



TECHNICAL BULLETIN

Issue Date : June 10, 2011

No. 07-325-11

Maxima 224

(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	1.54	0.8815	130.30	373.00	0.1705	0.0961	2.8765	0.0770	0.0709	2.1225

1. Section properties are calculated in accordance with the 2007 AISI North American Specification for the Design of Cold-Formed Steel Structural Members.
2. V_a is the allowable shear.
3. P_a is the allowable load for web crippling on end & interior supports.
4. I_x is for deflection determination.
5. S_e is for bending.
6. M_a 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	479	306	213	156	119	94	76	63	53	45	39	34	29	26
	Live	500	500	479	306	213	156	119	94	76	63	53	45	39	34	29	26
	Deflection (L/180)	500	500	500	500	500	347	232	163	119	89	68	54	43	35	29	24
	Deflection (L/240)	500	500	500	500	413	260	174	122	89	67	51	40	32	26	21	18
2 Span	Positive Wind	500	500	316	210	149	111	85	68	55	46	38	33	28	24	21	19
	Live	500	500	316	210	149	111	85	68	55	46	38	33	28	24	21	19
	Deflection (L/180)	500	500	500	500	500	407	285	208	156	120	94	75	61	50	42	
	Deflection (L/240)	500	500	500	500	500	455	305	214	156	117	90	71	56	46	38	31
3 Span	Positive Wind	500	500	378	254	182	136	105	84	68	57	48	41	35	31	27	24
	Live	500	500	378	254	182	136	105	84	68	57	48	41	35	31	27	24
	Deflection (L/180)	500	500	500	500	500	476	318	223	163	122	94	74	59	48	39	33
	Deflection (L/240)	500	500	500	500	500	357	239	167	122	92	70	55	44	36	29	24
4 Span	Positive Wind	500	500	358	240	171	128	99	79	64	53	45	38	33	29	25	22
	Live	500	500	358	240	171	128	99	79	64	53	45	38	33	29	25	22
	Deflection (L/180)	500	500	500	500	500	500	338	237	173	130	100	78	63	51	42	35
	Deflection (L/240)	500	500	500	500	500	379	253	178	130	97	75	59	47	38	31	26
ASTM E1592 Wind Uplift Testing		NO TEST DATA AVAILABLE															

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 2.0. 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.

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