



PBA 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*	0.75	0.0161	0.023	0.8275	0.0122	0.023	0.7297
26	60*	0.94	0.0219	0.0322	1.1562	0.0168	0.0283	1.0154
24	50	1.14	0.029	0.0431	1.2915	0.0222	0.0381	1.1404
22	50	1.44	0.0387	0.057	1.7052	0.029	0.0531	1.5882

* 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 PBA 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

PBA 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	61.3	34.5	22.1	15.3	11.3	8.6	6.8
	LIVE LOAD/DEFLECTION	39.5	16.7	8.5	4.9	3.1	2.1	1.5
2-SPAN	NEGATIVE WIND LOAD	54.1	30.4	19.5	13.5	9.9	7.6	6.0
	LIVE LOAD/DEFLECTION	52.6	29.9	19.3	11.9	7.5	5.0	3.5
3-SPAN	NEGATIVE WIND LOAD	67.6	38.0	24.3	16.9	12.4	9.5	7.5
	LIVE LOAD/DEFLECTION	63.9	31.4	16.1	9.3	5.9	3.9	2.8
4-SPAN	NEGATIVE WIND LOAD	63.1	35.5	22.7	15.8	11.6	8.9	7.0
	LIVE LOAD/DEFLECTION	60.9	33.4	17.1	9.9	6.2	4.2	2.9

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	85.6	48.2	30.8	21.4	15.7	12.0	9.5
	LIVE LOAD/DEFLECTION	54.4	22.9	11.7	6.8	4.3	2.9	2.0
2-SPAN	NEGATIVE WIND LOAD	75.2	42.3	27.1	18.8	13.8	10.6	8.4
	LIVE LOAD/DEFLECTION	72.9	41.5	26.8	16.4	10.3	6.9	4.9
3-SPAN	NEGATIVE WIND LOAD	94.0	52.9	33.8	23.5	17.3	13.2	10.4
	LIVE LOAD/DEFLECTION	89.9	43.3	22.2	12.8	8.1	5.4	3.8
4-SPAN	NEGATIVE WIND LOAD	87.8	49.4	31.6	21.9	16.1	12.3	9.8
	LIVE LOAD/DEFLECTION	84.3	46.0	23.5	13.6	8.6	5.7	4.0

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	95.7	53.8	34.4	23.9	17.6	13.5	10.6
	LIVE LOAD/DEFLECTION	71.9	30.3	15.5	9.0	5.7	3.8	2.7
2-SPAN	NEGATIVE WIND LOAD	84.5	47.5	30.4	21.1	15.5	11.9	9.4
	LIVE LOAD/DEFLECTION	81.3	46.5	30.0	20.9	13.6	9.1	6.4
3-SPAN	NEGATIVE WIND LOAD	105.6	59.4	38.0	26.4	19.4	14.8	11.7
	LIVE LOAD/DEFLECTION	100.1	57.2	29.3	17.0	10.7	7.2	5.0
4-SPAN	NEGATIVE WIND LOAD	98.6	55.5	35.5	24.6	18.1	13.9	11.0
	LIVE LOAD/DEFLECTION	93.9	53.9	31.1	18.0	11.3	7.6	5.3

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	126.3	71.1	45.5	31.6	23.2	17.8	14.0
	LIVE LOAD/DEFLECTION	93.9	39.6	20.3	11.7	7.4	5.0	3.5
2-SPAN	NEGATIVE WIND LOAD	117.6	66.2	42.4	29.4	21.6	16.5	13.1
	LIVE LOAD/DEFLECTION	112.5	64.5	41.7	28.3	17.8	11.9	8.4
3-SPAN	NEGATIVE WIND LOAD	147.1	82.7	52.9	36.8	27.0	20.7	16.3
	LIVE LOAD/DEFLECTION	138.1	74.7	38.3	22.1	13.9	9.3	6.6
4-SPAN	NEGATIVE WIND LOAD	137.3	77.2	49.4	34.3	25.2	19.3	15.3
	LIVE LOAD/DEFLECTION	129.8	74.8	40.6	25.5	14.8	9.9	7.0

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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