



# 238T



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.
24	50.0	1.18	0.5080	79.10	239.85	0.1230	0.0587	1.7580	0.0570	0.0479	1.1965

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	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	293	187	130	95	73	57	46	38	32	27	23	20	18
	Live	500	500	500	293	187	130	95	73	57	46	38	32	27	23	20	18
	Deflection (L/180)	500	500	500	500	500	398	250	167	117	86	64	49	39	31	25	20
	Deflection (L/240)	500	500	500	500	500	298	188	125	88	64	48	37	29	23	19	15
2 Span	Positive Wind	500	500	296	179	118	84	62	48	38	31	25	21	18	16	14	12
	Live	500	500	296	179	118	84	62	48	38	31	25	21	18	16	14	12
	Deflection (L/180)	500	500	500	500	500	500	441	296	207	151	113	87	69	55	44	37
	Deflection (L/240)	500	500	500	500	500	500	331	222	155	113	85	65	51	41	33	27
3 Span	Positive Wind	500	500	348	214	144	103	77	59	47	38	32	27	23	20	17	15
	Live	500	500	348	214	144	103	77	59	47	38	32	27	23	20	17	15
	Deflection (L/180)	500	500	500	500	500	500	346	231	162	118	89	68	54	43	35	28
	Deflection (L/240)	500	500	500	500	500	412	259	173	122	89	66	51	40	32	26	21
4 Span	Positive Wind	500	500	332	203	136	96	72	56	44	36	30	25	21	18	16	14
	Live	500	500	332	203	136	96	72	56	44	36	30	25	21	18	16	14
	Deflection (L/180)	500	500	500	500	500	500	367	246	172	126	94	72	57	45	37	30
	Deflection (L/240)	500	500	500	500	500	437	275	184	129	94	71	54	43	34	28	23
ASTM E1592 Uplift Testing <sup>11</sup>			143.7	134.6	125.4	110.8	96.2	81.6	67.0	52.4	37.7	31.0	24.3				
ASTM E1592 Uplift Testing <sup>12</sup>									140.5	114.2	105.4	82.0	76.0				
ASTM E1592 Uplift Testing <sup>13</sup>					163.3	151.9	140.5	129.1	117.7	106.2	94.8						
ASTM E1592 Uplift Testing <sup>14</sup>											106.6	88.8	85.2				

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 1.67 U.N.O.
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 Multi-Span clip. Design value at 5'-0" span is divided by a factor of safety of 1.67 and 4'-0", 4'-6", 5'-6" & 6'-0" are divided by a factor of safety of 2.0.
13. With 24 Ga Tall Multi-Span clip. Design value at spans between 2'-0" and 5'-0" are divided by a factor of safety of 1.67.
14. With 22 Ga Multi-Span clip. Design values at 5'-0" & 5'-6" span are divided by a factor of safety of 2.0. Design values at 6'-0" are divided by a factor of safety of 1.67.