



**ALL WEATHER  
INSULATED PANELS**

### HR3/HR5 Panel Allowable Loads (PSF)

Panel Thickness	Panel Weights	Design Criteria	Panel Span (ft)								
			2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	7'-0"
1.5"	2.15	Panel/Deflection Limit	85	70	59	51	45	40	36	32	25
2.5"	2.44	Panel/Deflection Limit	139	114	96	83	73	65	59	54	45
4"	2.75	Panel/Deflection Limit	191	158	134	116	102	90	81	73	61
5"	2.96	Panel/Deflection Limit	239	198	168	146	128	114	102	93	77
6"	3.22	Panel/Deflection Limit	286	238	202	175	155	138	124	112	94

Fastening Pattern	Connection Strength	Panel Span (ft)								
		2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	7'-0"
(1) Fastener, 20" O.C.	16 ga purlins	71	59	50	44	39	35	32	29	25
	12 ga purlins	149	124	106	93	83	75	68	62	53
	3/16" thick purlins	298	248	212	186	165	148	135	124	106
(1) Fastener, 10" O.C.	16 ga purlins	141	118	101	88	78	71	64	59	50
	12 ga purlins	298	248	213	186	166	149	135	124	107

**Notes:**

1. Spans shown are based on transverse load testing per ASTM-E72 and strength of fastening patterns.
2. Spans calculated with 26 gauge exterior and interior facings.
3. The lowest allowable load between panel design and connection strength must be used to determine maximum span.
4. Fastening calculated with 1/4-14 Tek 3 for 16 gauge and 12 gauge purlins and 1/4-20 Tek 5 for 3/16" thick purlins.
5. Deflection Limit: L/240
6. Safety factor = 2.5 for buckling, 3.0 for shear, 3.0 for fastening
7. Structural capacity of purlins have not been considered.
8. Thermal effect due to temperature differentials have not been considered.
9. Consult your AWIP representative for snow load design.
10. Consult your AWIP representative for project specific requirements.
11. Consult your AWIP representative for FM Global Loss Prevention Data Sheet 1-28 requirements.