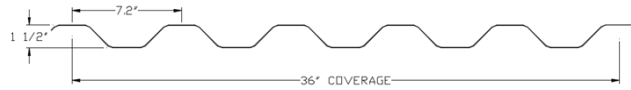




Mega-Rib

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.)
24	50.0	1.17	1.2580	233.13	643.31	0.0910	0.1098	2.7433	0.0890	0.0973	2.4300

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	149	114	90	73	60	50	43	37	32	28	25	22	20	18	16	15
	Negative Wind	132	101	80	64	53	45	38	33	28	25	22	20	17	16	14	13
	Live	149	114	90	73	60	50	43	37	32	28	25	22	20	18	16	15
	Deflection (L/180)	185	124	87	63	47	36	28	23	18	15	12	10	9	7	6	5
	Deflection (L/240)	139	93	65	47	35	27	21	17	14	11	9	8	6	5	5	4
2 Span	Positive Wind	128	99	78	63	52	44	38	32	28	25	22	19	17	16	14	13
	Negative Wind	144	111	88	71	59	50	42	37	32	28	25	22	20	18	16	15
	Live	128	99	78	63	52	44	38	32	28	25	22	19	17	16	14	13
	Deflection (L/180)	441	296	207	151	113	87	69	55	44	37	30	25	22	18	16	14
	Deflection (L/240)	331	222	155	113	85	65	51	41	33	27	23	19	16	14	12	10
3 Span	Positive Wind	159	123	97	79	65	55	47	40	35	31	27	24	22	20	18	16
	Negative Wind	178	137	109	89	74	62	53	46	40	35	31	28	25	22	20	18
	Live	159	123	97	79	65	55	47	40	35	31	27	24	22	20	18	16
	Deflection (L/180)	346	231	162	118	89	68	54	43	35	28	24	20	17	14	12	11
	Deflection (L/240)	259	173	122	89	66	51	40	32	26	21	18	15	12	11	9	8
4 Span	Positive Wind	149	115	91	74	61	51	44	38	33	29	26	23	20	18	17	15
	Negative Wind	167	129	102	83	69	58	49	43	37	33	29	26	23	21	19	17
	Live	149	115	91	74	61	51	44	38	33	29	26	23	20	18	17	15
	Deflection (L/180)	367	246	172	126	94	72	57	45	37	30	25	21	18	15	13	11
	Deflection (L/240)	275	184	129	94	71	54	43	34	28	23	19	16	13	11	10	8

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 3.125".
8. Web crippling values are determined using a ratio of the uniform load **actually** supported by the top flanges of the section.
9. Web crippling values are determined from ASTM E72-98 testing.
10. Web crippling values are the more conservative value whether from analytical calculation or testing.
11. Load Tables are limited to a maximum allowable load of 500 psf.