



PBD Panel

SECTION PROPERTIES								
PANEL GAUGE	Fy (KSI)	WEIGHT (PSF)	NEGATIVE BENDING			POSITIVE BENDING		
			Ixe (IN.4/FT.)	Sxe (IN.3/FT.)	Maxo (KIP-IN.)	Ixe (IN.4/FT.)	Sxe (IN.3/FT.)	Maxo (KIP-IN.)
29	60*	0.84	0.0124	0.0345	1.2384	0.0124	0.0345	1.2384
26	60*	1.06	0.0172	0.0496	1.7810	0.0172	0.0496	1.7810
24	50	1.28	0.0227	0.0681	2.0382	0.0227	0.0681	2.0382
22	50	1.62	0.0310	0.0915	2.7396	0.0310	0.0915	2.7396

* Fy is 80-ksi reduced to 60-ksi in accordance with the 2001 edition of the North American Specification For Design Of Cold-Formed Steel Structural Members - A2.3.2.

NOTES:

1. All calculations for the properties of PBD panels are calculated in accordance with the 2001 edition of the North American Specification For Design Of Cold-Formed Steel Structural Members.
2. Ixe is for deflection determination.
3. Sxe is for bending.
4. Maxo is allowable bending moment.
5. All values are for one foot of panel width.

The Engineering data contained herein is for the expressed use of customers and design professionals. Along with this data, it is recommended that the design professional have a copy of the most current version of the *North American Specification for the Design of Cold-Formed Steel Structural Members* published by the American Iron and Steel Institute to facilitate design. This Specification contains the design criteria for cold-formed steel components. Along with the Specification, the designer should reference the most current building code applicable to the project jobsite in order to determine environmental loads. If further information or guidance regarding cold-formed design practices is desired, please contact the manufacturer.



ALLOWABLE UNIFORM LOADS IN POUNDS PER SQUARE FOOT

PBD Panel

29 Gauge (Fy = 60 KSI)								
SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		3.0	4.0	5.0	6.0	7.0	8.0	9.0
SINGLE	NEGATIVE WIND LOAD	91.7	51.6	33.0	22.9	16.8	12.9	10.2
	LIVE LOAD/DEFLECTION	40.1	16.9	8.7	5.0	3.2	2.1	1.5
2-SPAN	NEGATIVE WIND LOAD	91.7	51.6	33.0	22.9	16.8	12.9	10.2
	LIVE LOAD/DEFLECTION	79.9	40.8	20.9	12.1	7.6	5.1	3.6
3-SPAN	NEGATIVE WIND LOAD	114.7	64.5	41.3	28.7	21.1	16.1	12.7
	LIVE LOAD/DEFLECTION	75.8	32.0	16.4	9.5	6.0	4.0	2.8
4-SPAN	NEGATIVE WIND LOAD	107.1	60.2	38.5	26.8	19.7	15.1	11.9
	LIVE LOAD/DEFLECTION	80.4	33.9	17.4	10.1	6.3	4.2	3.0

26 Gauge (Fy = 60 KSI)								
SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		3.0	4.0	5.0	6.0	7.0	8.0	9.0
SINGLE	NEGATIVE WIND LOAD	131.9	74.2	47.5	33.0	24.2	18.6	14.7
	LIVE LOAD/DEFLECTION	55.7	23.5	12.0	7.0	4.4	2.9	2.1
2-SPAN	NEGATIVE WIND LOAD	131.9	74.2	47.5	33.0	24.2	18.6	14.7
	LIVE LOAD/DEFLECTION	112.0	56.6	29.0	16.8	10.6	7.1	5.0
3-SPAN	NEGATIVE WIND LOAD	164.9	92.8	59.4	41.2	30.3	23.2	18.3
	LIVE LOAD/DEFLECTION	105.1	44.3	22.7	13.1	8.3	5.5	3.9
4-SPAN	NEGATIVE WIND LOAD	154.0	86.6	55.4	38.5	28.3	21.7	17.1
	LIVE LOAD/DEFLECTION	111.5	47.1	24.1	13.9	8.8	5.9	4.1

24 Gauge (Fy = 50 KSI)								
SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		3.0	4.0	5.0	6.0	7.0	8.0	9.0
SINGLE	NEGATIVE WIND LOAD	151.0	84.9	54.4	37.7	27.7	21.2	16.8
	LIVE LOAD/DEFLECTION	73.5	31.0	15.9	9.2	5.8	3.9	2.7
2-SPAN	NEGATIVE WIND LOAD	151.0	84.9	54.4	37.7	27.7	21.2	16.8
	LIVE LOAD/DEFLECTION	124.0	74.7	38.2	22.1	13.9	9.3	6.6
3-SPAN	NEGATIVE WIND LOAD	188.7	106.2	67.9	47.2	34.7	26.5	21.0
	LIVE LOAD/DEFLECTION	138.7	58.5	30.0	17.3	10.9	7.3	5.1
4-SPAN	NEGATIVE WIND LOAD	176.2	99.1	63.4	44.1	32.4	24.8	19.6
	LIVE LOAD/DEFLECTION	138.5	62.1	31.8	18.4	11.6	7.8	5.5

22 Gauge (Fy = 50 KSI)								
SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		3.0	4.0	5.0	6.0	7.0	8.0	9.0
SINGLE	NEGATIVE WIND LOAD	202.9	114.2	73.1	50.7	37.3	28.5	22.5
	LIVE LOAD/DEFLECTION	100.4	42.3	21.7	12.5	7.9	5.3	3.7
2-SPAN	NEGATIVE WIND LOAD	202.9	114.2	73.1	50.7	37.3	28.5	22.5
	LIVE LOAD/DEFLECTION	164.1	100.2	52.2	30.2	19.0	12.7	9.0
3-SPAN	NEGATIVE WIND LOAD	253.7	142.7	91.3	63.4	46.6	35.7	28.2
	LIVE LOAD/DEFLECTION	189.4	79.9	40.9	23.7	14.9	10.0	7.0
4-SPAN	NEGATIVE WIND LOAD	236.9	133.2	85.3	59.2	43.5	33.3	26.3
	LIVE LOAD/DEFLECTION	182.7	84.8	43.4	25.1	15.8	10.6	7.4

NOTES:

- 1) Allowable loads are based on uniform span lengths and Fy = 50 and 60-ksi.
- 2) LIVE LOAD is limited by bending, shear, combined shear & bending and web crippling.
- 3) **NEGATIVE WIND LOAD does not contain a 33.333% increase and does not consider fastener pullout or pullover.**
- 4) Above loads consider a maximum deflection ratio of L/180.
- 5) The weight of the panel has not been deducted from the allowable loads.
- 6) The use of any accessories other than those provided by the manufacturer may damage panels, void all warranties and will void all engineering data.
- 7) This material is subject to change without notice. Please contact MBCI for most current data.

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