Maxima 318

(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	1.37	0.4813	97.27	300.60	0.3627	0.1423	4.2620	0.1967	0.1191	3.5647

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	481	385	315	231	177	140	113	93	78	67	57	50	44	39
	Live	500	500	481	385	315	231	177	140	113	93	78	67	57	50	44	39
	Deflection (L/180)	500	500	500	500	500	500	495	347	253	190	146	115	92	75	61	51
	Deflection (L/240)	500	500	500	500	500	500	371	260	190	142	110	86	69	56	46	38
2 Span	Positive Wind	500	461	323	239	184	145	117	96	80	68	58	50	44	39	34	30
	Live	500	461	323	239	184	145	117	96	80	68	58	50	44	39	34	30
	Deflection (L/180)	500	500	500	500	500	500	500	500	471	353	272	214	171	139	115	95
	Deflection (L/240)	500	500	500	500	500	500	500	484	353	265	204	160	128	104	86	71
3 Span	Positive Wind	500	495	352	265	207	166	136	113	95	81	70	61	53	47	42	37
	Live	500	495	352	265	207	166	136	113	95	81	70	61	53	47	42	37
	Deflection (L/180)	500	500	500	500	500	500	500	500	369	277	213	167	134	109	90	75
	Deflection (L/240)	500	500	500	500	500	500	500	379	276	207	160	125	100	82	67	56
4 Span	Positive Wind	500	485	344	257	200	160	130	108	90	77	66	57	50	44	39	35
	Live	500	485	344	257	200	160	130	108	90	77	66	57	50	44	39	35
	Deflection (L/180)	500	500	500	500	500	500	500	500	391	294	226	178	142	116	95	79
	Deflection (L/240)	500	500	500	500	500	500	500	403	293	220	170	133	107	87	71	59
ASTM E1592 Wind Uplift Testing		160.4	137.1	113.8	102.2	90.6	79.0	67.4	55.8	44.2							

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 1.86. 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.