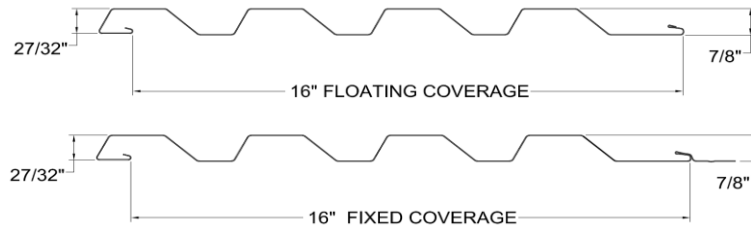




Wave Panel



SECTION PROPERTIES						TOP IN COMPRESSION			BOTTOM IN COMPRESSION		
GAUGE	FY (KSI)	WEIGHT (PSF)	V _a kip/ft.	P _{a_end} lbs/ft.	P _{a_int} lbs/ft.	I _x (in. ⁴ /ft.)	S _e (in. ³ /ft.)	M _a kip-in./ft.	I _x (in. ⁴ /ft.)	S _e (in. ³ /ft.)	M _a kip-in./ft.
24	50.0	1.28	1.8420	232.58	596.03	0.0390	0.0791	1.9770	0.0420	0.0911	2.2755

1. Section properties are calculated in accordance with the 2016 AISI North American Specification for the Design of Cold-Formed Steel Structural Members.
2. V_a is the allowable shear.
3. P_a is the allowable load for web crippling on end & interior supports.
4. I_x is for deflection determination.
5. S_e is for bending.
6. M_a is the allowable bending moment.
7. All values are for one foot of panel width.

Allowable Uniform Loads (PSF)

Span Type	Load Type	Span in Feet															
		1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00	6.50	7.00	7.50	8.00	8.50
Single	Positive Wind	500	500	329	210	146	107	82	65	52	43	36	31	26	23	20	18
	Live	500	500	329	210	146	107	82	65	52	43	36	31	26	23	20	18
	Deflection (L/180)	500	500	426	218	126	79	53	37	27	20	15	12	9	8	6	5
	Deflection (L/240)	500	500	319	163	94	59	39	28	20	15	11	9	7	6	4	4
2 Span	Positive Wind	500	500	367	237	166	122	94	74	60	49	41	35	30	26	23	20
	Live	500	500	367	237	166	122	94	74	60	49	41	35	30	26	23	20
	Deflection (L/180)	500	500	500	500	315	198	133	93	68	51	39	31	24	20	16	13
	Deflection (L/240)	500	500	500	409	236	149	99	70	51	38	29	23	18	15	12	10
3 Span	Positive Wind	500	500	452	294	206	152	117	92	75	62	52	44	38	33	29	26
	Live	500	500	452	294	206	152	117	92	75	62	52	44	38	33	29	26
	Deflection (L/180)	500	500	500	427	247	155	104	73	53	40	30	24	19	15	13	10
	Deflection (L/240)	500	500	500	320	185	116	78	54	40	30	23	18	14	11	9	8
4 Span	Positive Wind	500	500	424	275	193	142	109	86	70	58	48	41	35	31	27	24
	Live	500	500	424	275	193	142	109	86	70	58	48	41	35	31	27	24
	Deflection (L/180)	500	500	500	453	262	165	110	77	56	42	32	25	20	16	13	11
	Deflection (L/240)	500	500	500	340	196	124	83	58	42	31	24	19	15	12	10	8
ASTM E1592 Wind Uplift Testing ^{7,8}		127.7	121.8	115.9	103.1	90.2	77.3	64.5	51.6	38.7							
ASTM E1592 Wind Uplift Testing ^{8,9}		150.0	137.8	125.5	115.3	105.1	94.9	84.6	74.4	64.2							

Notes:

1. Allowable uniform loads are based upon equal span lengths.
2. Live is the allowable live or snow load.
3. Deflection (L/180) is the allowable load that limits the panel's deflection to L/180 while under positive or live load.
4. Deflection (L/240) is the allowable load that limits the panel's deflection to L/240 while under positive or live load.
5. The weight of the panel has **NOT** been deducted from the allowable loads.
6. Positive wind and Live load values are limited to combined shear & bending using Eq. H2-1 of the AISI Specification.
7. Values of ASTM E1592 Wind Uplift Testing include a factor of safety of 1.78 with (1) pancake head fastener per support, min 1" from edge of panel/clip.
8. Values of ASTM E1592 Wind Uplift Testing include a factor of safety of 1.67 with (2) pancake head fasteners per support, min 1" from edge of panel/clip.
9. Values of ASTM E1592 Wind Uplift Testing show results for both nail flange and wave clip installations, with the controlling results published.
10. Positive Wind and Live Load values are limited by web crippling using a bearing length of 2".
11. Web crippling values are determined using a ratio of the uniform load **actually** supported by the top flanges of the section.
12. The Section Properties used in this table reflect those of the Wave Floating panel, being the more conservative of the two.
13. Load Tables are limited to a maximum allowable load of 500 psf.