



ENGINEERING TECHNICAL BULLETIN

PRODUCT:

IRP Series – Insulated Metal Roof Panel
 Profiles: RidgeLine
 Width: 42-inch or narrower
 Thickness: 2.5, 3, 4, 5 and 6-inch
 Gauge: 26-gauge or heavier (facer and liner)
 Finish: embossed or smooth

ALLOWABLE UNIFORM LOADS (PSF):

Panel Thickness (in)	Load Type	Span (ft)										
		2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5
2.5	Positive	170.63	140.52	118.99	102.86	90.37	80.43	72.35	65.69	60.10	55.35	51.28
	Deflection*	132.45	108.50	91.28	78.29	68.15	60.03	53.38	47.84	43.16	39.16	35.70
	Negative (wind uplift)	78.05	69.38	63.19	58.55	53.65	48.29	43.90	40.24	37.14	34.49	32.19
3	Positive	201.27	165.96	140.67	121.71	106.99	95.27	85.73	77.83	71.21	65.58	60.75
	Deflection*	165.94	136.22	114.83	98.71	86.11	76.00	67.73	60.82	54.99	49.99	45.67
	Negative (wind uplift)	78.05	69.38	63.19	58.55	53.65	48.29	43.90	40.24	37.14	34.49	32.19
4	Positive	256.75	212.19	180.26	156.26	137.58	122.66	110.48	100.37	91.86	84.60	77.15
	Deflection*	215.85	177.85	150.52	129.90	113.77	100.83	90.20	81.33	73.81	67.37	61.79
	Negative (wind uplift)	78.05	69.38	63.19	58.55	53.65	48.29	43.90	40.24	37.14	34.49	32.19
5	Positive	303.53	251.26	213.79	185.61	163.65	146.07	131.70	119.74	109.65	101.03	93.60
	Deflection*	260.70	215.32	182.71	158.10	138.87	123.40	110.71	100.09	91.09	83.37	76.67
	Negative (wind uplift)	78.05	69.38	63.19	58.55	53.65	48.29	43.90	40.24	37.14	34.49	32.19
6	Positive	341.71	283.20	241.26	209.71	185.12	165.40	149.27	135.82	124.46	114.74	106.34
	Deflection*	300.47	248.58	211.32	183.22	161.25	143.60	129.09	116.96	106.66	97.82	90.14
	Negative (wind uplift)	78.05	69.38	63.19	58.55	53.65	48.29	43.90	40.24	37.14	34.49	32.19

NOTES:

1. Allowable loads were derived from test conducted in accordance with ASTM E1592 and ASTM E72.
2. All loads reflects standard fastening – RidgeLine clip with (2) ¼ - 14 self-drilling shoulder fasteners.
3. The above loads reflect attachment to 14-ga. steel supports. Attachment to other substrates must be designed separately.
4. Allowable loads assume a minimum bearing surface of 1.5”.
5. Allowable loads are for uniform span lengths.
6. Allowable loads reflect a deflection limit of L/240.
7. The panel self-weight was not added or subtracted from the allowable loads.
8. Above load table does not consider thermal effects.