



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.
24	50.0	1.29	0.7620	118.65	359.78	0.1759	0.0878	2.6287	0.0851	0.0716	1.7910

- 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	438	280	194	143	109	86	70	57	48	41	35	31	27
	Live	500	500	500	438	280	194	143	109	86	70	57	48	41	35	31	27
	Deflection (L/180)	500	500	500	500	500	500	358	240	168	122	92	71	55	44	36	30
	Deflection (L/240)	500	500	500	500	500	427	268	180	126	92	69	53	41	33	27	22
2 Span	Positive Wind	500	500	444	268	177	126	93	72	57	46	38	32	27	24	21	18
	Live	500	500	444	268	177	126	93	72	57	46	38	32	27	24	21	18
	Deflection (L/180)	500	500	500	500	500	500	429	301	219	165	127	100	80	65	53	
	Deflection (L/240)	500	500	500	500	500	500	480	321	226	164	123	95	75	60	48	40
3 Span	Positive Wind	500	500	500	321	216	154	115	89	71	58	48	40	34	30	26	23
	Live	500	500	500	321	216	154	115	89	71	58	48	40	34	30	26	23
	Deflection (L/180)	500	500	500	500	500	500	500	336	236	172	129	99	78	62	51	42
	Deflection (L/240)	500	500	500	500	500	500	376	252	177	129	97	74	58	47	38	31
4 Span	Positive Wind	500	500	497	304	203	145	108	83	66	54	45	38	32	28	24	21
	Live	500	500	497	304	203	145	108	83	66	54	45	38	32	28	24	21
	Deflection (L/180)	500	500	500	500	500	500	500	357	250	182	137	105	83	66	54	44
	Deflection (L/240)	500	500	500	500	500	500	399	267	188	137	103	79	62	49	40	33
ASTM E1592 Uplift Testing ¹¹			160.5	146.9	133.4	120.1	106.8	93.5	80.2	66.9	53.6						
ASTM E1592 Uplift Testing ¹²			192.2	183.9	175.6	166.5	157.5	148.4	139.3	130.2	121.1						
ASTM E1592 Uplift Testing ¹³											167.7	125.0	110.0				
ASTM E1592 Uplift Testing ¹⁴											45.5						

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 1.67 from 1.00 ft to 5.00 ft for Notes 11-13. A factor of safety of 2.0 will be applied to Note 14. A factor of safety of 2.0 will be applied to values greater than 5.00 ft.
- 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.
- With standard 6" long clip
- With 24 Ga multispans clip
- With 22 Ga multispans clip
- With 6" long retro clip