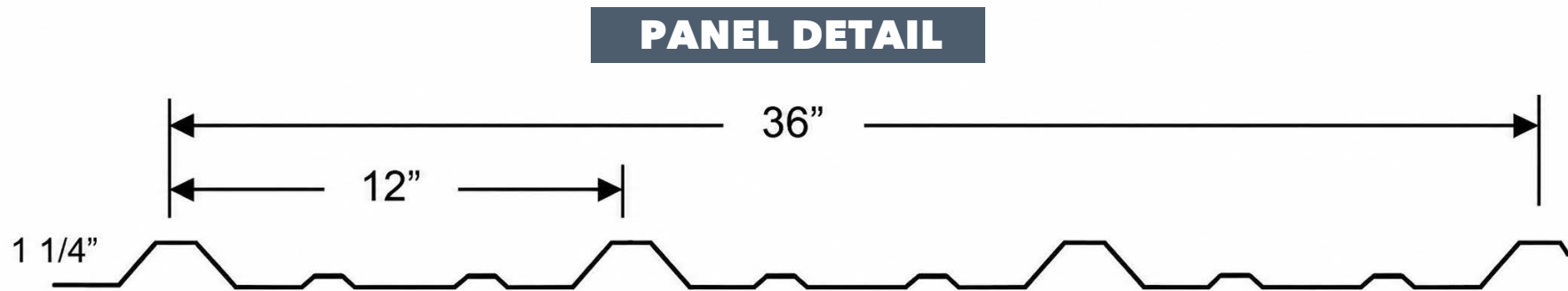


R PANEL

PBR panels are ideal for a wide range of applications, including roofs, walls, interior liners, fascias, soffits, and most other locations. The PBR panel features a purlin-bearing leg that helps ensure long-term performance of metal-to-metal lap-fastener connections. The rugged versatility of the 1 1/4"-deep panel, with major ribs at 12" on center and two minor ribs between the larger ribs, allows the product to perform well in most applications. The PBR panel is available in thirteen (13) standard S-P (Weather X) 40-year colors, fourteen (14) premium Fluoropon (Kynar) 35-year colors, and various gauges. This is the through-fastened panel of choice for designers, owners, and builders.



FEATURES

- Direct through-fastening system.
- Designed for strength and versatility.
- 1-1/4" rib height at 12" on center with intermediate minor ribs.
- Available in a wide range of standard colors and gauges.
- 3/4" wide lap sealant.

BENEFITS

- May reduce the amount of bracing required.
- Ideal panel for roofs, walls, and most other locations.
- Provides strength yet remains aesthetically pleasing.
- Nearly limitless possibilities for your project.
- Can be used in most applications.
- Roof lap screw placement can vary and still penetrate the sealant.

R-Panel General Information

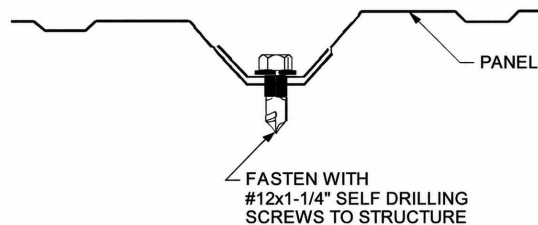
- **1.0 Slope**
R-Panel is ideal for both roof and wall applications. The minimum recommended roof slope for R-Panel is 1:12. When used as roof panels, sealant must be applied to both sidelaps and endlaps. It may be used as an interior liner for both roof and wall applications.
- **2.0 Substructure**
R-Panel is designed to be placed over open structural framing but can be used in conjunction with a solid substructure. To avoid panel distortion, be sure the substructure is uniform and properly aligned.
- **3.0 Coverage**
Each panel has a net coverage width of 36".
- **4.0 Lengths**
Minimum factory cut length is 4'-0". Maximum length is 40'-0".
- **5.0 Fasteners**
Panels are fastened to structural framing with #12x1 1/4 self-drilling screws. Sidelaps are fastened together with #14x7/8 self-drilling screws. Refer to the erection drawing package for fastener location and spacing.
- **6.0 Availability**
26-gauge steel is standard; 24-gauge steel is optional.

Allowable Uniform Loads for 3 or More Spans in PSF

		Live Load								Wind Load							
		Stress				Deflection				Stress				Deflection			
GA	KSI	4'	5'	6'	7'	4'	5'	6'	7'	4'	5'	6'	7'	4'	5'	6'	7'
26	80	80.2	51.3	35.7	26.2	80.2	51.3	35.7	26.2	67.9	43.4	30.2	22.2	67.9	43.4	30.2	22.2
24	50	88.0	56.3	39.1	28.7	88.0	56.3	39.1	28.7	86.5	55.4	38.4	28.2	86.5	55.4	38.4	28.2

- Tabulated values are total allowable loads calculated in accordance with the maximum bending stresses for physical and section properties.
- These load capacities are for the panel itself. Frames, purlins, fasteners, and all supports must be designed to resist all loads imposed by the panel.
- Deflection loads are limited by a maximum deflection ratio of L/240 of the span.

Sidelap Detail



- UL Class 90 Wind Uplift Rated Over Multiple Substrates
- UL 2218 Class 4 Impact (Hail) Resistance Rating
- UL 263 Class A One-Hour Fire Resistance Rated
- Texas Department of Insurance Windstorm Tested #RC-433
- ASTM E283-19 Air Infiltration and ASTM E331-00(2023) Water Penetration Tested, as modified by IBC 2021 Section 1402.2.

SECTION PROPERTIES								
			PANEL TOP IN COMPRESSION			PANEL BOTTOM IN COMPRESSION		
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.)
26	80	0.85	0.0378	0.0387	1.394	0.0345	0.0458	1.648
24	50	1.11	0.0560	0.0593	1.777	0.0467	0.0603	1.808

	SPAN TYPE	LOAD TYPE	SPAN IN FEET									
			3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5
ALLIANCE R-PANEL ALLOWABLE LIVE LOADS - ALL LOADS IN POUNDS PER SQUARE FOOT												
26 Gauge (fy=80 ksi)	SINGLE	STRESS	103.3	75.9	58.1	45.9	37.2	30.7	25.8	22.0	19.0	16.5
		DEFLECTION	103.3	75.9	58.1	45.9	37.2	29.8	22.9	18.0	14.4	11.7
	2-SPAN	STRESS	122.1	89.7	68.7	54.3	44.0	36.3	30.5	26.0	22.4	19.5
		DEFLECTION	122.1	89.7	68.7	54.3	44.0	36.3	29.8	23.5	18.8	15.3
	3-SPAN	STRESS	142.6	104.8	80.2	63.4	51.3	42.4	35.7	30.4	26.2	22.8
		DEFLECTION	142.6	104.8	80.2	63.4	51.3	42.4	35.7	30.4	26.2	22.1
24 Gauge (fy=50 ksi)	SINGLE	STRESS	131.6	96.7	74.0	58.5	47.4	39.2	32.9	28.0	24.2	21.1
		DEFLECTION	131.6	96.7	74.0	58.5	47.4	39.2	32.9	26.7	21.4	17.4
	2-SPAN	STRESS	134.0	98.4	75.3	59.5	48.2	39.9	33.5	28.5	24.6	21.4
		DEFLECTION	134.0	98.4	75.3	59.5	48.2	39.9	33.5	28.5	24.6	21.4
	3-SPAN	STRESS	156.5	115.0	88.0	69.5	56.3	46.6	39.1	33.3	28.7	25.0
		DEFLECTION	156.5	115.0	88.0	69.5	56.3	46.6	39.1	33.3	28.7	25.0