



**ALLOWABLE UNIFORM LOADS IN POUNDS PER SQUARE FOOT**

**PBD Roof Panel**

29 Gauge (0.0133"), Fy = 60 ksi, Fu = 61.5 ksi								
SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		3.0	4.0	5.0	6.0	7.0	8.0	9.0
1-span	NEGATIVE WIND LOAD	106.73	60.04	35.53	20.56	12.95	8.68	6.09
	LIVE LOAD/DEFLECTION	38.45	16.22	8.31	4.81	3.03	2.03	1.42
2-span	NEGATIVE WIND LOAD	105.41	59.69	38.32	26.66	19.60	15.02	11.87
	LIVE LOAD/DEFLECTION	105.12	45.14	23.11	13.38	8.42	5.64	3.96
3-span	NEGATIVE WIND LOAD	130.89	74.33	47.78	33.26	24.47	18.17	12.76
	LIVE LOAD/DEFLECTION	80.62	34.01	17.41	10.08	6.35	4.25	2.99
4-span	NEGATIVE WIND LOAD	122.45	69.46	44.63	31.06	22.85	17.51	13.73
	LIVE LOAD/DEFLECTION	86.73	36.59	18.73	10.84	6.83	4.57	3.21

26 Gauge (0.0181"), Fy = 60 ksi, Fu = 61.5 ksi								
SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		3.0	4.0	5.0	6.0	7.0	8.0	9.0
1-span	NEGATIVE WIND LOAD	163.78	92.13	51.62	29.87	18.81	12.60	8.85
	LIVE LOAD/DEFLECTION	56.04	23.64	12.11	7.01	4.41	2.96	2.08
2-span	NEGATIVE WIND LOAD	162.01	91.92	59.07	41.11	30.24	23.17	18.32
	LIVE LOAD/DEFLECTION	149.98	63.27	32.40	18.75	11.81	7.91	5.55
3-span	NEGATIVE WIND LOAD	200.80	114.34	73.60	51.27	37.74	26.03	18.28
	LIVE LOAD/DEFLECTION	116.06	48.96	25.07	14.51	9.14	6.12	4.30
4-span	NEGATIVE WIND LOAD	187.97	106.90	68.77	47.89	35.25	27.02	19.53
	LIVE LOAD/DEFLECTION	123.91	52.28	26.77	15.49	9.75	6.53	4.59

24 Gauge (0.0223"), Fy = 50 ksi, Fu = 60 ksi								
SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		3.0	4.0	5.0	6.0	7.0	8.0	9.0
1-span	NEGATIVE WIND LOAD	155.32	87.37	55.92	38.83	25.19	16.87	11.85
	LIVE LOAD/DEFLECTION	75.14	31.70	16.23	9.39	5.91	3.96	2.78
2-span	NEGATIVE WIND LOAD	154.61	87.62	56.28	39.16	28.80	22.07	17.45
	LIVE LOAD/DEFLECTION	152.72	77.68	39.77	23.02	14.49	9.71	6.82
3-span	NEGATIVE WIND LOAD	191.83	109.06	70.15	48.85	35.95	27.55	21.79
	LIVE LOAD/DEFLECTION	144.26	60.86	31.16	18.03	11.36	7.61	5.34
4-span	NEGATIVE WIND LOAD	179.51	101.95	65.54	45.63	33.57	25.73	20.34
	LIVE LOAD/DEFLECTION	153.12	64.60	33.07	19.14	12.05	8.07	5.67

22 Gauge (0.0286"), Fy = 50 ksi, Fu = 60 ksi								
SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		3.0	4.0	5.0	6.0	7.0	8.0	9.0
1-span	NEGATIVE WIND LOAD	201.90	113.57	72.68	50.48	32.69	21.90	15.38
	LIVE LOAD/DEFLECTION	97.47	41.12	21.05	12.18	7.67	5.14	3.61
2-span	NEGATIVE WIND LOAD	200.54	113.69	73.03	50.82	37.38	28.64	22.64
	LIVE LOAD/DEFLECTION	198.37	99.25	50.82	29.41	18.52	12.41	8.71
3-span	NEGATIVE WIND LOAD	248.75	141.48	91.02	63.39	46.66	35.76	28.28
	LIVE LOAD/DEFLECTION	184.31	77.75	39.81	23.04	14.51	9.72	6.83
4-span	NEGATIVE WIND LOAD	232.80	132.26	85.04	59.21	43.57	33.39	26.40
	LIVE LOAD/DEFLECTION	195.65	82.54	42.26	24.46	15.40	10.32	7.25

**Notes:**

- Strength calculations based on the 2012 AISI Standard "North American Specification for the Design of Cold-formed Steel Structural Members."
- Allowable loads are applicable for uniform loading and spans without overhangs.
- LIVE LOAD/DEFLECTION load capacities are for those loads that push the panel against its supports. The applicable limit states are flexure, shear, combined shear and flexure, web crippling at end and interior supports, and a deflection limit of L/180 under strength-level loads.
- NEGATIVE WIND LOAD capacities are for those loads that pull the panel away from its supports. The applicable limit states are flexure, shear, combined shear and flexure, and a deflection limit of L/60 under 10-year wind loading.
- Panel pullover and Screw pullout capacity must be checked separately using the screws employed for each particular application when utilizing this load chart.
- Effective yield strength has been determined in accordance with section A2.3.2 of the 2012 NAS specification.
- The use of any accessories other than those provided by the manufacturer may damage panels, void all warranties and will void all engineering data.
- This material is subject to change without notice. Please contact MBCI for most current data.

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.