I_g	y_b	S_g+	S_g-
	psf	in	ksi	ksi	in^2/ft	in^4/ft	in	in^3/ft	in^3/ft
24	1.45	0.0232	50	65	0.4162	0.1226	0.35	0.0875	0.3518
22	1.83	0.0294	50	65	0.5249	0.1530	0.35	0.1090	0.4393

Gauge	Effective Section Properties							Uniform Load Only	
	Area	Positive			Negative				
		Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	$I_d = (2I_e+I_g)/3$	
	A_e/ft	I_e+	y_b	S_e+	I_e-	y_b	S_e-	I+	I-
	in^2	in^4/ft	in	in^3/ft	in^4/ft	in	in^3/ft	in^4/ft	in^4/ft
24	0.1350	0.1165	0.33	0.0820	0.0530	0.85	0.0586	0.1185	0.0762
22	0.1913	0.1518	0.35	0.1080	0.0730	0.80	0.0771	0.1522	0.0997

TABLE 2.4 - Allowable reactions at supports (12" Design Span® hp):

Gauge	Condition	Allowable *(lbs/ft width)*	Factored *(lbs/ft width)*
24	1- End	412	660
	2- Interior	1005	1610
22	1- End	588	942
	2- Interior	1416	2267
Reaction capacities based on a minimum 1.5" web bearing length			

TABLE 2.5 - Inward (positive) uniform load capacities (12" Design Span® hp):

12in Design Span hp									
			Positive (Inward) Uniform Load Capacity (lbs/ft^2) / Span (ft. - in.)						
Gauge	Span	Condition	2' - 0"	2' - 6"	3' - 0"	3' - 6"	4' - 0"	4' - 6"	5' - 0"
24	Single Span	ASD, W/Ω	409	262	182	134	102	81	65
		LRFD, ϕW	649	415	289	212	162	128	104
		L/180	1295	663	384	242	162	114	83
		L/60	3885	1989	1151	725	486	341	249
	Double Span	ASD, W/Ω	275	180	126	93	71	56	46
		LRFD, ϕW	415	271	190	140	108	85	69
		L/180	3120	1597	924	582	390	274	200
		L/60	>5k	4792	2773	1746	1170	822	599
	Triple Span	ASD, W/Ω	337	221	156	116	89	71	57
		LRFD, ϕW	507	333	235	174	134	106	86
		L/180	2444	1251	724	456	305	215	156
		L/60	>5k	3754	2172	1368	916	644	469
22	Single Span	ASD, W/Ω	539	345	240	176	135	106	86
		LRFD, ϕW	855	547	380	279	214	169	137
		L/180	1663	851	493	310	208	146	106
		L/60	4989	2554	1478	931	624	438	319
	Double Span	ASD, W/Ω	367	239	167	123	95	75	61
		LRFD, ϕW	553	359	252	186	143	113	92
		L/180	4006	2051	1187	747	501	352	256
		L/60	>5k	>5k	3561	2242	1502	1055	769
	Triple Span	ASD, W/Ω	451	295	207	153	118	93	76
		LRFD, ϕW	679	444	312	230	178	141	114
		L/180	3138	1607	930	586	392	275	201
		L/60	>5k	4820	2789	1757	1177	826	603

TABLE 2.6 - Outward (negative) uniform load capacities (12", No. 22 & 24 gauge Design Span® hp):

12" Design Span hp, 22 & 24ga																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	1' - 0"		1' - 6"		2' - 0"		2' - 6"		3' - 0"		3' - 6"		4' - 0"		4' - 6"		5' - 0"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft²)																	
				82	123	76	115	71	106	67	101	63	95	59	89	56	83	52	78	48	72
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft²)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga *(.1050")*	2	#10	82	123	76	115	71	106	67	101	63	95	59	89	56	83	52	78	48	72
		2	#12	82	123	76	115	71	106	67	101	63	95	59	89	56	83	52	78	48	72
	14ga *(.0700")*	2	#10	82	123	76	115	71	106	67	101	63	95	59	89	56	83	52	78	47	71
		2	#12	82	123	76	115	71	106	67	101	63	95	59	89	56	83	52	78	48	72
	16ga *(.0590")*	2	#10	82	123	76	115	71	106	67	101	63	95	57	85	50	75	44	66	40	60
		2	#12	82	123	76	115	71	106	67	101	63	95	59	89	56	83	50	76	45	68
	18ga *(.0459")*	2	#10	82	123	76	115	71	106	62	93	52	78	44	67	39	58	34	52	31	47
		2	#12	82	123	76	115	71	106	67	101	59	88	50	76	44	66	39	59	35	53
	20ga *(.0354")*	2	#10	82	123	76	115	60	90	48	72	40	60	34	51	30	45	27	40	24	36
		2	#12	82	123	76	115	68	102	54	82	45	68	39	58	34	51	30	45	27	41
Cold Formed Steel (Gr 33 min.)	≥12ga *(.1050")*	2	#10	82	123	76	115	71	106	67	101	63	95	59	89	56	83	52	78	48	72
		2	#12	82	123	76	115	71	106	67	101	63	95	59	89	56	83	52	78	48	72
	16ga *(.0590")*	2	#10	82	123	76	115	69	104	55	83	46	69	39	59	35	52	31	46	28	41
		2	#12	82	123	76	115	71	106	63	94	52	78	45	67	39	59	35	52	31	47
	18ga *(.0459")*	2	#10	82	123	72	107	54	81	43	64	36	54	31	46	27	40	24	36	21	32
		2	#12	82	123	76	115	61	92	49	73	41	61	35	52	31	46	27	41	24	37
	20ga *(.0354")*	2	#10	82	123	55	83	41	62	33	50	28	41	24	36	21	31	18	28	17	25
		2	#12	82	123	63	94	47	71	38	57	31	47	27	40	24	35	21	31	19	28
	22ga *(.0294")*	2	#10	69	103	46	69	34	52	28	41	23	34	20	29	17	26	15	23	14	21
		2	#12	78	117	52	78	39	59	31	47	26	39	22	34	20	29	17	26	16	23
Plywood & OSB	15/32" (& 1/2")	2	#10	79	107	53	72	40	54	32	43	26	36	23	31	20	27	18	24	16	21
		2	#12	82	122	60	81	45	61	36	49	30	41	26	35	23	30	20	27	18	24
	19/32" (& 5/8")	2	#10	82	123	67	91	50	68	40	54	34	45	29	39	25	34	22	30	20	27
		2	#12	82	123	76	103	57	77	46	62	38	51	33	44	29	39	25	34	23	31
	23/32" (& 3/4")	2	#10	82	123	76	110	61	82	49	66	41	55	35	47	30	41	27	37	24	33
		2	#12	82	123	76	115	69	93	55	75	46	62	40	53	35	47	31	42	28	37
Lumber (DFL)	1" min	2	#10	82	123	76	115	71	106	67	101	63	90	57	78	50	68	45	60	40	54
		2	#12	82	123	76	115	71	106	67	101	63	95	59	88	56	77	51	69	46	62

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Table accounts for increased loads on fasteners due to the eccentricity of the fasteners relative to the panel seam. The Design Span hp panel summary chart at the front of this section provides for development of these fastener load adjustments.
2. Number of clip fasteners can be reduced to (1) if project load requirements can still be met. The tabulated panel system capacities shall be reduced by 1/2.
3. Number of clip fasteners can be increased to (3), and tabulated capacity increased by 50%, with the final capacity not to exceed max Panel/Clip Capacity stated at the top of the chart.

TABLE 2.7 - Section properties (16" Design Span® hp):

Gauge	Weight	Base Metal Thickness	Yield Strength	Tensile Strength	Gross Section Properties				
					Area	Moment of Inertia	Distance to N.A. from Bottom	Positive Section Modulus	Negative Section Modulus
	w	t	Fy	Fu	A_g	I_g	y_b	S_g+	S_g-
	psf	in	ksi	ksi	in^2/ft	in^4/ft	in	in^3/ft	in^3/ft
24	1.34	0.0232	50	65	0.3817	0.0983	0.29	0.0673	0.3428
22	1.68	0.0294	50	65	0.4819	0.1223	0.29	0.0838	0.4274

Gauge	Effective Section Properties							Uniform Load Only	
	Area	Positive			Negative				
		Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	$I_d = (2I_e+I_g)/3$	
	A_e/ft	I_e+	y_b	S_e+	I_e-	y_b	S_e-	I+	I-
	in^2	in^4/ft	in	in^3/ft	in^4/ft	in	in^3/ft	in^4/ft	in^4/ft
24	0.1013	0.0923	0.27	0.0624	0.0398	0.84	0.0440	0.0943	0.0593
22	0.1437	0.1208	0.28	0.0825	0.0548	0.80	0.0580	0.1213	0.0773

TABLE 2.8 - Allowable reactions at supports (16" Design Span® hp):

Gauge	Condition	Allowable *(lbs/ft width)*	Factored *(lbs/ft width)*
24	1- End	309	495
	2- Interior	754	1207
22	1- End	492	788
	2- Interior	612	980
Reaction capacities based on a minimum 1.5" web bearing length			

TABLE 2.9 - Inward (positive) uniform load capacities (16" Design Span® hp):

16in Design Span hp									
			Positive (Inward) Uniform Load Capacity (lbs/ft^2) / Span (ft. - in.)						
Gauge	Span	Condition	2' - 0"	2' - 6"	3' - 0"	3' - 6"	4' - 0"	4' - 6"	5' - 0"
24	Single Span	ASD, W/Ω	309	199	138	102	78	62	50
		LRFD, ϕW	494	316	220	161	124	98	79
		L/180	1030	527	305	192	129	90	66
		L/60	3089	1582	915	576	386	271	198
	Double Span	ASD, W/Ω	206	135	94	70	54	43	34
		LRFD, ϕW	311	203	142	105	81	64	52
		L/180	2481	1270	735	463	310	218	159
		L/60	>5k	3810	2205	1389	930	653	476
	Triple Span	ASD, W/Ω	253	166	117	86	66	52	43
		LRFD, ϕW	380	250	176	130	100	79	65
		L/180	1943	995	576	363	243	171	124
		L/60	>5k	2985	1727	1088	729	512	373
22	Single Span	ASD, W/Ω	412	263	183	134	103	81	66
		LRFD, ϕW	653	418	290	213	163	129	105
		L/180	1325	678	393	247	166	116	85
		L/60	3974	2035	1178	742	497	349	254
	Double Span	ASD, W/Ω	245	180	126	92	71	56	45
		LRFD, ϕW	392	270	189	139	107	85	68
		L/180	3191	1634	946	595	399	280	204
		L/60	>5k	4902	2837	1786	1197	840	613
	Triple Span	ASD, W/Ω	278	222	155	115	89	70	57
		LRFD, ϕW	445	334	234	174	134	105	86
		L/180	2500	1280	741	466	312	219	160
		L/60	>5k	3840	2222	1399	937	658	480

TABLE 2.10 - Outward (negative) uniform load capacities (16", No. 22 gauge Design Span® hp):

16" Design Span hp, 22ga																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	1' - 0"		1' - 6"		2' - 0"		2' - 6"		3' - 0"		3' - 6"		4' - 0"		4' - 6"		5' - 0"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				74	112	66	99	58	87	49	74	49	73	48	72	47	71	47	70	46	69
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga (.1050")	2	#10	74	112	66	99	58	87	49	74	49	73	48	72	47	71	47	70	46	69
		2	#12	74	112	66	99	58	87	49	74	49	73	48	72	47	71	47	70	46	69
	14ga (.0700")	2	#10	74	112	66	99	58	87	49	74	49	73	48	72	44	67	39	59	35	53
		2	#12	74	112	66	99	58	87	49	74	49	73	48	72	47	71	45	67	40	61
	16ga (.0590")	2	#10	74	112	66	99	58	87	49	74	49	73	43	64	37	56	33	50	30	45
		2	#12	74	112	66	99	58	87	49	74	49	73	48	72	43	64	38	57	34	51
	18ga (.0459")	2	#10	74	112	66	99	58	87	47	70	39	58	33	50	29	44	26	39	23	35
		2	#12	74	112	66	99	58	87	49	74	44	66	38	57	33	50	29	44	26	40
	20ga (.0354")	2	#10	74	112	60	90	45	67	36	54	30	45	26	38	22	34	20	30	18	27
		2	#12	74	112	66	99	51	77	41	61	34	51	29	44	26	38	23	34	20	31
Cold Formed Steel (Gr 33 min.)	≥12ga (.1050")	2	#10	74	112	66	99	58	87	49	74	49	73	48	72	46	69	41	61	37	55
		2	#12	74	112	66	99	58	87	49	74	49	73	48	72	47	71	47	70	42	63
	16ga (.0590")	2	#10	74	112	66	99	52	78	41	62	35	52	30	44	26	39	23	35	21	31
		2	#12	74	112	66	99	58	87	47	71	39	59	34	50	29	44	26	39	24	35
	18ga (.0459")	2	#10	74	112	54	81	40	60	32	48	27	40	23	35	20	30	18	27	16	24
		2	#12	74	112	61	92	46	69	37	55	31	46	26	39	23	34	20	31	18	27
	20ga (.0354")	2	#10	62	93	41	62	31	47	25	37	21	31	18	27	16	23	14	21	12	19
		2	#12	71	106	47	71	35	53	28	42	24	35	20	30	18	26	16	24	14	21
	22ga (.0294")	2	#10	52	77	34	52	26	39	21	31	17	26	15	22	13	19	11	17	10	15
		2	#12	59	88	39	59	29	44	23	35	20	29	17	25	15	22	13	20	12	18
Plywood & OSB	15/32" (& 1/2")	2	#10	60	80	40	54	30	40	24	32	20	27	17	23	15	20	13	18	12	16
		2	#12	68	91	45	61	34	46	27	37	23	30	19	26	17	23	15	20	14	18
	19/32" (& 5/8")	2	#10	74	102	50	68	38	51	30	41	25	34	22	29	19	25	17	23	15	20
		2	#12	74	112	57	77	43	58	34	46	29	39	25	33	21	29	19	26	17	23
	23/32" (& 3/4")	2	#10	74	112	61	82	46	62	37	49	30	41	26	35	23	31	20	27	18	25
		2	#12	74	112	66	93	52	70	42	56	35	47	30	40	26	35	23	31	21	28
Lumber (DFL)	1" min	2	#10	74	112	66	99	58	87	49	74	49	68	43	58	38	51	33	45	30	41
		2	#12	74	112	66	99	58	87	49	74	49	73	48	66	43	58	38	51	34	46

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Table accounts for increased loads on fasteners due to the eccentricity of the fasteners relative to the panel seam. The Design Span hp panel summary chart at the front of this section provides for development of these fastener load adjustments.
2. Number of clip fasteners can be reduced to (1) if project load requirements can still be met. The tabulated panel system capacities shall be reduced by 1/2.
3. Number of clip fasteners can be increased to (3), and tabulated capacity increased by 50%, with the final capacity not to exceed max Panel/Clip Capacity stated at the top of the chart.

TABLE 2.11 - Outward (negative) uniform load capacities (16", No. 24 gauge Design Span® hp):

16" Design Span hp, 24ga																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	1' - 0"		1' - 6"		2' - 0"		2' - 6"		3' - 0"		3' - 6"		4' - 0"		4' - 6"		5' - 0"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				49	73	42	64	36	54	30	44	29	44	29	44	29	43	28	43	28	42
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga *(.1050")*	2	#10	49	73	42	64	36	54	30	44	29	44	29	44	29	43	28	43	28	42
		2	#12	49	73	42	64	36	54	30	44	29	44	29	44	29	43	28	43	28	42
	14ga *(.0700")*	2	#10	49	73	42	64	36	54	30	44	29	44	29	44	29	43	28	43	28	42
		2	#12	49	73	42	64	36	54	30	44	29	44	29	44	29	43	28	43	28	42
	16ga *(.0590")*	2	#10	49	73	42	64	36	54	30	44	29	44	29	44	29	43	28	43	28	42
		2	#12	49	73	42	64	36	54	30	44	29	44	29	44	29	43	28	43	28	42
	18ga *(.0459")*	2	#10	49	73	42	64	36	54	30	44	29	44	29	44	29	43	26	39	23	35
		2	#12	49	73	42	64	36	54	30	44	29	44	29	44	29	43	28	43	26	40
	20ga *(.0354")*	2	#10	49	73	42	64	36	54	30	44	29	44	26	38	22	34	20	30	18	27
		2	#12	49	73	42	64	36	54	30	44	29	44	29	44	26	38	23	34	20	31
Cold Formed Steel (Gr 33 min.)	≥12ga *(.1050")*	2	#10	49	73	42	64	36	54	30	44	29	44	29	44	29	43	28	43	28	42
		2	#12	49	73	42	64	36	54	30	44	29	44	29	44	29	43	28	43	28	42
	16ga *(.0590")*	2	#10	49	73	42	64	36	54	30	44	29	44	29	44	26	39	23	35	21	31
		2	#12	49	73	42	64	36	54	30	44	29	44	29	44	29	43	26	39	24	35
	18ga *(.0459")*	2	#10	49	73	42	64	36	54	30	44	27	40	23	35	20	30	18	27	16	24
		2	#12	49	73	42	64	36	54	30	44	29	44	26	39	23	34	20	31	18	27
	20ga *(.0354")*	2	#10	49	73	41	62	31	47	25	37	21	31	18	27	16	23	14	21	12	19
		2	#12	49	73	42	64	35	53	28	42	24	35	20	30	18	26	16	24	14	21
	22ga *(.0294")*	2	#10	49	73	34	52	26	39	21	31	17	26	15	22	13	19	11	17	10	15
		2	#12	49	73	39	59	29	44	23	35	20	29	17	25	15	22	13	20	12	18
Plywood & OSB	15/32" (& 1/2")	2	#10	49	73	40	54	30	40	24	32	20	27	17	23	15	20	13	18	12	16
		2	#12	49	73	42	61	34	46	27	37	23	30	19	26	17	23	15	20	14	18
	19/32" (& 5/8")	2	#10	49	73	42	64	36	51	30	41	25	34	22	29	19	25	17	23	15	20
		2	#12	49	73	42	64	36	54	30	44	29	39	25	33	21	29	19	26	17	23
	23/32" (& 3/4")	2	#10	49	73	42	64	36	54	30	44	29	41	26	35	23	31	20	27	18	25
		2	#12	49	73	42	64	36	54	30	44	29	44	29	40	26	35	23	31	21	28
Lumber (DFL)	1" min	2	#10	49	73	42	64	36	54	30	44	29	44	29	44	29	43	28	43	28	41
		2	#12	49	73	42	64	36	54	30	44	29	44	29	44	29	43	28	43	28	42

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Table accounts for increased loads on fasteners due to the eccentricity of the fasteners relative to the panel seam. The Design Span hp panel summary chart at the front of this section provides for development of these fastener load adjustments.
2. Number of clip fasteners can be reduced to (1) if project load requirements can still be met. The tabulated panel system capacities shall be reduced by 1/2.
3. Number of clip fasteners can be increased to (3), and tabulated capacity increased by 50%, with the final capacity not to exceed max Panel/Clip Capacity stated at the top of the chart.

TABLE 2.12 - Section properties (17" Design Span® hp):

Gauge	Weight	Base Metal Thickness	Yield Strength	Tensile Strength	Gross Section Properties				
					Area	Moment of Inertia	Distance to N.A. from Bottom	Positive Section Modulus	Negative Section Modulus
	w	t	Fy	Fu	A_g	I_g	y_b	S_g+	S_g-
	psf	in	ksi	ksi	in^2/ft	in^4/ft	in	in^3/ft	in^3/ft
24	1.31	0.0232	50	65	0.3756	0.0939	0.28	0.0636	0.3411
22	1.65	0.0294	50	65	0.4743	0.1172	0.28	0.0792	0.4250

Gauge	Effective Section Properties							Uniform Load Only	
	Area	Positive			Negative				
		Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	$I_d = (2I_e+I_g)/3$	
	A_e/ft	I_e+	y_b	S_e+	I_e-	y_b	S_e-	I+	I-
	in^2	in^4/ft	in	in^3/ft	in^4/ft	in	in^3/ft	in^4/ft	in^4/ft
24	0.0954	0.0882	0.26	0.0589	0.0374	0.84	0.0414	0.0901	0.0562
22	0.1352	0.1151	0.27	0.0779	0.0515	0.80	0.0546	0.1158	0.0734

TABLE 2.13 - Allowable reactions at supports (17" Design Span® hp):

Gauge	Condition	Allowable *(lbs/ft width)*	Factored *(lbs/ft width)*
24	1- End	291	466
	2- Interior	710	1136
22	1- End	463	742
	2- Interior	576	922
Reaction capacities based on a minimum 1.5" web bearing length			

TABLE 2.14 - Inward (positive) uniform load capacities (17" Design Span® hp):

17in Design Span hp									
			Positive (Inward) Uniform Load Capacity (lbs/ft²) / Span (ft. - in.)						
Gauge	Span	Condition	2' - 0"	2' - 6"	3' - 0"	3' - 6"	4' - 0"	4' - 6"	5' - 0"
24	Single Span	ASD, W/Ω	291	188	131	96	73	58	47
		LRFD, ϕW	466	298	207	152	117	92	75
		L/180	*985*	*504*	*292*	*184*	*123*	*86*	*63*
		L/60	*2954*	*1512*	*875*	*551*	*369*	*259*	*189*
	Double Span	ASD, W/Ω	194	126	88	65	50	40	32
		LRFD, ϕW	293	191	133	99	76	60	49
		L/180	*2372*	*1214*	*703*	*443*	*296*	*208*	*152*
		L/60	*>5k*	*3643*	*2108*	*1328*	*889*	*625*	*455*
	Triple Span	ASD, W/Ω	238	156	110	81	63	49	41
		LRFD, ϕW	358	235	166	122	95	74	61
		L/180	*1858*	*951*	*551*	*347*	*232*	*163*	*119*
		L/60	*>5k*	*2854*	*1652*	*1040*	*697*	*489*	*357*
22	Single Span	ASD, W/Ω	389	249	173	127	97	77	62
		LRFD, ϕW	616	394	274	201	154	122	99
		L/180	*1265*	*648*	*375*	*236*	*158*	*111*	*81*
		L/60	*3795*	*1943*	*1124*	*708*	*474*	*333*	*243*
	Double Span	ASD, W/Ω	230	168	118	87	67	53	42
		LRFD, ϕW	369	254	178	131	101	80	64
		L/180	*3047*	*1560*	*903*	*569*	*381*	*267*	*195*
		L/60	*>5k*	*4680*	*2708*	*1706*	*1143*	*802*	*585*
	Triple Span	ASD, W/Ω	262	209	147	108	83	66	53
		LRFD, ϕW	419	314	221	163	125	99	80
		L/180	*2387*	*1222*	*707*	*445*	*298*	*210*	*153*
		L/60	*>5k*	*3666*	*2122*	*1336*	*895*	*629*	*458*

TABLE 2.15 - Outward (negative) uniform load capacities (17" & 18", No. 22 gauge Design Span® hp):

17" & 18" Design Span hp, 22ga																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	1' - 0"		1' - 6"		2' - 0"		2' - 6"		3' - 0"		3' - 6"		4' - 0"		4' - 6"		5' - 0"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft²)																	
				67	100	59	88	51	77	43	65	43	64	42	63	42	63	41	62	41	61
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft²)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga (.1050")	2	#10	67	100	59	88	51	77	43	65	43	64	42	63	42	63	41	62	41	61
		2	#12	67	100	59	88	51	77	43	65	43	64	42	63	42	63	41	62	41	61
	14ga (.0700")	2	#10	67	100	59	88	51	77	43	65	43	64	42	63	39	59	35	53	32	47
		2	#12	67	100	59	88	51	77	43	65	43	64	42	63	42	63	40	60	36	54
	16ga (.0590")	2	#10	67	100	59	88	51	77	43	65	43	64	38	57	33	50	30	44	27	40
		2	#12	67	100	59	88	51	77	43	65	43	64	42	63	38	57	34	50	30	45
	18ga (.0459")	2	#10	67	100	59	88	51	77	41	62	34	52	30	44	26	39	23	34	21	31
		2	#12	67	100	59	88	51	77	43	65	39	59	34	50	29	44	26	39	24	35
	20ga (.0354")	2	#10	67	100	53	80	40	60	32	48	27	40	23	34	20	30	18	27	16	24
		2	#12	67	100	59	88	45	68	36	54	30	45	26	39	23	34	20	30	18	27
Cold Formed Steel (Gr 33 min.)	≥12ga (.1050")	2	#10	67	100	59	88	51	77	43	65	43	64	42	63	41	61	36	55	33	49
		2	#12	67	100	59	88	51	77	43	65	43	64	42	63	42	63	41	62	37	56
	16ga (.0590")	2	#10	67	100	59	88	46	69	37	55	31	46	26	39	23	35	20	31	18	28
		2	#12	67	100	59	88	51	77	42	63	35	52	30	45	26	39	23	35	21	31
	18ga (.0459")	2	#10	67	100	48	72	36	54	29	43	24	36	20	31	18	27	16	24	14	21
		2	#12	67	100	54	81	41	61	33	49	27	41	23	35	20	31	18	27	16	24
	20ga (.0354")	2	#10	55	83	37	55	28	41	22	33	18	28	16	24	14	21	12	18	11	17
		2	#12	63	94	42	63	31	47	25	38	21	31	18	27	16	24	14	21	13	19
	22ga (.0294")	2	#10	46	69	31	46	23	34	18	28	15	23	13	20	11	17	10	15	9	14
		2	#12	52	78	35	52	26	39	21	31	17	26	15	22	13	20	12	17	10	16
Plywood & OSB	15/32" (& 1/2")	2	#10	53	72	35	48	26	36	21	29	18	24	15	20	13	18	12	16	11	14
		2	#12	60	81	40	54	30	41	24	33	20	27	17	23	15	20	13	18	12	16
	19/32" (& 5/8")	2	#10	67	91	45	60	34	45	27	36	22	30	19	26	17	23	15	20	13	18
		2	#12	67	100	51	69	38	51	31	41	25	34	22	29	19	26	17	23	15	21
	23/32" (& 3/4")	2	#10	67	100	54	73	41	55	32	44	27	37	23	31	20	27	18	24	16	22
		2	#12	67	100	59	83	46	62	37	50	31	42	26	36	23	31	21	28	18	25
Lumber (DFL)	1" min	2	#10	67	100	59	88	51	77	43	65	43	60	38	52	33	45	30	40	27	36
		2	#12	67	100	59	88	51	77	43	65	43	64	42	59	38	51	34	46	30	41

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Table accounts for increased loads on fasteners due to the eccentricity of the fasteners relative to the panel seam. The Design Span hp panel summary chart at the front of this section provides for development of these fastener load adjustments.
2. Number of clip fasteners can be reduced to (1) if project load requirements can still be met. The tabulated panel system capacities shall be reduced by 1/2.
3. Number of clip fasteners can be increased to (3), and tabulated capacity increased by 50%, with the final capacity not to exceed max Panel/Clip Capacity stated at the top of the chart.

TABLE 2.16 - Outward (negative) uniform load capacities (17" & 18", 24 gauge Design Span® hp):

17" & 18" Design Span hp, 24ga																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	1' - 0"		1' - 6"		2' - 0"		2' - 6"		3' - 0"		3' - 6"		4' - 0"		4' - 6"		5' - 0"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft²)																	
				48	74	42	64	35	55	29	45	29	45	28	44	28	43	28	43	27	42
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft²)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga (.1050")	2	#10	48	74	42	64	35	55	29	45	29	45	28	44	28	43	28	43	27	42
		2	#12	48	74	42	64	35	55	29	45	29	45	28	44	28	43	28	43	27	42
	14ga (.0700")	2	#10	48	74	42	64	35	55	29	45	29	45	28	44	28	43	28	43	27	42
		2	#12	48	74	42	64	35	55	29	45	29	45	28	44	28	43	28	43	27	42
	16ga (.0590")	2	#10	48	74	42	64	35	55	29	45	29	45	28	44	28	43	28	43	27	40
		2	#12	48	74	42	64	35	55	29	45	29	45	28	44	28	43	28	43	27	42
	18ga (.0459")	2	#10	48	74	42	64	35	55	29	45	29	45	28	44	26	39	23	34	21	31
		2	#12	48	74	42	64	35	55	29	45	29	45	28	44	28	43	26	39	24	35
	20ga (.0354")	2	#10	48	74	42	64	35	55	29	45	27	40	23	34	20	30	18	27	16	24
		2	#12	48	74	42	64	35	55	29	45	29	45	26	39	23	34	20	30	18	27
Cold Formed Steel (Gr 33 min.)	≥12ga (.1050")	2	#10	48	74	42	64	35	55	29	45	29	45	28	44	28	43	28	43	27	42
		2	#12	48	74	42	64	35	55	29	45	29	45	28	44	28	43	28	43	27	42
	16ga (.0590")	2	#10	48	74	42	64	35	55	29	45	29	45	26	39	23	35	20	31	18	28
		2	#12	48	74	42	64	35	55	29	45	29	45	28	44	26	39	23	35	21	31
	18ga (.0459")	2	#10	48	74	42	64	35	54	29	43	24	36	20	31	18	27	16	24	14	21
		2	#12	48	74	42	64	35	55	29	45	27	41	23	35	20	31	18	27	16	24
	20ga (.0354")	2	#10	48	74	37	55	28	41	22	33	18	28	16	24	14	21	12	18	11	17
		2	#12	48	74	42	63	31	47	25	38	21	31	18	27	16	24	14	21	13	19
	22ga (.0294")	2	#10	46	69	31	46	23	34	18	28	15	23	13	20	11	17	10	15	9	14
		2	#12	48	74	35	52	26	39	21	31	17	26	15	22	13	20	12	17	10	16
Plywood & OSB	15/32" (& 1/2")	2	#10	48	72	35	48	26	36	21	29	18	24	15	20	13	18	12	16	11	14
		2	#12	48	74	40	54	30	41	24	33	20	27	17	23	15	20	13	18	12	16
	19/32" (& 5/8")	2	#10	48	74	42	60	34	45	27	36	22	30	19	26	17	23	15	20	13	18
		2	#12	48	74	42	64	35	51	29	41	25	34	22	29	19	26	17	23	15	21
	23/32" (& 3/4")	2	#10	48	74	42	64	35	55	29	44	27	37	23	31	20	27	18	24	16	22
		2	#12	48	74	42	64	35	55	29	45	29	42	26	36	23	31	21	28	18	25
Lumber (DFL)	1" min	2	#10	48	74	42	64	35	55	29	45	29	45	28	44	28	43	28	40	27	36
		2	#12	48	74	42	64	35	55	29	45	29	45	28	44	28	43	28	43	27	41

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Table accounts for increased loads on fasteners due to the eccentricity of the fasteners relative to the panel seam. The Design Span hp panel summary chart at the front of this section provides for development of these fastener load adjustments.
2. Number of clip fasteners can be reduced to (1) if project load requirements can still be met. The tabulated panel system capacities shall be reduced by 1/2.
3. Number of clip fasteners can be increased to (3), and tabulated capacity increased by 50%, with the final capacity not to exceed max Panel/Clip Capacity stated at the top of the chart.

