



Mega-Rib

Bare & Painted



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	1.52	2.0930	519.60	619.67	0.1267	0.1594	3.9833	0.1300	0.1492	3.7300

1. Section properties are calculated in accordance with the 2016 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															
		3.50	4.00	4.50	5.00	5.50	6.00	6.50	7.00	7.50	8.00	8.50	9.00	9.50	10.00	10.50	11.00
Single	Positive Wind	216	165	131	106	87	73	62	54	47	41	36	32	29	26	24	21
	Negative Wind	202	155	122	99	82	69	58	50	44	38	34	30	27	24	22	20
	Live	216	165	131	106	87	73	62	54	47	41	36	32	29	26	24	21
	Deflection (L/180)	258	172	121	88	66	51	40	32	26	21	18	15	12	11	9	8
	Deflection (L/240)	193	129	91	66	49	38	30	24	19	16	13	11	9	8	7	6
2 Span	Positive Wind	198	152	121	98	81	68	58	50	43	38	34	30	27	24	22	20
	Negative Wind	211	162	129	104	86	73	62	53	46	41	36	32	29	26	24	21
	Live	198	152	121	98	81	68	58	50	43	38	34	30	27	24	22	20
	Deflection (L/180)	500	422	296	216	162	125	98	78	64	52	43	37	31	27	23	20
	Deflection (L/240)	472	316	222	162	121	93	73	59	48	39	32	27	23	20	17	15
3 Span	Positive Wind	229	189	150	122	101	85	72	62	54	48	42	38	34	30	28	25
	Negative Wind	261	201	160	130	108	91	77	67	58	51	45	40	36	33	29	27
	Live	229	189	150	122	101	85	72	62	54	48	42	38	34	30	28	25
	Deflection (L/180)	493	330	232	169	127	97	77	61	50	41	34	29	24	21	18	15
	Deflection (L/240)	370	248	174	127	95	73	57	46	37	31	25	21	18	15	13	11
4 Span	Positive Wind	221	177	140	114	94	79	68	58	51	45	39	35	32	28	26	23
	Negative Wind	244	188	150	121	101	85	72	62	54	48	42	38	34	30	27	25
	Live	221	177	140	114	94	79	68	58	51	45	39	35	32	28	26	23
	Deflection (L/180)	500	351	246	179	135	104	81	65	53	43	36	30	26	22	19	16
	Deflection (L/240)	393	263	184	134	101	78	61	49	39	32	27	23	19	16	14	12

Notes:

1. Allowable uniform loads are based upon equal span lengths.
2. Live is the allowable live or snow load.
3. Deflection (L/180) is the allowable load that limits the panel's deflection to L/180 while under positive or live load.
4. Deflection (L/240) is the allowable load that limits the panel's deflection to L/240 while under positive or live load.
5. The weight of the panel has **NOT** been deducted from the allowable loads.
6. Positive Wind, Negative Wind, and Live Load values are limited to combined shear & bending using Eq. H2-1 of the AISI Specification.
7. Positive Wind and Live Load values are limited by web crippling using a bearing length of 2".
8. Web crippling values are determined using a ratio of the uniform load **actually** supported by the top flanges of the section.
9. Load Tables are limited to a maximum allowable load of 500 psf.
10. Web crippling values are the more conservative value whether from analytical calculation or testing.