Maxima 218

(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.
22	50.0	1.64	1.1753	173.73	497.33	0.2180	0.1287	3.8540	0.1027	0.0945	2.8273

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	411	285	209	160	126	102	84	71	60	52	45	40	35
	Live	500	500	500	411	285	209	160	126	102	84	71	60	52	45	40	35
	Deflection (L/180)	500	500	500	500	500	444	297	209	152	114	88	69	55	45	37	31
	Deflection (L/240)	500	500	500	500	500	333	223	156	114	85	66	52	41	33	27	23
2 Span	Positive Wind	500	500	421	279	198	147	114	90	73	61	51	44	38	33	29	25
	Live	500	500	421	279	198	147	114	90	73	61	51	44	38	33	29	25
	Deflection (L/180)	500	500	500	500	500	500	500	370	270	202	156	122	98	80	65	54
	Deflection (L/240)	500	500	500	500	500	500	395	277	202	152	117	92	73	60	49	41
3 Span	Positive Wind	500	500	500	339	242	181	141	112	91	76	64	54	47	41	36	32
	Live	500	500	500	339	242	181	141	112	91	76	64	54	47	41	36	32
	Deflection (L/180)	500	500	500	500	500	500	413	290	211	158	122	96	77	62	51	43
	Deflection (L/240)	500	500	500	500	500	462	309	217	158	119	91	72	57	47	38	32
4 Span	Positive Wind	500	500	478	320	228	170	132	105	85	71	60	51	44	38	34	30
	Live	500	500	478	320	228	170	132	105	85	71	60	51	44	38	34	30
	Deflection (L/180)	500	500	500	500	500	500	438	308	224	168	129	102	81	66	54	45
	Deflection (L/240)	500	500	500	500	500	491	329	231	168	126	97	76	61	49	41	34
ASTM E1592 Wind Uplift Testing		194.8	167.2	139.6	124.7	109.7	94.7	79.7	64.7	49.7	43.5	41.1	38.6	36.2	33.8		

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 1.85 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.

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