TABLE 2.17 - Section properties (18" Design Span® hp):

Gauge	Weight	Base Metal Thickness	Yield Strength	Tensile Strength	Gross Section Properties				
					Area	Moment of Inertia	Distance to N.A. from Bottom	Positive Section Modulus	Negative Section Modulus
	w	t	Fy	Fu	A_g	I_g	y_b	S_g+	S_g-
	psf	in	ksi	ksi	in^2/ft	in^4/ft	in	in^3/ft	in^3/ft
24	1.30	0.0232	50	65	0.3702	0.0893	0.26	0.0603	0.3394
22	1.63	0.0294	50	65	0.4675	0.1113	0.26	0.0751	0.4228

Gauge	Effective Section Properties							Uniform Load Only	
	Area	Positive			Negative				
		Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	$I_d = (2I_e+I_g)/3$	
	A_e/ft	I_e+	y_b	S_e+	I_e-	y_b	S_e-	I+	I-
	in^2	in^4/ft	in	in^3/ft	in^4/ft	in	in^3/ft	in^4/ft	in^4/ft
24	0.0901	0.0840	0.25	0.0557	0.0353	0.84	0.0391	0.0858	0.0533
22	0.1278	0.1100	0.26	0.0737	0.0487	0.80	0.0515	0.1104	0.0696

TABLE 2.18 - Allowable reactions at supports (18" Design Span® hp):

Gauge	Condition	Allowable *(lbs/ft width)*	Factored *(lbs/ft width)*
24	1- End	275	440
	2- Interior	670	1073
22	1- End	437	701
	2- Interior	544	871
Reaction capacities based on a minimum 1.5" web bearing length			

TABLE 2.19 - Inward (positive) uniform load capacities (18" Design Span® hp):

18 in Design Span hp									
			Positive (Inward) Uniform Load Capacity (lbs/ft^2) / Span (ft. - in.)						
Gauge	Span	Condition	2' - 0"	2' - 6"	3' - 0"	3' - 6"	4' - 0"	4' - 6"	5' - 0"
24	Single Span	ASD, W/Ω	275	178	124	91	70	55	44
		LRFD, ϕW	440	282	196	144	110	87	71
		L/180	*937*	*480*	*278*	*175*	*117*	*82*	*60*
		L/60	*2812*	*1440*	*833*	*525*	*351*	*247*	*180*
	Double Span	ASD, W/Ω	184	120	84	62	48	38	31
		LRFD, ϕW	277	180	127	93	72	57	46
		L/180	*2258*	*1156*	*669*	*421*	*282*	*198*	*144*
		L/60	*>5k*	*3468*	*2007*	*1264*	*847*	*595*	*433*
	Triple Span	ASD, W/Ω	225	147	104	77	59	47	38
		LRFD, ϕW	338	222	157	116	89	70	57
		L/180	*1769*	*906*	*524*	*330*	*221*	*155*	*113*
		L/60	*>5k*	*2717*	*1572*	*990*	*663*	*466*	*340*
22	Single Span	ASD, W/Ω	368	235	164	120	92	73	59
		LRFD, ϕW	584	374	259	191	146	115	93
		L/180	*1207*	*618*	*358*	*225*	*151*	*106*	*77*
		L/60	*3620*	*1854*	*1073*	*675*	*453*	*318*	*232*
	Double Span	ASD, W/Ω	218	160	111	82	63	50	40
		LRFD, ϕW	348	240	168	124	95	75	61
		L/180	*2907*	*1488*	*861*	*542*	*363*	*255*	*186*
		L/60	*>5k*	*4465*	*2584*	*1627*	*1090*	*766*	*558*
	Triple Span	ASD, W/Ω	247	196	139	102	79	63	51
		LRFD, ϕW	396	296	209	153	118	94	76
		L/180	*2277*	*1166*	*675*	*425*	*285*	*200*	*146*
		L/60	*>5k*	*3498*	*2024*	*1275*	*854*	*600*	*437*

Outward (negative) uniform load capacities (18" Design Span® hp):
Tables 2.15 and 2.16 apply

3.0 - Select Seam® (Narrow Batten)

FIGURE 3.1 - Profile: As-installed view shown

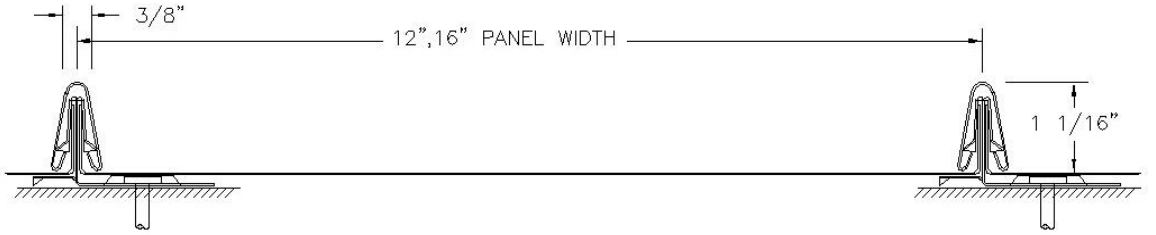


TABLE 3.1 - Profile:

Panel Use:	Roof (primary use), wall, fascia
Substrates:	Over solid or closely fitted deck
Available Gauges:	No. 22, 24 gauge
Minimum Slope:	3:12 (25 percent)
Load Combination Reduction Available (Ref. Section 5.6)	Yes
Uninstalled Panel View	

TABLE 3.2 - Attachment:

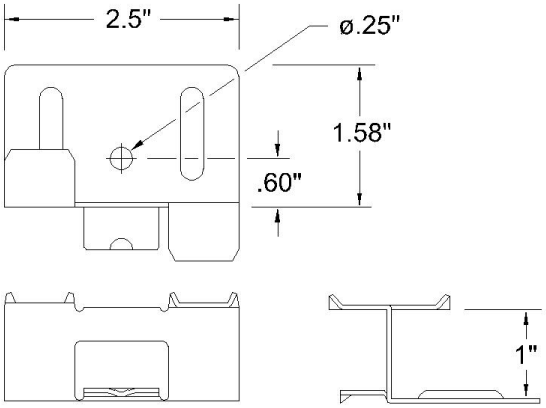
Clip Name:	Narrow Batten Clip
Clip View:	
Clip Usage:	Over solid substrates only.
Part #:	#SSMCLPNBZA
Panel/ Substrate Gap:	3/16 inch
Thermal Movement:	Unlimited
Fastener Limitations:	Nom. size: ¼ inch max. Head height: 0.140-inch max. Head dia.: 1 inch max.
Recommended Fastener(s):	#10 or #12 pancake head
Fastener Load Adjustments (due to eccentricity of fasteners relative to panel seam)**:**	Per fastener: 1.61 ΣM = 0 1.58P = .98R
Associated Bearing Plate:	#BPUNI22

TABLE 3.3 - Section properties (12" Select Seam®):

Gauge	Weight	Base Metal Thickness	Yield Strength	Tensile Strength	Gross Section Properties				
					Area	Moment of Inertia	Distance to N.A. from Bottom	Positive Section Modulus	Negative Section Modulus
	w	t	Fy	Fu	A_g	I_g	y_b	S_g+	S_g-
	psf	in	ksi	ksi	in^2/ft	in^4/ft	in	in^3/ft	in^3/ft
24	1.49	0.0232	50	65	0.3107	0.0057	0.05	0.0082	0.1093
22	1.86	0.0294	50	65	0.3932	0.0072	0.06	0.0103	0.1300

Gauge	Effective Section Properties							Uniform Load Only	
	Area	Positive			Negative				
		Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	$I_d = (2I_e+I_g)/3$	
	A_e/ft	I_e+	y_b	S_e+	I_e-	y_b	S_e-	I+	I-
	in^2	in^4/ft	in	in^3/ft	in^4/ft	in	in^3/ft	in^4/ft	in^4/ft
24	0.0442	0.0011	0.03	0.0015	0.0043	0.16	0.0073	0.0026	0.0048
22	0.0683	0.0023	0.03	0.0032	0.0059	0.14	0.0096	0.0039	0.0063

Inward (positive) uniform load capacities (12" Select Seam®):

Design Values are not available. Select Seam® requires installation over solid substrates.

TABLE 3.4 - Outward (negative) uniform load capacities (12", No. 22 gauge Select Seam®):

12" Select Seam Narrow Batten, 22ga																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	1' - 0"		1' - 6"		2' - 0"		2' - 6"		3' - 0"		3' - 6"		4' - 0"		4' - 6"		5' - 0"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				132	209	105	166	77	122	69	109	61	96	52	83	44	70	36	56	27	43
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga (.1050")	1	#10	132	209	105	166	77	122	69	109	61	96	52	83	44	70	36	56	27	43
		1	#12	132	209	105	166	77	122	69	109	61	96	52	83	44	70	36	56	27	43
	14ga (.0700")	1	#10	132	209	101	152	76	114	61	91	51	76	43	65	38	57	34	51	27	43
		1	#12	132	209	105	166	77	122	69	104	58	86	49	74	43	65	36	56	27	43
	16ga (.0590")	1	#10	128	192	85	128	64	96	51	77	43	64	37	55	32	48	28	43	26	38
		1	#12	132	209	97	146	73	109	58	87	49	73	42	62	36	55	32	49	27	43
	18ga (.0459")	1	#10	100	150	67	100	50	75	40	60	33	50	29	43	25	37	22	33	20	30
		1	#12	113	170	76	113	57	85	45	68	38	57	32	49	28	43	25	38	23	34
	20ga (.0354")	1	#10	77	115	51	77	38	58	31	46	26	38	22	33	19	29	17	26	15	23
		1	#12	87	131	58	87	44	66	35	52	29	44	25	37	22	33	19	29	17	26
Cold Formed Steel (Gr 33 min.)	≥12ga (.1050")	1	#10	132	209	105	158	77	118	63	95	53	79	45	68	39	59	35	53	27	43
		1	#12	132	209	105	166	77	122	69	108	60	90	51	77	44	67	36	56	27	43
	16ga (.0590")	1	#10	89	133	59	89	44	67	36	53	30	44	25	38	22	33	20	30	18	27
		1	#12	101	151	67	101	50	76	40	61	34	50	29	43	25	38	22	34	20	30
	18ga (.0459")	1	#10	69	104	46	69	35	52	28	41	23	35	20	30	17	26	15	23	14	21
		1	#12	79	118	52	79	39	59	31	47	26	39	22	34	20	29	17	26	16	24
	20ga (.0354")	1	#10	53	80	36	53	27	40	21	32	18	27	15	23	13	20	12	18	11	16
		1	#12	61	91	40	61	30	45	24	36	20	30	17	26	15	23	13	20	12	18
	22ga (.0294")	1	#10	44	66	29	44	22	33	18	27	15	22	13	19	11	17	10	15	9	13
		1	#12	50	75	34	50	25	38	20	30	17	25	14	22	13	19	11	17	10	15
Plywood & OSB	15/32" (& 1/2")	1	#10	51	69	34	46	26	34	20	28	17	23	15	20	13	17	11	15	10	14
		1	#12	58	78	39	52	29	39	23	31	19	26	17	22	15	20	13	17	12	16
	19/32" (& 5/8")	1	#10	65	87	43	58	32	44	26	35	22	29	18	25	16	22	14	19	13	17
		1	#12	74	99	49	66	37	50	29	40	25	33	21	28	18	25	16	22	15	20
	23/32" (& 3/4")	1	#10	78	106	52	70	39	53	31	42	26	35	22	30	20	26	17	23	16	21
		1	#12	89	120	59	80	45	60	36	48	30	40	25	34	22	30	20	27	18	24
Lumber (DFL)	1" min	1	#10	129	174	86	116	65	87	52	70	43	58	37	50	32	44	29	39	26	35
		1	#12	132	198	98	132	73	99	59	79	49	66	42	57	37	50	33	44	27	40

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Table accounts for increased loads on fasteners due to the eccentricity of the fasteners relative to the panel seam. The Select Seam Narrow Batten panel summary chart at the front of this section provides for development of these fastener load adjustments.

TABLE 3.5 - Outward (negative) uniform load capacities (12", No. 24 gauge Select Seam®):

12" Select Seam Narrow Batten, 24ga																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	1' - 0"		1' - 6"		2' - 0"		2' - 6"		3' - 0"		3' - 6"		4' - 0"		4' - 6"		5' - 0"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				95	149	78	122	61	95	54	85	48	75	41	65	35	55	28	44	22	34
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga (.1050")	1	#10	95	149	78	122	61	95	54	85	48	75	41	65	35	55	28	44	22	34
		1	#12	95	149	78	122	61	95	54	85	48	75	41	65	35	55	28	44	22	34
	14ga (.0700")	1	#10	95	149	78	122	61	95	54	85	48	75	41	65	35	55	28	44	22	34
		1	#12	95	149	78	122	61	95	54	85	48	75	41	65	35	55	28	44	22	34
	16ga (.0590")	1	#10	95	149	78	122	61	95	51	77	43	64	37	55	32	48	28	43	22	34
		1	#12	95	149	78	122	61	95	54	85	48	73	41	62	35	55	28	44	22	34
	18ga (.0459")	1	#10	95	149	67	100	50	75	40	60	33	50	29	43	25	37	22	33	20	30
		1	#12	95	149	76	113	57	85	45	68	38	57	32	49	28	43	25	38	22	34
	20ga (.0354")	1	#10	77	115	51	77	38	58	31	46	26	38	22	33	19	29	17	26	15	23
		1	#12	87	131	58	87	44	66	35	52	29	44	25	37	22	33	19	29	17	26
Cold Formed Steel (Gr 33 min.)	≥12ga (.1050")	1	#10	95	149	78	122	61	95	54	85	48	75	41	65	35	55	28	44	22	34
		1	#12	95	149	78	122	61	95	54	85	48	75	41	65	35	55	28	44	22	34
	16ga (.0590")	1	#10	89	133	59	89	44	67	36	53	30	44	25	38	22	33	20	30	18	27
		1	#12	95	149	67	101	50	76	40	61	34	50	29	43	25	38	22	34	20	30
	18ga (.0459")	1	#10	69	104	46	69	35	52	28	41	23	35	20	30	17	26	15	23	14	21
		1	#12	79	118	52	79	39	59	31	47	26	39	22	34	20	29	17	26	16	24
	20ga (.0354")	1	#10	53	80	36	53	27	40	21	32	18	27	15	23	13	20	12	18	11	16
		1	#12	61	91	40	61	30	45	24	36	20	30	17	26	15	23	13	20	12	18
	22ga (.0294")	1	#10	44	66	29	44	22	33	18	27	15	22	13	19	11	17	10	15	9	13
		1	#12	50	75	34	50	25	38	20	30	17	25	14	22	13	19	11	17	10	15
Plywood & OSB	15/32" (& 1/2")	1	#10	51	69	34	46	26	34	20	28	17	23	15	20	13	17	11	15	10	14
		1	#12	58	78	39	52	29	39	23	31	19	26	17	22	15	20	13	17	12	16
	19/32" (& 5/8")	1	#10	65	87	43	58	32	44	26	35	22	29	18	25	16	22	14	19	13	17
		1	#12	74	99	49	66	37	50	29	40	25	33	21	28	18	25	16	22	15	20
	23/32" (& 3/4")	1	#10	78	106	52	70	39	53	31	42	26	35	22	30	20	26	17	23	16	21
		1	#12	89	120	59	80	45	60	36	48	30	40	25	34	22	30	20	27	18	24
Lumber (DFL)	1" min	1	#10	95	149	78	116	61	87	52	70	43	58	37	50	32	44	28	39	22	34
		1	#12	95	149	78	122	61	95	54	79	48	66	41	57	35	50	28	44	22	34

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Table accounts for increased loads on fasteners due to the eccentricity of the fasteners relative to the panel seam. The Select Seam Narrow Batten panel summary chart at the front of this section provides for development of these fastener load adjustments.

TABLE 3.6 - Section properties (16" Select Seam®):

Gauge	Weight	Base Metal Thickness	Yield Strength	Tensile Strength	Gross Section Properties				
					Area	Moment of Inertia	Distance to N.A. from Bottom	Positive Section Modulus	Negative Section Modulus
	w	t	Fy	Fu	A_g	I_g	y_b	S_g+	S_g-
	psf	in	ksi	ksi	in^2/ft	in^4/ft	in	in^3/ft	in^3/ft
24	1.36	0.0232	50	65	0.3026	0.0044	0.04	0.0062	0.1020
22	1.71	0.0294	50	65	0.3831	0.0053	0.05	0.0078	0.1199

Gauge	Effective Section Properties							Uniform Load Only	
	Area	Positive			Negative				
		Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	$I_d = (2I_e+I_g)/3$	
	A_e/ft	I_e+	y_b	S_e+	I_e-	y_b	S_e-	I+	I-
	in^2	in^4/ft	in	in^3/ft	in^4/ft	in	in^3/ft	in^4/ft	in^4/ft
24	0.0332	0.0008	0.02	0.0011	0.0032	0.16	0.0055	0.0020	0.0036
22	0.0514	0.0017	0.03	0.0024	0.0044	0.14	0.0072	0.0029	0.0047

Inward (positive) uniform load capacities (16" Select Seam®):

Design Values are not available. Select Seam® requires installation over solid substrates.

TABLE 3.7 - Outward (negative) uniform load capacities (16", No. 22 gauge Select Seam®):

16" Select Seam Narrow Batten, 22ga																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	1' - 0"		1' - 6"		2' - 0"		2' - 6"		3' - 0"		3' - 6"		4' - 0"		4' - 6"		5' - 0"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				97	153	81	128	65	104	58	92	50	80	43	68	35	56	28	44	21	32
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga (.1050")	1	#10	97	153	81	128	65	104	58	92	50	76	43	65	35	56	28	44	21	32
		1	#12	97	153	81	128	65	104	58	92	50	80	43	68	35	56	28	44	21	32
	14ga (.0700")	1	#10	97	153	76	114	57	86	46	68	38	57	33	49	29	43	25	38	21	32
		1	#12	97	153	81	128	65	97	52	78	43	65	37	56	32	49	28	43	21	32
	16ga (.0590")	1	#10	96	144	64	96	48	72	38	58	32	48	27	41	24	36	21	32	19	29
		1	#12	97	153	73	109	55	82	44	66	36	55	31	47	27	41	24	36	21	32
	18ga (.0459")	1	#10	75	112	50	75	37	56	30	45	25	37	21	32	19	28	17	25	15	22
		1	#12	85	128	57	85	43	64	34	51	28	43	24	36	21	32	19	28	17	26
	20ga (.0354")	1	#10	58	87	38	58	29	43	23	35	19	29	16	25	14	22	13	19	12	17
		1	#12	66	98	44	66	33	49	26	39	22	33	19	28	16	25	15	22	13	20
Cold Formed Steel (Gr 33 min.)	≥12ga (.1050")	1	#10	97	153	79	118	59	89	47	71	39	59	34	51	30	44	26	39	21	32
		1	#12	97	153	81	128	65	101	54	81	45	67	38	58	34	51	28	44	21	32
	16ga (.0590")	1	#10	67	100	44	67	33	50	27	40	22	33	19	29	17	25	15	22	13	20
		1	#12	76	114	50	76	38	57	30	45	25	38	22	32	19	28	17	25	15	23
	18ga (.0459")	1	#10	52	78	35	52	26	39	21	31	17	26	15	22	13	19	12	17	10	16
		1	#12	59	88	39	59	29	44	24	35	20	29	17	25	15	22	13	20	12	18
	20ga (.0354")	1	#10	40	60	27	40	20	30	16	24	13	20	11	17	10	15	9	13	8	12
		1	#12	45	68	30	45	23	34	18	27	15	23	13	19	11	17	10	15	9	14
	22ga (.0294")	1	#10	33	50	22	33	17	25	13	20	11	17	9	14	8	12	7	11	7	10
		1	#12	38	57	25	38	19	28	15	23	13	19	11	16	9	14	8	13	8	11
Plywood & OSB	15/32" (& 1/2")	1	#10	38	52	26	34	19	26	15	21	13	17	11	15	10	13	9	11	8	10
		1	#12	44	59	29	39	22	29	17	24	15	20	12	17	11	15	10	13	9	12
	19/32" (& 5/8")	1	#10	49	66	32	44	24	33	19	26	16	22	14	19	12	16	11	15	10	13
		1	#12	55	74	37	50	28	37	22	30	18	25	16	21	14	19	12	17	11	15
	23/32" (& 3/4")	1	#10	59	79	39	53	29	40	23	32	20	26	17	23	15	20	13	18	12	16
		1	#12	67	90	45	60	33	45	27	36	22	30	19	26	17	23	15	20	13	18
Lumber (DFL)	1" min	1	#10	97	131	65	87	48	65	39	52	32	44	28	37	24	33	22	29	19	26
		1	#12	97	149	73	99	55	74	44	59	37	50	31	42	28	37	24	33	21	30

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Table accounts for increased loads on fasteners due to the eccentricity of the fasteners relative to the panel seam. The Select Seam Narrow Batten panel summary chart at the front of this section provides for development of these fastener load adjustments.

TABLE 3.8 - Outward (negative) uniform load capacities (16", No. 24 gauge Select Seam®):

16" Select Seam Narrow Batten, 24ga																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	1' - 0"		1' - 6"		2' - 0"		2' - 6"		3' - 0"		3' - 6"		4' - 0"		4' - 6"		5' - 0"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				70	112	55	88	40	65	36	58	32	51	28	45	24	38	19	31	15	24
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga *(.1050")*	1	#10	70	112	55	88	40	65	36	58	32	51	28	45	24	38	19	31	15	24
		1	#12	70	112	55	88	40	65	36	58	32	51	28	45	24	38	19	31	15	24
	14ga *(.0700")*	1	#10	70	112	55	88	40	65	36	58	32	51	28	45	24	38	19	31	15	24
		1	#12	70	112	55	88	40	65	36	58	32	51	28	45	24	38	19	31	15	24
	16ga *(.0590")*	1	#10	70	112	55	88	40	65	36	58	32	48	27	41	24	36	19	31	15	24
		1	#12	70	112	55	88	40	65	36	58	32	51	28	45	24	38	19	31	15	24
	18ga *(.0459")*	1	#10	70	112	50	75	37	56	30	45	25	37	21	32	19	28	17	25	15	22
		1	#12	70	112	55	85	40	64	34	51	28	43	24	36	21	32	19	28	15	24
	20ga *(.0354")*	1	#10	58	87	38	58	29	43	23	35	19	29	16	25	14	22	13	19	12	17
		1	#12	66	98	44	66	33	49	26	39	22	33	19	28	16	25	15	22	13	20
Cold Formed Steel (Gr 33 min.)	≥12ga *(.1050")*	1	#10	70	112	55	88	40	65	36	58	32	51	28	45	24	38	19	31	15	24
		1	#12	70	112	55	88	40	65	36	58	32	51	28	45	24	38	19	31	15	24
	16ga *(.0590")*	1	#10	67	100	44	67	33	50	27	40	22	33	19	29	17	25	15	22	13	20
		1	#12	70	112	50	76	38	57	30	45	25	38	22	32	19	28	17	25	15	23
	18ga *(.0459")*	1	#10	52	78	35	52	26	39	21	31	17	26	15	22	13	19	12	17	10	16
		1	#12	59	88	39	59	29	44	24	35	20	29	17	25	15	22	13	20	12	18
	20ga *(.0354")*	1	#10	40	60	27	40	20	30	16	24	13	20	11	17	10	15	9	13	8	12
		1	#12	45	68	30	45	23	34	18	27	15	23	13	19	11	17	10	15	9	14
	22ga *(.0294")*	1	#10	33	50	22	33	17	25	13	20	11	17	9	14	8	12	7	11	7	10
		1	#12	38	57	25	38	19	28	15	23	13	19	11	16	9	14	8	13	8	11
Plywood & OSB	15/32" (& 1/2")	1	#10	38	52	26	34	19	26	15	21	13	17	11	15	10	13	9	11	8	10
		1	#12	44	59	29	39	22	29	17	24	15	20	12	17	11	15	10	13	9	12
	19/32" (& 5/8")	1	#10	49	66	32	44	24	33	19	26	16	22	14	19	12	16	11	15	10	13
		1	#12	55	74	37	50	28	37	22	30	18	25	16	21	14	19	12	17	11	15
	23/32" (& 3/4")	1	#10	59	79	39	53	29	40	23	32	20	26	17	23	15	20	13	18	12	16
		1	#12	67	90	45	60	33	45	27	36	22	30	19	26	17	23	15	20	13	18
Lumber (DFL)	1" min	1	#10	70	112	55	87	40	65	36	52	32	44	28	37	24	33	19	29	15	24
		1	#12	70	112	55	88	40	65	36	58	32	50	28	42	24	37	19	31	15	24

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Table accounts for increased loads on fasteners due to the eccentricity of the fasteners relative to the panel seam. The Select Seam Narrow Batten panel summary chart at the front of this section provides for development of these fastener load adjustments.

4.0 - Prestige Series®

FIGURE 4.1 - Profile: As installed view shown, with optional clip.

