



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	1.67	1.3560	194.40	585.00	0.2453	0.1241	3.7155	0.1215	0.1075	2.4975

- 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	500	396	275	202	154	122	99	81	68	58	50	44	38
	Live	500	500	500	500	396	275	202	154	122	99	81	68	58	50	44	38
	Deflection (L/180)	500	500	500	500	500	500	499	334	235	171	128	99	78	62	50	41
	Deflection (L/240)	500	500	500	500	500	500	374	251	176	128	96	74	58	46	38	31
2 Span	Positive Wind	500	500	500	388	254	179	132	102	81	65	54	45	39	33	29	25
	Live	500	500	500	388	254	179	132	102	81	65	54	45	39	33	29	25
	Deflection (L/180)	500	500	500	500	500	500	500	500	423	308	232	178	140	112	91	75
	Deflection (L/240)	500	500	500	500	500	500	500	452	317	231	174	134	105	84	68	56
3 Span	Positive Wind	500	500	500	472	312	221	164	126	100	81	67	57	48	42	36	32
	Live	500	500	500	472	312	221	164	126	100	81	67	57	48	42	36	32
	Deflection (L/180)	500	500	500	500	500	500	500	472	331	241	181	140	110	88	71	59
	Deflection (L/240)	500	500	500	500	500	500	500	354	248	181	136	105	82	66	53	44
4 Span	Positive Wind	500	500	500	445	293	207	153	118	94	76	63	53	45	39	34	30
	Live	500	500	500	445	293	207	153	118	94	76	63	53	45	39	34	30
	Deflection (L/180)	500	500	500	500	500	500	500	500	352	256	192	148	116	93	76	62
	Deflection (L/240)	500	500	500	500	500	500	500	376	264	192	144	111	87	70	57	47
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. 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.