Maxima 216

(Bare Galvalume & Painted Galvalume)

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.
24	50.0	1.30	0.7733	119.48	341.40	0.1725	0.1024	3.0645	0.0848	0.0753	2.2553

1. Section properties are calculated in accordance with the 2007 AISI North American Specification for the Design of Cold-Formed Steel Structural Members.
2. Va is the allowable shear.
3. Pa is the allowable load for web crippling on end & interior supports.
4. Ix is for deflection determination.
5. Se is for bending.
6. Ma 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	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	326	227	166	127	100	81	67	56	48	41	36	31	28
	Live	500	500	500	326	227	166	127	100	81	67	56	48	41	36	31	28
	Deflection (L/180)	500	500	500	500	500	351	235	165	120	90	69	54	43	35	29	24
	Deflection (L/240)	500	500	500	500	418	263	176	124	90	67	52	41	32	26	22	18
2 Span	Positive Wind	500	500	321	216	154	115	89	71	58	48	40	34	30	26	23	20
	Live	500	500	321	216	154	115	89	71	58	48	40	34	30	26	23	20
	Deflection (L/180)	500	500	500	500	500	500	423	297	216	162	125	98	78	64	52	44
	Deflection (L/240)	500	500	500	500	500	473	317	222	162	122	94	73	59	48	39	33
3 Span	Positive Wind	500	500	379	259	187	141	110	88	72	60	50	43	37	32	28	25
	Live	500	500	379	259	187	141	110	88	72	60	50	43	37	32	28	25
	Deflection (L/180)	500	500	500	500	500	494	331	232	169	127	98	77	61	50	41	34
	Deflection (L/240)	500	500	500	500	500	371	248	174	127	95	73	57	46	37	31	25
4 Span	Positive Wind	500	500	361	245	177	133	103	82	67	56	47	40	35	30	27	23
	Live	500	500	361	245	177	133	103	82	67	56	47	40	35	30	27	23
	Deflection (L/180)	500	500	500	500	500	500	351	247	180	135	104	82	65	53	43	36
	Deflection (L/240)	500	500	500	500	500	394	263	185	135	101	78	61	49	40	32	27
ASTM E1592 Wind Uplift Testing		206.5	166.7	132.8	119.5	106.2	92.8	79.5	66.2	52.9	40.0	35.9	31.7	27.6	23.4		

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. 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.
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.
11. Load Tables are limited to a maximum allowable load of 500 psf.