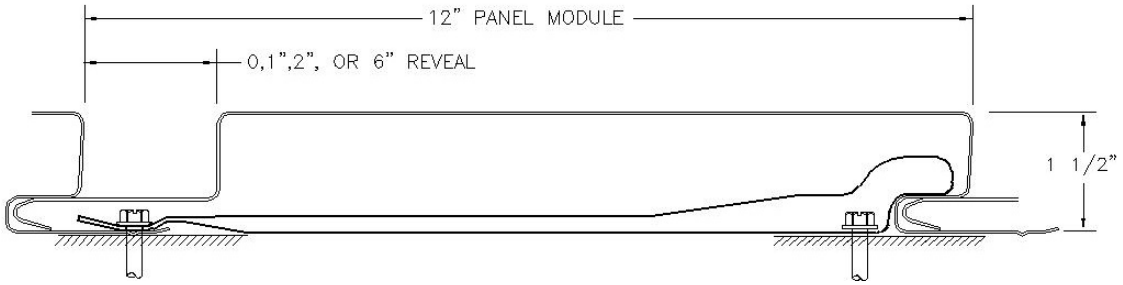


TABLE 4.1 - Profile:

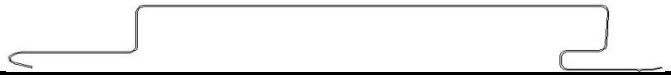
Panel Use:	Wall, soffit, fascia, ceiling
Substrates:	Over solid substrate or over open framing
Available Gauges:	Nos. 18, 20, 22, 24 gauge
Minimum Slope:	Wall (installed horiz. or vertically) or soffit applications only
Load Combination Reduction Available (Ref. Section 5.6)	N/A
Uninstalled Panel View	

TABLE 4.2 - Attachment:

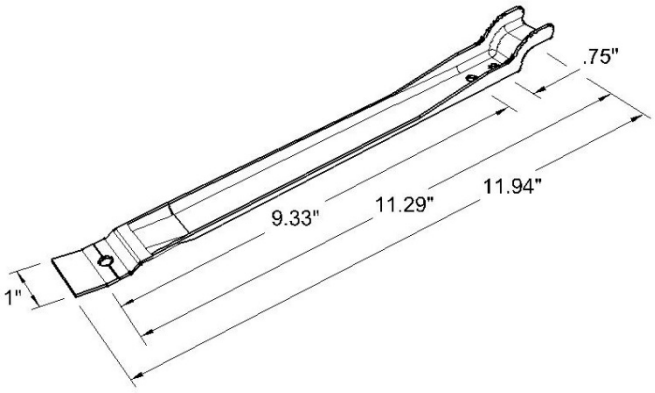
Clip Name:	Prestige Clip
Clip View:	
Clip Usage:	Optional, however, most applications require clips to meet wind loads. Over spaced framing or solid substrates.
Part #:	#PS12CLP
Panel/ Substrate Gap:	0"
Thermal Movement:	None.
Fastener Limitations:	Nom. size: #14 max. Head height: ¼ inch maximum Head dia.: ½ inch maximum
Recommended Fastener(s):	#10 or #12 pancake head #12 or ¼ inch dia. hex washer head
Fastener Load Adjustments (due to eccentricity of fasteners relative to panel seam)**:**	3 fasteners: 1.16 $\Sigma M = 0$ $11.29P = 9.33R_1 + 10.08R_2$
Associated Bearing Plate:	N/A

TABLE 4.3 - Section properties (Full 12" (0" Reveal) Prestige Series®):

Gauge	Weight	Base Metal Thickness	Yield Strength	Tensile Strength	Gross Section Properties				
					Area	Moment of Inertia	Distance to N.A. from Bottom	Positive Section Modulus	Negative Section Modulus
	w	t	Fy	Fu	A_g	I_g	y_b	S_g+	S_g-
	psf	in	ksi	ksi	in^2/ft	in^4/ft	in	in^3/ft	in^3/ft
24	1.51	0.0232	50	65	0.4295	0.1379	1.12	0.3536	0.1234
22	1.89	0.0294	50	65	0.5426	0.1710	1.11	0.4406	0.1540
20	2.27	0.0354	40	55	0.6517	0.2030	1.11	0.5222	0.1833
18	2.93	0.0459	40	55	0.8415	0.2550	1.10	0.6587	0.2329

Gauge	Effective Section Properties							Uniform Load Only	
	Area	Positive			Negative				
		Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	$I_d = (2I_e+I_g)/3$	
	A_e/ft	I_e+	y_b	S_e+	I_e-	y_b	S_e-	I+	I-
	in^2	in^4/ft	in	in^3/ft	in^4/ft	in	in^3/ft	in^4/ft	in^4/ft
24	0.1426	0.0546	0.61	0.0605	0.0882	1.22	0.0721	0.0824	0.1048
22	0.1944	0.0741	0.63	0.0853	0.1152	1.21	0.0954	0.1064	0.1338
20	0.2552	0.0990	0.68	0.1203	0.1450	1.19	0.1221	0.1337	0.1643
18	0.3584	0.1380	0.71	0.1799	0.1920	1.16	0.1649	0.1770	0.2130

TABLE 4.4 - Allowable reactions at supports (Full 12" (0" Reveal) Prestige Series®):

Gauge	Condition	Allowable *(lbs/ft width)*	Factored *(lbs/ft width)*
24	1- End	468	749
	2- Interior	517	827
22	1- End	656	1051
	2- Interior	816	1307
20	1- End	656	1051
	2- Interior	816	1307
18	1- End	656	1051
	2- Interior	816	1307
Reaction capacities based on a minimum 1.5" web bearing length			

TABLE 4.5 - Inward (positive) uniform load capacities (Full 12" (0" Reveal) Prestige Series®):

Prestige 12-up (0" Reveal)									
			Positive (Inward) Uniform Load Capacity (lbs/ft²) / Span (ft. - in.)						
Gauge	Span	Condition	2' - 0"	3' - 0"	4' - 0"	5' - 0"	6' - 0"	7' - 0"	7' - 6"
24	Single Span	ASD, W/Ω	302	134	75	48	34	25	21
		LRFD, ϕW	479	213	120	77	53	39	34
		L/180	*900*	*267*	*112*	*58*	*33*	*21*	*17*
		L/60	*2700*	*800*	*337*	*173*	*100*	*63*	*51*
	Double Span	ASD, W/Ω	207	136	81	54	38	28	24
		LRFD, ϕW	331	205	122	81	57	42	37
		L/180	*2168*	*642*	*271*	*139*	*80*	*51*	*41*
		L/60	*>5k*	*1927*	*813*	*416*	*241*	*152*	*123*
	Triple Span	ASD, W/Ω	235	157	98	65	47	34	30
		LRFD, ϕW	376	242	148	98	70	52	46
		L/180	*1698*	*503*	*212*	*109*	*63*	*40*	*32*
		L/60	*>5k*	*1510*	*637*	*326*	*189*	*119*	*97*
22	Single Span	ASD, W/Ω	426	189	106	68	47	35	30
		LRFD, ϕW	675	300	169	108	75	55	48
		L/180	*1163*	*344*	*145*	*74*	*43*	*27*	*22*
		L/60	*3488*	*1033*	*436*	*223*	*129*	*81*	*66*
	Double Span	ASD, W/Ω	326	176	106	70	50	37	33
		LRFD, ϕW	510	265	160	106	75	55	49
		L/180	*2800*	*830*	*350*	*179*	*104*	*65*	*53*
		L/60	*>5k*	*2489*	*1050*	*538*	*311*	*196*	*159*
	Triple Span	ASD, W/Ω	371	207	128	86	61	46	40
		LRFD, ϕW	579	312	192	129	92	69	60
		L/180	*2194*	*650*	*274*	*140*	*81*	*51*	*42*
		L/60	*>5k*	*1950*	*823*	*421*	*244*	*153*	*125*
20	Single Span	ASD, W/Ω	480	213	120	77	53	39	34
		LRFD, ϕW	762	339	190	122	85	62	54
		L/180	*1460*	*433*	*183*	*93*	*54*	*34*	*28*
		L/60	*4381*	*1298*	*548*	*280*	*162*	*102*	*83*
	Double Span	ASD, W/Ω	326	175	107	72	51	37	33
		LRFD, ϕW	501	265	161	108	76	57	50
		L/180	*3518*	*1042*	*440*	*225*	*130*	*82*	*67*
		L/60	*>5k*	*3127*	*1319*	*675*	*391*	*246*	*200*
	Triple Span	ASD, W/Ω	371	205	127	87	61	46	40
		LRFD, ϕW	564	309	192	130	93	69	61
		L/180	*2756*	*817*	*344*	*176*	*102*	*64*	*52*
		L/60	*>5k*	*2450*	*1033*	*529*	*306*	*193*	*157*
18	Single Span	ASD, W/Ω	656	319	180	115	80	59	51
		LRFD, ϕW	1051	506	285	182	127	93	81
		L/180	*1934*	*573*	*242*	*124*	*72*	*45*	*37*
		L/60	*>5k*	*1719*	*725*	*371*	*215*	*135*	*110*
	Double Span	ASD, W/Ω	326	218	142	95	68	51	44
		LRFD, ϕW	523	348	214	144	102	77	67
		L/180	*4658*	*1380*	*582*	*298*	*173*	*109*	*88*
		L/60	*>5k*	*4141*	*1747*	*894*	*518*	*326*	*265*
	Triple Span	ASD, W/Ω	371	247	168	115	82	62	54
		LRFD, ϕW	594	396	253	173	124	93	82
		L/180	*3649*	*1081*	*456*	*234*	*135*	*85*	*69*
		L/60	*>5k*	*3244*	*1369*	*701*	*405*	*255*	*208*

TABLE 4.6 - Outward (negative) uniform load capacities (No. 20 and 22 gauge Prestige Series® with 0" or 1" reveal, DIRECT FASTENED):

Prestige Series, 20-22ga, with 0" or 1" Reveal																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	2' - 0"		3' - 0"		3' - 6"		4' - 0"		4' - 6"		5' - 0"		6' - 0"		7' - 0"		7' - 6"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	18	27
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga (.1050")	1	#10	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	18	27
		1	#12	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	18	27
		1	1/4"	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	18	27
	14ga (.0700")	1	#10	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	18	27
		1	#12	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	18	27
		1	1/4"	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	18	27
	16ga (.0590")	1	#10	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	18	27
		1	#12	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	18	27
		1	1/4"	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	18	27
	18ga (.0459")	1	#10	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	18	27
		1	#12	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	18	27
		1	1/4"	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	18	27
	20ga (.0354")	1	#10	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	17	25
		1	#12	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	18	27
		1	1/4"	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	18	27
Cold Formed Steel (Gr 33 min.)	≥12ga (.1050")	1	#10	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	18	27
		1	#12	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	18	27
		1	1/4"	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	18	27
	16ga (.0590")	1	#10	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	18	27
		1	#12	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	18	27
		1	1/4"	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	18	27
	18ga (.0459")	1	#10	20	29	19	29	19	29	19	28	19	28	19	28	18	28	16	24	15	22
		1	#12	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	17	25
		1	1/4"	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	18	27
	20ga (.0354")	1	#10	20	29	19	29	19	29	19	28	19	28	17	26	14	21	12	18	11	17
		1	#12	20	29	19	29	19	29	19	28	19	28	19	28	16	24	14	21	13	19
		1	1/4"	20	29	19	29	19	29	19	28	19	28	19	28	18	28	16	24	15	23
	22ga (.0294")	1	#10	20	29	19	29	19	29	18	27	16	24	14	21	12	18	10	15	9	14
		1	#12	20	29	19	29	19	29	19	28	18	27	16	24	13	20	12	17	11	16
		1	1/4"	20	29	19	29	19	29	19	28	19	28	19	28	16	23	13	20	12	19
Plywood & OSB	15/32" (& 1/2")	1	#10	20	29	19	29	19	29	19	28	18	25	16	22	14	19	12	16	11	15
		1	#12	20	29	19	29	19	29	19	28	19	28	19	25	16	21	13	18	12	17
		1	#14	20	29	19	29	19	29	19	28	19	28	19	28	17	23	15	20	14	19
	19/32" (& 5/8")	1	#10	20	29	19	29	19	29	19	28	19	28	19	28	17	23	15	20	14	19
		1	#12	20	29	19	29	19	29	19	28	19	28	19	28	18	27	17	23	16	21
		1	#14	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	25	17	23
	23/32" (& 3/4")	1	#10	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	24	17	23
		1	#12	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	18	26
		1	#14	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	18	27
Lumber (DFL)	1" min	1	#10	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	18	27
		1	#12	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	18	27
		1	#14	20	29	19	29	19	29	19	28	19	28	19	28	18	28	18	27	18	27

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Number of fasteners at each support location can be increased to (2), and tabulated capacity doubled, with the final capacity not to exceed max Panel/Clip Capacity stated at the top of the chart. Fastener locations must satisfy minimum edge distance requirements; refer to General Notes.

TABLE 4.7 - Outward (negative) uniform load capacities (No. 20 and 22 gauge Prestige Series® with 0", 1", or 2" reveal – CLIP ATTACHED):

Prestige Series, 20-22ga, 0",1",or 2" Reveal (CLIP ATTACHED)																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	2' - 0"		3' - 0"		3' - 6"		4' - 0"		4' - 6"		5' - 0"		6' - 0"		7' - 0"		7' - 6"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft²)																	
				88	142	88	142	82	132	76	122	70	112	64	102	51	82	39	62	33	53
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft²)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga (.1050")	2	#10	88	142	88	142	82	132	76	122	70	112	64	102	51	82	39	62	33	53
		2	#12	88	142	88	142	82	132	76	122	70	112	64	102	51	82	39	62	33	53
		2	1/4"	88	142	88	142	82	132	76	122	70	112	64	102	51	82	39	62	33	53
	14ga (.0700")	2	#10	88	142	88	142	82	132	76	122	70	112	64	102	51	82	39	62	33	53
		2	#12	88	142	88	142	82	132	76	122	70	112	64	102	51	82	39	62	33	53
		2	1/4"	88	142	88	142	82	132	76	122	70	112	64	102	51	82	39	62	33	53
	16ga (.0590")	2	#10	88	142	88	142	82	132	76	122	70	112	64	102	51	82	39	62	33	53
		2	#12	88	142	88	142	82	132	76	122	70	112	64	102	51	82	39	62	33	53
		2	1/4"	88	142	88	142	82	132	76	122	70	112	64	102	51	82	39	62	33	53
	18ga (.0459")	2	#10	88	142	88	138	79	119	69	104	62	92	55	83	46	69	39	59	33	53
		2	#12	88	142	88	142	82	132	76	118	70	105	63	94	51	79	39	62	33	53
		2	1/4"	88	142	88	142	82	132	76	122	70	112	64	102	51	82	39	62	33	53
	20ga (.0354")	2	#10	88	142	71	107	61	92	53	80	47	71	43	64	36	53	31	46	28	43
		2	#12	88	142	81	121	69	104	61	91	54	81	49	73	40	61	35	52	32	49
		2	1/4"	88	142	88	141	80	120	70	105	62	94	56	84	47	70	39	60	33	53
Cold Formed Steel (Gr 33 min.)	≥12ga (.1050")	2	#10	88	142	88	142	82	132	76	122	70	112	64	102	51	82	39	62	33	53
		2	#12	88	142	88	142	82	132	76	122	70	112	64	102	51	82	39	62	33	53
		2	1/4"	88	142	88	142	82	132	76	122	70	112	64	102	51	82	39	62	33	53
	16ga (.0590")	2	#10	88	142	82	123	70	106	62	92	55	82	49	74	41	62	35	53	33	49
		2	#12	88	142	88	140	80	120	70	105	62	93	56	84	47	70	39	60	33	53
		2	1/4"	88	142	88	142	82	132	76	122	70	108	64	97	51	81	39	62	33	53
	18ga (.0459")	2	#10	88	142	64	96	55	82	48	72	43	64	38	58	32	48	27	41	26	38
		2	#12	88	142	73	109	62	93	54	82	48	73	44	65	36	54	31	47	29	44
		2	1/4"	88	142	84	126	72	108	63	95	56	84	50	76	42	63	36	54	33	50
	20ga (.0354")	2	#10	74	111	49	74	42	63	37	55	33	49	30	44	25	37	21	32	20	30
		2	#12	84	126	56	84	48	72	42	63	37	56	34	50	28	42	24	36	22	34
		2	1/4"	88	142	65	97	56	83	49	73	43	65	39	58	32	49	28	42	26	39
	22ga (.0294")	2	#10	61	92	41	61	35	53	31	46	27	41	25	37	20	31	18	26	16	25
		2	#12	70	105	47	70	40	60	35	52	31	47	28	42	23	35	20	30	19	28
		2	1/4"	81	121	54	81	46	69	40	61	36	54	32	48	27	40	23	35	22	32
Plywood & OSB	15/32" (& 1/2")	2	#10	71	96	47	64	41	55	35	48	32	43	28	38	24	32	20	27	19	26
		2	#12	81	109	54	73	46	62	40	54	36	48	32	44	27	36	23	31	21	29
		2	#14	88	120	59	80	51	69	44	60	39	53	36	48	30	40	25	34	24	32
	19/32" (& 5/8")	2	#10	88	121	60	81	51	69	45	61	40	54	36	48	30	40	26	35	24	32
		2	#12	88	138	68	92	58	79	51	69	45	61	41	55	34	46	29	39	27	37
		2	#14	88	142	75	101	64	87	56	76	50	67	45	61	37	51	32	43	30	40
	23/32" (& 3/4")	2	#10	88	142	72	98	62	84	54	73	48	65	43	59	36	49	31	42	29	39
		2	#12	88	142	82	111	71	95	62	83	55	74	49	67	41	56	35	48	33	44
		2	#14	88	142	88	123	78	105	68	92	61	82	54	74	45	61	39	53	33	49
Lumber (DFL)	1" min	2	#10	88	142	88	142	82	132	76	121	70	108	64	97	51	81	39	62	33	53
		2	#12	88	142	88	142	82	132	76	122	70	112	64	102	51	82	39	62	33	53
		2	#14	88	142	88	142	82	132	76	122	70	112	64	102	51	82	39	62	33	53

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Table accounts for increased loads on fasteners due to the eccentricity of the fasteners relative to the panel seam. The Prestige Series panel summary chart at the front of this section provides for development of these fastener load adjustments.
2. Number of fasteners can be reduced to (1) if project load requirements can still be met. Reduce stated capacities above by 1/2 (a required additional fastener at panel nailing flange does not factor into the above capacities).

TABLE 4.8 - Outward (negative) uniform load capacities (No. 24 gauge Prestige Series® with 0" or 1" reveal – CLIP ATTACHED):

Prestige Series, 24ga, 0" or 1" Reveal (CLIP ATTACHED)																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	2' - 0"		3' - 0"		3' - 6"		4' - 0"		4' - 6"		5' - 0"		6' - 0"		7' - 0"		7' - 6"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft²)																	
				69	110	69	110	65	104	61	98	57	91	53	85	45	72	37	59	33	53
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft²)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga (.1050")	2	#10	69	110	69	110	65	104	61	98	57	91	53	85	45	72	37	59	33	53
		2	#12	69	110	69	110	65	104	61	98	57	91	53	85	45	72	37	59	33	53
		2	1/4"	69	110	69	110	65	104	61	98	57	91	53	85	45	72	37	59	33	53
	14ga (.0700")	2	#10	69	110	69	110	65	104	61	98	57	91	53	85	45	72	37	59	33	53
		2	#12	69	110	69	110	65	104	61	98	57	91	53	85	45	72	37	59	33	53
		2	1/4"	69	110	69	110	65	104	61	98	57	91	53	85	45	72	37	59	33	53
	16ga (.0590")	2	#10	69	110	69	110	65	104	61	98	57	91	53	85	45	72	37	59	33	53
		2	#12	69	110	69	110	65	104	61	98	57	91	53	85	45	72	37	59	33	53
		2	1/4"	69	110	69	110	65	104	61	98	57	91	53	85	45	72	37	59	33	53
	18ga (.0459")	2	#10	69	110	69	110	65	104	61	98	57	91	53	83	45	69	37	59	33	53
		2	#12	69	110	69	110	65	104	61	98	57	91	53	85	45	72	37	59	33	53
		2	1/4"	69	110	69	110	65	104	61	98	57	91	53	85	45	72	37	59	33	53
	20ga (.0354")	2	#10	69	110	69	107	61	92	53	80	47	71	43	64	36	53	31	46	28	43
		2	#12	69	110	69	110	65	104	61	91	54	81	49	73	40	61	35	52	32	49
		2	1/4"	69	110	69	110	65	104	61	98	57	91	53	84	45	70	37	59	33	53
Cold Formed Steel (Gr 33 min.)	≥12ga (.1050")	2	#10	69	110	69	110	65	104	61	98	57	91	53	85	45	72	37	59	33	53
		2	#12	69	110	69	110	65	104	61	98	57	91	53	85	45	72	37	59	33	53
		2	1/4"	69	110	69	110	65	104	61	98	57	91	53	85	45	72	37	59	33	53
	16ga (.0590")	2	#10	69	110	69	110	65	104	61	92	55	82	49	74	41	62	35	53	33	49
		2	#12	69	110	69	110	65	104	61	98	57	91	53	84	45	70	37	59	33	53
		2	1/4"	69	110	69	110	65	104	61	98	57	91	53	85	45	72	37	59	33	53
	18ga (.0459")	2	#10	69	110	64	96	55	82	48	72	43	64	38	58	32	48	27	41	26	38
		2	#12	69	110	69	109	62	93	54	82	48	73	44	65	36	54	31	47	29	44
		2	1/4"	69	110	69	110	65	104	61	95	56	84	50	76	42	63	36	54	33	50
	20ga (.0354")	2	#10	69	110	49	74	42	63	37	55	33	49	30	44	25	37	21	32	20	30
		2	#12	69	110	56	84	48	72	42	63	37	56	34	50	28	42	24	36	22	34
		2	1/4"	69	110	65	97	56	83	49	73	43	65	39	58	32	49	28	42	26	39
	22ga (.0294")	2	#10	61	92	41	61	35	53	31	46	27	41	25	37	20	31	18	26	16	25
		2	#12	69	105	47	70	40	60	35	52	31	47	28	42	23	35	20	30	19	28
		2	1/4"	69	110	54	81	46	69	40	61	36	54	32	48	27	40	23	35	22	32
Plywood & OSB	15/32" (& 1/2")	2	#10	69	96	47	64	41	55	35	48	32	43	28	38	24	32	20	27	19	26
		2	#12	69	109	54	73	46	62	40	54	36	48	32	44	27	36	23	31	21	29
		2	#14	69	110	59	80	51	69	44	60	39	53	36	48	30	40	25	34	24	32
	19/32" (& 5/8")	2	#10	69	110	60	81	51	69	45	61	40	54	36	48	30	40	26	35	24	32
		2	#12	69	110	68	92	58	79	51	69	45	61	41	55	34	46	29	39	27	37
		2	#14	69	110	69	101	64	87	56	76	50	67	45	61	37	51	32	43	30	40
	23/32" (& 3/4")	2	#10	69	110	69	98	62	84	54	73	48	65	43	59	36	49	31	42	29	39
		2	#12	69	110	69	110	65	95	61	83	55	74	49	67	41	56	35	48	33	44
		2	#14	69	110	69	110	65	104	61	92	57	82	53	74	45	61	37	53	33	49
Lumber (DFL)	1" min	2	#10	69	110	69	110	65	104	61	98	57	91	53	85	45	72	37	59	33	53
		2	#12	69	110	69	110	65	104	61	98	57	91	53	85	45	72	37	59	33	53
		2	#14	69	110	69	110	65	104	61	98	57	91	53	85	45	72	37	59	33	53

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Table accounts for increased loads on fasteners due to the eccentricity of the fasteners relative to the panel seam. The Prestige Series panel summary chart at the front of this section provides for development of these fastener load adjustments.
2. Number of fasteners can be reduced to (1) if project load requirements can still be met. Reduce stated capacities above by 1/2 (a required additional fastener at panel nailing flange does not factor into the above capacities).

TABLE 4.9 - Section properties (1" reveal Prestige Series®):

Gauge	Weight	Base Metal Thickness	Yield Strength	Tensile Strength	Gross Section Properties				
					Area	Moment of Inertia	Distance to N.A. from Bottom	Positive Section Modulus	Negative Section Modulus
	w	t	Fy	Fu	A_g	I_g	y_b	S_g+	S_g-
	psf	in	ksi	ksi	in^2/ft	in^4/ft	in	in^3/ft	in^3/ft
24	1.51	0.0232	50	65	0.4295	0.1444	1.06	0.3222	0.1363
22	1.89	0.0294	50	65	0.5426	0.1800	1.05	0.4019	0.1703
20	2.27	0.0354	40	55	0.6517	0.2130	1.05	0.4769	0.2028
18	2.93	0.0459	40	55	0.8415	0.2680	1.04	0.6026	0.2582

Gauge	Effective Section Properties							Uniform Load Only	
	Area	Positive			Negative				
		Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	$I_d = (2I_e+I_g)/3$	
	A_e/ft	I_e+	y_b	S_e+	I_e-	y_b	S_e-	I+	I-
	in^2	in^4/ft	in	in^3/ft	in^4/ft	in	in^3/ft	in^4/ft	in^4/ft
24	0.1531	0.0552	0.58	0.0598	0.0949	1.18	0.0807	0.0849	0.1114
22	0.2130	0.0752	0.61	0.0843	0.1264	1.15	0.1098	0.1101	0.1443
20	0.2863	0.1010	0.65	0.1187	0.1610	1.13	0.1430	0.1383	0.1783
18	0.4039	0.1420	0.68	0.1773	0.2120	1.11	0.1917	0.1840	0.2307

TABLE 4.10 - Allowable reactions at supports (1" reveal Prestige Series®):

Gauge	Condition	Allowable *(lbs/ft width)*	Factored *(lbs/ft width)*
24	1- End	460	737
	2- Interior	522	835
22	1- End	619	991
	2- Interior	720	1153
20	1- End	619	991
	2- Interior	720	1153
18	1- End	619	991
	2- Interior	720	1153
Reaction capacities based on a minimum 1.5" web bearing length			

TABLE 4.11 - Inward (positive) uniform load capacities (1" reveal Prestige Series®):

Prestige 11-up (1" Reveal)									
			Positive (Inward) Uniform Load Capacity (lbs/ft²) / Span (ft. - in.)						
Gauge	Span	Condition	2' - 0"	3' - 0"	4' - 0"	5' - 0"	6' - 0"	7' - 0"	7' - 6"
24	Single Span	ASD, W/Ω	298	133	75	48	33	24	21
		LRFD, ϕW	473	210	118	76	53	39	34
		L/180	*928*	*275*	*116*	*59*	*34*	*22*	*18*
		L/60	*2784*	*825*	*348*	*178*	*103*	*65*	*53*
	Double Span	ASD, W/Ω	209	139	89	59	42	31	27
		LRFD, ϕW	334	221	134	89	63	47	41
		L/180	*2235*	*662*	*279*	*143*	*83*	*52*	*42*
		L/60	*>5k*	*1987*	*838*	*429*	*248*	*156*	*127*
	Triple Span	ASD, W/Ω	237	158	106	72	51	39	34
		LRFD, ϕW	380	253	160	109	77	58	51
		L/180	*1751*	*519*	*219*	*112*	*65*	*41*	*33*
		L/60	*>5k*	*1557*	*657*	*336*	*195*	*123*	*100*
22	Single Span	ASD, W/Ω	421	187	105	67	47	34	30
		LRFD, ϕW	667	297	167	107	74	54	47
		L/180	*1203*	*357*	*150*	*77*	*45*	*28*	*23*
		L/60	*3610*	*1070*	*451*	*231*	*134*	*84*	*68*
	Double Span	ASD, W/Ω	288	192	119	79	57	42	37
		LRFD, ϕW	461	292	179	119	85	64	56
		L/180	*2899*	*859*	*362*	*186*	*107*	*68*	*55*
		L/60	*>5k*	*2577*	*1087*	*557*	*322*	*203*	*165*
	Triple Span	ASD, W/Ω	327	218	141	96	69	51	45
		LRFD, ϕW	524	339	213	144	104	77	68
		L/180	*2271*	*673*	*284*	*145*	*84*	*53*	*43*
		L/60	*>5k*	*2018*	*852*	*436*	*252*	*159*	*129*
20	Single Span	ASD, W/Ω	474	211	118	76	53	39	34
		LRFD, ϕW	752	334	188	120	84	61	53
		L/180	*1511*	*448*	*189*	*97*	*56*	*35*	*29*
		L/60	*4534*	*1343*	*567*	*290*	*168*	*106*	*86*
	Double Span	ASD, W/Ω	288	192	121	81	58	43	38
		LRFD, ϕW	461	292	182	122	87	65	58
		L/180	*3641*	*1079*	*455*	*233*	*135*	*85*	*69*
		L/60	*>5k*	*3236*	*1365*	*699*	*405*	*255*	*207*
	Triple Span	ASD, W/Ω	327	218	142	97	70	53	47
		LRFD, ϕW	524	337	214	147	106	80	70
		L/180	*2852*	*845*	*357*	*183*	*106*	*67*	*54*
		L/60	*>5k*	*2535*	*1070*	*548*	*317*	*200*	*162*
18	Single Span	ASD, W/Ω	619	315	177	113	79	58	50
		LRFD, ϕW	991	499	281	180	125	92	80
		L/180	*2010*	*596*	*251*	*129*	*74*	*47*	*38*
		L/60	*>5k*	*1787*	*754*	*386*	*223*	*141*	*114*
	Double Span	ASD, W/Ω	288	192	144	108	77	57	51
		LRFD, ϕW	461	307	231	162	116	87	77
		L/180	*4843*	*1435*	*605*	*310*	*179*	*113*	*92*
		L/60	*>5k*	*4305*	*1816*	*930*	*538*	*339*	*275*
	Triple Span	ASD, W/Ω	327	218	164	128	93	71	62
		LRFD, ϕW	524	349	262	194	140	106	93
		L/180	*3794*	*1124*	*474*	*243*	*141*	*88*	*72*
		L/60	*>5k*	*3372*	*1423*	*728*	*422*	*265*	*216*

Outward (negative) uniform load capacities (1" reveal Prestige Series panel):

Tables 4.7 to 4.8 apply

TABLE 4.12 - Section properties (2" reveal Prestige Series®):

Gauge	Weight	Base Metal Thickness	Yield Strength	Tensile Strength	Gross Section Properties				
					Area	Moment of Inertia	Distance to N.A. from Bottom	Positive Section Modulus	Negative Section Modulus
	w	t	Fy	Fu	A_g	I_g	y_b	S_g+	S_g-
	psf	in	ksi	ksi	in^2/ft	in^4/ft	in	in^3/ft	in^3/ft
24	1.51	0.0232	50	65	0.4295	0.1480	1.00	0.2924	0.1478
22	1.89	0.0294	50	65	0.5426	0.1840	1.00	0.3649	0.1849
20	2.27	0.0354	40	55	0.6517	0.2180	0.99	0.4333	0.2203
18	2.93	0.0459	40	55	0.8415	0.2760	0.98	0.5483	0.2808

Gauge	Effective Section Properties							Uniform Load Only	
	Area	Positive			Negative				
		Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	$I_d = (2I_e+I_g)/3$	
	A_e/ft	I_e+	y_b	S_e+	I_e-	y_b	S_e-	I+	I-
	in^2	in^4/ft	in	in^3/ft	in^4/ft	in	in^3/ft	in^4/ft	in^4/ft
24	0.1547	0.0557	0.57	0.0593	0.0938	1.15	0.0816	0.0865	0.1119
22	0.2163	0.0761	0.59	0.0835	0.1257	1.12	0.1121	0.1121	0.1451
20	0.2935	0.1020	0.62	0.1173	0.1630	1.09	0.1499	0.1407	0.1813
18	0.4235	0.1450	0.66	0.1750	0.2210	1.05	0.2102	0.1887	0.2393

TABLE 4.13 - Allowable reactions at supports (2" reveal Prestige Series®):

Gauge	Condition	Allowable *(lbs/ft width)*	Factored *(lbs/ft width)*
24	1- End	460	737
	2- Interior	522	835
22	1- End	619	991
	2- Interior	720	1153
20	1- End	619	991
	2- Interior	720	1153
18	1- End	619	991
	2- Interior	720	1153
Reaction capacities based on a minimum 1.5" web bearing length			

TABLE 4.14 - Inward (positive) uniform load capacities (2" reveal Prestige Series®):

Prestige 10-up (2" Reveal)									
			Positive (Inward) Uniform Load Capacity (lbs/ft²) / Span (ft. - in.)						
Gauge	Span	Condition	2' - 0"	3' - 0"	4' - 0"	5' - 0"	6' - 0"	7' - 0"	7' - 6"
24	Single Span	ASD, W/Ω	296	132	74	47	33	24	21
		LRFD, ϕW	469	209	117	75	52	38	33
		L/180	*945*	*280*	*118*	*60*	*35*	*22*	*18*
		L/60	*2834*	*840*	*354*	*181*	*105*	*66*	*54*
	Double Span	ASD, W/Ω	209	139	89	59	42	32	27
		LRFD, ϕW	334	223	135	90	63	48	41
		L/180	*2276*	*674*	*284*	*146*	*84*	*53*	*43*
		L/60	*>5k*	*2023*	*853*	*437*	*253*	*159*	*129*
	Triple Span	ASD, W/Ω	237	158	108	72	51	38	33
		LRFD, ϕW	380	253	162	109	78	58	51
		L/180	*1783*	*528*	*223*	*114*	*66*	*42*	*34*
		L/60	*>5k*	*1585*	*669*	*342*	*198*	*125*	*101*
22	Single Span	ASD, W/Ω	417	185	104	67	46	34	30
		LRFD, ϕW	661	294	165	106	73	54	47
		L/180	*1224*	*363*	*153*	*78*	*45*	*29*	*23*
		L/60	*3673*	*1088*	*459*	*235*	*136*	*86*	*70*
	Double Span	ASD, W/Ω	288	192	120	81	58	43	37
		LRFD, ϕW	461	296	181	122	87	65	57
		L/180	*2949*	*874*	*369*	*189*	*109*	*69*	*56*
		L/60	*>5k*	*2622*	*1106*	*566*	*328*	*206*	*168*
	Triple Span	ASD, W/Ω	327	218	143	97	70	52	46
		LRFD, ϕW	524	343	216	147	106	79	70
		L/180	*2311*	*685*	*289*	*148*	*86*	*54*	*44*
		L/60	*>5k*	*2054*	*866*	*444*	*257*	*162*	*131*
20	Single Span	ASD, W/Ω	468	208	117	75	52	38	33
		LRFD, ϕW	743	330	186	119	83	61	53
		L/180	*1537*	*455*	*192*	*98*	*57*	*36*	*29*
		L/60	*4611*	*1366*	*576*	*295*	*171*	*108*	*87*
	Double Span	ASD, W/Ω	288	192	124	84	60	45	39
		LRFD, ϕW	461	301	188	127	91	68	60
		L/180	*3702*	*1097*	*463*	*237*	*137*	*86*	*70*
		L/60	*>5k*	*3291*	*1388*	*711*	*411*	*259*	*211*
	Triple Span	ASD, W/Ω	327	218	146	101	73	55	49
		LRFD, ϕW	524	345	220	152	110	83	73
		L/180	*2900*	*859*	*363*	*186*	*107*	*68*	*55*
		L/60	*>5k*	*2578*	*1088*	*557*	*322*	*203*	*165*
18	Single Span	ASD, W/Ω	619	310	175	112	78	57	50
		LRFD, ϕW	991	493	277	177	123	90	79
		L/180	*2061*	*611*	*258*	*132*	*76*	*48*	*39*
		L/60	*>5k*	*1832*	*773*	*396*	*229*	*144*	*117*
	Double Span	ASD, W/Ω	288	192	144	115	83	62	55
		LRFD, ϕW	461	307	231	174	126	94	83
		L/180	*4966*	*1471*	*621*	*318*	*184*	*116*	*94*
		L/60	*>5k*	*4414*	*1862*	*953*	*552*	*347*	*282*
	Triple Span	ASD, W/Ω	327	218	164	131	100	76	67
		LRFD, ϕW	524	349	262	206	151	115	101
		L/180	*3890*	*1153*	*486*	*249*	*144*	*91*	*74*
		L/60	*>5k*	*3458*	*1459*	*747*	*432*	*272*	*221*

