



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	1.25	0.6773	105.47	319.80	0.1587	0.0781	2.3390	0.0753	0.0637	1.5930

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															
		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	7.92	8.00
Single	Positive Wind	500	500	500	389	249	173	127	97	77	62	51	43	36	31	24	24
	Live	500	500	500	389	249	173	127	97	77	62	51	43	36	31	24	24
	Deflection (L/180)	500	500	500	500	500	500	323	216	152	110	83	64	50	40	27	27
	Deflection (L/240)	500	500	500	500	500	385	242	162	114	83	62	48	37	30	20	20
2 Span	Positive Wind	500	500	395	238	158	112	83	64	51	41	34	29	24	21	16	16
	Live	500	500	395	238	158	112	83	64	51	41	34	29	24	21	16	16
	Deflection (L/180)	500	500	500	500	500	500	384	270	197	148	114	89	71	49	48	
	Deflection (L/240)	500	500	500	500	500	500	430	288	202	147	111	85	67	53	37	36
3 Span	Positive Wind	500	500	464	286	192	137	102	79	63	51	42	36	30	26	20	20
	Live	500	500	464	286	192	137	102	79	63	51	42	36	30	26	20	20
	Deflection (L/180)	500	500	500	500	500	500	450	301	211	154	115	89	70	56	38	37
	Deflection (L/240)	500	500	500	500	500	500	337	226	158	115	86	67	52	42	29	28
4 Span	Positive Wind	500	500	442	270	181	129	96	74	59	48	40	33	28	24	19	19
	Live	500	500	442	270	181	129	96	74	59	48	40	33	28	24	19	19
	Deflection (L/180)	500	500	500	500	500	500	477	320	224	163	123	94	74	59	41	40
	Deflection (L/240)	500	500	500	500	500	500	358	240	168	122	92	71	55	44	30	30
ASTM E1592 Uplift Testing ¹¹			215.5	177.8	140.1	124.9	109.6	94.4	79.2	64.0	48.8						
ASTM E1592 Uplift Testing ¹²											108.3	86.9	83.4	74.5	65.7	49.4	
ASTM E1592 Uplift Testing ¹³											148.7						
ASTM E1592 Uplift Testing ¹⁴											41.3						
ASTM E1592 Uplift Testing ¹⁵											76.9						

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 1.67 from 1.00 ft to 5.00 ft for standard 6" long clip.
 Values of ASTM E1592 Wind Uplift Testing include a factor of safety of 1.67 at 5.00 ft for 24 Ga. multispans clip.
 Values of ASTM E1592 Wind Uplift Testing include a factor of safety of 2.0 at 5.00 ft for 6" long retro clip.
 Values of ASTM E1592 Wind Uplift Testing include a factor of safety of 2.0 at 5.00 ft for 24 Ga tall multispans clip.
 Shaded areas are outside of test range. Contact McElroy for more information.
8. Positive Wind and Live Load values are limited by web crippling using a bearing length of 2".
9. Web crippling values are determined using a ratio of the uniform load **actually** supported by the top flanges of the section.
10. Load Tables are limited to a maximum allowable load of 500 psf.
11. With standard 6" long clip
12. With 24 Ga multispans clip
13. With 22 Ga multispans clip
14. With 6" long retro clip
15. With 24 Ga tall multispans clip