R-Panel PB

(Bare Galvalume & 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	80.0	1.13	1.0340	306.50	473.60	0.0550	0.0558	2.0000	0.0430	0.0775	2.1400

1. Section properties are calculated in accordance with the 2004 AISI North American Specification for the Design of Cold-Formed Steel Structural Members.
2. Va is the allowable shear.
3. Pa is the allowable load for web crippling on end & interior supports.
4. Ix is for deflection determination.
5. Se is for bending.
6. Ma is the allowable bending moment.
7. All values are for one foot of panel width.

Allowable Uniform Loads (PSF)

		Span in Feet															
Span Type	Load Type	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	500	333	213	148	108	83	65	53	44	37	31	27	23	20	18	16
	Negative Wind	500	356	228	158	116	89	70	57	47	39	33	29	25	22	19	17
	Live	500	333	213	148	108	83	65	53	44	37	31	27	23	20	18	16
	Deflection (L/180)	500	500	307	178	112	75	52	38	28	22	17	14	11	9	7	6
	Deflection (L/240)	500	450	230	133	84	56	39	28	21	16	13	10	8	7	5	4
2 Span	Positive Wind	500	327	215	152	113	87	69	56	46	39	33	28	25	22	19	17
	Negative Wind	500	309	203	143	106	81	64	52	43	36	31	27	23	20	18	16
	Live	500	327	215	152	113	87	69	56	46	39	33	28	25	22	19	17
	Deflection (L/180)	500	500	500	382	240	161	113	82	62	47	37	30	24	20	16	14
	Deflection (L/240)	500	500	495	286	180	120	84	61	46	35	28	22	18	15	12	10
3 Span	Positive Wind	500	395	263	187	139	107	85	69	57	48	41	36	31	27	24	21
	Negative Wind	500	375	248	176	131	101	80	65	54	45	39	33	29	25	22	20
	Live	500	395	263	187	139	107	85	69	57	48	41	36	31	27	24	21
	Deflection (L/180)	500	500	500	299	188	126	88	64	48	37	29	23	19	15	13	11
	Deflection (L/240)	500	500	387	224	141	94	66	48	36	28	22	17	14	11	9	8
4 Span	Positive Wind	500	373	248	175	130	101	80	65	54	45	38	33	29	25	22	20
	Negative Wind	500	353	233	165	122	94	75	61	50	42	36	31	27	24	21	19
	Live	500	373	248	175	130	101	80	65	54	45	38	33	29	25	22	20
	Deflection (L/180)	500	500	500	317	200	134	94	68	51	39	31	25	20	16	13	11
	Deflection (L/240)	500	500	411	238	150	100	70	51	38	29	23	18	15	12	10	8

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.