



Trap Tee



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	1.84	1.6380	125.20	324.13	0.3607	0.1640	4.9107	0.2113	0.1626	3.6340

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															
		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	8.50
Single	Positive Wind	500	500	500	500	363	267	204	161	130	108	90	77	66	58	51	45
	Live	500	500	500	500	363	267	204	161	130	108	90	77	66	58	51	45
	Deflection (L/180)	500	500	500	500	500	500	492	345	252	189	145	114	91	74	61	51
	Deflection (L/240)	500	500	500	500	500	500	369	259	189	142	109	86	68	56	46	38
2 Span	Positive Wind	500	500	500	363	257	191	147	117	95	78	66	56	49	42	37	33
	Live	500	500	500	363	257	191	147	117	95	78	66	56	49	42	37	33
	Deflection (L/180)	500	500	500	500	500	500	500	500	481	361	278	219	175	142	117	98
	Deflection (L/240)	500	500	500	500	500	500	500	495	361	271	209	164	131	107	88	73
3 Span	Positive Wind	500	500	500	442	315	235	182	145	118	98	82	70	61	53	46	41
	Live	500	500	500	442	315	235	182	145	118	98	82	70	61	53	46	41
	Deflection (L/180)	500	500	500	500	500	500	500	500	377	283	218	171	137	111	92	76
	Deflection (L/240)	500	500	500	500	500	500	500	388	283	212	163	128	103	83	69	57
4 Span (or more)	Positive Wind	500	500	500	417	296	221	170	135	110	91	77	66	57	49	43	38
	Live	500	500	500	417	296	221	170	135	110	91	77	66	57	49	43	38
	Deflection (L/180)	500	500	500	500	500	500	500	500	400	300	231	182	145	118	97	81
	Deflection (L/240)	500	500	500	500	500	500	500	412	300	225	173	136	109	89	73	61
ASTM E1592 Wind Uplift Testing																	

Notes:

1. Allowable uniform loads are based upon equal span lengths.
2. Positive Wind is wind pressure and is **NOT** increased by 33 1/3 %.
3. Live is the allowable live or snow load.
4. Deflection (L/180) is the allowable load that limits the panel's deflection to L/180 while under positive or live load.
5. Deflection (L/240) is the allowable load that limits the panel's deflection to L/240 while under positive or live load.
6. The weight of the panel has **NOT** been deducted from the allowable loads.
7. Positive wind and Live load values are limited to combined shear & bending using Eq. C3.3.1-1 of the AISI Specification.
8. Uplift values have not been updated, as testing is continuing. Shaded areas are outside of test range. Contact McElroy Metal for more information.
9. Positive Wind and Live Load values are limited by web crippling using a bearing length of 2".
10. Web crippling values are determined using a ratio of the uniform load **actually** supported by the top flanges of the section.