



238T



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.
22	50.0	1.53	0.9040	129.60	390.00	0.1730	0.0832	2.4910	0.0815	0.0720	1.6670

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

Allowable Uniform Loads (PSF)

Span Type	Load Type	Span in Feet															
		0.50	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
Single	Positive Wind	500	500	500	415	265	184	135	103	82	66	54	46	39	33	29	25
	Live	500	500	500	415	265	184	135	103	82	66	54	46	39	33	29	25
	Deflection (L/180)	500	500	500	500	500	500	352	236	165	120	90	70	55	44	35	29
	Deflection (L/240)	500	500	500	500	500	420	264	177	124	90	68	52	41	33	26	22
2 Span	Positive Wind	500	500	439	259	169	119	88	68	54	43	36	30	26	22	19	17
	Live	500	500	439	259	169	119	88	68	54	43	36	30	26	22	19	17
	Deflection (L/180)	500	500	500	500	500	500	418	294	214	161	124	97	78	63	52	
	Deflection (L/240)	500	500	500	500	500	500	468	313	220	160	120	93	73	58	47	39
3 Span	Positive Wind	500	500	500	315	208	147	109	84	67	54	45	38	32	28	24	21
	Live	500	500	500	315	208	147	109	84	67	54	45	38	32	28	24	21
	Deflection (L/180)	500	500	500	500	500	500	489	327	230	167	126	97	76	61	49	40
	Deflection (L/240)	500	500	500	500	500	500	367	245	172	125	94	72	57	45	37	30
4 Span	Positive Wind	500	500	498	297	195	138	102	79	62	51	42	35	30	26	22	20
	Live	500	500	498	297	195	138	102	79	62	51	42	35	30	26	22	20
	Deflection (L/180)	500	500	500	500	500	500	500	348	244	178	133	103	81	64	52	43
	Deflection (L/240)	500	500	500	500	500	500	389	261	183	133	100	77	60	48	39	32
ASTM E1592 Wind Uplift Testing		NO TEST DATA AVAILABLE															

Notes:

- Allowable uniform loads are based upon equal span lengths.
- Live is the allowable live or snow load.
- Deflection (L/180) is the allowable load that limits the panel's deflection to L/180 while under positive or live load.
- Deflection (L/240) is the allowable load that limits the panel's deflection to L/240 while under positive or live load.
- The weight of the panel has **NOT** been deducted from the allowable loads.
- Positive wind and Live load values are limited to combined shear & bending using Eq. H2-1 of the AISI Specification.
- 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.
- Positive Wind and Live Load values are limited by web crippling using a bearing length of 2".
- Web crippling values are determined using a ratio of the uniform load **actually** supported by the top flanges of the section.
- Load Tables are limited to a maximum allowable load of 500 psf.