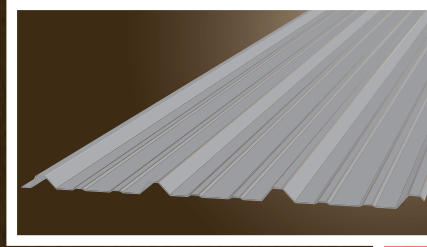


# PBR

## Roof and Wall System



### Description

The PBR panel's deep ribs create an even-shadowed appearance. The area between the major ribs is reinforced with minor ribs. PBR is one of the most economical panel systems and can be used for both roof and wall applications.

### Gauge

- 26 gauge (standard)
- 24 gauge
- 22 gauge

### Length

45' maximum length is standard but longer lengths are available by special request

### Dimensions

36" x 1 1/4"

### Finish

- Galvalume Plus®
- Signature® 200 Colors
- Signature® 300 Colors

**NOTE:** Oil-canning is not considered grounds for rejection of any panel system. Oil-canning can occur in any panel with wide flat sections. Heavier gauge, embossing, striations, flatter sub-frame systems and support from a solid sub-deck can all help to minimize oil-canning.

### Fasteners

Standard coated, zinc- aluminum cast head, or stainless steel head screw

### Usage

Roof, wall, liner, mansard, and soffit panel applications

### Limitations

Not designed for coverage over bar joist or to be used as rigid secondary; Five foot on center purlin spacing



## Attributes

1. Reverse rolled profile
2. Purlin bearing leg
3. Installation may start at either end
4. Economical profile
5. 36" coverage
6. Wind uplift rating
7. Diaphragm action
  
8. Light transmitting panels
9. Finish warranty

## Advantages

1. The panel can serve as an alternate wall panel by putting the paint finish on the under side
2. An additional leg is rolled on one side of lap rib to facilitate installation
3. Flexible installation
4. Cost effective
5. Ease of installation
6. The panel qualifies for UL® 90 in multiple construction numbers
7. The panel configuration enhances diaphragm capabilities for purlin stability
8. Profile light transmitting panels are available for the PBR panel
9. Used with long-life fasteners this panel has a 25-year warranty

### PBR - Section Properties

PANEL GAUGE	Fy (KSI)	WEIGHT (PSF)	NEGATIVE BENDING			POSITIVE BENDING		
			I <sub>xe</sub> (IN.4/FT.)	S <sub>xe</sub> (IN.3/FT.)	Maxo (KIP-IN.)	I <sub>xe</sub> (IN.4/FT.)	S <sub>xe</sub> (IN.3/FT.)	Maxo (KIP-IN.)
29	60*	0.75	0.0219	0.0357	1.2835	0.0242	0.0234	0.8423
26	60*	0.94	0.0302	0.0511	1.8366	0.0369	0.0372	1.3373
24	50	1.14	0.0404	0.0733	2.1953	0.0506	0.0521	1.5594

\* 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.*

### Allowable Uniform Loads In Pounds Per Square Foot

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	136.0	76.5	49.0	34.0	25.0	19.1	15.1	
	LIVE LOAD/DEFLECTION	99.1	50.4	25.8	14.9	9.4	6.3	4.4	
2-SPAN	NEGATIVE WIND LOAD	99.1	55.7	35.7	24.8	18.2	13.9	11.0	
	LIVE LOAD/DEFLECTION	87.3	54.6	35.2	24.5	18.1	13.9	10.7	
3-SPAN	NEGATIVE WIND LOAD	123.8	69.7	44.6	31.0	22.7	17.4	13.8	
	LIVE LOAD/DEFLECTION	99.2	67.7	43.8	28.2	17.7	11.9	8.3	
4-SPAN	NEGATIVE WIND LOAD	115.6	65.0	41.6	28.9	21.2	16.3	12.8	
	LIVE LOAD/DEFLECTION	95.9	63.4	40.9	28.6	18.8	12.6	8.9	

24 Gauge (Fy = 60 Ksi)

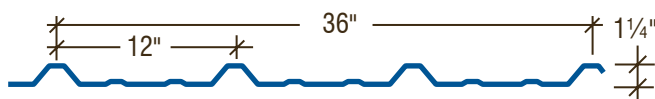
SPAN TYPE	LOAD TYPE	SPAN IN FEET							
		3.0	4.0	5.0	6.0	7.0	8.0	9.0	
SINGLE	NEGATIVE WIND LOAD	162.6	91.5	58.5	40.7	29.9	22.9	18.1	
	LIVE LOAD/DEFLECTION	115.5	65.0	35.4	20.5	12.9	8.6	6.1	
2-SPAN	NEGATIVE WIND LOAD	115.5	65.0	41.6	28.9	21.2	16.2	12.8	
	LIVE LOAD/DEFLECTION	109.4	64.2	41.3	28.7	21.1	16.2	12.8	
3-SPAN	NEGATIVE WIND LOAD	144.4	81.2	52.0	36.1	26.5	20.3	16.0	
	LIVE LOAD/DEFLECTION	124.3	79.8	51.4	35.8	26.4	16.3	11.4	
4-SPAN	NEGATIVE WIND LOAD	134.8	75.8	48.5	33.7	24.8	19.0	15.0	
	LIVE LOAD/DEFLECTION	119.6	74.7	48.1	33.5	24.6	17.3	12.2	

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.

**EFFECTIVE NOVEMBER 3, 2004**  
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Galvalume Plus® is a registered trademark of BIEC International, Inc.

Signature® is a registered trademark of the NCI Group.



### Properties Notes:

1. All calculations for the properties of PBR panels are calculated in accordance with the 2001 edition of the *North American Specification For Design Of Cold-Formed Steel Structural Members.*
2. **I<sub>xe</sub>** is for deflection determination.
3. **S<sub>xe</sub>** is for bending.
4. **Maxo** is allowable bending moment.
5. All values are for one foot of panel width.

### Allowable Uniform Loads 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 and bending and web crippling.
3. **NEGATIVE WIND LOAD** does not contain a 33.333% increase and does not consider fastener pull-out or pull-over.
4. Allowable 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 data.



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