



TECHNICAL BULLETIN

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Maxima 1.5 18" (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	1.49	0.9470	316.70	489.50	0.0810	0.0595	2.0710	0.0410	0.0588	1.4410

- Section properties are calculated in accordance with the 2001 AISI North American Specification for the Design of Cold-Formed Steel Structural Members.
- V_a is the allowable shear.
- P_a is the allowable load for web crippling on end & interior supports.
- I_x is for deflection determination.
- S_e is for bending.
- M_a 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	345	220	153	112	86	68	55	45	38	32	28	24	21	19
	Live	500	500	345	220	153	112	86	68	55	45	38	32	28	24	21	19
	Deflection (L/180)	500	500	500	453	262	165	110	77	56	42	32	25	20	16	13	11
	Deflection (L/240)	500	500	500	339	196	123	82	58	42	31	24	19	15	12	10	8
2 Span	Positive Wind	500	393	228	148	104	77	59	46	38	31	26	22	19	17	14	13
	Live	500	393	228	148	104	77	59	46	38	31	26	22	19	17	14	13
	Deflection (L/180)	500	500	500	500	475	299	200	140	102	77	59	46	37	30	25	20
	Deflection (L/240)	500	500	500	500	356	224	150	105	77	57	44	35	28	22	18	15
3 Span	Positive Wind	500	475	280	183	129	95	73	58	47	39	33	28	24	21	18	16
	Live	500	475	280	183	129	95	73	58	47	39	33	28	24	21	18	16
	Deflection (L/180)	500	500	500	500	372	234	157	110	80	60	46	36	29	23	19	16
	Deflection (L/240)	500	500	500	482	279	176	117	82	60	45	34	27	22	17	14	12
4 Span	Positive Wind	500	449	263	172	121	89	68	54	44	36	30	26	22	19	17	15
	Live	500	449	263	172	121	89	68	54	44	36	30	26	22	19	17	15
	Deflection (L/180)	500	500	500	500	395	249	166	117	85	64	49	38	31	25	20	17
	Deflection (L/240)	500	500	500	500	296	186	125	87	64	48	37	29	23	18	15	13
ASTM E1592 Wind Uplift Testing		NO TEST DATA AVAILABLE															

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 of 2.0. 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.
- Load Tables are limited to a maximum allowable load of 500 psf.

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