OneDek® RD1/RD1-M

Panel Thickness	Panel Weight (PSF)	Design Criteria	Panel Span (ft)											
			2'-6"	3'-0"	3'-6''	4'-0''	4'-6''	5'-0''	5′-6″	6'-0"	6'-6''	7'-0''	7′-6″	8'-0"
2"	2.22	Panel/Deflection Limit	88	72	61	53	46	41	37	33	30	27	24	22
2.5"	2.34	Panel/Deflection Limit	109	89	76	65	57	51	46	42	38	35	32	30
3"	2.41	Panel/Deflection Limit	129	106	89	77	68	60	54	49	45	42	39	36
4"	2.62	Panel/Deflection Limit	165	135	115	99	87	78	70	64	58	54	50	46
5"	2.82	Panel/Deflection Limit	196	161	137	118	104	93	84	76	70	64	60	55
6"	2.98	Panel/Deflection Limit	223	184	156	135	119	106	95	87	79	73	68	63
8"	3.31	Panel/Deflection Limit	262	216	184	159	140	125	113	103	94	87	80	75

Wind Uplift Loads for OneDek RD1/RD1-M Insulated Roof Deck Pancake Fastening (PSF)







Fastening	Support/Purlin Type	Panel Span (ft)											
Pattern		2'-6″	3'-0"	3′-6″	4'-0''	4'-6''	5'-0''	5′-6″	6'-0''	6'-6"	7'-0''	7'-6″	8'-0"
(3) Fasteners Across Panel Width	16-gauge min	71	59	50	43	38	34	31	28	26	24	22	21
(4) Fasteners Across Panel Width	16-gauge min	95	79	67	58	51	46	41	38	35	32	30	28

Notes:

- 1 Spans shown are based on transverse load testing per ASTM-E72 and strength of fastening patterns.
- 2. Load span table is based on Allowable Stress Design (ASD).
- 3 If design for diaphragm resistance is required see OneDek RD1/RD1-M Diaphragm Table.
- 4. Spans calculated with 26 gauge exterior and interior facings.
- The lowest allowable load between panel design and connection strength must be used to determine maximum span. 5.
- 6.
- 7. Deflection Limit = L/240.
- Safety factor = 2.5 for buckling, 3.0 for shear, 3.0 for fastening. See note #2 (ASD only). 8
- 9. White single-ply roofing membrane or single skin roof panels must be installed for weatherproofing.
- 10. Thermal effect due to temperature differentials have not been considered.
- 11. Structural capacity of purlins have not been considered.
- 12. Consult your AWIP representative for snow load design.
- 13. Consult your AWIP representative for project specific requirements.



1 (888) 970-AWIP (2947) awipanels.com sales@awipanels.com



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