

TECHNICAL BULLETIN

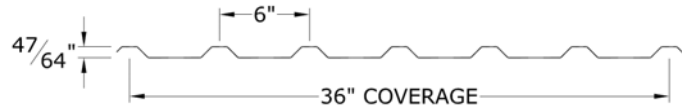
Issue Date : June 1, 2006

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No. 07-246-06

U-Panel PB

(Bare & Painted Galvalume)



SECTION PROPERTIES						TOP IN COMPRESSION			BOTTOM IN COMPRESSION		
GAUGE	FY (KSI)	WEIGHT (PSF)	V _a kip/ft.	P _{a, end} lbs/ft.	P _{a, int} lbs/ft.	I _x (in. ⁴ /ft.)	S _e (in. ³ /ft.)	M _a kip-in./ft.	I _x (in. ⁴ /ft.)	S _e (in. ³ /ft.)	M _a kip-in./ft.
24	50.0	1.11	1.1540	463.60	683.40	0.0267	0.0520	1.5600	0.0183	0.0479	1.4330

1. Section properties are calculated in accordance with the 2007 AISI North American Specification for the Design of Cold-Formed Steel Structural Members.
2. V_a is the allowable shear.
3. P_a is the allowable load for web crippling on end & interior supports.
4. I_x is for deflection determination.
5. S_e is for bending.
6. M_a is the allowable bending moment.
7. All values are for one foot of panel width.

Allowable Uniform Loads (PSF)

Span Type	Load Type	Span in Feet															
		1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00	6.50	7.00	7.50	8.00	8.50	9.00
Single	Positive Wind	462	260	166	115	84	65	51	41	34	28	24	21	18	16	14	12
	Negative Wind	424	238	152	106	77	59	47	38	31	26	22	19	16	14	13	11
	Live	462	260	166	115	84	65	51	41	34	28	24	21	18	16	14	12
	Deflection (L/180)	500	291	149	86	54	36	25	18	14	10	8	6	5	4	3	3
	Deflection (L/240)	500	218	112	64	40	27	19	14	10	8	6	5	4	3	2	2
2 Span	Positive Wind	401	231	149	104	77	59	46	38	31	26	22	19	16	14	13	11
	Negative Wind	432	250	162	113	83	64	50	41	34	28	24	21	18	16	14	12
	Live	401	231	149	104	77	59	46	38	31	26	22	19	16	14	13	11
	Deflection (L/180)	500	500	303	175	110	74	51	37	28	21	17	13	11	9	7	6
	Deflection (L/240)	500	444	227	131	82	55	38	28	21	16	12	10	8	6	5	4
3 Span	Positive Wind	490	285	185	129	95	73	58	47	39	32	28	24	21	18	16	14
	Negative Wind	500	307	200	140	104	80	63	51	42	35	30	26	23	20	17	16
	Live	490	285	185	129	95	73	58	47	39	32	28	24	21	18	16	14
	Deflection (L/180)	500	463	237	137	86	57	40	29	22	17	13	10	8	7	6	5
	Deflection (L/240)	500	347	178	103	64	43	30	22	16	12	10	8	6	5	4	3
4 Span	Positive Wind	461	267	173	121	89	68	54	44	36	30	26	22	19	17	15	13
	Negative Wind	496	288	188	131	97	74	59	48	39	33	28	24	21	18	16	14
	Live	461	267	173	121	89	68	54	44	36	30	26	22	19	17	15	13
	Deflection (L/180)	500	492	252	145	91	61	43	31	23	18	14	11	9	7	6	5
	Deflection (L/240)	500	369	189	109	68	46	32	23	17	13	10	8	7	5	4	4

Notes:

1. Allowable uniform loads are based upon equal span lengths.
2. Positive Wind is wind pressure and is **NOT** increased by 33 1/3 %.
3. Negative Wind is wind suction or uplift and is **NOT** increased by 33 1/3%.
4. Live is the allowable live or snow load.
5. Deflection (L/180) is the allowable load that limits the panel's deflection to L/180 while under positive or live load.
6. Deflection (L/240) is the allowable load that limits the panel's deflection to L/240 while under positive or live load.
7. The weight of the panel has **NOT** been deducted from the allowable loads.
8. Positive Wind, Negative Wind, and Live Load values are limited to combined shear & bending using Eq. C3.3.1-1 of the AISI Specification.
9. Positive Wind and Live Load values are limited by web crippling using a bearing length of 2".
10. Web crippling values are determined using a ratio of the uniform load **actually** supported by the top flanges of the section.
11. Load Tables are limited to a maximum allowable load of 500 psf.

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