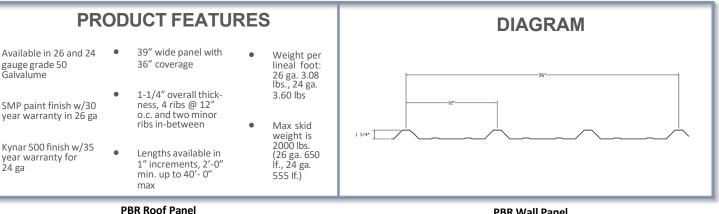
PREMIER PBR PANEL

Exposed Fastener Series



OVERVIEW

Premier PBR Panel is a structural panel exposed fastener panel that can be used for both roof and wall applications. The minimum roof slope for PBR is ½:12.



ALLOWABLE UNIFORM LOADS IN POUNDS PER SQUARE FOOT

26 Gauge (0.0181"), Fy = 60 ksi, Fu = 61.5 ksi					
SPAN TYPE	LOAD TYPE	SPAN IN FEET			
	EOAD TIPE	3	4	5	
1-span	NEGATIVE WIND LOAD		75.08	48.05	
	LIVE LOAD/DEFLECTION	119.08	52.22	26.74	
2-span	NEGATIVE WIND LOAD	114.41	66.59	43.33	
	LIVE LOAD/DEFLECTION	105.6	71.09	46.37	
3-span	NEGATIVE WIND LOAD	138.49	81.62	53.46	
	LIVE LOAD/DEFLECTION	120	86.91	57.11	
4-span	NEGATIVE WIND LOAD	130.7	76.7	50.12	
	LIVE LOAD/DEFLECTION	115.5	81.75	53.58	

24 Gauge (0.0223"), Fy = 50 ksi, Fu = 60 ksi						
SPAN TYPE	LOAD TYPE	SPAN IN FEET				
	EOAD TIPE	3	4	5		
1-span	NEGATIVE WIND LOAD		71.08	45.49		
	LIVE LOAD/DEFLECTION	125.69	70.7	38.51		
2-span	NEGATIVE WIND LOAD	120.59	69.04	44.56		
	LIVE LOAD/DEFLECTION	117.33	69.4	44.8		
3-span	NEGATIVE WIND LOAD	148.17	85.44	55.34		
	LIVE LOAD/DEFLECTION	133.33	85.87	55.62		
4-span	NEGATIVE WIND LOAD	139.13	80.03	51.77		
	LIVE LOAD/DEFLECTION	128.33	80.43	52.04		

Notes:

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1. Strength calculations based on the 2012 AISI Standard "North American Specification for the Design of Cold-formed Steel Structural Members."

2. 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.

PBR Wall Panel ALLOWABLE UNIFORM LOADS IN POUNDS PER SQUARE FOOT

26 Gauge (0.0181"), Fy = 60 ksi, Fu = 61.5 ksi						
SPAN TYPE	LOAD TYPE	SPAN IN FEET				
	LOAD TIFE	3	4	5		
1-span	NEGATIVE WIND LOAD	133.48	75.08	48.05		
	LIVE LOAD/DEFLECTION	119.08	69.83	44.69		
2 chan	NEGATIVE WIND LOAD	114.41	66.59	43.33		
2-span	LIVE LOAD/DEFLECTION	105.6	71.09	46.37		
2 chan	NEGATIVE WIND LOAD	138.49	81.62	53.46		
3-span	LIVE LOAD/DEFLECTION	120	86.91	57.11		
4-span	NEGATIVE WIND LOAD	130.7	76.7	50.12		
	LIVE LOAD/DEFLECTION	115.5	81.75	53.58		

24 Gauge (0.0223"), Fy = 50 ksi, Fu = 60 ksi						
SPAN TYPE	LOAD TYPE	SPAN IN FEET				
SPAN ITPE	LOAD TIFE	3	4	5		
1-span	NEGATIVE WIND LOAD	126.37	71.08	45.49		
	LIVE LOAD/DEFLECTION	125.69	70.7	45.25		
2-span	NEGATIVE WIND LOAD	120.59	69.04	44.56		
	LIVE LOAD/DEFLECTION	117.33	69.4	44.8		
3-span	NEGATIVE WIND LOAD	148.17	85.44	55.34		
	LIVE LOAD/DEFLECTION	133.33	85.87	55.62		
4-span	NEGATIVE WIND LOAD	139.13	80.03	51.77		
	LIVE LOAD/DEFLECTION	128.33	80.43	52.04		

Notes:

- 1. Strength calculations based on the 2012 AISI Standard "North American Specification for the Design of Cold-formed Steel Structural Members."
- 2. 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/60 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.

SECTION PROPERTIES								
			NEGATIVE BENDING		POSITIVE BENDING			
PANEL	Fy	WEIGHT	lxe	Sxe	Maxo	lxe	Sxe	Maxo
GAUGE	(KSI)	(PSF)	(IN.4/FT.)	(IN.3/FT.)	(KIP-IN.)	(IN.4/FT.)	(IN.3/FT.)	(KIP-IN.)
26	60*	0.94	0.0309	0.0449	1.8019	0.0382	0.0381	1.6759
24	50	1.14	0.042	0.057	1.706	0.0551	0.0567	1.6968
Fy is 80-ksi in accordance with the 2012 edition of the north American Specification For Design of Cold-Formed Steel Structural N								

Notes:

1. All calculations for the properties of PBR Roof panels are calculated in accordance with the 2012 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

