



# Modern Rib

Bare & Painted

SECTION PROPERTIES						TOP IN COMPRESSION			BOTTOM IN COMPRESSION		
GAUGE	FY (ksi)	WEIGHT (psf)	V <sub>a</sub> (kip/ft.)	P <sub>a_end</sub> (lbs/ft.)	P <sub>a_int</sub> (lbs/ft.)	I <sub>x</sub> (in. <sup>4</sup> /ft.)	S <sub>e</sub> (in. <sup>3</sup> /ft.)	M <sub>a</sub> (kip-in./ft.)	I <sub>x</sub> (in. <sup>4</sup> /ft.)	S <sub>e</sub> (in. <sup>3</sup> /ft.)	M <sub>a</sub> (kip-in./ft.)
29	80.0	0.66	0.3863	130.90	186.20	0.0063	0.0097	0.2900	0.0063	0.0605	0.3567

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<sub>a</sub> is the allowable shear.
3. P<sub>a</sub> is the allowable load for web crippling on end & interior supports.
4. I<sub>x</sub> is for deflection determination.
5. S<sub>e</sub> is for bending.
6. M<sub>a</sub> 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	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00
Single	Positive Wind	500	500	343	193	123	85	63	48	38	30	25	21	18	15	13	12
	Negative Wind	500	500	422	237	152	105	77	59	46	38	31	26	22	19	16	14
	Live	500	500	343	193	123	85	63	48	38	30	25	21	18	15	13	12
	Deflection (L/180)	500	500	500	500	283	164	103	69	48	35	26	20	16	12	10	8
	Deflection (L/240)	500	500	500	415	212	123	77	51	36	26	19	15	12	9	7	6
2 Span	Positive Wind	500	500	376	221	145	102	75	58	46	37	31	26	22	19	16	14
	Negative Wind	500	500	317	184	120	84	62	47	37	30	25	21	18	15	13	12
	Live	500	500	376	221	145	102	75	58	46	37	31	26	22	19	16	14
	Deflection (L/180)	500	500	500	500	500	395	248	166	117	85	64	49	38	31	25	20
	Deflection (L/240)	500	500	500	500	500	296	186	125	87	64	48	37	29	23	18	15
3 Span	Positive Wind	500	500	449	269	178	126	93	72	57	46	38	32	27	24	20	18
	Negative Wind	500	500	384	226	148	104	77	59	47	38	31	26	22	19	17	15
	Live	500	500	449	269	178	126	93	72	57	46	38	32	27	24	20	18
	Deflection (L/180)	500	500	500	500	500	309	194	130	91	66	50	38	30	24	19	16
	Deflection (L/240)	500	500	500	500	401	232	146	97	68	50	37	29	22	18	14	12
4 Span	Positive Wind	500	500	426	254	167	118	87	67	53	43	36	30	26	22	19	17
	Negative Wind	500	500	362	212	138	97	72	55	44	35	29	24	21	18	15	14
	Live	500	500	426	254	167	118	87	67	53	43	36	30	26	22	19	17
	Deflection (L/180)	500	500	500	500	500	328	206	138	97	70	53	41	32	25	21	17
	Deflection (L/240)	500	500	500	500	425	246	155	103	73	53	39	30	24	19	15	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.