



# Maxima 218

(Bare Galvalume & Painted Galvalume)



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	1.27	0.6873	106.20	303.47	0.1560	0.0907	2.7140	0.0753	0.0669	2.0047

- Section properties are calculated in accordance with the 2007 AISI North American Specification for the Design of Cold-Formed Steel Structural Members.
- V<sub>a</sub> is the allowable shear.
- P<sub>a</sub> is the allowable load for web crippling on end & interior supports.
- I<sub>x</sub> is for deflection determination.
- S<sub>e</sub> is for bending.
- M<sub>a</sub> 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															
		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	452	289	201	147	113	89	72	59	50	42	36	32	28	25
	Live	500	500	452	289	201	147	113	89	72	59	50	42	36	32	28	25
	Deflection (L/180)	500	500	500	500	500	318	213	149	109	81	63	49	39	32	26	22
	Deflection (L/240)	500	500	500	500	378	238	159	112	81	61	47	37	29	24	19	16
2 Span	Positive Wind	500	461	285	192	137	103	79	63	51	43	36	31	26	23	20	18
	Live	500	461	285	192	137	103	79	63	51	43	36	31	26	23	20	18
	Deflection (L/180)	500	500	500	500	500	500	380	267	194	146	112	88	70	57	47	39
	Deflection (L/240)	500	500	500	500	500	425	285	200	146	109	84	66	53	43	35	29
3 Span	Positive Wind	500	500	337	230	166	125	98	78	64	53	45	38	33	29	25	22
	Live	500	500	337	230	166	125	98	78	64	53	45	38	33	29	25	22
	Deflection (L/180)	500	500	500	500	500	444	298	209	152	114	88	69	55	45	37	31
	Deflection (L/240)	500	500	500	500	500	333	223	157	114	85	66	52	41	33	27	23
4 Span	Positive Wind	500	500	321	218	157	118	92	73	60	50	42	36	31	27	24	21
	Live	500	500	321	218	157	118	92	73	60	50	42	36	31	27	24	21
	Deflection (L/180)	500	500	500	500	500	472	316	222	161	121	93	73	59	47	39	32
	Deflection (L/240)	500	500	500	500	500	354	237	166	121	91	70	55	44	35	29	24
ASTM E1592 Wind Uplift Testing		214.9	176.4	138.0	122.0	105.9	89.8	73.7	57.6	41.5	32.9	31.2	29.5	27.7	26.0		

**Notes:**

- Allowable uniform loads are based upon equal span lengths.
- Positive Wind is wind pressure and is **NOT** increased by 33 1/3 %.
- 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. C3.3.1-1 of the AISI Specification.
- Values of ASTM E1592 Wind Uplift Testing include a Factor of Safety. The Factor of Safety for spans 1'-0" thru 5'-0" is 1.67 and spans 5'-6" thru 7'-6" is 2.00. 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.