TABLE 4.15 - Outward (negative) uniform load capacities (No. 20 and 22 gauge Prestige Series® with 2" reveal, DIRECT FASTENED):

Prestige Series, 20-22ga, with 2" Reveal																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	2' - 0"		3' - 0"		3' - 6"		4' - 0"		4' - 6"		5' - 0"		6' - 0"		7' - 0"		7' - 6"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft²)																	
				27	40	26	40	26	39	26	39	26	39	26	38	25	38	25	37	25	37
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft²)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga (.1050")	1	#10	27	40	26	40	26	39	26	39	26	39	26	38	25	38	25	37	25	37
		1	#12	27	40	26	40	26	39	26	39	26	39	26	38	25	38	25	37	25	37
		1	1/4"	27	40	26	40	26	39	26	39	26	39	26	38	25	38	25	37	25	37
	14ga (.0700")	1	#10	27	40	26	40	26	39	26	39	26	39	26	38	25	38	25	37	25	37
		1	#12	27	40	26	40	26	39	26	39	26	39	26	38	25	38	25	37	25	37
		1	1/4"	27	40	26	40	26	39	26	39	26	39	26	38	25	38	25	37	25	37
	16ga (.0590")	1	#10	27	40	26	40	26	39	26	39	26	39	26	38	25	38	25	37	25	37
		1	#12	27	40	26	40	26	39	26	39	26	39	26	38	25	38	25	37	25	37
		1	1/4"	27	40	26	40	26	39	26	39	26	39	26	38	25	38	25	37	25	37
	18ga (.0459")	1	#10	27	40	26	40	26	39	26	39	26	39	26	38	25	38	23	34	21	32
		1	#12	27	40	26	40	26	39	26	39	26	39	26	38	25	38	25	37	24	37
		1	1/4"	27	40	26	40	26	39	26	39	26	39	26	38	25	38	25	37	25	37
	20ga (.0354")	1	#10	27	40	26	40	26	39	26	39	26	39	25	37	21	31	18	27	17	25
		1	#12	27	40	26	40	26	39	26	39	26	39	26	38	23	35	20	30	19	28
		1	1/4"	27	40	26	40	26	39	26	39	26	39	26	38	25	38	23	35	22	33
Cold Formed Steel (Gr 33 min.)	≥12ga (.1050")	1	#10	27	40	26	40	26	39	26	39	26	39	26	38	25	38	25	37	25	37
		1	#12	27	40	26	40	26	39	26	39	26	39	26	38	25	38	25	37	25	37
		1	1/4"	27	40	26	40	26	39	26	39	26	39	26	38	25	38	25	37	25	37
	16ga (.0590")	1	#10	27	40	26	40	26	39	26	39	26	39	26	38	24	36	20	31	19	29
		1	#12	27	40	26	40	26	39	26	39	26	39	26	38	25	38	23	35	22	32
		1	1/4"	27	40	26	40	26	39	26	39	26	39	26	38	25	38	25	37	25	37
	18ga (.0459")	1	#10	27	40	26	40	26	39	26	39	25	37	22	33	19	28	16	24	15	22
		1	#12	27	40	26	40	26	39	26	39	26	39	25	38	21	32	18	27	17	25
		1	1/4"	27	40	26	40	26	39	26	39	26	39	26	38	24	37	21	31	20	29
	20ga (.0354")	1	#10	27	40	26	40	25	37	21	32	19	29	17	26	14	21	12	18	11	17
		1	#12	27	40	26	40	26	39	24	37	22	32	19	29	16	24	14	21	13	19
		1	1/4"	27	40	26	40	26	39	26	39	25	38	23	34	19	28	16	24	15	23
	22ga (.0294")	1	#10	27	40	24	36	20	31	18	27	16	24	14	21	12	18	10	15	9	14
		1	#12	27	40	26	40	23	35	20	30	18	27	16	24	13	20	12	17	11	16
		1	1/4"	27	40	26	40	26	39	23	35	21	31	19	28	16	23	13	20	12	19
Plywood & OSB	15/32" (& 1/2")	1	#10	27	40	26	37	23	32	21	28	18	25	16	22	14	19	12	16	11	15
		1	#12	27	40	26	40	26	36	23	32	21	28	19	25	16	21	13	18	12	17
		1	#14	27	40	26	40	26	39	26	35	23	31	21	28	17	23	15	20	14	19
	19/32" (& 5/8")	1	#10	27	40	26	40	26	39	26	35	23	31	21	28	17	23	15	20	14	19
		1	#12	27	40	26	40	26	39	26	39	26	36	24	32	20	27	17	23	16	21
		1	#14	27	40	26	40	26	39	26	39	26	39	26	35	22	29	19	25	17	23
	23/32" (& 3/4")	1	#10	27	40	26	40	26	39	26	39	26	38	25	34	21	28	18	24	17	23
		1	#12	27	40	26	40	26	39	26	39	26	39	26	38	24	32	20	28	19	26
		1	#14	27	40	26	40	26	39	26	39	26	39	26	38	25	36	23	30	21	28
Lumber (DFL)	1" min	1	#10	27	40	26	40	26	39	26	39	26	39	26	38	25	38	25	37	25	37
		1	#12	27	40	26	40	26	39	26	39	26	39	26	38	25	38	25	37	25	37
		1	#14	27	40	26	40	26	39	26	39	26	39	26	38	25	38	25	37	25	37

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Number of fasteners at each support location can be increased to (2), and tabulated capacity doubled, with the final capacity not to exceed max Panel/Clip Capacity stated at the top of the chart. Fastener locations must satisfy minimum edge distance requirements; refer to General Notes.

TABLE 4.16 - Outward (negative) uniform load capacities (No. 24 gauge Prestige Series® with 2" reveal, CLIP ATTACHED):

Prestige Series, 24ga, 2" Reveal (CLIP ATTACHED)																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	2' - 0"		3' - 0"		3' - 6"		4' - 0"		4' - 0"		5' - 0"		6' - 0"		7' - 0"		7' - 6"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				81	130	81	130	77	123	72	115	67	108	63	101	54	86	45	71	40	64
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga (.1050")	2	#10	81	130	81	130	77	123	72	115	67	108	63	101	54	86	45	71	40	64
		2	#12	81	130	81	130	77	123	72	115	67	108	63	101	54	86	45	71	40	64
		2	1/4"	81	130	81	130	77	123	72	115	67	108	63	101	54	86	45	71	40	64
	14ga (.0700")	2	#10	81	130	81	130	77	123	72	115	67	108	63	101	54	86	45	71	40	64
		2	#12	81	130	81	130	77	123	72	115	67	108	63	101	54	86	45	71	40	64
		2	1/4"	81	130	81	130	77	123	72	115	67	108	63	101	54	86	45	71	40	64
	16ga (.0590")	2	#10	81	130	81	130	77	123	72	115	67	108	63	101	54	86	45	71	40	64
		2	#12	81	130	81	130	77	123	72	115	67	108	63	101	54	86	45	71	40	64
		2	1/4"	81	130	81	130	77	123	72	115	67	108	63	101	54	86	45	71	40	64
	18ga (.0459")	2	#10	81	130	81	130	77	119	69	104	62	92	55	83	46	69	40	59	37	55
		2	#12	81	130	81	130	77	123	72	115	67	105	63	94	52	79	45	67	40	63
		2	1/4"	81	130	81	130	77	123	72	115	67	108	63	101	54	86	45	71	40	64
	20ga (.0354")	2	#10	81	130	71	107	61	92	53	80	47	71	43	64	36	53	31	46	28	43
		2	#12	81	130	81	121	69	104	61	91	54	81	49	73	40	61	35	52	32	49
		2	1/4"	81	130	81	130	77	120	70	105	62	94	56	84	47	70	40	60	37	56
Cold Formed Steel (Gr 33 min.)	≥12ga (.1050")	2	#10	81	130	81	130	77	123	72	115	67	108	63	101	54	86	45	71	40	64
		2	#12	81	130	81	130	77	123	72	115	67	108	63	101	54	86	45	71	40	64
		2	1/4"	81	130	81	130	77	123	72	115	67	108	63	101	54	86	45	71	40	64
	16ga (.0590")	2	#10	81	130	81	123	70	106	62	92	55	82	49	74	41	62	35	53	33	49
		2	#12	81	130	81	130	77	120	70	105	62	93	56	84	47	70	40	60	37	56
		2	1/4"	81	130	81	130	77	123	72	115	67	108	63	97	54	81	45	69	40	64
	18ga (.0459")	2	#10	81	130	64	96	55	82	48	72	43	64	38	58	32	48	27	41	26	38
		2	#12	81	130	73	109	62	93	54	82	48	73	44	65	36	54	31	47	29	44
		2	1/4"	81	130	81	126	72	108	63	95	56	84	50	76	42	63	36	54	34	50
	20ga (.0354")	2	#10	74	111	49	74	42	63	37	55	33	49	30	44	25	37	21	32	20	30
		2	#12	81	126	56	84	48	72	42	63	37	56	34	50	28	42	24	36	22	34
		2	1/4"	81	130	65	97	56	83	49	73	43	65	39	58	32	49	28	42	26	39
	22ga (.0294")	2	#10	61	92	41	61	35	53	31	46	27	41	25	37	20	31	18	26	16	25
		2	#12	70	105	47	70	40	60	35	52	31	47	28	42	23	35	20	30	19	28
		2	1/4"	81	121	54	81	46	69	40	61	36	54	32	48	27	40	23	35	22	32
Plywood & OSB	15/32" (& 1/2")	2	#10	71	96	47	64	41	55	35	48	32	43	28	38	24	32	20	27	19	26
		2	#12	81	109	54	73	46	62	40	54	36	48	32	44	27	36	23	31	21	29
		2	#14	81	120	59	80	51	69	44	60	39	53	36	48	30	40	25	34	24	32
	19/32" (& 5/8")	2	#10	81	121	60	81	51	69	45	61	40	54	36	48	30	40	26	35	24	32
		2	#12	81	130	68	92	58	79	51	69	45	61	41	55	34	46	29	39	27	37
		2	#14	81	130	75	101	64	87	56	76	50	67	45	61	37	51	32	43	30	40
	23/32" (& 3/4")	2	#10	81	130	72	98	62	84	54	73	48	65	43	59	36	49	31	42	29	39
		2	#12	81	130	81	111	71	95	62	83	55	74	49	67	41	56	35	48	33	44
		2	#14	81	130	81	123	77	105	68	92	61	82	54	74	45	61	39	53	36	49
Lumber (DFL)	1" min	2	#10	81	130	81	130	77	123	72	115	67	108	63	97	54	81	45	69	40	64
		2	#12	81	130	81	130	77	123	72	115	67	108	63	101	54	86	45	71	40	64
		2	#14	81	130	81	130	77	123	72	115	67	108	63	101	54	86	45	71	40	64

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Table accounts for increased loads on fasteners due to the eccentricity of the fasteners relative to the panel seam. The Prestige Series panel summary chart at the front of this section provides for development of these fastener load adjustments.
2. Number of fasteners can be reduced to (1) if project load requirements can still be met. Reduce stated capacities above by 1/2 (a required additional fastener at panel nailing flange does not factor into the above capacities).

TABLE 4.17 - Section properties (6" reveal Prestige Series®):

Gauge	Weight	Base Metal Thickness	Yield Strength	Tensile Strength	Gross Section Properties				
					Area	Moment of Inertia	Distance to N.A. from Bottom	Positive Section Modulus	Negative Section Modulus
	w	t	Fy	Fu	A_g	I_g	y_b	S_g+	S_g-
	psf	in	ksi	ksi	in^2/ft	in^4/ft	in	in^3/ft	in^3/ft
24	1.51	0.0232	50	65	0.4295	0.1330	0.77	0.1806	0.1734
22	1.89	0.0294	50	65	0.5426	0.1660	0.76	0.2258	0.2174
20	2.27	0.0354	40	55	0.6517	0.1970	0.76	0.2684	0.2595
18	2.93	0.0459	40	55	0.8415	0.2490	0.75	0.3404	0.3317

Gauge	Effective Section Properties							Uniform Load Only	
	Area	Positive			Negative				
		Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	$I_d = (2I_e+I_g)/3$	
	A_e/ft	I_e+	y_b	S_e+	I_e-	y_b	S_e-	I+	I-
	in^2	in^4/ft	in	in^3/ft	in^4/ft	in	in^3/ft	in^4/ft	in^4/ft
24	0.1557	0.0567	0.52	0.0577	0.0801	1.02	0.0783	0.0821	0.0977
22	0.2185	0.0778	0.54	0.0808	0.1071	0.99	0.1083	0.1072	0.1267
20	0.2983	0.1051	0.56	0.1127	0.1387	0.95	0.1467	0.1357	0.1581
18	0.4340	0.1500	0.59	0.1666	0.1890	0.90	0.2094	0.1830	0.2090

TABLE 4.18 - Allowable reactions at supports (6" reveal Prestige Series®):

Gauge	Condition	Allowable *(lbs/ft width)*	Factored *(lbs/ft width)*
24	1- End	460	737
	2- Interior	522	835
22	1- End	619	991
	2- Interior	720	1153
20	1- End	619	991
	2- Interior	720	1153
18	1- End	619	991
	2- Interior	720	1153
Reaction capacities based on a minimum 1.5" web bearing length			

TABLE 4.19 - Inward (positive) uniform load capacities (6" reveal Prestige Series®):

Prestige 6-up (6" Reveal)									
			Positive (Inward) Uniform Load Capacity (lbs/ft²) / Span (ft. - in.)						
Gauge	Span	Condition	2' - 0"	3' - 0"	4' - 0"	5' - 0"	6' - 0"	7' - 0"	7' - 6"
24	Single Span	ASD, W/Ω	288	128	72	46	32	23	20
		LRFD, ϕW	456	203	114	73	51	37	32
		L/180	*897*	*266*	*112*	*57*	*33*	*21*	*17*
		L/60	*2692*	*798*	*337*	*172*	*100*	*63*	*51*
	Double Span	ASD, W/Ω	209	139	87	58	41	30	27
		LRFD, ϕW	334	217	131	87	62	46	40
		L/180	*2162*	*640*	*270*	*138*	*80*	*50*	*41*
		L/60	*>5k*	*1921*	*811*	*415*	*240*	*151*	*123*
	Triple Span	ASD, W/Ω	237	158	104	70	50	38	33
		LRFD, ϕW	380	253	157	106	76	57	49
		L/180	*1693*	*502*	*212*	*108*	*63*	*39*	*32*
		L/60	*>5k*	*1505*	*635*	*325*	*188*	*118*	*96*
22	Single Span	ASD, W/Ω	403	179	101	65	45	33	29
		LRFD, ϕW	640	284	160	102	71	52	45
		L/180	*1171*	*347*	*146*	*75*	*43*	*27*	*22*
		L/60	*3514*	*1041*	*439*	*225*	*130*	*82*	*67*
	Double Span	ASD, W/Ω	288	191	117	79	55	42	36
		LRFD, ϕW	461	289	177	118	84	63	55
		L/180	*2821*	*836*	*353*	*181*	*104*	*66*	*54*
		L/60	*>5k*	*2508*	*1058*	*542*	*313*	*197*	*161*
	Triple Span	ASD, W/Ω	327	218	139	95	68	51	44
		LRFD, ϕW	524	336	210	143	102	77	67
		L/180	*2210*	*655*	*276*	*141*	*82*	*52*	*42*
		L/60	*>5k*	*1965*	*829*	*424*	*246*	*155*	*126*
20	Single Span	ASD, W/Ω	450	200	112	72	50	37	32
		LRFD, ϕW	714	317	178	114	79	58	51
		L/180	*1483*	*439*	*185*	*95*	*55*	*35*	*28*
		L/60	*4449*	*1318*	*556*	*285*	*165*	*104*	*84*
	Double Span	ASD, W/Ω	288	192	123	83	59	44	39
		LRFD, ϕW	461	297	185	125	89	67	59
		L/180	*3572*	*1058*	*447*	*229*	*132*	*83*	*68*
		L/60	*>5k*	*3175*	*1340*	*686*	*397*	*250*	*203*
	Triple Span	ASD, W/Ω	327	218	144	99	72	54	48
		LRFD, ϕW	524	341	218	150	108	82	72
		L/180	*2799*	*829*	*350*	*179*	*104*	*65*	*53*
		L/60	*>5k*	*2488*	*1049*	*537*	*311*	*196*	*159*
18	Single Span	ASD, W/Ω	619	296	166	106	74	54	47
		LRFD, ϕW	991	469	264	169	117	86	75
		L/180	*1999*	*592*	*250*	*128*	*74*	*47*	*38*
		L/60	*>5k*	*1777*	*750*	*384*	*222*	*140*	*114*
	Double Span	ASD, W/Ω	288	192	144	115	83	63	54
		LRFD, ϕW	461	307	231	173	125	95	82
		L/180	*4816*	*1427*	*602*	*308*	*178*	*112*	*91*
		L/60	*>5k*	*4281*	*1806*	*925*	*535*	*337*	*274*
	Triple Span	ASD, W/Ω	327	218	164	131	100	75	67
		LRFD, ϕW	524	349	262	205	150	114	101
		L/180	*3773*	*1118*	*472*	*241*	*140*	*88*	*72*
		L/60	*>5k*	*3354*	*1415*	*724*	*419*	*264*	*215*

TABLE 4.20 - Outward (negative) uniform load capacities (20-22ga Prestige Series® with 6" reveal, CLIP ATTACHED)

Prestige Series, 20-22ga, 6" Reveal (CLIP ATTACHED)																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	2' - 0"		3' - 0"		3' - 6"		4' - 0"		4' - 6"		5' - 0"		6' - 0"		7' - 0"		7' - 6"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				76	121	76	121	72	116	69	110	65	104	62	98	54	87	47	75	44	70
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga *(.1050")*	2	#10	76	121	76	121	72	116	69	110	65	104	62	98	54	87	47	75	44	70
		2	#12	76	121	76	121	72	116	69	110	65	104	62	98	54	87	47	75	44	70
		2	1/4"	76	121	76	121	72	116	69	110	65	104	62	98	54	87	47	75	44	70
	14ga *(.0700")*	2	#10	76	121	76	121	72	116	69	110	65	104	62	98	54	87	47	75	44	70
		2	#12	76	121	76	121	72	116	69	110	65	104	62	98	54	87	47	75	44	70
		2	1/4"	76	121	76	121	72	116	69	110	65	104	62	98	54	87	47	75	44	70
	16ga *(.0590")*	2	#10	76	121	76	121	72	116	69	110	65	104	62	98	54	87	47	75	44	70
		2	#12	76	121	76	121	72	116	69	110	65	104	62	98	54	87	47	75	44	70
		2	1/4"	76	121	76	121	72	116	69	110	65	104	62	98	54	87	47	75	44	70
	18ga *(.0459")*	2	#10	76	121	76	121	72	116	69	104	62	92	55	83	46	69	40	59	37	55
		2	#12	76	121	76	121	72	116	69	110	65	104	62	94	52	79	45	67	42	63
		2	1/4"	76	121	76	121	72	116	69	110	65	104	62	98	54	87	47	75	44	70
	20ga *(.0354")*	2	#10	76	121	71	107	61	92	53	80	47	71	43	64	36	53	31	46	28	43
		2	#12	76	121	76	121	69	104	61	91	54	81	49	73	40	61	35	52	32	49
		2	1/4"	76	121	76	121	72	116	69	105	62	94	56	84	47	70	40	60	37	56
Cold Formed Steel (Gr 33 min.)	≥12ga *(.1050")*	2	#10	76	121	76	121	72	116	69	110	65	104	62	98	54	87	47	75	44	70
		2	#12	76	121	76	121	72	116	69	110	65	104	62	98	54	87	47	75	44	70
		2	1/4"	76	121	76	121	72	116	69	110	65	104	62	98	54	87	47	75	44	70
	16ga *(.0590")*	2	#10	76	121	76	121	70	106	62	92	55	82	49	74	41	62	35	53	33	49
		2	#12	76	121	76	121	72	116	69	105	62	93	56	84	47	70	40	60	37	56
		2	1/4"	76	121	76	121	72	116	69	110	65	104	62	97	54	81	46	69	43	65
	18ga *(.0459")*	2	#10	76	121	64	96	55	82	48	72	43	64	38	58	32	48	27	41	26	38
		2	#12	76	121	73	109	62	93	54	82	48	73	44	65	36	54	31	47	29	44
		2	1/4"	76	121	76	121	72	108	63	95	56	84	50	76	42	63	36	54	34	50
	20ga *(.0354")*	2	#10	74	111	49	74	42	63	37	55	33	49	30	44	25	37	21	32	20	30
		2	#12	76	121	56	84	48	72	42	63	37	56	34	50	28	42	24	36	22	34
		2	1/4"	76	121	65	97	56	83	49	73	43	65	39	58	32	49	28	42	26	39
	22ga *(.0294")*	2	#10	61	92	41	61	35	53	31	46	27	41	25	37	20	31	18	26	16	25
		2	#12	70	105	47	70	40	60	35	52	31	47	28	42	23	35	20	30	19	28
		2	1/4"	76	121	54	81	46	69	40	61	36	54	32	48	27	40	23	35	22	32
Plywood & OSB	15/32" (& 1/2")	2	#10	71	96	47	64	41	55	35	48	32	43	28	38	24	32	20	27	19	26
		2	#12	76	109	54	73	46	62	40	54	36	48	32	44	27	36	23	31	21	29
		2	#14	76	120	59	80	51	69	44	60	39	53	36	48	30	40	25	34	24	32
	19/32" (& 5/8")	2	#10	76	121	60	81	51	69	45	61	40	54	36	48	30	40	26	35	24	32
		2	#12	76	121	68	92	58	79	51	69	45	61	41	55	34	46	29	39	27	37
		2	#14	76	121	75	101	64	87	56	76	50	67	45	61	37	51	32	43	30	40
	23/32" (& 3/4")	2	#10	76	121	72	98	62	84	54	73	48	65	43	59	36	49	31	42	29	39
		2	#12	76	121	76	111	71	95	62	83	55	74	49	67	41	56	35	48	33	44
		2	#14	76	121	76	121	72	105	68	92	61	82	54	74	45	61	39	53	36	49
Lumber (DFL)	1" min	2	#10	76	121	76	121	72	116	69	110	65	104	62	97	54	81	47	69	44	65
		2	#12	76	121	76	121	72	116	69	110	65	104	62	98	54	87	47	75	44	70
		2	#14	76	121	76	121	72	116	69	110	65	104	62	98	54	87	47	75	44	70

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Table accounts for increased loads on fasteners due to the eccentricity of the fasteners relative to the panel seam. The Prestige Series panel summary chart at the front of this section provides for development of these fastener load adjustments.
2. Number of fasteners can be reduced to (1) if project load requirements can still be met. Reduce stated capacities above by 1/2 (a required additional fastener at panel nailing flange does not factor into the above capacities).

5.0 - Skyline Roofing® & Skyline Roofing® hp

FIGURE 5.1 - Profile: As installed view shown.

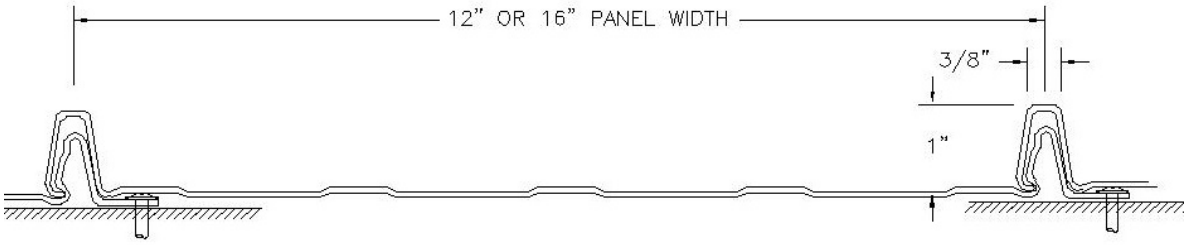


TABLE 5.1 – Profile:

Panel Use:	Roof (primary use), wall, fascia
Substrates:	Over solid or closely fitted deck.
Available Gauges:	No. 24 gauge (Skyline Roofing® hp) No. 26 (Skyline Roofing®)
Minimum Slope:	3:12 (25 percent)
Load Combination Reduction Available (Ref. Section 5.6)	No.
Uninstalled Panel View	

TABLE 5.2 – Attachment:

Clip Name:	N/A (fastener attached panel)
Clip View:	N/A
Clip Usage:	N/A
Part #:	N/A
Panel/ Substrate Gap:	0 inch
Thermal Movement:	5/16 inch each direction (with centered fastener)
Fastener Limitations:	Nom. Size: #10 max. Head height: 0.090 inch max. Head dia.: ½ inch max.
Recommended Fastener(s):	#8 modified truss head, #10 pancake
Fastener Load Adjustment:	N/A
Associated Bearing Plate:	N/A

TABLE 5.3 – Section properties (12" Skyline Roofing®):

Gauge	Weight	Base Metal Thickness	Yield Strength	Tensile Strength	Gross Section Properties				
					Area	Moment of Inertia	Distance to N.A. from Bottom	Positive Section Modulus	Negative Section Modulus
	w	t	Fy	Fu	A_g	I_g	y_b	S_g+	S_g-
	psf	in	ksi	ksi	in^2/ft	in^4/ft	in	in^3/ft	in^3/ft
26	1.01	0.0173	33	45	0.2775	0.0119	0.11	0.0169	0.1082

Gauge	Effective Section Properties							Uniform Load Only	
	Area	Positive			Negative				
		Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	$I_d = (2I_e+I_g)/3$	
	A_e/ft	I_e+	y_b	S_e+	I_e-	y_b	S_e-	I+	I-
	in^2	in^4/ft	in	in^3/ft	in^4/ft	in	in^3/ft	in^4/ft	in^4/ft
26	0.0735	0.0119	0.11	0.0169	0.0069	0.30	0.0136	0.0119	0.0086

TABLE 5.4 – Outward (negative) uniform load capacities (12", No. 26 gauge Skyline Roofing®):

Substrate		Fastener		Attachment Spacing, (ft-in)									
		#	Size	5.5"		11"		16.5"		22"		27.5"	
				Panel Negative (Outward) Uniform Load Capacity, (lbs/ft^2)									
				40	60	39	59	37	56	34	53	31	49
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft^2)									
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Plywood & OSB	15/32"	1	#8	40	*60*	39	*59*	37	*56*	34	*52*	31	*42*
		1	#10	40	*60*	39	*59*	37	*56*	34	*53*	31	*48*
	19/32"	1	#8	40	*60*	39	*59*	37	*56*	34	*52*	31	*42*
		1	#10	40	*60*	39	*59*	37	*56*	34	*53*	31	*48*
	23/32"	1	#8	40	*60*	39	*59*	37	*56*	34	*52*	31	*42*
		1	#10	40	*60*	39	*59*	37	*56*	34	*53*	31	*48*
Lumber (DFL)	1" min	1	#8	40	*60*	39	*59*	37	*56*	34	*53*	31	*49*
		1	#10	40	*60*	39	*59*	37	*56*	34	*53*	31	*49*

TABLE 5.5 – Section properties (16" Skyline Roofing® & Skyline Roofing® hp):

Gauge	Weight	Base Metal Thickness	Yield Strength	Tensile Strength	Gross Section Properties				
					Area	Moment of Inertia	Distance to N.A. from Bottom	Positive Section Modulus	Negative Section Modulus
	w	t	Fy	Fu	A_g	I_g	y_b	S_g+	S_g-
	psf	in	ksi	ksi	in^2/ft	in^4/ft	in	in^3/ft	in^3/ft
26	0.94	0.0173	33	45	0.2659	0.0143	0.11	0.0152	0.1229
24	1.25	0.0232	50	65	0.3551	0.0180	0.12	0.0197	0.1457

Gauge	Effective Section Properties							Uniform Load Only	
	Area	Positive			Negative				
		Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	$I_d = (2I_e+I_g)/3$	
	A_e/ft	I_e+	y_b	S_e+	I_e-	y_b	S_e-	I+	I-
	in^2	in^4/ft	in	in^3/ft	in^4/ft	in	in^3/ft	in^4/ft	in^4/ft
26	0.0568	0.0140	0.11	0.0152	0.0080	0.35	0.0119	0.0141	0.0101
24	0.0774	0.0181	0.12	0.0197	0.0107	0.35	0.0155	0.0181	0.0132

TABLE 5.6 – Outward (negative) uniform load capacities (16", 24ga Skyline Roofing® hp):

Substrate		Fastener		Attachment Spacing, (ft-in)									
		#	Size	5.5"		11"		16.5"		22"		27.5"	
				Panel Negative (Outward) Uniform Load Capacity, (lbs/ft^2)									
				46	74	45	73	44	71	43	69	42	67
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft^2)									
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Plywood & OSB	15/32"	1	#8	46	*74*	45	*73*	39	*52*	29	*39*	23	*31*
		1	#10	46	*74*	45	*73*	44	*61*	34	*45*	27	*36*
	19/32"	1	#8	46	*74*	45	*73*	39	*52*	29	*39*	23	*31*
		1	#10	46	*74*	45	*73*	44	*61*	34	*45*	27	*36*
	23/32"	1	#8	46	*74*	45	*73*	39	*52*	29	*39*	23	*31*
		1	#10	46	*74*	45	*73*	44	*61*	34	*45*	27	*36*
Lumber (DFL)	1" min	1	#8	46	*74*	45	*73*	44	*71*	43	*69*	42	*67*
		1	#10	46	*74*	45	*73*	44	*71*	43	*69*	42	*67*

TABLE 5.7 – Outward (negative) uniform load capacities (16", 26ga Skyline Roofing®):

Substrate		Fastener #	Fastener Size	Attachment Spacing, (ft-in) 5.5"		11"		16.5"		22"		27.5"		33"	
				Panel Negative (Outward) Uniform Load Capacity, (lbs/ft²)											
				31	50	31	49	30	48	29	46	28	45	26	42
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft²)											
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Plywood & OSB	15/32"	1	#8	31	*50*	31	*49*	30	*48*	29	*39*	23	*31*	19	*26*
		1	#10	31	*50*	31	*49*	30	*48*	29	*45*	27	*36*	22	*30*
	19/32"	1	#8	31	*50*	31	*49*	30	*48*	29	*39*	23	*31*	19	*26*
		1	#10	31	*50*	31	*49*	30	*48*	29	*45*	27	*36*	22	*30*
	23/32"	1	#8	31	*50*	31	*49*	30	*48*	29	*39*	23	*31*	19	*26*
		1	#10	31	*50*	31	*49*	30	*48*	29	*45*	27	*36*	22	*30*
Lumber (DFL)	1" min	1	#8	31	*50*	31	*49*	30	*48*	29	*46*	28	*45*	26	*42*
		1	#10	31	*50*	31	*49*	30	*48*	29	*46*	28	*45*	26	*42*

6.0 – Flush Panel

FIGURE 6.1 – Profile: As installed view shown.

