PBM PANEL

The PBM panel is designed for roof, exterior wall, soffit and liner panels, in architectural, commercial or industrial settings, consists of fastening the panel utilizing through panel fastening and side lap installation. The panel has (6) ¾" ribs spaced at 6" o.c., with a total coverage of 36". Panels are fabricated from 22, 24, or 26 gauge steel. The Galvalume® coated or painted sheet will provide a long-lasting weathering membrane and has a proven weather resistance in excess of 20 years.

APPLICATION

Roof covering as well as interior and exterior wall covering for new projects or retrofit construction.

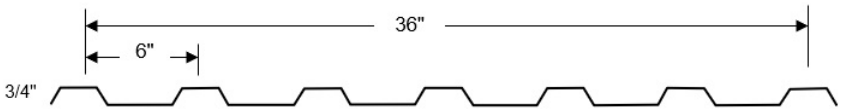
PANEL AND FLASHING MATERIALS

PBM panels are made of 26 gauge steel (80,000 psi) and of 22 and 24 gauge steel, 50,000 psi minimum yield strength (ASTM A792- 06a, Grade 50, Class 1), coated with AZ50 (minimum) aluminum/ zinc alloy for painted finish or AZ55 aluminum/zinc alloy for unpainted finish.

The Flashing and trim will be 24 or 26 gauge steel 50,000 psi yield strength (ASTM A792, SS Grade 50, Class 1), coated with AZ50 (minimum) aluminum/zinc alloy for painted finish zinc or AZ55 aluminum zinc for unpainted finish.

SEALANTS

All sealants are a 100% solids, asbestos-free butyl tape sealant that is highly rubbery, tacky, reinforced compound designed for sealing metal lap joints. Application temperatures of the sealant is -5° F to 120° F and service temperatures from -40° F to 200° F.



PBM Panel

MAINTENANCE

Routine maintenance is required to maximize the life expectancy of the panel. Routine inspections of the roof, walls, flashings, gutter and fasteners insure that the investment will maximize performance of all new products.

FASTENERS

PBM panels may attach to secondary framing (purlins or girts) using, #12 x 1 ¼" hex head, self-drilling, steel screws with neoprene washers. Fasteners available for use with up to 8" of blanket insulation.

PBM stitch screws, screws at side laps, are ¼" – 14 x 7/8" self-drilling screws w/neoprene washers.

PRODUCT NOTES

"Oil-canning," slight waviness inherent in light gauge metal may exist in this panel. This minor waviness does not affect the finish or structural integrity of the panel and is therefore not a cause for rejection.

WARRANTY

Up to 20-year material and paint finish warranty information available upon request. No Weather-tightness Warranty available.

UL Construction Number: #39

SECTION PROPERTIES: PBM PANEL

GAUGE	YIELD STRESS (KSI)	WT. (PSF)	STEEL THICKNESS (IN.)	TOTAL THICKNESS (IN.)
26	50	0.96	0.180	0.0196
24	50	1.18	0.0227	0.0243
22	50	1.39	0.0272	0.0288

Ga.	Panel Top in Compression (Positive Bending)			Panel Bottom in Compression (Negative Bending)			
	Ix (in 4/ft)	Sx (in 3/ ft)	Maxo (in.kip s/ft)	Ix (in 4/ft)	Sx (in 3/ ft)	Maxo (in.kip s/ ft)	Fb (ksi)
26	0.024	0.043	1.29	0.016	0.038	1.14	30
24	0.032	0.058	1.74	0.022	0.054	1.62	30
22	0.040	0.073	2.19	0.030	0.067	2.01	30

PBM MAXIMUM TOTAL UNIFORM LOADS IN PSF

Gauge	Span Type	Span Ft.							
		3.0	3.5	4.0	4.5	5.0	6.0	7.0	7.5
26	1	95 / -84	70 / -62	53 / -47	42 / -37	34 / -30	24 / -20	18 / -12	15 / -10
	2	83 / -74	62 / -63	47 / -53	37 / -42	30 / -34	21 / -24	15 / -18	13 / -15
	3	104 / -84	77 / -72	59 / -63	47 / -53	38 / -43	26 / -30	19 / -22	17 / -19
	4	97 / -80	72 / -69	55 / -60	44 / -49	35 / -40	25 / -28	18 / -20	16 / -18

Gauge	Span Type	Span Ft.							
		3.0	3.5	4.0	4.5	5.0	6.0	7.0	7.5
24	1	128 / -119	94 / -88	72 / -67	57 / -53	46 / -43	32 / -27	24 / -17	20 / -14
	2	118 / -93	87 / -80	67 / -70	53 / -57	43 / -46	30 / -32	22 / -24	19 / -21
	3	147 / -106	109 / -91	83 / -79	66 / -71	54 / -57	37 / -40	27 / -29	24 / -26
	4	137 / -102	101 / -87	78 / -76	62 / -66	50 / -54	35 / -37	26 / -28	22 / -24

Gauge	Span Type	Span Ft.							
		3.0	3.5	4.0	4.5	5.0	6.0	7.0	7.5
22	1	160 / -147	118 / -109	91 / -83	72 / -66	58 / -53	40 / -36	30 / -23	25 / -19
	2	147 / -111	108 / -96	83 / -84	66 / -72	53 / -58	37 / -40	27 / -30	24 / -26
	3	182 / -127	134 / -109	103 / -95	82 / -84	66 / -72	46 / -50	34 / -37	30 / -32
	4	170 / -122	126 / -104	97 / -91	77 / -81	62 / -68	43 / -47	32 / -35	28 / -30

- Section Properties have been calculated in accordance with Supplement 2004 to the North American Specification, 2001 Edition, for the Design of Cold-Formed Steel Structural Members.
- Steel Panels have a protective coating of either aluminum-zinc alloy or G-90 galvanizing.
- The base steel thickness was used in determining section properties.
- Minimum Yield Strength of 22 and 24 gauge steel 50,000 psi. Minimum Yield Strength of 26 gauge steel 80,000 psi.
- The deflection loads were calculated from a deflection limit of Span/60 for structural roof panels.
- The loads shown do not include allowance for the panel weight.
- Positive Load is applied inward toward the panel supports and is applied to the outer surface of the panel cross-section. Negative Load is applied in the opposite direction.