

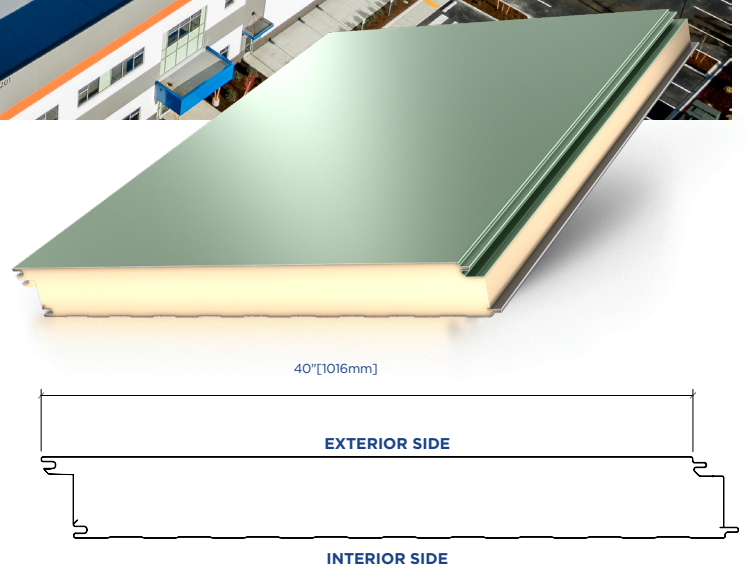
RD1-M Insulated Roof Deck: A component of OneDek®

AWIP PRODUCT DATA SHEET



Features & Benefits

- Fewer materials, components, trucks to site, installation steps, penetrations and trades saves time and reduces cost
- Insulated roof deck is a single component functioning as the deck, air and vapor barrier, insulation, and coverboard while providing a uniform walkable surface ideal for membrane installation
- Single point of accountability from the roof structure (decking, insulation, membrane and edge metal) out for weather tightness warranties and components
- Coil coated interior skin eliminates the need for field painting of the decking. Interior can be painted virtually any color



Product Specifications

Profile	Exterior	Smooth Flat					
	Interior	Embossed, Lightly Planked, Mesa Rib					
Exterior Face Skin	22 Gauge G90/AZ50						
Interior Face Skin	26 Gauge G90 Galvanized or AZ50 Galvalume. 24 and 22 Gauge optional, 26 304 2B Stainless Steel*						
Slope Requirements	Minimum 1/4:12 Slope Maximum 2:12 TPO or PVC						
Panel Module	40"[1016mm]						
Lengths**	Minimum: 8'[2.44m], Maximum: 50'[15.24m]						
Side Lap	Double Tongue and Groove						
GWP±	5.7 to 10.6 Lb CO ₂ eq/ft² [27.6 to 51.9 kg CO ₂ eq/m²]						
Core Type	Polyisocyanurate/ PIR						
Thermal Performance [†]							
Thickness	2"[51mm]	2.5"[64mm]	3"[76mm]	4"[102mm]	5"[127mm]	6"[152mm]	8"[203mm]
R-Value @ 75°F mean (°F·ft²·h/BTU)	14.4	18.0	21.6	28.8	36.0	43.2	57.6
U-Value @ 75°F mean (BTU/°F·ft²·h) ‡	0.102	0.088	0.073	0.044	0.033	0.022	0.023
R-Value @ 35°F mean (°F·ft²·h/BTU)	16.4	20.5	24.6	32.8	41.0	49.2	65.6
U-Value @ 35°F mean (BTU/°F·ft²·h) ‡	0.093	0.078	0.064	0.034	0.027	0.020	0.018

* For interior applications only

** Contact AWIP for Custom Sizes

† R-values as tested per ASTM C518

‡ U-values as tested per ASTM C1363

± Per EPD based on TRACI method from cradle to gate(A1-A3). Lower range based on 2" 26/26 gauge panel. Higher limit based on 6" 22/22 gauge panel. Not all profiles are available in these specific configurations, contact AWIP for more information.



All Weather
Insulated Panels

Testing & Approvals

Category	Test	Test Title	Results
Fire	FM 4880	FM Class 1 Fire Rating	Pass
	ASTM E108	Roof Coverings Fire Test	Pass with Approved Assemblies
	ASTM E84	Surface Burning Characteristics of Building Materials	Flame Spread Index: 25 or less Smoke Developed Index: 450 or less
	CAN/ULC S126	Fire Spread Under Roof	Pass
	CAN/ULC S138	Room Corner Test	Pass
Water Penetration	ASTM E1646	Standard Test Method for Water Penetration of Exterior Metal Roof Panel Systems by Uniform Static Air Pressure Difference	20 PSF
Air Infiltration	ASTM E1680	Standard Test Method for Rate of Air Leakage Through Exterior Metal Roof Panel Systems	< 0.02 cfm/ft ² at 12 PSF
Structural	ASTM E72	Standard Test Methods of Conducting Strength Tests of Panels for Building Construction	See Span Tables
	ASTM E1592	Structural Performance for Sheet Metal and Sidings Systems by Uniform Static Air Pressure Difference	See Span Tables
	FM 4470	FM Class 1 Single Ply Roof	Pass
	FM 4471	FM Class 1 Panel Roof	Pass
	AISI S907	Test Standard for Determining the Strength and Stiffness of Cold-Formed Steel Diaphragms	Available
Thermal	ASTM C518	Steady-State Thermal Transmission Properties by Means of the Heat-Flow Meter Apparatus	Nominal R-value of 7.2 [hr·ft ² ·°F/Btu] per inch at 75°F mean temperature and 8.2 [hr·ft ² ·°F/Btu] per inch at 35°F mean temperature
	ASTM C1363	Thermal Performance of Building Materials and Envelope Assemblies by Means of a Hot Box Apparatus	U-values are tested with 2", 4", 6" and 8" thicknesses. U-values for other thicknesses are interpolated. See U-values in the table on page 1
Code Approval	IAPMO	International Building Code	Evaluation Report 529

OneDek (Diaphragm) – U.S. Patent: 11,299,889
 OneDek (Diaphragm) – Canada Patent: 3,084,177



Additional Note: Consult your AWIP Technical Services Representative or RoofNav for FM Approved Assemblies



Scan for the most current product information

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