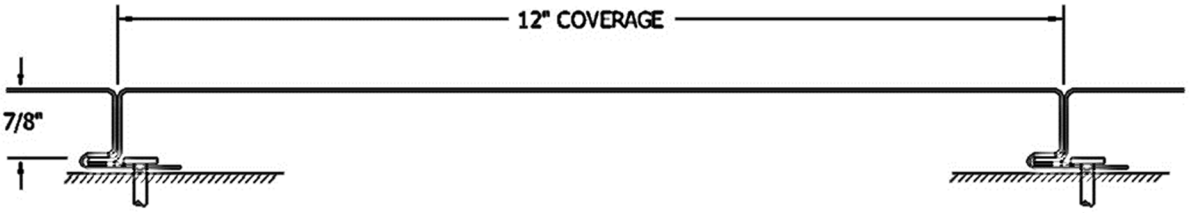


TABLE 6.1 – Profile Details:

Panel Use:	Wall, soffit, fascia, ceiling
Substrates:	Over solid substrate or over open framing
Available Gauges:	No. 20, 22, 24, 26 gauge
Minimum Slope:	Wall (installed horizontally or vertically) or soffit applications only
Load Combination Reduction Available (Ref. Section 5.6)	No.
Uninstalled Panel View	

TABLE 6.2 – Attachment:

Clip Name:	N/A (fastener attached panel)
Clip View:	N/A
Clip Usage:	N/A
Part #:	N/A
Panel/ Substrate Gap:	0 inch
Thermal Movement:	None
Fastener Limitations:	Nom. Size: #12 max. Low head fastener
Recommended Fastener(s):	#10 or #12 pancake head
Fastener Load Adjustment:	N/A
Associated Bearing Plate:	N/A

TABLE 6.3 – Section properties (Flush Panel):

Gauge	Weight	Base Metal Thickness	Yield Strength	Tensile Strength	Gross Section Properties				
					Area	Moment of Inertia	Distance to N.A. from Bottom	Positive Section Modulus	Negative Section Modulus
	w	t	Fy	Fu	A_g	I_g	y_b	S_g+	S_g-
	psf	in	ksi	ksi	in^2/ft	in^4/ft	in	in^3/ft	in^3/ft
26	0.98	0.0173	80	82	0.2773	0.0341	0.80	0.1744	0.0425
24	1.30	0.0232	50	65	0.3718	0.0457	0.81	0.2304	0.0567
22	1.64	0.0294	50	65	0.4712	0.0579	0.81	0.2875	0.0716
20	1.97	0.0354	40	55	0.5673	0.0700	0.81	0.3412	0.0860

Gauge	Effective Section Properties							Uniform Load Only	
	Area	Positive			Negative				
		Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	$I_d = (2I_e+I_g)/3$	
	A_e/ft	I_e+	y_b	S_e+	I_e-	y_b	S_e-	I+	I-
	in^2	in^4/ft	in	in^3/ft	in^4/ft	in	in^3/ft	in^4/ft	in^4/ft
26	0.0741	0.0207	0.41	0.0240	0.0254	0.85	0.0281	0.0252	0.0283
24	0.1026	0.0288	0.43	0.0338	0.0340	0.85	0.0381	0.0344	0.0379
22	0.1405	0.0382	0.46	0.0493	0.0452	0.85	0.0503	0.0448	0.0494
20	0.1892	0.0514	0.50	0.0720	0.0582	0.84	0.0645	0.0576	0.0621

TABLE 6.4 – Allowable reactions at supports (Flush Panel):

Reactions at Supports based on Web Crippling			
Gauge	Condition	Allowable *(lbs/ft width)*	Factored *(lbs/ft width)*
26	1- End	206	315
	2- Interior	314	467
24	1- End	290	444
	2- Interior	449	667
22	1- End	443	678
	2- Interior	693	1031
20	1- End	495	757
	2- Interior	780	1160

Reaction capacities based on a minimum 1.25" web bearing length

TABLE 6.5 – Inward (positive) uniform load capacities (Flush Panel):

Flush Panel									
			Positive (Inward) Uniform Load Capacity (lbs/ft^2) / Span (ft. - in.)						
Gauge	Span	Condition	2' - 0"	2' - 6"	3' - 0"	3' - 6"	4' - 0"	4' - 6"	5' - 0"
26	Single Span	ASD, W/Ω	144	92	64	47	36	28	23
		LRFD, ϕW	228	146	101	75	57	45	37
		L/180	*275*	*141*	*81*	*51*	*34*	*24*	*18*
		L/60	*825*	*422*	*244*	*154*	*103*	*72*	*53*
	Double Span	ASD, W/Ω	110	78	59	45	36	30	24
		LRFD, ϕW	166	119	89	69	55	44	36
		L/180	*662*	*339*	*196*	*124*	*83*	*58*	*42*
		L/60	*1987*	*1017*	*589*	*371*	*248*	*174*	*127*
	Triple Span	ASD, W/Ω	122	89	68	54	43	35	29
		LRFD, ϕW	185	135	103	81	65	53	44
		L/180	*519*	*266*	*154*	*97*	*65*	*46*	*33*
		L/60	*1557*	*797*	*461*	*290*	*195*	*137*	*100*
24	Single Span	ASD, W/Ω	168	108	75	55	42	33	27
		LRFD, ϕW	267	171	119	87	67	53	43
		L/180	*376*	*193*	*111*	*70*	*47*	*33*	*24*
		L/60	*1129*	*578*	*334*	*211*	*141*	*99*	*72*
	Double Span	ASD, W/Ω	159	108	77	58	45	35	29
		LRFD, ϕW	241	162	117	87	68	53	44
		L/180	*906*	*464*	*269*	*169*	*113*	*80*	*58*
		L/60	*2719*	*1392*	*806*	*507*	*340*	*239*	*174*
	Triple Span	ASD, W/Ω	187	129	93	70	55	44	35
		LRFD, ϕW	283	194	141	106	83	66	54
		L/180	*710*	*363*	*210*	*132*	*89*	*62*	*45*
		L/60	*2130*	*1090*	*631*	*397*	*266*	*187*	*136*
22	Single Span	ASD, W/Ω	246	157	109	80	62	49	39
		LRFD, ϕW	390	250	173	127	98	77	62
		L/180	*489*	*250*	*145*	*91*	*61*	*43*	*31*
		L/60	*1467*	*751*	*435*	*274*	*183*	*129*	*94*
	Double Span	ASD, W/Ω	208	141	101	76	59	47	38
		LRFD, ϕW	314	213	153	114	89	71	58
		L/180	*1178*	*603*	*349*	*220*	*147*	*103*	*75*
		L/60	*3535*	*1810*	*1047*	*660*	*442*	*310*	*226*
	Triple Span	ASD, W/Ω	244	169	122	93	72	58	48
		LRFD, ϕW	369	254	184	140	109	88	72
		L/180	*923*	*473*	*273*	*172*	*115*	*81*	*59*
		L/60	*2769*	*1418*	*820*	*517*	*346*	*243*	*177*
20	Single Span	ASD, W/Ω	287	184	128	94	72	57	46
		LRFD, ϕW	456	292	203	149	114	90	73
		L/180	*629*	*322*	*186*	*117*	*79*	*55*	*40*
		L/60	*1888*	*967*	*559*	*352*	*236*	*166*	*121*
	Double Span	ASD, W/Ω	209	142	103	78	60	48	39
		LRFD, ϕW	315	215	155	117	91	72	59
		L/180	*1516*	*776*	*449*	*283*	*189*	*133*	*97*
		L/60	*4548*	*2329*	*1348*	*849*	*568*	*399*	*291*
	Triple Span	ASD, W/Ω	244	170	123	94	74	59	48
		LRFD, ϕW	369	256	186	142	111	89	73
		L/180	*1188*	*608*	*352*	*222*	*148*	*104*	*76*
		L/60	*3563*	*1824*	*1056*	*665*	*445*	*313*	*228*

TABLE 6.6 – Outward (negative) uniform load capacities (No. 20 & 22 gauge Flush Panel):

Flush Panel, 22ga																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	1' - 0"		1' - 6"		2' - 0"		2' - 6"		3' - 0"		3' - 6"		4' - 0"		4' - 6"		5' - 0"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				112	179	112	179	112	179	101	161	89	143	78	125	67	107	55	88	44	70
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga *(.1050")*	1	#10	112	179	112	179	112	179	101	161	89	143	78	125	67	107	55	88	44	70
		1	#12	112	179	112	179	112	179	101	161	89	143	78	125	67	107	55	88	44	70
	14ga *(.0700")*	1	#10	112	179	112	179	112	179	98	147	82	122	70	105	61	92	54	82	44	70
		1	#12	112	179	112	179	112	179	101	161	89	139	78	119	67	104	55	88	44	70
	16ga *(.0590")*	1	#10	112	179	112	179	103	155	83	124	69	103	59	88	52	77	46	69	41	62
		1	#12	112	179	112	179	112	176	94	141	78	117	67	101	59	88	52	78	44	70
	18ga *(.0459")*	1	#10	112	179	107	161	80	120	64	96	54	80	46	69	40	60	36	54	32	48
		1	#12	112	179	112	179	91	137	73	110	61	91	52	78	46	68	41	61	37	55
	20ga *(.0354")*	1	#10	112	179	83	124	62	93	50	74	41	62	35	53	31	46	28	41	25	37
		1	#12	112	179	94	141	70	106	56	84	47	70	40	60	35	53	31	47	28	42
Cold Formed Steel (Gr 33 min.)	≥12ga *(.1050")*	1	#10	112	179	112	179	112	179	101	153	85	127	73	109	64	95	55	85	44	70
		1	#12	112	179	112	179	112	179	101	161	89	143	78	124	67	107	55	88	44	70
	16ga *(.0590")*	1	#10	112	179	95	143	71	107	57	86	48	71	41	61	36	54	32	48	29	43
		1	#12	112	179	108	162	81	122	65	97	54	81	46	70	41	61	36	54	32	49
	18ga *(.0459")*	1	#10	111	167	74	111	56	83	44	67	37	56	32	48	28	42	25	37	22	33
		1	#12	112	179	84	126	63	95	51	76	42	63	36	54	32	47	28	42	25	38
	20ga *(.0354")*	1	#10	86	129	57	86	43	64	34	51	29	43	25	37	21	32	19	29	17	26
		1	#12	97	146	65	97	49	73	39	58	32	49	28	42	24	37	22	32	19	29
	22ga *(.0294")*	1	#10	71	107	47	71	36	53	28	43	24	36	20	31	18	27	16	24	14	21
		1	#12	81	121	54	81	40	61	32	49	27	40	23	35	20	30	18	27	16	24
Plywood & OSB	15/32" (& 1/2")	1	#10	82	111	55	74	41	56	33	44	27	37	23	32	21	28	18	25	16	22
		1	#12	93	126	62	84	47	63	37	50	31	42	27	36	23	32	21	28	19	25
	19/32" (& 5/8")	1	#10	104	141	69	94	52	70	42	56	35	47	30	40	26	35	23	31	21	28
		1	#12	112	160	79	107	59	80	47	64	39	53	34	46	30	40	26	36	24	32
	23/32" (& 3/4")	1	#10	112	170	84	113	63	85	50	68	42	57	36	49	32	43	28	38	25	34
		1	#12	112	179	96	129	72	97	57	77	48	65	41	55	36	48	32	43	29	39
Lumber (DFL)	1" min	1	#10	112	179	112	179	104	140	83	112	69	94	59	80	52	70	46	62	42	56
		1	#12	112	179	112	179	112	160	95	128	79	106	68	91	59	80	53	71	44	64

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Number of fasteners at each support location can be increased to (2), and tabulated capacity doubled, with the final capacity not to exceed max Panel/Clip Capacity stated at the top of the chart. Fastener locations must satisfy minimum edge distance requirements; refer to General Notes.

TABLE 6.7 – Outward (negative) uniform load capacities (No. 24 gauge Flush Panel):

Flush Panel, 24ga																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	1' - 0"		1' - 6"		2' - 0"		2' - 6"		3' - 0"		3' - 6"		4' - 0"		4' - 6"		5' - 0"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				66	105	66	105	66	105	60	96	55	87	49	78	43	69	38	60	32	51
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga *(.1050")*	1	#10	66	105	66	105	66	105	60	96	55	87	49	78	43	69	38	60	32	51
		1	#12	66	105	66	105	66	105	60	96	55	87	49	78	43	69	38	60	32	51
	14ga *(.0700")*	1	#10	66	105	66	105	66	105	60	96	55	87	49	78	43	69	38	60	32	51
		1	#12	66	105	66	105	66	105	60	96	55	87	49	78	43	69	38	60	32	51
	16ga *(.0590")*	1	#10	66	105	66	105	66	105	60	96	55	87	49	78	43	69	38	60	32	51
		1	#12	66	105	66	105	66	105	60	96	55	87	49	78	43	69	38	60	32	51
	18ga *(.0459")*	1	#10	66	105	66	105	66	105	60	96	54	80	46	69	40	60	36	54	32	48
		1	#12	66	105	66	105	66	105	60	96	55	87	49	78	43	68	38	60	32	51
	20ga *(.0354")*	1	#10	66	105	66	105	62	93	50	74	41	62	35	53	31	46	28	41	25	37
		1	#12	66	105	66	105	66	105	56	84	47	70	40	60	35	53	31	47	28	42
Cold Formed Steel (Gr 33 min.)	≥12ga *(.1050")*	1	#10	66	105	66	105	66	105	60	96	55	87	49	78	43	69	38	60	32	51
		1	#12	66	105	66	105	66	105	60	96	55	87	49	78	43	69	38	60	32	51
	16ga *(.0590")*	1	#10	66	105	66	105	66	105	57	86	48	71	41	61	36	54	32	48	29	43
		1	#12	66	105	66	105	66	105	60	96	54	81	46	70	41	61	36	54	32	49
	18ga *(.0459")*	1	#10	66	105	66	105	56	83	44	67	37	56	32	48	28	42	25	37	22	33
		1	#12	66	105	66	105	63	95	51	76	42	63	36	54	32	47	28	42	25	38
	20ga *(.0354")*	1	#10	66	105	57	86	43	64	34	51	29	43	25	37	21	32	19	29	17	26
		1	#12	66	105	65	97	49	73	39	58	32	49	28	42	24	37	22	32	19	29
	22ga *(.0294")*	1	#10	66	105	47	71	36	53	28	43	24	36	20	31	18	27	16	24	14	21
		1	#12	66	105	54	81	40	61	32	49	27	40	23	35	20	30	18	27	16	24
Plywood & OSB	15/32" (& 1/2")	1	#10	66	105	55	74	41	56	33	44	27	37	23	32	21	28	18	25	16	22
		1	#12	66	105	62	84	47	63	37	50	31	42	27	36	23	32	21	28	19	25
	19/32" (& 5/8")	1	#10	66	105	66	94	52	70	42	56	35	47	30	40	26	35	23	31	21	28
		1	#12	66	105	66	105	59	80	47	64	39	53	34	46	30	40	26	36	24	32
	23/32" (& 3/4")	1	#10	66	105	66	105	63	85	50	68	42	57	36	49	32	43	28	38	25	34
		1	#12	66	105	66	105	66	97	57	77	48	65	41	55	36	48	32	43	29	39
Lumber (DFL)	1" min	1	#10	66	105	66	105	66	105	60	96	55	87	49	78	43	69	38	60	32	51
		1	#12	66	105	66	105	66	105	60	96	55	87	49	78	43	69	38	60	32	51

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Number of fasteners at each support location can be increased to (2), and tabulated capacity doubled, with the final capacity not to exceed max Panel/Clip Capacity stated at the top of the chart. Fastener locations must satisfy minimum edge distance requirements; refer to General Notes.

7.0 – Flex Series

TABLE 7.1 – Profiles:

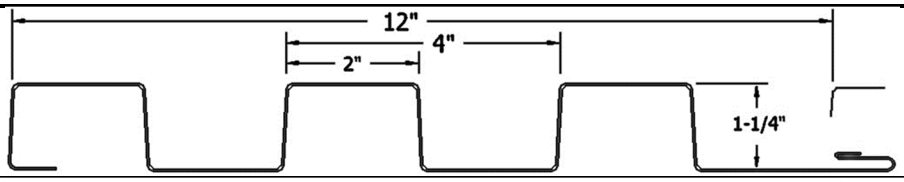
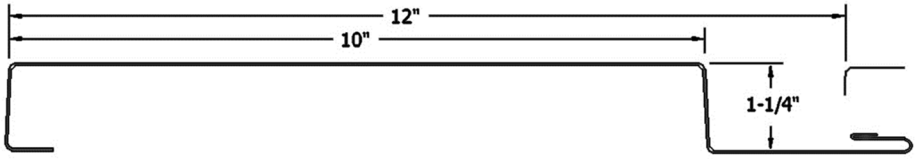
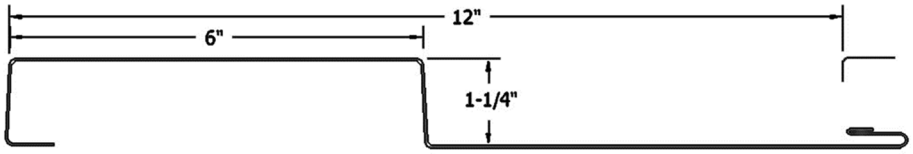
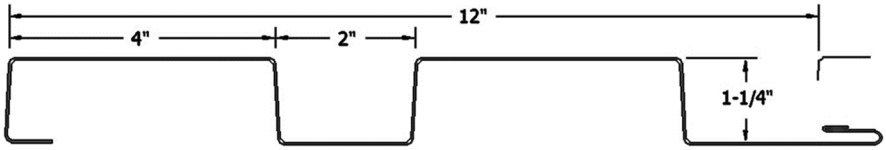
Flex Series 1.2FX10-12	
Flex Series 1.2FX20-12	
Flex Series 1.2FX30-12	
Flex Series 1.2FX40-12	
Profiles shown with Clip Attached (C suffix) configuration. Also available Direct Fastened – with nailing flange (D suffix).	

TABLE 7.2 – Profile Details:

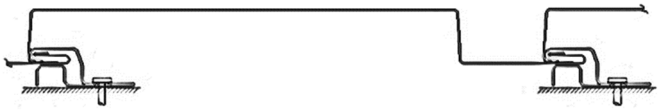
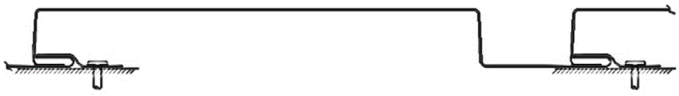
Panel Use:	Wall, soffit, fascia, ceiling
Substrates:	Over solid substrate or over open framing
Available Gauges:	No. 20, 22, 24 gauge
Minimum Slope:	Wall (installed horizontally or vertically) or soffit applications only
Load Combination Reduction Available (Ref. Section 5.6)	No.
Typical Installed View – Clip Attached ("0.5 Stand-off)	
Typical Installed View – Direct Fastened	

TABLE 7.3 – Attachment:

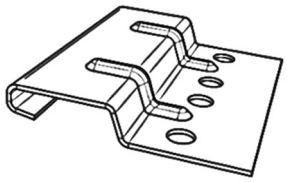
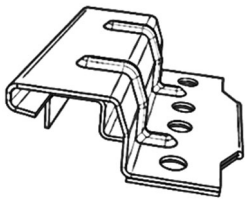
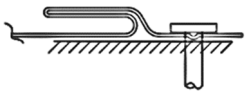
Clip Name:	Flush Clip	Standoff Clip	N/A – Direct Fastened
Clip View:			
Clip Usage:	Over spaced framing or solid substrates		
Part #:	#WALLCLP	#WALLCLP0.5	N/A
Panel/ Substrate Gap:	0” (Flush)	½”	0” (Flush)
Thermal Movement:	Unlimited	Unlimited	None.
Fastener Limitations:	Nom. Size: ¼ inch max. Head height: 5/16 inch max. Head dia.: ½ inch max.		
Recommended Fastener(s):	#12, #14, or ¼ inch dia. Hex washer head		
Fastener Load Adjustments (due to eccentricity of fasteners relative to panel seam)**:**	Per fastener: 2.5 ΣM = 0 1.88P = .75R		N/A
Associated Bearing Plate:	N/A		

TABLE 7.4 – Section properties (Flex Series 1.2FX10-12):

Gauge	Weight	Base Metal Thickness	Yield Strength	Tensile Strength	Gross Section Properties				
					Area	Moment of Inertia	Distance to N.A. from Bottom	Positive Section Modulus	Negative Section Modulus
	w	t	Fy	Fu	A_g	I_g	y_b	S_g+	S_g-
	psf	in	ksi	ksi	in^2/ft	in^4/ft	in	in^3/ft	in^3/ft
24	1.76	0.0232	50	65	0.5030	0.1410	0.56	0.1980	0.2514
22	2.22	0.0294	50	65	0.6374	0.1790	0.56	0.2499	0.3169
20	2.66	0.0354	40	55	0.7675	0.2150	0.57	0.2996	0.3796

Gauge	Effective Section Properties							Uniform Load Only	
	Area	Positive			Negative				
		Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	$I_d = (2I_e+I_g)/3$	
	A_e/ft	I_e+	y_b	S_e+	I_e-	y_b	S_e-	I+	I-
	in^2	in^4/ft	in	in^3/ft	in^4/ft	in	in^3/ft	in^4/ft	in^4/ft
24	0.2582	0.1319	0.47	0.1360	0.1268	0.69	0.1527	0.1349	0.1315
22	0.3881	0.1750	0.50	0.1909	0.1686	0.67	0.2160	0.1763	0.1721
20	0.5649	0.2150	0.53	0.2614	0.2100	0.62	0.2902	0.2150	0.2117

TABLE 7.5 – Allowable reactions at supports (Flex Series 1.2FX10-12):

Reactions at Supports based on Web Crippling (lbs/ft width)			
Gauge	Condition	Allowable	Factored
24	End	832	1273
	Interior	1348	2005
22	End	1278	1955
	Interior	2081	3096
20	End	1431	2190
	Interior	2341	3483

Reaction capacities based on a minimum 1.25" web bearing length.
Capacities apply to flush mounted panel installations only. Data not available for assemblies using 1/2" stand-off clip.

TABLE 7.6 – Inward (positive) uniform load capacities (Flex Series 1.2FX10-12):

Flex Series 1.2FX10-12									
			Positive (Inward) Uniform Load Capacity (lbs/ft^2) / Span (ft. - in.)						
Gauge	Span	Condition	2' - 0"	3' - 0"	4' - 0"	5' - 0"	6' - 0"	7' - 0"	8' - 0"
24	Single Span	ASD, W/Ω	679	302	170	109	75	55	42
		LRFD, ϕW	1077	479	269	172	120	88	67
		L/180	*1474*	*437*	*184*	*94*	*55*	*34*	*23*
		L/60	*4423*	*1310*	*553*	*283*	*164*	*103*	*69*
	Double Span	ASD, W/Ω	539	318	184	119	83	61	46
		LRFD, ϕW	802	480	277	179	124	92	70
		L/180	*3551*	*1052*	*444*	*227*	*132*	*83*	*55*
		L/60	*>5k*	*3157*	*1332*	*682*	*395*	*248*	*166*
	Triple Span	ASD, W/Ω	613	389	227	147	103	76	59
		LRFD, ϕW	911	586	341	221	155	115	88
		L/180	*2782*	*824*	*348*	*178*	*103*	*65*	*43*
		L/60	*>5k*	*2473*	*1043*	*534*	*309*	*195*	*130*
22	Single Span	ASD, W/Ω	953	423	238	152	106	78	60
		LRFD, ϕW	1511	672	378	242	168	123	94
		L/180	*1927*	*571*	*241*	*123*	*71*	*45*	*30*
		L/60	*>5k*	*1713*	*722*	*370*	*214*	*135*	*90*
	Double Span	ASD, W/Ω	832	445	258	167	117	86	66
		LRFD, ϕW	1238	670	388	252	177	130	100
		L/180	*4641*	*1375*	*580*	*297*	*172*	*108*	*73*
		L/60	*>5k*	*4125*	*1740*	*891*	*516*	*325*	*218*
	Triple Span	ASD, W/Ω	946	541	316	207	145	107	82
		LRFD, ϕW	1407	815	477	312	218	162	124
		L/180	*3636*	*1077*	*454*	*233*	*135*	*85*	*57*
		L/60	*>5k*	*3232*	*1363*	*698*	*404*	*254*	*170*
20	Single Span	ASD, W/Ω	1044	464	261	167	116	85	65
		LRFD, ϕW	1656	736	414	265	184	135	103
		L/180	*2349*	*696*	*294*	*150*	*87*	*55*	*37*
		L/60	*>5k*	*2088*	*881*	*451*	*261*	*164*	*110*
	Double Span	ASD, W/Ω	936	471	275	178	125	93	71
		LRFD, ϕW	1393	709	413	269	188	139	107
		L/180	*>5k*	*1677*	*707*	*362*	*210*	*132*	*88*
		L/60	*>5k*	*>5k*	*2122*	*1086*	*629*	*396*	*265*
	Triple Span	ASD, W/Ω	1064	568	336	221	156	115	88
		LRFD, ϕW	1583	857	506	332	234	173	133
		L/180	*4433*	*1313*	*554*	*284*	*164*	*103*	*69*
		L/60	*>5k*	*3940*	*1662*	*851*	*493*	*310*	*208*

TABLE 7.7 – Section properties (Flex Series 1.2FX20-12):

Gauge	Weight	Base Metal Thickness	Yield Strength	Tensile Strength	Gross Section Properties				
					Area	Moment of Inertia	Distance to N.A. from Bottom	Positive Section Modulus	Negative Section Modulus
	w	t	Fy	Fu	A_g	I_g	y_b	S_g+	S_g-
	psf	in	ksi	ksi	in^2/ft	in^4/ft	in	in^3/ft	in^3/ft
24	1.40	0.0232	50	65	0.3983	0.1174	0.84	0.2689	0.1404
22	1.76	0.0294	50	65	0.5048	0.1490	0.84	0.3384	0.1773
20	2.11	0.0354	40	55	0.6078	0.1790	0.84	0.4048	0.2127

Gauge	Effective Section Properties							Uniform Load Only	
	Area	Positive			Negative				
		Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	$I_d = (2I_e+I_g)/3$	
	A_e/ft	I_e+	y_b	S_e+	I_e-	y_b	S_e-	I+	I-
	in^2	in^4/ft	in	in^3/ft	in^4/ft	in	in^3/ft	in^4/ft	in^4/ft
24	0.1157	0.0617	0.40	0.0496	0.0892	0.98	0.0742	0.0803	0.0986
22	0.1737	0.0879	0.43	0.0715	0.1276	0.96	0.1060	0.1083	0.1347
20	0.2554	0.1215	0.47	0.1029	0.1670	0.93	0.1505	0.1407	0.1710

TABLE 7.8 – Allowable reactions at supports (Flex Series 1.2FX20-12):

Reactions at Supports based on Web Crippling (lbs/ft width)			
Gauge	Condition	Allowable	Factored
24	End	277	424
	Interior	449	668
22	End	426	652
	Interior	694	1032
20	End	477	730
	Interior	780	1161

Reaction capacities based on a minimum 1.25" web bearing length.
Capacities apply to flush mounted panel installations only. Data not available for assemblies using 1/2" stand-off clip.

