

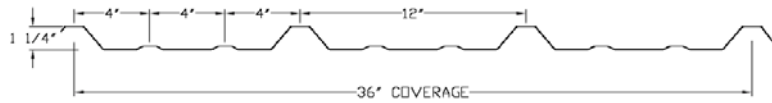


TECHNICAL BULLETIN

Issue Date : June 1, 2006

No. 07-243-06

PBR-Panel



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	80.0	1.14	1.0481	247.88	480.55	0.0537	0.0547	1.9667	0.0430	0.0781	2.1333

- 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															
		1.50	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	9.00
Single	Positive Wind	582	327	209	145	107	81	64	52	43	36	31	26	23	20	18	16
	Negative Wind	632	355	227	158	116	88	70	56	47	39	33	29	25	22	19	17
	Live	582	327	209	145	107	81	64	52	43	36	31	26	23	20	18	16
	Deflection (L/180)	1390	586	300	173	109	73	51	37	28	21	17	13	11	9	7	6
	Deflection (L/240)	1043	440	225	130	82	55	38	28	21	16	12	10	8	6	5	4
2 Span	Positive Wind	550	327	215	152	112	86	69	56	46	39	33	28	25	22	19	17
	Negative Wind	516	305	200	140	104	80	63	51	42	36	30	26	23	20	18	16
	Live	550	327	215	152	112	86	69	56	46	39	33	28	25	22	19	17
	Deflection (L/180)	3016	1272	651	377	237	159	111	81	61	47	37	29	24	19	16	13
	Deflection (L/240)	2262	954	488	282	178	119	83	61	45	35	27	22	18	14	12	10
3 Span	Positive Wind	653	396	263	187	139	107	85	69	57	48	41	35	31	27	24	21
	Negative Wind	617	370	245	173	129	99	79	64	53	44	38	33	28	25	22	20
	Live	653	396	263	187	139	107	85	69	57	48	41	35	31	27	24	21
	Deflection (L/180)	2362	996	510	295	186	124	87	63	47	36	29	23	18	15	12	10
	Deflection (L/240)	1772	747	382	221	139	93	65	47	35	27	21	17	14	11	9	8
4 Span	Positive Wind	620	373	247	175	130	100	80	65	54	45	38	33	29	25	22	20
	Negative Wind	585	349	230	163	121	93	74	60	49	42	35	30	27	23	21	18
	Live	620	373	247	175	130	100	80	65	54	45	38	33	29	25	22	20
	Deflection (L/180)	2508	1058	541	313	197	132	92	67	50	39	30	24	20	16	13	11
	Deflection (L/240)	1881	793	406	235	148	99	69	50	38	29	23	18	15	12	10	8

Notes:

- Allowable uniform loads are based upon equal span lengths.
- Positive Wind is wind pressure and is **NOT** increased by 33 1/3 %.
- Negative Wind is wind suction or uplift 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, Negative Wind, and Live Load values are limited to combined shear & bending using Eq. C3.3.1-1 of the AISI Specification.
- 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.

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