



## Wave Panel



SECTION PROPERTIES						TOP IN COMPRESSION			BOTTOM IN COMPRESSION		
GAUGE	FY (KSI)	WEIGHT (PSF)	V <sub>a</sub> kip/ft.	P <sub>a_end</sub> lbs/ft.	P <sub>a_int</sub> lbs/ft.	I <sub>x</sub> (in. <sup>4</sup> /ft.)	S <sub>e</sub> (in. <sup>3</sup> /ft.)	M <sub>a</sub> kip-in./ft.	I <sub>x</sub> (in. <sup>4</sup> /ft.)	S <sub>e</sub> (in. <sup>3</sup> /ft.)	M <sub>a</sub> kip-in./ft.
22	50.0	1.66	2.3990	375.30	980.33	0.0578	0.1278	3.1950	0.0548	0.1155	2.8868

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<sub>a</sub> is the allowable shear.
3. P<sub>a</sub> is the allowable load for web crippling on end & interior supports.
4. I<sub>x</sub> is for deflection determination.
5. S<sub>e</sub> is for bending.
6. M<sub>a</sub> is the allowable bending moment.
7. All values are for one foot of panel width.

### Allowable Uniform Loads (PSF)

		Span in Feet															
Span Type	Load Type	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	500	323	187	117	78	55	40	30	23	18	14	11	9	8
	Deflection (L/240)	500	500	473	242	140	88	59	41	30	22	17	13	11	8	7	6
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	439	276	185	130	94	71	54	43	34	28	23	19
	Deflection (L/240)	500	500	500	500	329	207	138	97	71	53	41	32	25	21	17	14
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	500	343	216	145	101	74	55	42	33	27	22	18	15
	Deflection (L/240)	500	500	500	445	257	162	108	76	55	41	32	25	20	16	13	11
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	500	365	229	154	108	78	59	45	35	28	23	19	16
	Deflection (L/240)	500	500	500	473	273	172	115	81	59	44	34	26	21	17	14	12
ASTM E1592 Wind Uplift Testing		NO TEST DATA AVAILABLE															

Notes:

1. Allowable uniform loads are based upon equal span lengths.
2. Positive Wind is wind pressure and is **NOT** increased by 33 1/3 %.
3. Live is the allowable live or snow load.
4. Deflection (L/180) is the allowable load that limits the panel's deflection to L/180 while under positive or live load.
5. Deflection (L/240) is the allowable load that limits the panel's deflection to L/240 while under positive or live load.
6. The weight of the panel has **NOT** been deducted from the allowable loads.
7. Positive wind and Live load values are limited to combined shear & bending using Eq. H2-1 of the AISI Specification.
8. Values of ASTM E1592 Wind Uplift Testing include a factor of safety of 2.0. Shaded areas are outside of test range. Contact McElroy Metal for more information.
9. Positive Wind and Live Load values are limited by web crippling using a bearing length of 2".
10. Web crippling values are determined using a ratio of the uniform load **actually** supported by the top flanges of the section.
11. Load Tables are limited to a maximum allowable load of 500 psf.
12. The Section Properties used in this table reflect those of the Wave Floating panel, being the more conservative of the two.