TABLE 7.9 – Inward (positive) uniform load capacities (Flex Series 1.2FX20-12):

Flex Series 1.2FX20-12									
			Positive (Inward) Uniform Load Capacity (lbs/ft^2) / Span (ft. - in.)						
Gauge	Span	Condition	2' - 0"	3' - 0"	4' - 0"	5' - 0"	6' - 0"	7' - 0"	8' - 0"
24	Single Span	ASD, W/Ω	248	110	62	40	28	20	15
		LRFD, ϕW	393	175	98	63	44	32	25
		L/180	*877*	*260*	*110*	*56*	*32*	*20*	*14*
		L/60	*2631*	*780*	*329*	*168*	*97*	*61*	*41*
	Double Span	ASD, W/Ω	180	120	86	56	39	29	23
		LRFD, ϕW	267	178	130	85	59	44	34
		L/180	*2113*	*626*	*264*	*135*	*78*	*49*	*33*
		L/60	*>5k*	*1878*	*792*	*406*	*235*	*148*	*99*
	Triple Span	ASD, W/Ω	204	136	102	69	49	36	27
		LRFD, ϕW	304	203	152	104	73	54	42
		L/180	*1655*	*490*	*207*	*106*	*61*	*39*	*26*
		L/60	*4965*	*1471*	*621*	*318*	*184*	*116*	*78*
22	Single Span	ASD, W/Ω	357	159	89	57	40	29	22
		LRFD, ϕW	566	252	142	91	63	46	35
		L/180	*1183*	*350*	*148*	*76*	*44*	*28*	*18*
		L/60	*3549*	*1051*	*444*	*227*	*131*	*83*	*55*
	Double Span	ASD, W/Ω	277	185	121	79	55	41	32
		LRFD, ϕW	413	275	182	119	84	62	48
		L/180	*2849*	*844*	*356*	*182*	*106*	*66*	*45*
		L/60	*>5k*	*2533*	*1069*	*547*	*317*	*199*	*134*
	Triple Span	ASD, W/Ω	315	210	146	97	69	51	39
		LRFD, ϕW	469	313	220	147	104	77	60
		L/180	*2232*	*661*	*279*	*143*	*83*	*52*	*35*
		L/60	*>5k*	*1984*	*837*	*429*	*248*	*156*	*105*
20	Single Span	ASD, W/Ω	411	183	103	66	46	34	26
		LRFD, ϕW	652	290	163	104	72	53	41
		L/180	*1537*	*455*	*192*	*98*	*57*	*36*	*24*
		L/60	*4611*	*1366*	*576*	*295*	*171*	*108*	*72*
	Double Span	ASD, W/Ω	312	208	133	88	62	47	35
		LRFD, ϕW	464	310	201	133	94	71	54
		L/180	*3702*	*1097*	*463*	*237*	*137*	*86*	*58*
		L/60	*>5k*	*3291*	*1388*	*711*	*411*	*259*	*174*
	Triple Span	ASD, W/Ω	355	236	159	107	76	57	44
		LRFD, ϕW	528	352	240	162	115	86	67
		L/180	*2900*	*859*	*363*	*186*	*107*	*68*	*45*
		L/60	*>5k*	*2578*	*1088*	*557*	*322*	*203*	*136*

TABLE 7.10 - Section properties (Flex Series 1.2FX30-12):

Gauge	Weight	Base Metal Thickness	Yield Strength	Tensile Strength	Gross Section Properties				
					Area	Moment of Inertia	Distance to N.A. from Bottom	Positive Section Modulus	Negative Section Modulus
	w	t	Fy	Fu	A_g	I_g	y_b	S_g+	S_g-
	psf	in	ksi	ksi	in^2/ft	in^4/ft	in	in^3/ft	in^3/ft
24	1.40	0.0232	50	65	0.3983	0.1300	0.55	0.1787	0.2385
22	1.76	0.0294	50	65	0.5048	0.1650	0.55	0.2255	0.3005
20	2.11	0.0354	40	55	0.6078	0.1980	0.55	0.2704	0.3599

Gauge	Effective Section Properties							Uniform Load Only	
	Area	Positive			Negative				
		Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	$I_d = (2I_e+I_g)/3$	
	A_e/ft	I_e+	y_b	S_e+	I_e-	y_b	S_e-	I+	I-
	in^2	in^4/ft	in	in^3/ft	in^4/ft	in	in^3/ft	in^4/ft	in^4/ft
24	0.1166	0.0750	0.27	0.0524	0.0781	0.87	0.0734	0.0933	0.0954
22	0.1755	0.1073	0.30	0.2488	0.1106	0.84	0.1056	0.1265	0.1287
20	0.2592	0.1488	0.33	0.1072	0.1459	0.80	0.1524	0.1652	0.1633

TABLE 7.11 - Allowable reactions at supports (Flex Series 1.2FX30-12):

Reactions at Supports based on Web Crippling (lbs/ft width)			
Gauge	Condition	Allowable	Factored
24	End	277	424
	Interior	449	668
22	End	426	652
	Interior	694	1032
20	End	477	730
	Interior	780	1161

Reaction capacities based on a minimum 1.25" web bearing length.
Capacities apply to flush mounted panel installations only. Data not available for assemblies using 1/2" stand-off clip.

TABLE 7.12 - Inward (positive) uniform load capacities (Flex Series 1.2FX30-12):

Flex Series 1.2FX30-12									
			Positive (Inward) Uniform Load Capacity (lbs/ft^2) / Span (ft. - in.)						
Gauge	Span	Condition	2' - 0"	3' - 0"	4' - 0"	5' - 0"	6' - 0"	7' - 0"	8' - 0"
24	Single Span	ASD, W/Ω	262	116	65	42	29	21	16
		LRFD, ϕW	415	184	104	66	46	34	26
		L/180	*1020*	*302*	*127*	*65*	*38*	*24*	*16*
		L/60	*3059*	*906*	*382*	*196*	*113*	*71*	*48*
	Double Span	ASD, W/Ω	180	120	85	56	39	29	22
		LRFD, ϕW	267	178	128	84	59	44	33
		L/180	*2456*	*728*	*307*	*157*	*91*	*57*	*38*
		L/60	*>5k*	*2183*	*921*	*472*	*273*	*172*	*115*
	Triple Span	ASD, W/Ω	204	136	102	68	48	35	28
		LRFD, ϕW	304	203	152	103	73	53	42
		L/180	*1924*	*570*	*241*	*123*	*71*	*45*	*30*
		L/60	*>5k*	*1711*	*722*	*369*	*214*	*135*	*90*
22	Single Span	ASD, W/Ω	426	284	213	170	138	101	78
		LRFD, ϕW	652	435	326	261	217	161	123
		L/180	*1382*	*410*	*173*	*88*	*51*	*32*	*22*
		L/60	*4147*	*1229*	*518*	*265*	*154*	*97*	*65*
	Double Span	ASD, W/Ω	277	185	120	79	55	41	32
		LRFD, ϕW	413	275	181	120	84	62	48
		L/180	*3330*	*987*	*416*	*213*	*123*	*78*	*52*
		L/60	*>5k*	*2960*	*1249*	*639*	*370*	*233*	*156*
	Triple Span	ASD, W/Ω	315	210	145	96	69	51	39
		LRFD, ϕW	469	313	219	145	103	77	59
		L/180	*2609*	*773*	*326*	*167*	*97*	*61*	*41*
		L/60	*>5k*	*2319*	*978*	*501*	*290*	*183*	*122*
20	Single Span	ASD, W/Ω	428	190	107	68	48	35	27
		LRFD, ϕW	679	302	170	109	75	55	42
		L/180	*1805*	*535*	*226*	*116*	*67*	*42*	*28*
		L/60	*>5k*	*1604*	*677*	*347*	*201*	*126*	*85*
	Double Span	ASD, W/Ω	312	208	135	89	64	47	36
		LRFD, ϕW	464	310	203	135	96	71	55
		L/180	*4348*	*1288*	*543*	*278*	*161*	*101*	*68*
		L/60	*>5k*	*3865*	*1630*	*835*	*483*	*304*	*204*
	Triple Span	ASD, W/Ω	355	236	161	108	77	58	44
		LRFD, ϕW	528	352	243	163	117	88	67
		L/180	*3406*	*1009*	*426*	*218*	*126*	*79*	*53*
		L/60	*>5k*	*3028*	*1277*	*654*	*378*	*238*	*160*

TABLE 7.13 - Section properties (Flex Series 1.2FX40-12):

Gauge	Weight	Base Metal Thickness	Yield Strength	Tensile Strength	Gross Section Properties				
					Area	Moment of Inertia	Distance to N.A. from Bottom	Positive Section Modulus	Negative Section Modulus
	w	t	Fy	Fu	A_g	I_g	y_b	S_g+	S_g-
	psf	in	ksi	ksi	in^2/ft	in^4/ft	in	in^3/ft	in^3/ft
24	1.58	0.0232	50	65	0.4507	0.1376	0.68	0.2332	0.2016
22	1.99	0.0294	50	65	0.5711	0.1740	0.69	0.2940	0.2544
20	2.38	0.0354	40	55	0.6876	0.2100	0.69	0.3522	0.3050

Gauge	Effective Section Properties							Uniform Load Only	
	Area	Positive			Negative				
		Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	$I_d = (2I_e+I_g)/3$	
	A_e/ft	I_e+	y_b	S_e+	I_e-	y_b	S_e-	I+	I-
	in^2	in^4/ft	in	in^3/ft	in^4/ft	in	in^3/ft	in^4/ft	in^4/ft
24	0.1659	0.1034	0.45	0.0953	0.1177	0.82	0.1174	0.1148	0.1243
22	0.2525	0.1429	0.49	0.1362	0.1598	0.80	0.1665	0.1533	0.1645
20	0.3781	0.1890	0.53	0.1930	0.2020	0.76	0.2334	0.1960	0.2047

TABLE 7.14 - Allowable reactions at supports (Flex Series 1.2FX40-12):

Reactions at Supports based on Web Crippling (lbs/ft width)			
Gauge	Condition	Allowable	Factored
24	End	555	848
	Interior	899	1337
22	End	852	1304
	Interior	1387	2064
20	End	954	1460
	Interior	1561	2322

Reaction capacities based on a minimum 1.25" web bearing length.
Capacities apply to flush mounted panel installations only. Data not available for assemblies using 1/2" stand-off clip.

TABLE 7.15 - Inward (positive) uniform load capacities (Flex Series 1.2FX40-12):

Flex Series 1.2FX40-12									
			Positive (Inward) Uniform Load Capacity (lbs/ft^2) / Span (ft. - in.)						
Gauge	Span	Condition	2' - 0"	3' - 0"	4' - 0"	5' - 0"	6' - 0"	7' - 0"	8' - 0"
24	Single Span	ASD, W/Ω	476	211	119	76	53	39	30
		LRFD, ϕW	755	335	189	121	84	62	47
		L/180	*1254*	*372*	*157*	*80*	*46*	*29*	*20*
		L/60	*3763*	*1115*	*470*	*241*	*139*	*88*	*59*
	Double Span	ASD, W/Ω	359	240	140	90	63	47	36
		LRFD, ϕW	535	356	210	136	95	70	54
		L/180	*3021*	*895*	*378*	*193*	*112*	*70*	*47*
		L/60	*>5k*	*2686*	*1133*	*580*	*336*	*211*	*142*
	Triple Span	ASD, W/Ω	408	272	171	112	79	58	45
		LRFD, ϕW	608	405	258	169	118	87	68
		L/180	*2367*	*701*	*296*	*151*	*88*	*55*	*37*
		L/60	*>5k*	*2104*	*888*	*454*	*263*	*166*	*111*
22	Single Span	ASD, W/Ω	680	302	170	109	76	55	42
		LRFD, ϕW	1078	479	270	173	120	88	67
		L/180	*1675*	*496*	*209*	*107*	*62*	*39*	*26*
		L/60	*>5k*	*1489*	*628*	*322*	*186*	*117*	*78*
	Double Span	ASD, W/Ω	555	335	196	128	89	66	51
		LRFD, ϕW	826	505	295	193	135	99	76
		L/180	*4034*	*1195*	*504*	*258*	*149*	*94*	*63*
		L/60	*>5k*	*3586*	*1513*	*774*	*448*	*282*	*189*
	Triple Span	ASD, W/Ω	631	404	239	158	111	82	63
		LRFD, ϕW	938	609	361	237	167	124	95
		L/180	*3160*	*936*	*395*	*202*	*117*	*74*	*49*
		L/60	*>5k*	*2809*	*1185*	*607*	*351*	*221*	*148*
20	Single Span	ASD, W/Ω	770	342	193	123	86	63	48
		LRFD, ϕW	1222	543	306	196	136	100	76
		L/180	*2141*	*635*	*268*	*137*	*79*	*50*	*33*
		L/60	*>5k*	*1904*	*803*	*411*	*238*	*150*	*100*
	Double Span	ASD, W/Ω	624	365	216	142	99	74	57
		LRFD, ϕW	929	550	326	214	150	111	85
		L/180	*>5k*	*1528*	*645*	*330*	*191*	*120*	*81*
		L/60	*>5k*	*4585*	*1934*	*990*	*573*	*361*	*242*
	Triple Span	ASD, W/Ω	709	436	262	174	122	91	71
		LRFD, ϕW	1055	658	395	262	185	137	106
		L/180	*4041*	*1197*	*505*	*259*	*150*	*94*	*63*
		L/60	*>5k*	*3592*	*1515*	*776*	*449*	*283*	*189*

TABLE 7.16 - Outward (negative) uniform load capacities (Flex Series 1.2FX10/20/30/40-12c, 20-22ga, CLIP ATTACHED):

Flex Series 1.2FX10/20/30/40-12c, 20-22ga (CLIP ATTACHED)																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	2' - 0"		2' - 6"		2' - 8"		3' - 0"		3' - 6"		3' - 9"		4' - 0"		4' - 6"		5' - 0"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				86	138	81	130	80	128	76	122	72	114	69	111	67	107	62	99	57	91
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga (.1050")	2	#10	86	138	81	130	80	128	76	122	72	114	69	111	67	107	62	98	57	88
		2	#12	86	138	81	130	80	128	76	122	72	114	69	111	67	107	62	99	57	91
		2	1/4"	86	138	81	130	80	128	76	122	72	114	69	111	67	107	62	99	57	91
	14ga (.0700")	2	#10	86	138	78	118	73	110	65	98	56	84	52	78	49	73	44	65	39	59
		2	#12	86	138	81	130	80	125	74	111	64	95	59	89	56	84	50	74	45	67
		2	1/4"	86	138	81	130	80	128	76	122	72	111	69	103	64	97	57	86	52	77
	16ga (.0590")	2	#10	83	124	66	99	62	93	55	83	47	71	44	66	41	62	37	55	33	50
		2	#12	86	138	75	113	70	106	63	94	54	80	50	75	47	70	42	63	38	56
		2	1/4"	86	138	81	130	80	122	72	109	62	93	58	87	54	81	48	72	43	65
	18ga (.0459")	2	#10	64	96	51	77	48	72	43	64	37	55	34	51	32	48	29	43	26	39
		2	#12	73	110	58	88	55	82	49	73	42	63	39	58	37	55	32	49	29	44
		2	1/4"	85	127	68	101	63	95	56	85	48	72	45	68	42	63	38	56	34	51
	20ga (.0354")	2	#10	50	74	40	59	37	56	33	50	28	42	26	40	25	37	22	33	20	30
		2	#12	56	84	45	68	42	63	38	56	32	48	30	45	28	42	25	38	23	34
		2	1/4"	65	98	52	78	49	73	43	65	37	56	35	52	33	49	29	43	26	39
Cold Formed Steel (Gr 33 min.)	≥12ga (.1050")	2	#10	86	138	81	122	76	114	68	102	58	87	54	81	51	76	45	68	41	61
		2	#12	86	138	81	130	80	128	76	116	66	99	62	93	58	87	51	77	46	69
		2	1/4"	86	138	81	130	80	128	76	122	72	114	69	107	67	100	60	89	54	80
	16ga (.0590")	2	#10	57	86	46	69	43	64	38	57	33	49	30	46	29	43	25	38	23	34
		2	#12	65	97	52	78	49	73	43	65	37	56	35	52	32	49	29	43	26	39
		2	1/4"	75	113	60	90	56	85	50	75	43	64	40	60	38	56	33	50	30	45
	18ga (.0459")	2	#10	44	67	36	53	33	50	30	44	25	38	24	36	22	33	20	30	18	27
		2	#12	51	76	40	61	38	57	34	51	29	43	27	40	25	38	22	34	20	30
		2	1/4"	59	88	47	70	44	66	39	59	33	50	31	47	29	44	26	39	23	35
	20ga (.0354")	2	#10	34	51	27	41	26	39	23	34	20	29	18	27	17	26	15	23	14	21
		2	#12	39	58	31	47	29	44	26	39	22	33	21	31	19	29	17	26	16	23
		2	1/4"	45	68	36	54	34	51	30	45	26	39	24	36	23	34	20	30	18	27
	22ga (.0294")	2	#10	28	43	23	34	21	32	19	28	16	24	15	23	14	21	13	19	11	17
		2	#12	32	49	26	39	24	36	22	32	19	28	17	26	16	24	14	22	13	19
		2	1/4"	37	56	30	45	28	42	25	37	21	32	20	30	19	28	17	25	15	22
Plywood & OSB	15/32" (& 1/2")	2	#10	33	44	26	36	25	33	22	30	19	25	18	24	16	22	15	20	13	18
		2	#12	37	50	30	40	28	38	25	34	21	29	20	27	19	25	17	22	15	20
		2	#14	41	56	33	45	31	42	27	37	24	32	22	30	21	28	18	25	16	22
	19/32" (& 5/8")	2	#10	42	56	33	45	31	42	28	38	24	32	22	30	21	28	19	25	17	23
		2	#12	47	64	38	51	36	48	32	43	27	37	25	34	24	32	21	28	19	26
		2	#14	52	70	42	56	39	53	35	47	30	40	28	38	26	35	23	31	21	28
	23/32" (& 3/4")	2	#10	50	68	40	54	38	51	34	45	29	39	27	36	25	34	22	30	20	27
		2	#12	57	77	46	62	43	58	38	52	33	44	31	41	29	39	25	34	23	31
		2	#14	63	85	51	68	47	64	42	57	36	49	34	45	32	43	28	38	25	34
Lumber (DFL)	1" min	2	#10	83	112	67	90	62	84	55	75	48	64	44	60	42	56	37	50	33	45
		2	#12	86	128	76	102	71	96	63	85	54	73	50	68	47	64	42	57	38	51
		2	#14	86	138	81	113	78	106	69	94	60	80	56	75	52	70	46	63	42	56

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Table accounts for increased loads on fasteners due to the eccentricity of the fasteners relative to the panel seam. The Flex Series panel summary chart at the front of this section provides for development of these fastener load adjustments.
2. Number of clip fasteners can be reduced to (1) if project load requirements can still be met. The tabulated panel system capacities shall be reduced by 1/2.
3. Number of clip fasteners can be increased to (3), and tabulated capacity increased by 50%, with the final capacity not to exceed max Panel/Clip Capacity stated at the top of the chart.

TABLE 7.17 - Outward (negative) uniform load capacities (Flex Series 1.2FX10/20/30/40-12c, 24ga, CLIP ATTACHED):

Flex Series 1.2FX10/20/30/40-12c, 24ga (CLIP ATTACHED)																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	2' - 0"		2' - 6"		2' - 8"		3' - 0"		3' - 6"		3' - 9"		4' - 0"		4' - 6"		5' - 0"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				87	139	78	125	75	120	69	110	60	96	55	89	51	81	42	67	33	52
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga (.1050")	2	#10	87	139	78	125	75	120	69	110	60	96	55	89	51	81	42	67	33	52
		2	#12	87	139	78	125	75	120	69	110	60	96	55	89	51	81	42	67	33	52
		2	1/4"	87	139	78	125	75	120	69	110	60	96	55	89	51	81	42	67	33	52
	14ga (.0700")	2	#10	87	139	78	118	73	110	65	98	56	84	52	78	49	73	42	65	33	52
		2	#12	87	139	78	125	75	120	69	110	60	95	55	89	51	81	42	67	33	52
		2	1/4"	87	139	78	125	75	120	69	110	60	96	55	89	51	81	42	67	33	52
	16ga (.0590")	2	#10	83	124	66	99	62	93	55	83	47	71	44	66	41	62	37	55	33	50
		2	#12	87	139	75	113	70	106	63	94	54	80	50	75	47	70	42	63	33	52
		2	1/4"	87	139	78	125	75	120	69	109	60	93	55	87	51	81	42	67	33	52
	18ga (.0459")	2	#10	64	96	51	77	48	72	43	64	37	55	34	51	32	48	29	43	26	39
		2	#12	73	110	58	88	55	82	49	73	42	63	39	58	37	55	32	49	29	44
		2	1/4"	85	127	68	101	63	95	56	85	48	72	45	68	42	63	38	56	33	51
	20ga (.0354")	2	#10	50	74	40	59	37	56	33	50	28	42	26	40	25	37	22	33	20	30
		2	#12	56	84	45	68	42	63	38	56	32	48	30	45	28	42	25	38	23	34
		2	1/4"	65	98	52	78	49	73	43	65	37	56	35	52	33	49	29	43	26	39
Cold Formed Steel (Gr 33 min.)	≥12ga (.1050")	2	#10	87	139	78	122	75	114	68	102	58	87	54	81	51	76	42	67	33	52
		2	#12	87	139	78	125	75	120	69	110	60	96	55	89	51	81	42	67	33	52
		2	1/4"	87	139	78	125	75	120	69	110	60	96	55	89	51	81	42	67	33	52
	16ga (.0590")	2	#10	57	86	46	69	43	64	38	57	33	49	30	46	29	43	25	38	23	34
		2	#12	65	97	52	78	49	73	43	65	37	56	35	52	32	49	29	43	26	39
		2	1/4"	75	113	60	90	56	85	50	75	43	64	40	60	38	56	33	50	30	45
	18ga (.0459")	2	#10	44	67	36	53	33	50	30	44	25	38	24	36	22	33	20	30	18	27
		2	#12	51	76	40	61	38	57	34	51	29	43	27	40	25	38	22	34	20	30
		2	1/4"	59	88	47	70	44	66	39	59	33	50	31	47	29	44	26	39	23	35
	20ga (.0354")	2	#10	34	51	27	41	26	39	23	34	20	29	18	27	17	26	15	23	14	21
		2	#12	39	58	31	47	29	44	26	39	22	33	21	31	19	29	17	26	16	23
		2	1/4"	45	68	36	54	34	51	30	45	26	39	24	36	23	34	20	30	18	27
	22ga (.0294")	2	#10	28	43	23	34	21	32	19	28	16	24	15	23	14	21	13	19	11	17
		2	#12	32	49	26	39	24	36	22	32	19	28	17	26	16	24	14	22	13	19
		2	1/4"	37	56	30	45	28	42	25	37	21	32	20	30	19	28	17	25	15	22
Plywood & OSB	15/32" (& 1/2")	2	#10	33	44	26	36	25	33	22	30	19	25	18	24	16	22	15	20	13	18
		2	#12	37	50	30	40	28	38	25	34	21	29	20	27	19	25	17	22	15	20
		2	#14	41	56	33	45	31	42	27	37	24	32	22	30	21	28	18	25	16	22
	19/32" (& 5/8")	2	#10	42	56	33	45	31	42	28	38	24	32	22	30	21	28	19	25	17	23
		2	#12	47	64	38	51	36	48	32	43	27	37	25	34	24	32	21	28	19	26
		2	#14	52	70	42	56	39	53	35	47	30	40	28	38	26	35	23	31	21	28
	23/32" (& 3/4")	2	#10	50	68	40	54	38	51	34	45	29	39	27	36	25	34	22	30	20	27
		2	#12	57	77	46	62	43	58	38	52	33	44	31	41	29	39	25	34	23	31
		2	#14	63	85	51	68	47	64	42	57	36	49	34	45	32	43	28	38	25	34
Lumber (DFL)	1" min	2	#10	83	112	67	90	62	84	55	75	48	64	44	60	42	56	37	50	33	45
		2	#12	87	128	76	102	71	96	63	85	54	73	50	68	47	64	42	57	33	51
		2	#14	87	139	78	113	75	106	69	94	60	80	55	75	51	70	42	63	33	52

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Table accounts for increased loads on fasteners due to the eccentricity of the fasteners relative to the panel seam. The Flex Series panel summary chart at the front of this section provides for development of these fastener load adjustments.
2. Number of clip fasteners can be reduced to (1) if project load requirements can still be met. The tabulated panel system capacities shall be reduced by 1/2.
3. Number of clip fasteners can be increased to (3), and tabulated capacity increased by 50%, with the final capacity not to exceed max Panel/Clip Capacity stated at the top of the chart.

TABLE 7.18- Outward (negative) uniform load capacities (Flex Series 1.2FX10-12d, 20-24ga, DIRECT FASTENED):

Flex Series 1.2FX10-12d, 20-24ga (DIRECT FASTENED)																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	2' - 0"		2' - 6"		2' - 8"		3' - 0"		3' - 6"		3' - 9"		4' - 0"		4' - 6"		5' - 0"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				100	160	93	149	91	146	87	139	80	128	77	123	73	117	67	107	60	96
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga (.1050")	1	#10	100	160	93	149	91	146	87	139	80	128	77	123	73	117	67	107	60	96
		1	#12	100	160	93	149	91	146	87	139	80	128	77	123	73	117	67	107	60	96
		1	1/4"	100	160	93	149	91	146	87	139	80	128	77	123	73	117	67	107	60	96
	14ga (.0700")	1	#10	100	160	93	147	91	138	82	122	70	105	65	98	61	92	54	82	49	73
		1	#12	100	160	93	149	91	146	87	139	80	119	74	111	70	104	62	93	56	84
		1	1/4"	100	160	93	149	91	146	87	139	80	128	77	123	73	117	67	107	60	96
	16ga (.0590")	1	#10	100	155	83	124	77	116	69	103	59	88	55	83	52	77	46	69	41	62
		1	#12	100	160	93	141	88	132	78	117	67	101	63	94	59	88	52	78	47	70
		1	1/4"	100	160	93	149	91	146	87	136	78	116	72	109	68	102	60	91	54	81
	18ga (.0459")	1	#10	80	120	64	96	60	90	54	80	46	69	43	64	40	60	36	54	32	48
		1	#12	91	137	73	110	68	103	61	91	52	78	49	73	46	68	41	61	37	55
		1	1/4"	100	158	85	127	79	119	70	106	60	91	56	85	53	79	47	70	42	63
	20ga (.0354")	1	#10	62	93	50	74	46	70	41	62	35	53	33	50	31	46	28	41	25	37
		1	#12	70	106	56	84	53	79	47	70	40	60	38	56	35	53	31	47	28	42
		1	1/4"	81	122	65	98	61	92	54	81	47	70	43	65	41	61	36	54	33	49
Cold Formed Steel (Gr 33 min.)	≥12ga (.1050")	1	#10	100	160	93	149	91	143	85	127	73	109	68	102	64	95	57	85	51	76
		1	#12	100	160	93	149	91	146	87	139	80	124	77	116	72	108	64	96	58	87
		1	1/4"	100	160	93	149	91	146	87	139	80	128	77	123	73	117	67	107	60	96
	16ga (.0590")	1	#10	71	107	57	86	54	80	48	71	41	61	38	57	36	54	32	48	29	43
		1	#12	81	122	65	97	61	91	54	81	46	70	43	65	41	61	36	54	32	49
		1	1/4"	94	141	75	113	71	106	63	94	54	81	50	75	47	71	42	63	38	56
	18ga (.0459")	1	#10	56	83	44	67	42	63	37	56	32	48	30	44	28	42	25	37	22	33
		1	#12	63	95	51	76	47	71	42	63	36	54	34	51	32	47	28	42	25	38
		1	1/4"	73	110	59	88	55	82	49	73	42	63	39	59	37	55	33	49	29	44
	20ga (.0354")	1	#10	43	64	34	51	32	48	29	43	25	37	23	34	21	32	19	29	17	26
		1	#12	49	73	39	58	37	55	32	49	28	42	26	39	24	37	22	32	19	29
		1	1/4"	56	85	45	68	42	63	38	56	32	48	30	45	28	42	25	38	23	34
	22ga (.0294")	1	#10	36	53	28	43	27	40	24	36	20	31	19	28	18	27	16	24	14	21
		1	#12	40	61	32	49	30	46	27	40	23	35	22	32	20	30	18	27	16	24
		1	1/4"	47	70	37	56	35	53	31	47	27	40	25	37	23	35	21	31	19	28
Plywood & OSB	15/32" (& 1/2")	1	#10	41	56	33	44	31	42	27	37	23	32	22	30	21	28	18	25	16	22
		1	#12	47	63	37	50	35	47	31	42	27	36	25	34	23	32	21	28	19	25
		1	#14	52	70	41	56	39	52	34	46	29	40	27	37	26	35	23	31	21	28
	19/32" (& 5/8")	1	#10	52	70	42	56	39	53	35	47	30	40	28	38	26	35	23	31	21	28
		1	#12	59	80	47	64	44	60	39	53	34	46	32	43	30	40	26	36	24	32
		1	#14	65	88	52	70	49	66	43	59	37	50	35	47	33	44	29	39	26	35
	23/32" (& 3/4")	1	#10	63	85	50	68	47	64	42	57	36	49	34	45	32	43	28	38	25	34
		1	#12	72	97	57	77	54	73	48	65	41	55	38	52	36	48	32	43	29	39
		1	#14	79	107	63	85	59	80	53	71	45	61	42	57	39	53	35	47	32	43
Lumber (DFL)	1" min	1	#10	100	140	83	112	78	105	69	94	59	80	55	75	52	70	46	62	42	56
		1	#12	100	160	93	128	89	120	79	106	68	91	63	85	59	80	53	71	47	64
		1	#14	100	160	93	141	91	132	87	117	74	101	69	94	65	88	58	78	52	70

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Number of fasteners at each support location can be increased to (2), and tabulated capacity doubled, with the final capacity not to exceed max Panel/Clip Capacity stated at the top of the chart. Fastener locations must satisfy minimum edge distance requirements; refer to General Notes.

