

Design highly efficient building enclosures using vapour-permeable spray foam

Vapour-permeable
Wrapsulate[®]

Open Cell Spray
Foam (1lb)

Exterior
Application

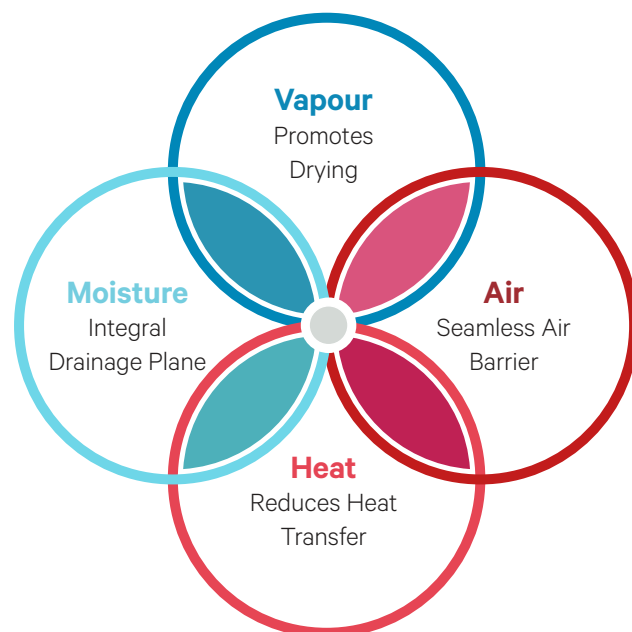
R-4.3
per inch

100% Water
Blown

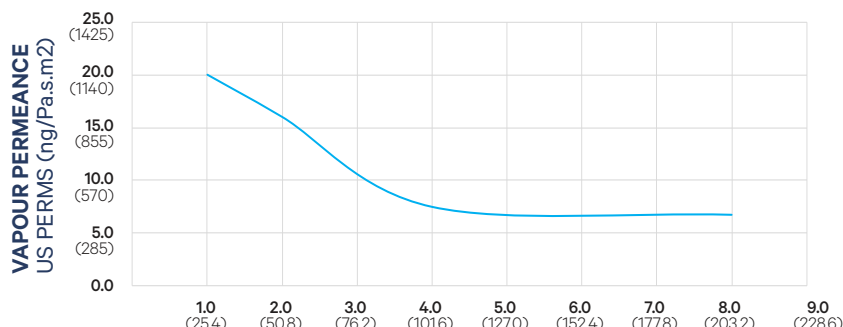
Wrapsulate[®] Foam Jacket is an open-cell vapour-permeable spray foam insulation that is uniquely designed for the exterior. The all-in-one system acts as a vapour-permeable thermally insulating layer, water control layer and air barrier, helping to achieve a highly effective and sustainable building enclosure.

- Monolithic:** spray-applied system creates a continuous seal
- Eliminates layers:** one product covers the 4 key control layers
- Saves time:** quick installation provides labour efficiency
- 100% water blown:** eliminates high global warming agents
- Transportation efficiency:** reduces material and bulk shipping

1 Product, 4 Controls



Wrapsulate[®] Vapour Permeability



Wrapsulate® Foam Jacket

Technical Data



Attribute	Test	Results
Density	ASTM D1622	1.07 lb/ft ³ 17.2 Kg/m ³
Aged Thermal Resistance (90 Day)	ASTM C518 25mm	R 4.3 RSI .75
Thermal Resistance After Ice Lens	NRC TG 072510.09	100% Retention
Water Vapour Permeation	ASTM E96 25 mm	1175 ng/ (Pa·s·m ²)
Water Vapour Permeation	ASTM E96 50 mm	949 ng/ (Pa·s·m ²)
Initial Tensile Strength	ASTM D1623	13.6 psi, pass 94 kPa, pass
Tensile Strength After Ice Lens	ASTM D1623	103% Retention
Air Permeance	ASTM E2178	0.0005 L/s·m ² @ 1½ inch
Water Absorption (% by Volume)	ASTM D2842	1.6%
UV and Heat Aged Water Absorption (% by Volume)	QUV as per NRC TG 072510.09	2.3%
Water Penetration Resistance	ASTM E331 as per NRC TG 072510.09	700 Pa
Flame Spread	ULC S-102 Steiner Tunnel	Flame <500 Smoke <500
VOC Emissions	CAN/ULC S774-09	Passed

Attribute	Test	Results
Dimensional Stability (Volume Change after 28 days)	ASTM D2126	-20°C, .008% 80°C, -9% 70°C @ 97% RH, -2.3%
Fungi Resistance	ASTM C1338	No Growth
Open Cell Content	ASTM D6226	99%
Compression Strength	ASTM 1621 NRC Performance	60 kPa
Flexural Strength	ASTM C203 NRC Performance	16.07 kPa
Water Absorption Coefficient (% by Volume)	ISO 15148 NRC Performance	0.00015 Kg m ⁻² ·s ^{-1/2}
Full Scale Wall Test Temperature Limits	NRC TG 072510.09	5°C to 40°C
Adhesion to Substrates	NRC TG 072510.09	Various See TG
Density Variation	ASTM D1622 NRC Performance	1%
All Tests Performed On Samples With and Without Skin	NRC Performance Assessment	Pass
Exterior Gypsum Exterior Concrete	CAN/ULC-S742 Air Barrier Testing ¹	0.014 L/s·m ² 0.011 L/s·m ²
CCMC #	Material Air Barrier	14049-R 14067-R



¹As per CAN/ULC-S742 Air Barrier Systems for Exterior Walls of Low-Rise Buildings: (< 0.05 L/s·m²) @ 75 PA - A1 Classification

All properties determined through testing by an accredited independent third party test facility.



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