



PBC Panel

SECTION PROPERTIES								
			NEGATIVE BENDING			POSITIVE BENDING		
PANEL	Fy	WEIGHT	Ixe	Sxe	Maxo	Ixe	Sxe	Maxo
GAUGE	(KSI)	(PSF)	(IN.4/FT.)	(IN.3/FT.)	(KIP-IN.)	(IN.4/FT.)	(IN.3/FT.)	(KIP-IN.)
29	60*	0.84	0.0187	0.0405	1.4547	0.0187	0.0405	1.4547
26	60*	1.06	0.0249	0.055	1.9759	0.0249	0.055	1.9759
24	50	1.28	0.0318	0.0711	2.1296	0.0318	0.0711	2.1296
22	50	1.62	0.0415	0.0905	2.7099	0.0415	0.0905	2.7099

* 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 PBC 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

PBC 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	107.8	60.6	38.8	26.9	19.8	15.2	12.0
	LIVE LOAD/DEFLECTION	60.5	25.5	13.1	7.6	4.8	3.2	2.2
2-SPAN	NEGATIVE WIND LOAD	107.8	60.6	38.8	26.9	19.8	15.2	12.0
	LIVE LOAD/DEFLECTION	94.3	56.0	31.5	18.2	11.5	7.7	5.4
3-SPAN	NEGATIVE WIND LOAD	134.7	75.8	48.5	33.7	24.7	18.9	15.0
	LIVE LOAD/DEFLECTION	112.3	48.2	24.7	14.3	9.0	6.0	4.2
4-SPAN	NEGATIVE WIND LOAD	125.8	70.7	45.3	31.4	23.1	17.7	14.0
	LIVE LOAD/DEFLECTION	106.6	51.2	26.2	15.2	9.5	6.4	4.5

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	146.4	82.3	52.7	36.6	26.9	20.6	16.3
	LIVE LOAD/DEFLECTION	80.6	34.0	17.4	10.1	6.3	4.3	3.0
2-SPAN	NEGATIVE WIND LOAD	146.4	82.3	52.7	36.6	26.9	20.6	16.3
	LIVE LOAD/DEFLECTION	126.8	75.6	41.9	24.3	15.3	10.2	7.2
3-SPAN	NEGATIVE WIND LOAD	183.0	102.9	65.9	45.7	33.6	25.7	20.3
	LIVE LOAD/DEFLECTION	150.5	64.2	32.9	19.0	12.0	8.0	5.6
4-SPAN	NEGATIVE WIND LOAD	170.8	96.1	61.5	42.7	31.4	24.0	19.0
	LIVE LOAD/DEFLECTION	143.1	68.1	34.9	20.2	12.7	8.5	6.0

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	157.7	88.7	56.8	39.4	29.0	22.2	17.5
	LIVE LOAD/DEFLECTION	102.9	43.4	22.2	12.9	8.1	5.4	3.8
2-SPAN	NEGATIVE WIND LOAD	157.7	88.7	56.8	39.4	29.0	22.2	17.5
	LIVE LOAD/DEFLECTION	135.0	80.8	53.4	31.0	19.5	13.1	9.2
3-SPAN	NEGATIVE WIND LOAD	197.2	110.9	71.0	49.3	36.2	27.7	21.9
	LIVE LOAD/DEFLECTION	159.6	82.0	42.0	24.3	15.3	10.2	7.2
4-SPAN	NEGATIVE WIND LOAD	184.1	103.6	66.3	46.0	33.8	25.9	20.5
	LIVE LOAD/DEFLECTION	151.9	87.0	44.5	25.8	16.2	10.9	7.6

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	200.7	112.9	72.3	50.2	36.9	28.2	22.3
	LIVE LOAD/DEFLECTION	134.3	56.7	29.0	16.8	10.6	7.1	5.0
2-SPAN	NEGATIVE WIND LOAD	200.7	112.9	72.3	50.2	36.9	28.2	22.3
	LIVE LOAD/DEFLECTION	172.2	103.0	68.0	40.5	25.5	17.1	12.0
3-SPAN	NEGATIVE WIND LOAD	250.9	141.1	90.3	62.7	46.1	35.3	27.9
	LIVE LOAD/DEFLECTION	203.7	107.0	54.8	31.7	20.0	13.4	9.4
4-SPAN	NEGATIVE WIND LOAD	234.3	131.8	84.3	58.6	43.0	32.9	26.0
	LIVE LOAD/DEFLECTION	193.8	113.5	58.1	33.6	21.2	14.2	10.0

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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