TABLE 7.19 - Outward (negative) uniform load capacities (Flex Series 1.2FX20/30/40-12d, 20-24ga, DIRECT FASTENED):

Flex Series 1.2FX20/30/40-12d, 20-24ga (DIRECT FASTENED)																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	2' - 0"		2' - 6"		2' - 8"		3' - 0"		3' - 6"		3' - 9"		4' - 0"		4' - 6"		5' - 0"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				89	142	81	130	79	126	74	119	67	107	63	101	60	96	53	84	45	72
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga (.1050")	1	#10	89	142	81	130	79	126	74	119	67	107	63	101	60	96	53	84	45	72
		1	#12	89	142	81	130	79	126	74	119	67	107	63	101	60	96	53	84	45	72
		1	1/4"	89	142	81	130	79	126	74	119	67	107	63	101	60	96	53	84	45	72
	14ga (.0700")	1	#10	89	142	81	130	79	126	74	119	67	105	63	98	60	92	53	82	45	72
		1	#12	89	142	81	130	79	126	74	119	67	107	63	101	60	96	53	84	45	72
		1	1/4"	89	142	81	130	79	126	74	119	67	107	63	101	60	96	53	84	45	72
	16ga (.0590")	1	#10	89	142	81	124	77	116	69	103	59	88	55	83	52	77	46	69	41	62
		1	#12	89	142	81	130	79	126	74	117	67	101	63	94	59	88	52	78	45	70
		1	1/4"	89	142	81	130	79	126	74	119	67	107	63	101	60	96	53	84	45	72
	18ga (.0459")	1	#10	80	120	64	96	60	90	54	80	46	69	43	64	40	60	36	54	32	48
		1	#12	89	137	73	110	68	103	61	91	52	78	49	73	46	68	41	61	37	55
		1	1/4"	89	142	81	127	79	119	70	106	60	91	56	85	53	79	47	70	42	63
	20ga (.0354")	1	#10	62	93	50	74	46	70	41	62	35	53	33	50	31	46	28	41	25	37
		1	#12	70	106	56	84	53	79	47	70	40	60	38	56	35	53	31	47	28	42
		1	1/4"	81	122	65	98	61	92	54	81	47	70	43	65	41	61	36	54	33	49
Cold Formed Steel (Gr 33 min.)	≥12ga (.1050")	1	#10	89	142	81	130	79	126	74	119	67	107	63	101	60	95	53	84	45	72
		1	#12	89	142	81	130	79	126	74	119	67	107	63	101	60	96	53	84	45	72
		1	1/4"	89	142	81	130	79	126	74	119	67	107	63	101	60	96	53	84	45	72
	16ga (.0590")	1	#10	71	107	57	86	54	80	48	71	41	61	38	57	36	54	32	48	29	43
		1	#12	81	122	65	97	61	91	54	81	46	70	43	65	41	61	36	54	32	49
		1	1/4"	89	141	75	113	71	106	63	94	54	81	50	75	47	71	42	63	38	56
	18ga (.0459")	1	#10	56	83	44	67	42	63	37	56	32	48	30	44	28	42	25	37	22	33
		1	#12	63	95	51	76	47	71	42	63	36	54	34	51	32	47	28	42	25	38
		1	1/4"	73	110	59	88	55	82	49	73	42	63	39	59	37	55	33	49	29	44
	20ga (.0354")	1	#10	43	64	34	51	32	48	29	43	25	37	23	34	21	32	19	29	17	26
		1	#12	49	73	39	58	37	55	32	49	28	42	26	39	24	37	22	32	19	29
		1	1/4"	56	85	45	68	42	63	38	56	32	48	30	45	28	42	25	38	23	34
	22ga (.0294")	1	#10	36	53	28	43	27	40	24	36	20	31	19	28	18	27	16	24	14	21
		1	#12	40	61	32	49	30	46	27	40	23	35	22	32	20	30	18	27	16	24
		1	1/4"	47	70	37	56	35	53	31	47	27	40	25	37	23	35	21	31	19	28
Plywood & OSB	15/32" (& 1/2")	1	#10	41	56	33	44	31	42	27	37	23	32	22	30	21	28	18	25	16	22
		1	#12	47	63	37	50	35	47	31	42	27	36	25	34	23	32	21	28	19	25
		1	#14	52	70	41	56	39	52	34	46	29	40	27	37	26	35	23	31	21	28
	19/32" (& 5/8")	1	#10	52	70	42	56	39	53	35	47	30	40	28	38	26	35	23	31	21	28
		1	#12	59	80	47	64	44	60	39	53	34	46	32	43	30	40	26	36	24	32
		1	#14	65	88	52	70	49	66	43	59	37	50	35	47	33	44	29	39	26	35
	23/32" (& 3/4")	1	#10	63	85	50	68	47	64	42	57	36	49	34	45	32	43	28	38	25	34
		1	#12	72	97	57	77	54	73	48	65	41	55	38	52	36	48	32	43	29	39
		1	#14	79	107	63	85	59	80	53	71	45	61	42	57	39	53	35	47	32	43
Lumber (DFL)	1" min	1	#10	89	140	81	112	78	105	69	94	59	80	55	75	52	70	46	62	42	56
		1	#12	89	142	81	128	79	120	74	106	67	91	63	85	59	80	53	71	45	64
		1	#14	89	142	81	130	79	126	74	117	67	101	63	94	60	88	53	78	45	70

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Number of fasteners at each support location can be increased to (2), and tabulated capacity doubled, with the final capacity not to exceed max Panel/Clip Capacity stated at the top of the chart. Fastener locations must satisfy minimum edge distance requirements; refer to General Notes.

8.0 – Perception Collection®

TABLE 8.1 - Profiles:

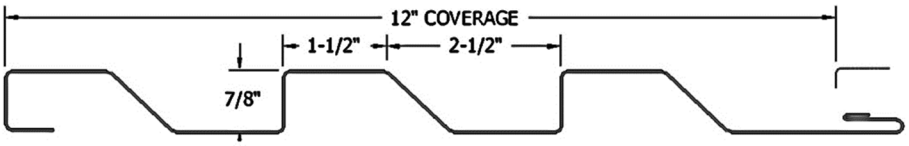
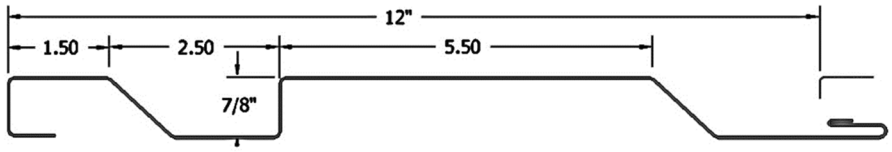
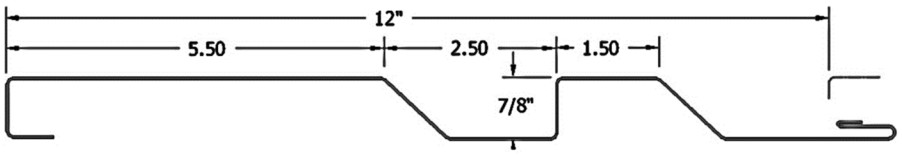
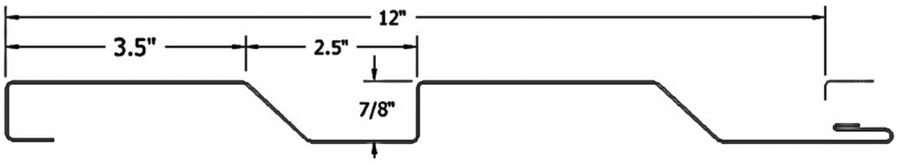
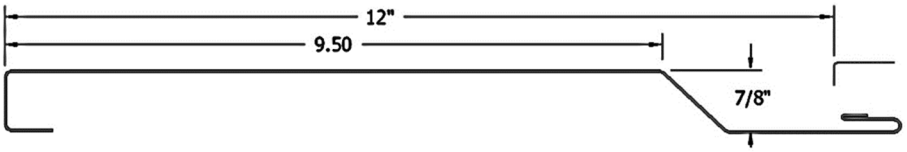
Perception Collection® PC10-12	
Perception Collection® PC20-12	
Perception Collection® PC30-12	
Perception Collection® PC40-12	
Perception Collection® PC50-12	
Profiles are shown with Clip Attached (C suffix) configuration. Also available Direct Fastened - with nailing flange (D suffix).	

TABLE 8.2 – Profile Details:

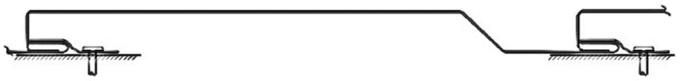
Panel Use:	Wall, soffit, fascia, ceiling
Substrates:	Over solid substrates or over open framing
Available Gauges:	No. 20, 22, 24 gauge
Minimum Slope:	Wall (installed horizontally or vertically) or soffit applications only
Load Combination Reduction Available (Ref. Section 5.6)	No.
Typical Installed View – Clip Attached ("0.5 Stand-off)	
Typical Installed View – Direct Fastened	

TABLE 8.3 - Attachment:

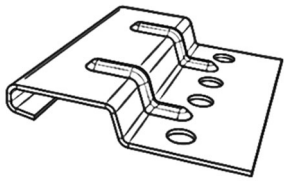
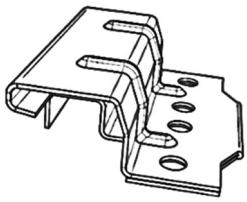
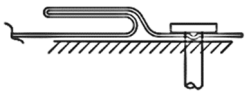
Clip Name:	Flush Clip	Standoff Clip	N/A – Direct Fastened
Clip View:			
Clip Usage:	Over spaced framing or solid substrates		
Part #:	#WALLCLP	#WALLCLP0.5	N/A
Panel/ Substrate Gap:	0” (Flush)	1/2"	0” (Flush)
Thermal Movement:	Unlimited	Unlimited	None.
Fastener Limitations:	Nom. size: 1/4 inch max. Head height: 5/16 inch max. Head dia.: 1/2 inch max.		
Recommended Fastener(s):	#12, #14, or 1/4 inch dia. hex washer head		
Fastener Load Adjustments (due to eccentricity of fasteners relative to panel seam)**:**	Per fastener: 2.5 ΣM = 0 1.88P = .75R		N/A
Associated Bearing Plate:	N/A		

TABLE 8.4 - Section properties (Perception Collection® PC10-12):

Gauge	Weight	Base Metal Thickness	Yield Strength	Tensile Strength	Gross Section Properties				
					Area	Moment of Inertia	Distance to N.A. from Bottom	Positive Section Modulus	Negative Section Modulus
	w	t	Fy	Fu	A_g	I_g	y_b	S_g+	S_g-
	psf	in	ksi	ksi	in^2/ft	in^4/ft	in	in^3/ft	in^3/ft
24	1.49	0.0232	50	65	0.4258	0.0562	0.39	0.1101	0.1447
22	1.87	0.0294	50	65	0.5396	0.0712	0.39	0.1388	0.1820
20	2.24	0.0354	40	55	0.6498	0.0860	0.39	0.1661	0.2175

Gauge	Effective Section Properties							Uniform Load Only	
	Area	Positive			Negative				
		Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	$I_d = (2I_e+I_g)/3$	
	A_e/ft	I_e+	y_b	S_e+	I_e-	y_b	S_e-	I+	I-
	in^2	in^4/ft	in	in^3/ft	in^4/ft	in	in^3/ft	in^4/ft	in^4/ft
24	0.2369	0.0549	0.35	0.0855	0.0521	0.46	0.0959	0.0553	0.0535
22	0.3522	0.0711	0.37	0.1194	0.0682	0.45	0.1327	0.0711	0.0692
20	0.5119	0.0860	0.39	0.1610	0.0850	0.41	0.1632	0.0860	0.0853

TABLE 8.5 - Allowable reactions at supports (Perception Collection® PC10-12):

Reactions at Supports based on Web Crippling (lbs/ft width)			
Gauge	Condition	Allowable	Factored
24	End	433	663
	Interior	679	1009
22	End	662	1013
	Interior	1047	1558
20	End	739	1131
	Interior	1177	1751

Reaction capacities based on a minimum 1.25" web bearing length.
Capacities apply to flush mounted panel installations only. Data not available for assemblies using 1/2" stand-off clip.

TABLE 8.6 - Inward (positive) uniform load capacities (Perception Collection® PC10-12):

Perception Collection PC10-12									
			Positive (Inward) Uniform Load Capacity (lbs/ft²) / Span (ft. - in.)						
Gauge	Span	Condition	2' - 0"	3' - 0"	4' - 0"	5' - 0"	6' - 0"	7' - 0"	8' - 0"
24	Single Span	ASD, W/Ω	427	190	107	68	47	35	27
		LRFD, ϕW	663	301	169	108	75	55	42
		L/180	*605*	*179*	*76*	*39*	*22*	*14*	*9*
		L/60	*1814*	*537*	*227*	*116*	*67*	*42*	*28*
	Double Span	ASD, W/Ω	271	181	116	74	52	38	29
		LRFD, ϕW	404	269	174	112	79	58	44
		L/180	*1456*	*432*	*182*	*93*	*54*	*34*	*23*
		L/60	*4369*	*1295*	*546*	*280*	*162*	*102*	*68*
	Triple Span	ASD, W/Ω	308	206	143	93	65	48	37
		LRFD, ϕW	459	306	216	140	98	72	56
		L/180	*1141*	*338*	*143*	*73*	*42*	*27*	*18*
		L/60	*3423*	*1014*	*428*	*219*	*127*	*80*	*53*
22	Single Span	ASD, W/Ω	596	265	149	95	66	49	37
		LRFD, ϕW	945	420	236	151	105	77	59
		L/180	*777*	*230*	*97*	*50*	*29*	*18*	*12*
		L/60	*2332*	*691*	*291*	*149*	*86*	*54*	*36*
	Double Span	ASD, W/Ω	419	278	159	104	72	52	41
		LRFD, ϕW	623	415	240	156	108	79	61
		L/180	*1872*	*555*	*234*	*120*	*69*	*44*	*29*
		L/60	*>5k*	*1664*	*702*	*359*	*208*	*131*	*88*
	Triple Span	ASD, W/Ω	476	317	197	128	90	66	50
		LRFD, ϕW	708	472	297	193	135	100	76
		L/180	*1467*	*435*	*183*	*94*	*54*	*34*	*23*
		L/60	*4400*	*1304*	*550*	*282*	*163*	*103*	*69*
20	Single Span	ASD, W/Ω	643	286	161	103	71	52	40
		LRFD, ϕW	1020	453	255	163	113	83	64
		L/180	*940*	*278*	*117*	*60*	*35*	*22*	*15*
		L/60	*2819*	*835*	*352*	*180*	*104*	*66*	*44*
	Double Span	ASD, W/Ω	471	273	157	101	71	52	40
		LRFD, ϕW	701	411	237	152	107	79	60
		L/180	*2263*	*671*	*283*	*145*	*84*	*53*	*35*
		L/60	*>5k*	*2012*	*849*	*435*	*251*	*158*	*106*
	Triple Span	ASD, W/Ω	535	333	193	125	88	65	50
		LRFD, ϕW	796	501	291	189	132	98	75
		L/180	*1773*	*525*	*222*	*113*	*66*	*41*	*28*
		L/60	*>5k*	*1576*	*665*	*340*	*197*	*124*	*83*

TABLE 8.7 - Section properties (Perception Collection® PC20-12):

Gauge	Weight	Base Metal Thickness	Yield Strength	Tensile Strength	Gross Section Properties				
					Area	Moment of Inertia	Distance to N.A. from Bottom	Positive Section Modulus	Negative Section Modulus
	w	t	Fy	Fu	A_g	I_g	y_b	S_g+	S_g-
	psf	in	ksi	ksi	in^2/ft	in^4/ft	in	in^3/ft	in^3/ft
24	1.40	0.0232	50	65	0.3992	0.0584	0.49	0.1426	0.1197
22	1.76	0.0294	50	65	0.5059	0.0741	0.49	0.1794	0.1507
20	2.11	0.0354	40	55	0.6091	0.0890	0.49	0.2145	0.1804

Gauge	Effective Section Properties							Uniform Load Only	
	Area	Positive			Negative				
		Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	$I_d = (2I_e+I_g)/3$	
	A_e/ft	I_e+	y_b	S_e+	I_e-	y_b	S_e-	I+	I-
	in^2	in^4/ft	in	in^3/ft	in^4/ft	in	in^3/ft	in^4/ft	in^4/ft
24	0.1279	0.0429	0.33	0.0600	0.0518	0.57	0.0752	0.0481	0.0540
22	0.1944	0.0577	0.36	0.0852	0.0691	0.56	0.1067	0.0632	0.0708
20	0.2929	0.0740	0.39	0.1190	0.0870	0.53	0.1498	0.0790	0.0877

TABLE 8.8 - Allowable reactions at supports (Perception Collection® PC20-12):

Reactions at Supports based on Web Crippling (lbs/ft width)			
Gauge	Condition	Allowable	Factored
24	End	289	442
	Interior	452	673
22	End	441	675
	Interior	698	1038
20	End	493	754
	Interior	785	1168

Reaction capacities based on a minimum 1.25" web bearing length.
Capacities apply to flush mounted panel installations only. Data not available for assemblies using 1/2" stand-off clip.

TABLE 8.9 - Inward (positive) uniform load capacities (Perception Collection® PC20-12):

Perception Collection PC20-12									
			Positive (Inward) Uniform Load Capacity (lbs/ft²) / Span (ft. - in.)						
Gauge	Span	Condition	2' - 0"	3' - 0"	4' - 0"	5' - 0"	6' - 0"	7' - 0"	8' - 0"
24	Single Span	ASD, W/Ω	289	133	75	48	33	24	19
		LRFD, ϕW	442	211	119	76	53	39	30
		L/180	*525*	*156*	*66*	*34*	*19*	*12*	*8*
		L/60	*1576*	*467*	*197*	*101*	*58*	*37*	*25*
	Double Span	ASD, W/Ω	181	121	90	58	41	30	23
		LRFD, ϕW	269	179	135	87	61	45	35
		L/180	*1265*	*375*	*158*	*81*	*47*	*30*	*20*
		L/60	*3795*	*1125*	*474*	*243*	*141*	*89*	*59*
	Triple Span	ASD, W/Ω	206	137	103	72	50	37	28
		LRFD, ϕW	306	204	153	108	76	56	43
		L/180	*991*	*294*	*124*	*63*	*37*	*23*	*15*
		L/60	*2973*	*881*	*372*	*190*	*110*	*69*	*46*
22	Single Span	ASD, W/Ω	425	189	106	68	47	35	27
		LRFD, ϕW	675	300	169	108	75	55	42
		L/180	*690*	*204*	*86*	*44*	*26*	*16*	*11*
		L/60	*2070*	*613*	*259*	*133*	*77*	*48*	*32*
	Double Span	ASD, W/Ω	279	186	126	82	58	42	33
		LRFD, ϕW	415	277	190	124	87	64	49
		L/180	*1662*	*493*	*208*	*106*	*62*	*39*	*26*
		L/60	*4987*	*1478*	*623*	*319*	*185*	*116*	*78*
	Triple Span	ASD, W/Ω	317	212	155	102	71	53	40
		LRFD, ϕW	472	315	234	153	107	80	61
		L/180	*1302*	*386*	*163*	*83*	*48*	*30*	*20*
		L/60	*3907*	*1158*	*488*	*250*	*145*	*91*	*61*
20	Single Span	ASD, W/Ω	475	211	119	76	53	39	30
		LRFD, ϕW	754	335	188	121	84	62	47
		L/180	*863*	*256*	*108*	*55*	*32*	*20*	*13*
		L/60	*2589*	*767*	*324*	*166*	*96*	*60*	*40*
	Double Span	ASD, W/Ω	314	209	140	91	64	47	36
		LRFD, ϕW	467	311	211	138	96	71	55
		L/180	*2079*	*616*	*260*	*133*	*77*	*48*	*32*
		L/60	*>5k*	*1848*	*780*	*399*	*231*	*145*	*97*
	Triple Span	ASD, W/Ω	357	238	171	113	80	59	45
		LRFD, ϕW	531	354	257	170	120	89	68
		L/180	*1629*	*483*	*204*	*104*	*60*	*38*	*25*
		L/60	*4886*	*1448*	*611*	*313*	*181*	*114*	*76*

TABLE 8.10 - Section properties (Perception Collection® PC30-12):

Gauge	Weight	Base Metal Thickness	Yield Strength	Tensile Strength	Gross Section Properties				
					Area	Moment of Inertia	Distance to N.A. from Bottom	Positive Section Modulus	Negative Section Modulus
	w	t	Fy	Fu	A_g	I_g	y_b	S_g+	S_g-
	psf	in	ksi	ksi	in^2/ft	in^4/ft	in	in^3/ft	in^3/ft
24	1.40	0.0232	50	65	0.3992	0.0585	0.49	0.1426	0.1197
22	1.76	0.0294	50	65	0.5059	0.0741	0.49	0.1794	0.1507
20	2.11	0.0354	40	55	0.6092	0.0890	0.49	0.2146	0.1805

Gauge	Effective Section Properties							Uniform Load Only	
	Area	Positive			Negative				
		Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	$I_d = (2I_e+I_g)/3$	
	A_e/ft	I_e+	y_b	S_e+	I_e-	y_b	S_e-	I+	I-
	in^2	in^4/ft	in	in^3/ft	in^4/ft	in	in^3/ft	in^4/ft	in^4/ft
24	0.1278	0.0429	0.33	0.0600	0.0518	0.57	0.0752	0.0481	0.0540
22	0.1943	0.0577	0.36	0.0852	0.0691	0.56	0.1066	0.0632	0.0708
20	0.2928	0.0745	0.38	0.1190	0.0870	0.53	0.1498	0.0793	0.0877

TABLE 8.11 - Allowable reactions at supports (Perception Collection® PC30-12):

Reactions at Supports based on Web Crippling (lbs/ft width)			
Gauge	Condition	Allowable	Factored
24	End	289	442
	Interior	452	673
22	End	441	675
	Interior	698	1038
20	End	493	754
	Interior	785	1168

Reaction capacities based on a minimum 1.25" web bearing length.
Capacities apply to flush mounted panel installations only. Data not available for assemblies using 1/2" stand-off clip.

TABLE 8.12 - Inward (positive) uniform load capacities (Perception Collection® PC30-12):

Perception Collection PC30-12									
			Positive (Inward) Uniform Load Capacity (lbs/ft^2) / Span (ft. - in.)						
Gauge	Span	Condition	2' - 0"	3' - 0"	4' - 0"	5' - 0"	6' - 0"	7' - 0"	8' - 0"
24	Single Span	ASD, W/Ω	289	133	75	48	33	24	19
		LRFD, ϕW	442	211	119	76	53	39	30
		L/180	*526*	*156*	*66*	*34*	*19*	*12*	*8*
		L/60	*1577*	*467*	*197*	*101*	*58*	*37*	*25*
	Double Span	ASD, W/Ω	181	121	89	58	41	30	23
		LRFD, ϕW	269	179	135	87	61	45	35
		L/180	*1266*	*375*	*158*	*81*	*47*	*30*	*20*
		L/60	*3798*	*1125*	*475*	*243*	*141*	*89*	*59*
	Triple Span	ASD, W/Ω	206	137	103	72	50	37	28
		LRFD, ϕW	306	204	153	108	76	56	43
		L/180	*992*	*294*	*124*	*63*	*37*	*23*	*15*
		L/60	*2975*	*882*	*372*	*190*	*110*	*69*	*46*
22	Single Span	ASD, W/Ω	425	189	106	68	47	35	27
		LRFD, ϕW	675	300	169	108	75	55	42
		L/180	*690*	*204*	*86*	*44*	*26*	*16*	*11*
		L/60	*2070*	*613*	*259*	*133*	*77*	*48*	*32*
	Double Span	ASD, W/Ω	279	186	127	82	57	42	33
		LRFD, ϕW	415	277	191	124	86	64	49
		L/180	*1662*	*493*	*208*	*106*	*62*	*39*	*26*
		L/60	*4987*	*1478*	*623*	*319*	*185*	*116*	*78*
	Triple Span	ASD, W/Ω	317	212	156	102	71	53	40
		LRFD, ϕW	472	315	234	153	107	80	61
		L/180	*1302*	*386*	*163*	*83*	*48*	*30*	*20*
		L/60	*3907*	*1158*	*488*	*250*	*145*	*91*	*61*
20	Single Span	ASD, W/Ω	475	211	119	76	53	39	30
		LRFD, ϕW	754	335	188	121	84	62	47
		L/180	*867*	*257*	*108*	*55*	*32*	*20*	*14*
		L/60	*2600*	*770*	*325*	*166*	*96*	*61*	*41*
	Double Span	ASD, W/Ω	314	209	140	91	64	47	36
		LRFD, ϕW	467	311	211	138	96	71	55
		L/180	*2088*	*619*	*261*	*134*	*77*	*49*	*33*
		L/60	*>5k*	*1856*	*783*	*401*	*232*	*146*	*98*
	Triple Span	ASD, W/Ω	357	238	171	113	80	59	45
		LRFD, ϕW	531	354	257	170	120	89	68
		L/180	*1636*	*485*	*204*	*105*	*61*	*38*	*26*
		L/60	*4907*	*1454*	*613*	*314*	*182*	*114*	*77*

TABLE 8.13 - Section properties (Perception Collection® PC40-12):

Gauge	Weight	Base Metal Thickness	Yield Strength	Tensile Strength	Gross Section Properties				
					Area	Moment of Inertia	Distance to N.A. from Bottom	Positive Section Modulus	Negative Section Modulus
	w	t	Fy	Fu	A_g	I_g	y_b	S_g+	S_g-
	psf	in	ksi	ksi	in^2/ft	in^4/ft	in	in^3/ft	in^3/ft
24	1.40	0.0232	50	65	0.3992	0.0585	0.49	0.1426	0.1197
22	1.76	0.0294	50	65	0.5059	0.0741	0.49	0.1794	0.1507
20	2.11	0.0354	40	55	0.6092	0.0890	0.49	0.2145	0.1805

Gauge	Effective Section Properties							Uniform Load Only	
	Area	Positive			Negative				
		Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	$I_d = (2I_e+I_g)/3$	
	A_e/ft	I_e+	y_b	S_e+	I_e-	y_b	S_e-	I+	I-
	in^2	in^4/ft	in	in^3/ft	in^4/ft	in	in^3/ft	in^4/ft	in^4/ft
24	0.1534	0.0458	0.34	0.0614	0.0518	0.57	0.0752	0.0500	0.0540
22	0.2340	0.0630	0.36	0.0881	0.0691	0.56	0.1066	0.0667	0.0708
20	0.3534	0.0824	0.39	0.1253	0.0870	0.53	0.1497	0.0846	0.0877

TABLE 8.14 - Allowable reactions at supports (Perception Collection® PC40-12):

Reactions at Supports based on Web Crippling (lbs/ft width)			
Gauge	Condition	Allowable	Factored
24	End	289	442
	Interior	452	673
22	End	441	675
	Interior	698	1038
20	End	493	754
	Interior	785	1168

Reaction capacities based on a minimum 1.25" web bearing length.
Capacities apply to flush mounted panel installations only. Data not available for assemblies using 1/2" stand-off clip.

TABLE 8.15 - Inward (positive) uniform load capacities (Perception Collection® PC40-12):

Perception Collection PC40-12									
			Positive (Inward) Uniform Load Capacity (lbs/ft^2) / Span (ft. - in.)						
Gauge	Span	Condition	2' - 0"	3' - 0"	4' - 0"	5' - 0"	6' - 0"	7' - 0"	8' - 0"
24	Single Span	ASD, W/Ω	289	136	77	49	34	25	19
		LRFD, ϕW	442	216	122	78	54	40	30
		L/180	*547*	*162*	*68*	*35*	*20*	*13*	*9*
		L/60	*1640*	*486*	*205*	*105*	*61*	*38*	*26*
	Double Span	ASD, W/Ω	181	121	89	58	41	30	23
		LRFD, ϕW	269	179	135	87	61	45	35
		L/180	*1317*	*390*	*165*	*84*	*49*	*31*	*21*
		L/60	*3950*	*1171*	*494*	*253*	*146*	*92*	*62*
	Triple Span	ASD, W/Ω	206	137	103	72	51	37	28
		LRFD, ϕW	306	204	153	109	76	56	43
		L/180	*1032*	*306*	*129*	*66*	*38*	*24*	*16*
		L/60	*3095*	*917*	*387*	*198*	*115*	*72*	*48*
22	Single Span	ASD, W/Ω	440	195	110	70	49	36	27
		LRFD, ϕW	675	310	174	112	77	57	44
		L/180	*729*	*216*	*91*	*47*	*27*	*17*	*11*
		L/60	*2186*	*648*	*273*	*140*	*81*	*51*	*34*
	Double Span	ASD, W/Ω	279	186	127	82	57	42	33
		LRFD, ϕW	415	277	191	124	86	64	49
		L/180	*1755*	*520*	*219*	*112*	*65*	*41*	*27*
		L/60	*>5k*	*1560*	*658*	*337*	*195*	*123*	*82*
	Triple Span	ASD, W/Ω	317	212	155	102	71	53	41
		LRFD, ϕW	472	315	234	153	107	80	61
		L/180	*1375*	*407*	*172*	*88*	*51*	*32*	*21*
		L/60	*4126*	*1222*	*516*	*264*	*153*	*96*	*64*
20	Single Span	ASD, W/Ω	493	222	125	80	56	41	31
		LRFD, ϕW	754	353	198	127	88	65	50
		L/180	*924*	*274*	*116*	*59*	*34*	*22*	*14*
		L/60	*2773*	*822*	*347*	*177*	*103*	*65*	*43*
	Double Span	ASD, W/Ω	314	209	140	91	64	47	36
		LRFD, ϕW	467	311	211	138	96	71	55
		L/180	*2227*	*660*	*278*	*143*	*82*	*52*	*35*
		L/60	*>5k*	*1979*	*835*	*428*	*247*	*156*	*104*
	Triple Span	ASD, W/Ω	357	238	170	113	79	59	46
		LRFD, ϕW	531	354	257	169	119	89	69
		L/180	*1744*	*517*	*218*	*112*	*65*	*41*	*27*
		L/60	*>5k*	*1550*	*654*	*335*	*194*	*122*	*82*

TABLE 8.16 - Section properties (Perception Collection® PC50-12):

Gauge	Weight	Base Metal Thickness	Yield Strength	Tensile Strength	Gross Section Properties				
					Area	Moment of Inertia	Distance to N.A. from Bottom	Positive Section Modulus	Negative Section Modulus
	w	t	Fy	Fu	A_g	I_g	y_b	S_g+	S_g-
	psf	in	ksi	ksi	in^2/ft	in^4/ft	in	in^3/ft	in^3/ft
24	1.30	0.0232	50	65	0.3726	0.0516	0.60	0.1746	0.0855
22	1.64	0.0294	50	65	0.4722	0.0650	0.61	0.2190	0.1078
20	1.97	0.0354	40	55	0.5685	0.0790	0.61	0.2612	0.1292

Gauge	Effective Section Properties							Uniform Load Only	
	Area	Positive			Negative				
		Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	Moment of Inertia	Distance to N.A. from Bottom	Section Modulus	$I_d = (2I_e+I_g)/3$	
	A_e/ft	I_e+	y_b	S_e+	I_e-	y_b	S_e-	I+	I-
	in^2	in^4/ft	in	in^3/ft	in^4/ft	in	in^3/ft	in^4/ft	in^4/ft
24	0.1055	0.0279	0.30	0.0322	0.0411	0.69	0.0479	0.0358	0.0446
22	0.1591	0.0399	0.32	0.0467	0.0579	0.68	0.0686	0.0483	0.0603
20	0.2375	0.0550	0.35	0.0677	0.0760	0.66	0.0979	0.0630	0.0770

TABLE 8.17 - Allowable reactions at supports (Perception Collection® PC50-12):

Reactions at Supports based on Web Crippling (lbs/ft width)			
Gauge	Condition	Allowable	Factored
24	End	144	221
	Interior	226	336
22	End	221	338
	Interior	349	519
20	End	246	377
	Interior	392	584

Reaction capacities based on a minimum 1.25" web bearing length.
Capacities apply to flush mounted panel installations only. Data not available for assemblies using 1/2" stand-off clip.

