

Manufacturer

ISOSHIELD is manufactured by Isofoam Group, a premier manufacturer of insulation products for over 40 years.

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Product Description & Applications

ISOSHIELD is a rigid insulation panel faced with a non-reflective coated metalized film on the front and a reflective one on the back.

The product is used as a continuous insulating sheathing for both new construction requirements and retrofit. It minimizes energy loss due to thermal bridges. It can act as a second plane of protection for exterior walls when joints are taped and sealed (OBC 9.27.3).



ISOSHIELD premium NVB (NVB = Non Vapour Barrier)	<ul style="list-style-type: none"> – ISOSHIELD premium NVB is a non vapour barrier insulation panel made of Neopor® Plus GPS faced with a non-reflective coated metalized film on the front and a reflective one on the back. – Both sides perforated to ensure water vapour permeance to reduce the risk of trapped moisture. – Made of graphite enhanced polystyrene (GPS), which reduces thermal conductivity and offers a greater insulation value for thickness equivalent to traditional expanded polystyrene.
ISOSHIELD	<ul style="list-style-type: none"> – ISOSHIELD is a rigid low vapour permeance insulation panel made of expanded polystyrene faced with a non-reflective coated metalized film on the front and a reflective one on the back.

Dimensions	ISOSHIELD premium NVB 100			ISOSHIELD 100		
	Thicknesses	R Value (RSI)		Thicknesses	R Value (RSI)	
48" x 96" Butt Edge	1 1/16"	5.0	(0.88)	1"	3.75	(0.66)
	1 5/8"	7.64	(1.34)	1 1/2"	5.62	(0.99)
	2 1/8"	10.0	(1.76)	2"	7.5	(1.32)

Also available: 48" x 108" or 48" x 120", perforated or non-perforated films, other thicknesses and densities.

Environment

Containing between 95% and 98% air and only 2% to 5% of plastics, ISOSHIELD presents risks of toxicity lower than those from conventional building materials and it does not contain HFCs that damage the ozone layer. Contains no gas in its manufacture other than air.

Neopor® Plus GPS contained in ISOSHIELD premium is recognized as a product that produces low chemical emissions and is certified UL-GREENGUARD and UL-GREENGUARD Gold (UL.COM/GG). Contact us for more details.

Physical Properties

Insulation panel	METHODS	UNITS	ISOSHIELD premium NVB 100	ISOSHIELD 100
THERMAL RESISTANCE	ASTM C-518	$m^2 \cdot ^\circ C / W / 25 \text{ mm}$ ($h \cdot r \cdot e \cdot \pi^2 \cdot ^\circ F / Btu / in$)	See table on page 1	See table on page 1
COMPRESSIVE STRENGTH MIN.	ASTM D-1621	kPa (psi)	70 (10)	70 (10)
FLEXURAL STRENGTH MIN.	ASTM C-203	kPa (psi)	170 (25)	170 (25)
WATER VAPOR TRANSMISSION	ASTM E-96	$ng / Pa \cdot s \cdot m^2$ (perms)	75 (1.25)	15 (0.25)
WATER ABSORPTION MAX.	ASTM D-2842	%	6.0	6.0
DIMENSIONAL STABILITY MAX.	ASTM D-2126	%	1.5	1.5
FLAME SPREAD	CAN/ULC S102.2M	-	230	240

The Safety Data Sheet of Isofoam Group products is available on the website.

Warranty & Certifications

Meets the standards and requirements:

- CAN/ULC-S701, Type 1
- CCMC # 12894-L

Advantages & Benefits

- Stable and permanent R value insulation.
- Highly flexible: makes installation on radius walls easier.
- Cutting marks are printed on the front film. Easy to cut and install.
- Handling and installation time are minimized thanks to lightweight products.
- Resistant to handling damage.
- Different product versions provide more flexible options for builders.
- ISOSHIELD is a high performing insulation that allows to easily meet building code requirements, at a cost competitive price.

Technical Services

Our experts will be pleased to answer your questions regarding application and installation of our products.

Availability & Cost

Availability: Ontario.

Costs: Current price list available on request.

Project estimations are rapidly available with a physical description made from industrial designs and summary specifications based on information in this technical data sheet.

Limitations & Storage

ISOSHIELD, when not perforated, is a low vapour permeance insulation (<60 ng). When used in an above grade-wall application in some area, its installation is restricted by the Ratio of Outboard to Inboard Thermal Resistance, whereas ISOSHIELD NVB is permeable and not restricted by that same Ratio.

Combustible material. Inside, a protective barrier or thermal barrier is required as specified by the appropriate building code. Avoid contact between insulation and petroleum-based solvents or their vapours.

Cover within 60 days after installation to protect from ultraviolet damage. Follow the specifications of storage specified on the package.