

6612 Snowdrift Road | Allentown, PA 18106 | 610.395.8445

ISOLEREN TECHNICAL BULLETIN: ALLOWABLE UNIFORM LOADS TABLE ROOF

PRODUCT:

Isoleren Insulated Metal Roof Panels

Isoleren Profiles: RL 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	Load Type	Span (ft)										
(in)		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	118.90	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	Negative FP1	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	Negative FP1	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	245.58	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	37.17	34.49	32.19

NOTES:

- 1. Allowable loads were derived from test conducted in accordance with ASTM E1592 and ASTM E72.
- 2. All loads reflect standard fastening Isoleren RL clip with (2) $\frac{1}{4}$ 14-ga 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.

ITB-0020