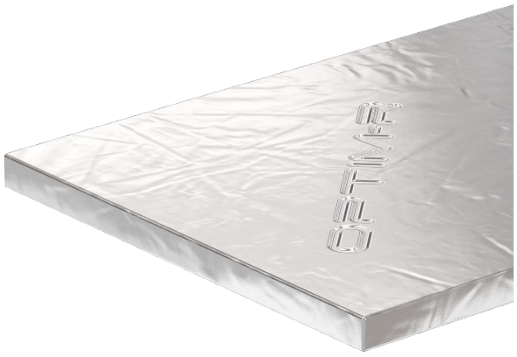
Kingspan® OPTIM-R®

Commercial Product Data Sheet



Kingspan® OPTIM-R® is a premier performance next generation insulation solution comprised of a rigid vacuum insulation panel with a microporous core. It is evacuated, encased and sealed in a thin, gas-tight envelope, giving an outstanding thermal resistance, in an exceptionally thin insulation solution.

Contact Siplast for additional information on approved product uses.

USES:
VEGETATED ASSEMBLIES

Standards	ISO 9001: 2015, ISO 14001: 2015, ISO 45001 & ISO 50001: 2018
Density	10.60 – 13.10 pcf 170 – 120 kg/m^3
Standard Width	11.80 in – 23.60 in (300 mm – 600 mm)
Standard Length	11.80 in – 47.20 in (300 mm – 1200 mm)

PRODUCT INFORMATION

Application

Refer to the Kingspan OPTIM-R Installation Guide for detailed application information.

Storage and Handling

Material should be carefully coordinated with the schedule for roofing operations to minimize job site storage time. Upon delivery, the factory packaging should be removed or slit on all four sides to allow for ventilation and to prevent the accumulation of condensation. Interior storage offering dry, well-ventilated conditions should be considered when the product is to be stored for more than 14 days prior to installation. When short-term job site storage is necessary, Kingspan OPTIM-R should be stored flat on raised pallets or platforms at least 4 inches above the ground. Pallets should be stored on a finished surface rather than on dirt or grass to avoid upward transpiration of moisture. Pallets should be covered with a breathable, waterproof covering in all cases.

See product packaging and the Safety Data Sheet for specific information on the safe handling of this product.

Packaging

Factory packaging not adequate for outdoor protection.

Listings, Approvals, & Certifications

c UL us LISTED FM APPROVED c ETL us Intertek

Classified by UL in accordance with ANSI/UL 790. Refer to UL Product iQ for specific assemblies.
FM Approved - Refer to RoofNav.com for specific assemblies.

Current copies of all Siplast Commercial Product Data Sheets & Safety Data Sheets are posted on our website at www.siplast.com
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KINGSPAN OPTIM-R®
Physical and Mechanical Properties

siplast® With you every step of the way

Property (As Manufactured)		Value/Units	Test Method
Nominal Thickness		0.79 in – 1.97 in (20 mm – 50 mm)	N/A
Nominal Panel Mass	20 mm thickness	0.82 lb/ft^2 / 4 kg/m	N/A
	25 mm thickness	1.02 lb/ft^2 / 5 kg/m	N/A
	30 mm thickness	1.23 lb/ft^2 / 6 kg/m	N/A
	35 mm thickness	1.43 lb/ft^2 / 7 kg/m	N/A
	40 mm thickness	1.64 lb/ft^2 / 8 kg/m	N/A
Compressive Strength (min.) @10% deformation		23 psi	ASTM C165
Dimensional Stability	0.79 in – 1.79 in (20 mm – 50 mm)	Length max.: 0.5% Width max.: 0.6%	ASTM D2126

Insulation Thickness	ASTM C1667 Center Panel Thermal Resistance Properties (R-value)*	Calculated Edge Effect Thermal Resistance Properties (R-value)**
0.79 in (20 mm)	26	22
0.98 in (25 mm)	32*	28
1.18 in (30 mm)	37*	33
1.57 in (40 mm)	49*	46
1.97 in (50 mm)	60	57

* These values are based on linear interpolation of test results for 20mm and 50mm Optim-R boards.
** Based on ASTM C1667 Thermal Resistance Values. Edge effect R-values vary based on panel size. The listed edge effect R-values in the table are based on the average edge effect R-values from six of the most commonly used panel sizes.

Values stated are approximate and subject to normal manufacturing variation. These values are not guaranteed and are provided solely as a guide.

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