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.
22	50.0	1.69	1.3223	195.45	559.50	0.2393	0.1444	4.3223	0.1155	0.1062	3.1800

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	461	320	235	180	142	115	95	80	68	58	51	45	39
	Live	500	500	500	461	320	235	180	142	115	95	80	68	58	51	45	39
	Deflection (L/180)	500	500	500	500	500	487	326	229	167	125	96	76	60	49	40	34
	Deflection (L/240)	500	500	500	500	500	365	245	172	125	94	72	57	45	37	30	25
2 Span	Positive Wind	500	500	473	314	223	166	128	102	83	68	58	49	42	37	32	29
	Live	500	500	473	314	223	166	128	102	83	68	58	49	42	37	32	29
	Deflection (L/180)	500	500	500	500	500	500	500	409	298	224	172	136	108	88	72	60
	Deflection (L/240)	500	500	500	500	500	500	437	307	224	168	129	102	81	66	54	45
3 Span	Positive Wind	500	500	500	382	273	204	158	126	103	85	72	61	53	46	40	36
	Live	500	500	500	382	273	204	158	126	103	85	72	61	53	46	40	36
	Deflection (L/180)	500	500	500	500	500	500	457	321	234	175	135	106	85	69	57	47
	Deflection (L/240)	500	500	500	500	500	500	342	240	175	131	101	79	63	52	42	35
4 Span	Positive Wind	500	500	500	360	257	192	148	118	96	80	67	57	49	43	38	33
	Live	500	500	500	360	257	192	148	118	96	80	67	57	49	43	38	33
	Deflection (L/180)	500	500	500	500	500	500	485	340	248	186	143	113	90	73	60	50
	Deflection (L/240)	500	500	500	500	500	500	364	255	186	140	107	84	67	55	45	37
ASTM E1592 Wind Uplift Testing		235.5	201.5	167.5	150.1	132.8	115.5	98.1	80.8	63.5	49.7	46.3	43.0	39.7	36.4		

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 of 1.67 from 1.00 ft to 5.00 ft and a factor of safety of 2.0 for values greater than 5.00 ft.
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.