



# Trap Tee



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	1.42	1.1453	76.87	194.67	0.2547	0.1139	3.4107	0.1493	0.1086	2.7147

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 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	363	252	185	142	112	90	75	63	53	46	40	35	31
	Live	500	500	500	363	252	185	142	112	90	75	63	53	46	40	35	31
	Deflection (L/180)	500	500	500	500	500	500	347	244	178	133	103	81	64	52	43	36
	Deflection (L/240)	500	500	500	500	500	389	260	183	133	100	77	60	48	39	32	27
2 Span	Positive Wind	500	500	405	269	191	142	109	87	71	58	49	42	36	31	28	24
	Live	500	500	405	269	191	142	109	87	71	58	49	42	36	31	28	24
	Deflection (L/180)	500	500	500	500	500	500	466	340	255	196	154	123	100	83	69	
	Deflection (L/240)	500	500	500	500	500	500	498	350	255	191	147	116	92	75	62	51
3 Span	Positive Wind	500	500	486	327	233	174	135	108	88	73	61	52	45	39	34	31
	Live	500	500	486	327	233	174	135	108	88	73	61	52	45	39	34	31
	Deflection (L/180)	500	500	500	500	500	500	365	266	200	154	121	97	78	65	54	
	Deflection (L/240)	500	500	500	500	500	500	390	274	199	150	115	90	72	59	48	40
4 Span (or more)	Positive Wind	500	500	460	308	219	164	127	101	82	68	57	49	42	37	32	28
	Live	500	500	460	308	219	164	127	101	82	68	57	49	42	37	32	28
	Deflection (L/180)	500	500	500	500	500	500	388	282	212	163	128	103	83	69	57	
	Deflection (L/240)	500	500	500	500	500	500	414	291	212	159	122	96	77	62	51	43
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.