TABLE 8.18 - Inward (positive) uniform load capacities (Perception Collection® PC50-12):

Perception Collection PC50-12									
			Positive (Inward) Uniform Load Capacity (lbs/ft²) / Span (ft. - in.)						
Gauge	Span	Condition	2' - 0"	3' - 0"	4' - 0"	5' - 0"	6' - 0"	7' - 0"	8' - 0"
24	Single Span	ASD, W/Ω	144	72	40	26	18	13	10
		LRFD, ϕW	221	113	64	41	28	21	16
		L/180	*391*	*116*	*49*	*25*	*14*	*9*	*6*
		L/60	*1173*	*348*	*147*	*75*	*43*	*27*	*18*
	Double Span	ASD, W/Ω	90	60	45	36	25	19	14
		LRFD, ϕW	135	90	67	54	38	28	21
		L/180	*942*	*279*	*118*	*60*	*35*	*22*	*15*
		L/60	*2827*	*838*	*353*	*181*	*105*	*66*	*44*
	Triple Span	ASD, W/Ω	103	69	51	41	31	23	18
		LRFD, ϕW	153	102	76	61	47	35	27
		L/180	*738*	*219*	*92*	*47*	*27*	*17*	*12*
		L/60	*2214*	*656*	*277*	*142*	*82*	*52*	*35*
22	Single Span	ASD, W/Ω	221	104	58	37	26	19	15
		LRFD, ϕW	338	164	92	59	41	30	23
		L/180	*527*	*156*	*66*	*34*	*20*	*12*	*8*
		L/60	*1582*	*469*	*198*	*101*	*59*	*37*	*25*
	Double Span	ASD, W/Ω	140	93	70	52	36	27	21
		LRFD, ϕW	208	138	104	78	55	40	32
		L/180	*1270*	*376*	*159*	*81*	*47*	*30*	*20*
		L/60	*3811*	*1129*	*476*	*244*	*141*	*89*	*60*
	Triple Span	ASD, W/Ω	159	106	79	63	44	33	26
		LRFD, ϕW	236	157	118	94	67	50	39
		L/180	*995*	*295*	*124*	*64*	*37*	*23*	*16*
		L/60	*2985*	*885*	*373*	*191*	*111*	*70*	*47*
20	Single Span	ASD, W/Ω	246	120	68	43	30	22	17
		LRFD, ϕW	377	191	107	69	48	35	27
		L/180	*688*	*204*	*86*	*44*	*25*	*16*	*11*
		L/60	*2065*	*612*	*258*	*132*	*76*	*48*	*32*
	Double Span	ASD, W/Ω	157	105	78	58	41	31	24
		LRFD, ϕW	234	156	117	88	62	46	36
		L/180	*1658*	*491*	*207*	*106*	*61*	*39*	*26*
		L/60	*4974*	*1474*	*622*	*318*	*184*	*116*	*78*
	Triple Span	ASD, W/Ω	178	119	89	71	51	38	29
		LRFD, ϕW	265	177	133	106	76	57	44
		L/180	*1299*	*385*	*162*	*83*	*48*	*30*	*20*
		L/60	*3897*	*1155*	*487*	*249*	*144*	*91*	*61*

TABLE 8.19 - Outward (negative) uniform load capacities (Perception Collection® PC10/20/30/40/50-12c, 20-22ga, CLIP ATTACHED):

Perception Collection PC10/20/30/40/50-12c, 20-22ga (CLIP ATTACHED)																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	2' - 0"		2' - 6"		2' - 8"		3' - 0"		3' - 6"		3' - 9"		4' - 0"		4' - 6"		5' - 0"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				101	161	93	148	90	144	85	135	76	122	72	116	68	109	60	96	52	84
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga (.1050")	2	#10	101	161	93	148	90	144	85	135	76	122	72	116	68	109	60	96	52	84
		2	#12	101	161	93	148	90	144	85	135	76	122	72	116	68	109	60	96	52	84
		2	1/4"	101	161	93	148	90	144	85	135	76	122	72	116	68	109	60	96	52	84
	14ga (.0700")	2	#10	98	147	78	118	73	110	65	98	56	84	52	78	49	73	44	65	39	59
		2	#12	101	161	89	134	84	125	74	111	64	95	59	89	56	84	50	74	45	67
		2	1/4"	101	161	93	148	90	144	85	129	74	111	69	103	64	97	57	86	52	77
	16ga (.0590")	2	#10	83	124	66	99	62	93	55	83	47	71	44	66	41	62	37	55	33	50
		2	#12	94	141	75	113	70	106	63	94	54	80	50	75	47	70	42	63	38	56
		2	1/4"	101	161	87	130	81	122	72	109	62	93	58	87	54	81	48	72	43	65
	18ga (.0459")	2	#10	64	96	51	77	48	72	43	64	37	55	34	51	32	48	29	43	26	39
		2	#12	73	110	58	88	55	82	49	73	42	63	39	58	37	55	32	49	29	44
		2	1/4"	85	127	68	101	63	95	56	85	48	72	45	68	42	63	38	56	34	51
	20ga (.0354")	2	#10	50	74	40	59	37	56	33	50	28	42	26	40	25	37	22	33	20	30
		2	#12	56	84	45	68	42	63	38	56	32	48	30	45	28	42	25	38	23	34
		2	1/4"	65	98	52	78	49	73	43	65	37	56	35	52	33	49	29	43	26	39
Cold Formed Steel (Gr 33 min.)	≥12ga (.1050")	2	#10	101	153	81	122	76	114	68	102	58	87	54	81	51	76	45	68	41	61
		2	#12	101	161	93	139	87	130	77	116	66	99	62	93	58	87	51	77	46	69
		2	1/4"	101	161	93	148	90	144	85	134	76	115	71	107	67	100	60	89	52	80
	16ga (.0590")	2	#10	57	86	46	69	43	64	38	57	33	49	30	46	29	43	25	38	23	34
		2	#12	65	97	52	78	49	73	43	65	37	56	35	52	32	49	29	43	26	39
		2	1/4"	75	113	60	90	56	85	50	75	43	64	40	60	38	56	33	50	30	45
	18ga (.0459")	2	#10	44	67	36	53	33	50	30	44	25	38	24	36	22	33	20	30	18	27
		2	#12	51	76	40	61	38	57	34	51	29	43	27	40	25	38	22	34	20	30
		2	1/4"	59	88	47	70	44	66	39	59	33	50	31	47	29	44	26	39	23	35
	20ga (.0354")	2	#10	34	51	27	41	26	39	23	34	20	29	18	27	17	26	15	23	14	21
		2	#12	39	58	31	47	29	44	26	39	22	33	21	31	19	29	17	26	16	23
		2	1/4"	45	68	36	54	34	51	30	45	26	39	24	36	23	34	20	30	18	27
	22ga (.0294")	2	#10	28	43	23	34	21	32	19	28	16	24	15	23	14	21	13	19	11	17
		2	#12	32	49	26	39	24	36	22	32	19	28	17	26	16	24	14	22	13	19
		2	1/4"	37	56	30	45	28	42	25	37	21	32	20	30	19	28	17	25	15	22
Plywood & OSB	15/32" (& 1/2")	2	#10	33	44	26	36	25	33	22	30	19	25	18	24	16	22	15	20	13	18
		2	#12	37	50	30	40	28	38	25	34	21	29	20	27	19	25	17	22	15	20
		2	#14	41	56	33	45	31	42	27	37	24	32	22	30	21	28	18	25	16	22
	19/32" (& 5/8")	2	#10	42	56	33	45	31	42	28	38	24	32	22	30	21	28	19	25	17	23
		2	#12	47	64	38	51	36	48	32	43	27	37	25	34	24	32	21	28	19	26
		2	#14	52	70	42	56	39	53	35	47	30	40	28	38	26	35	23	31	21	28
	23/32" (& 3/4")	2	#10	50	68	40	54	38	51	34	45	29	39	27	36	25	34	22	30	20	27
		2	#12	57	77	46	62	43	58	38	52	33	44	31	41	29	39	25	34	23	31
		2	#14	63	85	51	68	47	64	42	57	36	49	34	45	32	43	28	38	25	34
Lumber (DFL)	1" min	2	#10	83	112	67	90	62	84	55	75	48	64	44	60	42	56	37	50	33	45
		2	#12	95	128	76	102	71	96	63	85	54	73	50	68	47	64	42	57	38	51
		2	#14	101	141	83	113	78	106	69	94	60	80	56	75	52	70	46	63	42	56

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Table accounts for increased loads on fasteners due to the eccentricity of the fasteners relative to the panel seam. The Perception Collection panel summary chart at the front of this section provides for development of these fastener load adjustments.
2. Number of clip fasteners can be reduced to (1) if project load requirements can still be met. The tabulated panel system capacities shall be reduced by 1/2.
3. Number of clip fasteners can be increased to (3), and tabulated capacity increased by 50%, w ith the final capacity not to exceed max Panel/Clip Capacity stated at the top of the chart.

TABLE 8.20 - Outward (negative) uniform load capacities (Perception Collection® PC10/20/30/40/50-12c, 24ga, DIRECT FASTENED):

Perception Collection PC10/20/30/40/50-12c, 24ga (CLIP ATTACHED)																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	2' - 0"		2' - 6"		2' - 8"		3' - 0"		3' - 6"		3' - 9"		4' - 0"		4' - 6"		5' - 0"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft²)																	
				85	136	78	124	75	120	70	112	62	100	58	94	55	87	47	75	39	63
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft²)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga (.1050")	2	#10	85	136	78	124	75	120	70	112	62	100	58	94	55	87	47	75	39	63
		2	#12	85	136	78	124	75	120	70	112	62	100	58	94	55	87	47	75	39	63
		2	1/4"	85	136	78	124	75	120	70	112	62	100	58	94	55	87	47	75	39	63
	14ga (.0700")	2	#10	85	136	78	118	73	110	65	98	56	84	52	78	49	73	44	65	39	59
		2	#12	85	136	78	124	75	120	70	111	62	95	58	89	55	84	47	74	39	63
		2	1/4"	85	136	78	124	75	120	70	112	62	100	58	94	55	87	47	75	39	63
	16ga (.0590")	2	#10	83	124	66	99	62	93	55	83	47	71	44	66	41	62	37	55	33	50
		2	#12	85	136	75	113	70	106	63	94	54	80	50	75	47	70	42	63	38	56
		2	1/4"	85	136	78	124	75	120	70	109	62	93	58	87	54	81	47	72	39	63
	18ga (.0459")	2	#10	64	96	51	77	48	72	43	64	37	55	34	51	32	48	29	43	26	39
		2	#12	73	110	58	88	55	82	49	73	42	63	39	58	37	55	32	49	29	44
		2	1/4"	85	127	68	101	63	95	56	85	48	72	45	68	42	63	38	56	34	51
	20ga (.0354")	2	#10	50	74	40	59	37	56	33	50	28	42	26	40	25	37	22	33	20	30
		2	#12	56	84	45	68	42	63	38	56	32	48	30	45	28	42	25	38	23	34
		2	1/4"	65	98	52	78	49	73	43	65	37	56	35	52	33	49	29	43	26	39
Cold Formed Steel (Gr 33 min.)	≥12ga (.1050")	2	#10	85	136	78	122	75	114	68	102	58	87	54	81	51	76	45	68	39	61
		2	#12	85	136	78	124	75	120	70	112	62	99	58	93	55	87	47	75	39	63
		2	1/4"	85	136	78	124	75	120	70	112	62	100	58	94	55	87	47	75	39	63
	16ga (.0590")	2	#10	57	86	46	69	43	64	38	57	33	49	30	46	29	43	25	38	23	34
		2	#12	65	97	52	78	49	73	43	65	37	56	35	52	32	49	29	43	26	39
		2	1/4"	75	113	60	90	56	85	50	75	43	64	40	60	38	56	33	50	30	45
	18ga (.0459")	2	#10	44	67	36	53	33	50	30	44	25	38	24	36	22	33	20	30	18	27
		2	#12	51	76	40	61	38	57	34	51	29	43	27	40	25	38	22	34	20	30
		2	1/4"	59	88	47	70	44	66	39	59	33	50	31	47	29	44	26	39	23	35
	20ga (.0354")	2	#10	34	51	27	41	26	39	23	34	20	29	18	27	17	26	15	23	14	21
		2	#12	39	58	31	47	29	44	26	39	22	33	21	31	19	29	17	26	16	23
		2	1/4"	45	68	36	54	34	51	30	45	26	39	24	36	23	34	20	30	18	27
	22ga (.0294")	2	#10	28	43	23	34	21	32	19	28	16	24	15	23	14	21	13	19	11	17
		2	#12	32	49	26	39	24	36	22	32	19	28	17	26	16	24	14	22	13	19
		2	1/4"	37	56	30	45	28	42	25	37	21	32	20	30	19	28	17	25	15	22
Plywood & OSB	15/32" (& 1/2")	2	#10	33	44	26	36	25	33	22	30	19	25	18	24	16	22	15	20	13	18
		2	#12	37	50	30	40	28	38	25	34	21	29	20	27	19	25	17	22	15	20
		2	#14	41	56	33	45	31	42	27	37	24	32	22	30	21	28	18	25	16	22
	19/32" (& 5/8")	2	#10	42	56	33	45	31	42	28	38	24	32	22	30	21	28	19	25	17	23
		2	#12	47	64	38	51	36	48	32	43	27	37	25	34	24	32	21	28	19	26
		2	#14	52	70	42	56	39	53	35	47	30	40	28	38	26	35	23	31	21	28
	23/32" (& 3/4")	2	#10	50	68	40	54	38	51	34	45	29	39	27	36	25	34	22	30	20	27
		2	#12	57	77	46	62	43	58	38	52	33	44	31	41	29	39	25	34	23	31
		2	#14	63	85	51	68	47	64	42	57	36	49	34	45	32	43	28	38	25	34
Lumber (DFL)	1" min	2	#10	83	112	67	90	62	84	55	75	48	64	44	60	42	56	37	50	33	45
		2	#12	85	128	76	102	71	96	63	85	54	73	50	68	47	64	42	57	38	51
		2	#14	85	136	78	113	75	106	69	94	60	80	56	75	52	70	46	63	39	56

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Table accounts for increased loads on fasteners due to the eccentricity of the fasteners relative to the panel seam. The Perception Collection panel summary chart at the front of this section provides for development of these fastener load adjustments.
2. Number of clip fasteners can be reduced to (1) if project load requirements can still be met. The tabulated panel system capacities shall be reduced by 1/2.
3. Number of clip fasteners can be increased to (3), and tabulated capacity increased by 50%, with the final capacity not to exceed max Panel/Clip Capacity stated at the top of the chart.

TABLE 8.21 - Outward (negative) uniform load capacities (Perception Collection® PC10-12d, 20-24ga, DIRECT FASTENED):

Perception Collection PC10-12d, 20-24ga (DIRECT FASTENED)																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	2' - 0"		2' - 6"		2' - 8"		3' - 0"		3' - 6"		3' - 9"		4' - 0"		4' - 6"		5' - 0"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				93	148	85	136	82	132	77	123	69	111	65	105	62	99	54	86	46	74
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga (.1050")	1	#10	93	148	85	136	82	132	77	123	69	111	65	105	62	99	54	86	46	74
		1	#12	93	148	85	136	82	132	77	123	69	111	65	105	62	99	54	86	46	74
		1	1/4"	93	148	85	136	82	132	77	123	69	111	65	105	62	99	54	86	46	74
	14ga (.0700")	1	#10	93	148	85	136	82	132	77	122	69	105	65	98	61	92	54	82	46	73
		1	#12	93	148	85	136	82	132	77	123	69	111	65	105	62	99	54	86	46	74
		1	1/4"	93	148	85	136	82	132	77	123	69	111	65	105	62	99	54	86	46	74
	16ga (.0590")	1	#10	93	148	83	124	77	116	69	103	59	88	55	83	52	77	46	69	41	62
		1	#12	93	148	85	136	82	132	77	117	67	101	63	94	59	88	52	78	46	70
		1	1/4"	93	148	85	136	82	132	77	123	69	111	65	105	62	99	54	86	46	74
	18ga (.0459")	1	#10	80	120	64	96	60	90	54	80	46	69	43	64	40	60	36	54	32	48
		1	#12	91	137	73	110	68	103	61	91	52	78	49	73	46	68	41	61	37	55
		1	1/4"	93	148	85	127	79	119	70	106	60	91	56	85	53	79	47	70	42	63
	20ga (.0354")	1	#10	62	93	50	74	46	70	41	62	35	53	33	50	31	46	28	41	25	37
		1	#12	70	106	56	84	53	79	47	70	40	60	38	56	35	53	31	47	28	42
		1	1/4"	81	122	65	98	61	92	54	81	47	70	43	65	41	61	36	54	33	49
Cold Formed Steel (Gr 33 min.)	≥12ga (.1050")	1	#10	93	148	85	136	82	132	77	123	69	109	65	102	62	95	54	85	46	74
		1	#12	93	148	85	136	82	132	77	123	69	111	65	105	62	99	54	86	46	74
		1	1/4"	93	148	85	136	82	132	77	123	69	111	65	105	62	99	54	86	46	74
	16ga (.0590")	1	#10	71	107	57	86	54	80	48	71	41	61	38	57	36	54	32	48	29	43
		1	#12	81	122	65	97	61	91	54	81	46	70	43	65	41	61	36	54	32	49
		1	1/4"	93	141	75	113	71	106	63	94	54	81	50	75	47	71	42	63	38	56
	18ga (.0459")	1	#10	56	83	44	67	42	63	37	56	32	48	30	44	28	42	25	37	22	33
		1	#12	63	95	51	76	47	71	42	63	36	54	34	51	32	47	28	42	25	38
		1	1/4"	73	110	59	88	55	82	49	73	42	63	39	59	37	55	33	49	29	44
	20ga (.0354")	1	#10	43	64	34	51	32	48	29	43	25	37	23	34	21	32	19	29	17	26
		1	#12	49	73	39	58	37	55	32	49	28	42	26	39	24	37	22	32	19	29
		1	1/4"	56	85	45	68	42	63	38	56	32	48	30	45	28	42	25	38	23	34
	22ga (.0294")	1	#10	36	53	28	43	27	40	24	36	20	31	19	28	18	27	16	24	14	21
		1	#12	40	61	32	49	30	46	27	40	23	35	22	32	20	30	18	27	16	24
		1	1/4"	47	70	37	56	35	53	31	47	27	40	25	37	23	35	21	31	19	28
Plywood & OSB	15/32" (& 1/2")	1	#10	41	56	33	44	31	42	27	37	23	32	22	30	21	28	18	25	16	22
		1	#12	47	63	37	50	35	47	31	42	27	36	25	34	23	32	21	28	19	25
		1	#14	52	70	41	56	39	52	34	46	29	40	27	37	26	35	23	31	21	28
	19/32" (& 5/8")	1	#10	52	70	42	56	39	53	35	47	30	40	28	38	26	35	23	31	21	28
		1	#12	59	80	47	64	44	60	39	53	34	46	32	43	30	40	26	36	24	32
		1	#14	65	88	52	70	49	66	43	59	37	50	35	47	33	44	29	39	26	35
	23/32" (& 3/4")	1	#10	63	85	50	68	47	64	42	57	36	49	34	45	32	43	28	38	25	34
		1	#12	72	97	57	77	54	73	48	65	41	55	38	52	36	48	32	43	29	39
		1	#14	79	107	63	85	59	80	53	71	45	61	42	57	39	53	35	47	32	43
Lumber (DFL)	1" min	1	#10	93	140	83	112	78	105	69	94	59	80	55	75	52	70	46	62	42	56
		1	#12	93	148	85	128	82	120	77	106	68	91	63	85	59	80	53	71	46	64
		1	#14	93	148	85	136	82	132	77	117	69	101	65	94	62	88	54	78	46	70

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Number of fasteners at each support location can be increased to (2), and tabulated capacity doubled, with the final capacity not to exceed max Panel/Clip Capacity stated at the top of the chart. Fastener locations must satisfy minimum edge distance requirements; refer to General Notes.

TABLE 8.22 - Outward (negative) uniform load capacities (Perception Collection® PC20/30/40/50-12d, 20-24ga, DIRECT FASTENED):

Perception Collection PC20/30/40/50-12d, 20-24ga (DIRECT FASTENED)																					
Substrate		Fastener		Attachment Spacing, (ft-in)																	
		# per clip	Size	2' - 0"		2' - 6"		2' - 8"		3' - 0"		3' - 6"		3' - 9"		4' - 0"		4' - 6"		5' - 0"	
				Maximum **Panel / Clip** Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				92	147	83	134	81	129	75	120	67	107	63	100	59	94	50	80	42	67
				Panel System Negative (Outward) Uniform Load Capacity, (lbs/ft^2)																	
				ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW	ASD W/Ω	LRFD ϕW
Cold Formed Steel (Gr 50 min.)	≥12ga *(.1050")*	1	#10	92	147	83	134	81	129	75	120	67	107	63	100	59	94	50	80	42	67
		1	#12	92	147	83	134	81	129	75	120	67	107	63	100	59	94	50	80	42	67
		1	1/4"	92	147	83	134	81	129	75	120	67	107	63	100	59	94	50	80	42	67
	14ga *(.0700")*	1	#10	92	147	83	134	81	129	75	120	67	105	63	98	59	92	50	80	42	67
		1	#12	92	147	83	134	81	129	75	120	67	107	63	100	59	94	50	80	42	67
		1	1/4"	92	147	83	134	81	129	75	120	67	107	63	100	59	94	50	80	42	67
	16ga *(.0590")*	1	#10	92	147	83	124	77	116	69	103	59	88	55	83	52	77	46	69	41	62
		1	#12	92	147	83	134	81	129	75	117	67	101	63	94	59	88	50	78	42	67
		1	1/4"	92	147	83	134	81	129	75	120	67	107	63	100	59	94	50	80	42	67
	18ga *(.0459")*	1	#10	80	120	64	96	60	90	54	80	46	69	43	64	40	60	36	54	32	48
		1	#12	91	137	73	110	68	103	61	91	52	78	49	73	46	68	41	61	37	55
		1	1/4"	92	147	83	127	79	119	70	106	60	91	56	85	53	79	47	70	42	63
	20ga *(.0354")*	1	#10	62	93	50	74	46	70	41	62	35	53	33	50	31	46	28	41	25	37
		1	#12	70	106	56	84	53	79	47	70	40	60	38	56	35	53	31	47	28	42
		1	1/4"	81	122	65	98	61	92	54	81	47	70	43	65	41	61	36	54	33	49
Cold Formed Steel (Gr 33 min.)	≥12ga *(.1050")*	1	#10	92	147	83	134	81	129	75	120	67	107	63	100	59	94	50	80	42	67
		1	#12	92	147	83	134	81	129	75	120	67	107	63	100	59	94	50	80	42	67
		1	1/4"	92	147	83	134	81	129	75	120	67	107	63	100	59	94	50	80	42	67
	16ga *(.0590")*	1	#10	71	107	57	86	54	80	48	71	41	61	38	57	36	54	32	48	29	43
		1	#12	81	122	65	97	61	91	54	81	46	70	43	65	41	61	36	54	32	49
		1	1/4"	92	141	75	113	71	106	63	94	54	81	50	75	47	71	42	63	38	56
	18ga *(.0459")*	1	#10	56	83	44	67	42	63	37	56	32	48	30	44	28	42	25	37	22	33
		1	#12	63	95	51	76	47	71	42	63	36	54	34	51	32	47	28	42	25	38
		1	1/4"	73	110	59	88	55	82	49	73	42	63	39	59	37	55	33	49	29	44
	20ga *(.0354")*	1	#10	43	64	34	51	32	48	29	43	25	37	23	34	21	32	19	29	17	26
		1	#12	49	73	39	58	37	55	32	49	28	42	26	39	24	37	22	32	19	29
		1	1/4"	56	85	45	68	42	63	38	56	32	48	30	45	28	42	25	38	23	34
	22ga *(.0294")*	1	#10	36	53	28	43	27	40	24	36	20	31	19	28	18	27	16	24	14	21
		1	#12	40	61	32	49	30	46	27	40	23	35	22	32	20	30	18	27	16	24
		1	1/4"	47	70	37	56	35	53	31	47	27	40	25	37	23	35	21	31	19	28
Plywood & OSB	15/32" (& 1/2")	1	#10	41	56	33	44	31	42	27	37	23	32	22	30	21	28	18	25	16	22
		1	#12	47	63	37	50	35	47	31	42	27	36	25	34	23	32	21	28	19	25
		1	#14	52	70	41	56	39	52	34	46	29	40	27	37	26	35	23	31	21	28
	19/32" (& 5/8")	1	#10	52	70	42	56	39	53	35	47	30	40	28	38	26	35	23	31	21	28
		1	#12	59	80	47	64	44	60	39	53	34	46	32	43	30	40	26	36	24	32
		1	#14	65	88	52	70	49	66	43	59	37	50	35	47	33	44	29	39	26	35
	23/32" (& 3/4")	1	#10	63	85	50	68	47	64	42	57	36	49	34	45	32	43	28	38	25	34
		1	#12	72	97	57	77	54	73	48	65	41	55	38	52	36	48	32	43	29	39
		1	#14	79	107	63	85	59	80	53	71	45	61	42	57	39	53	35	47	32	43
Lumber (DFL)	1" min	1	#10	92	140	83	112	78	105	69	94	59	80	55	75	52	70	46	62	42	56
		1	#12	92	147	83	128	81	120	75	106	67	91	63	85	59	80	50	71	42	64
		1	#14	92	147	83	134	81	129	75	117	67	101	63	94	59	88	50	78	42	67

Specific Notes (Refer to the General Notes section for other applicable notes):

1. Number of fasteners at each support location can be increased to (2), and tabulated capacity doubled, with the final capacity not to exceed max Panel/Clip Capacity stated at the top of the chart. Fastener locations must satisfy minimum edge distance requirements; refer to General Notes.

CALIFORNIA SUPPLEMENT

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AEP SPAN AND ASC BUILDING PRODUCTS: SINGLE SKIN STEEL ROOF AND WALL PANELS WITH CONCEALED FASTENERS

CSI Section:
07 61 00 Sheet Metal Roofing
07 64 00 Sheet Metal Wall Cladding

1.0 RECOGNITION

ASC Profiles, LLC. AEP Span and ASC Building Products Single Skin Steel Roof and Wall Panels with Concealed Fasteners have been evaluated for use as exterior roof and wall covering panels. The structural and fire resistance properties of the panels have been evaluated for compliance with the following codes:

- 2022 and 2019 California Building Code (CBC)
- 2022 and 2019 California Residential Code (CRC)

The roof panels comply with requirements for metal roof panels in Chapter 15 of the CBC, and Section R905 of the CRC. The wall panels comply with requirements for steel exterior wall coverings in Chapter 14 of the CBC, and Section R703 of the CRC.

2.0 ADDITIONAL REQUIREMENTS

2.1 Roof panels may be used in "new buildings located in any Fire Hazard Severity Zone or any Wildland-Urban Interface Fire Area designated by the enforcing agency constructed after the application date stipulated in CBC Section 701A.3.1 shall comply with the provisions" in accordance with Sections 701A.3 and 705A of the CBC and with the 2018 IBC as presented in ER-309.

2.2 The AEP Span and ASC Building Products panels, clips, and fasteners described in evaluation report ER-309 are in compliance with or are acceptable alternatives to what is specified in those codes listed in Section 1.0 of this report subject to the limitations contained in ER-309 and to the following limitations, as applicable.

2.3 The minimum allowable roof panel slopes shall conform to CBC Section 1507.4 or CRC Section R905.10; or as stated within this report.

2.4 Roof panel flashing requirements, when applicable, shall comply with CBC Section 1503.2 and 1503.3 or CRC Sections R903.2 and R903.3. Underlayment shall be installed in accordance with CBC Section 1507.4.5 or CRC Section R905.10.5 where applicable wind conditions occur.

2.5 Panels used on exterior walls shall be flashed in accordance with CBC Section 1405.4 and shall be over a water-resistant barrier complying and installed in accordance with CBC Section 1403.2 or CRC Section R703.1. Vapor retarders shall be installed, as applicable, in accordance with CBC Section 1405.3.

2.6 Design of panel penetrations and other panel discontinuities shall be the responsibility of the structural design professional in accordance with CBC Section 1604.4 or in accordance with the manufacturer's installation instructions, when approved by the building official.

2.7 Roof assemblies complying with the requirements of CBC Section 1505.2 Exception 2, or CRC Section R902.1 Exception 2 are considered Class A roof assemblies. For other conditions, roof assemblies shall be listed as Class A, B, or C in accordance with ASTM E108 or UL 790 by an approved testing agency or shall be considered as non-classified roofing. ASC Profiles shall be contacted for information on specific listed assemblies.

2.8 Pertaining to structures under the jurisdiction of DSA and OSHPD, designs for the transfer of anchorage forces into the diaphragm shall comply with CBC Section 1613A.5.1 of the 2019 CBC.

2.9 This supplement expires concurrently with ER-309.

3.0 SUBSTANTIATING DATA

Data submitted in conformance with IAPMO-UES Evaluation Criteria Single Skin Steel Roof and Wall Panels, EC-011, revised January 2022. Test reports are from laboratories in compliance with ISO/IEC 17025.

For additional information about this evaluation report please visit www.uniform-es.org or email us at info@uniform-es.org