

TECHNICAL DATA SHEET ISOFOIL

DESCRIPTION

ISOFOIL thermal insulation panel manufactured by Isofoam Group is a rigid insulation panel of closed-cell expanded polystyrene with a laminated reflective vapour barrier membrane.

APPLICATIONS

Interior Foundation Walls Insulation

- New construction and retrofit.
- Residential, commercial, industrial, institutional.

ADVANTAGES & BENEFITS

Superior Insulation

- Thanks to its integrated reflective vapor barrier membrane, ISOFOIL helps maximize the wall's insulating performance by reducing the risk of condensation, which causes unpleasant odors and wall deterioration.
- It forms a barrier that prevents water vapour and moisture from penetrating the insulation and condensing on cold concrete, a phenomenon that would otherwise promote mold growth.
- Keeps the walls dry and increase the effectiveness of insulation.
- Stable and permanent insulating value.

Reflect Heat

- The reflective effect of its unique vapour barrier transfers more than 95% of heat generated by energy sources such as lighting. Therefore, heating requirements are reduced.

Easy Installation

- Easy handling and installation.
- No need to add another vapour barrier membrane.
- Blends perfectly with imperfections in the concrete.

DIMENSIONS

DIMENSIONS	THICKNESSES	R-VALUE (RSI)	
		TESTED ASSEMBLIES	INSULATION ONLY
48" x 96" or 48" x 100" Shiplapped 2 sides	2"	11* (1.94)*	8 (1.41)
	3"	15.5* (2.73)*	12 (2.11)

*Thermal resistance in a wall system, according to installation recommendations and tested assemblies.

For more details on the various wall assemblies that include the reflective effect and recognized by the *Ontario Ministry of Municipal Affairs and Housing*, see CCMC Report #13459-R: Effective Thermal Resistance of Specific Assemblies.



ENVIRONMENT

Containing 98% air and only 2% plastic, ISOFOIL expanded polystyrene component presents lower risks of toxicity than those from conventional building materials and, it does not and has never contained ozone-depleting expansion gases that damage the ozone layer.

ISOFOIL 3" is certified for low chemical emissions: Greenguard and Greenguard Gold (UL.COM/GG).

ISOLOFOAM products contribute to obtaining LEED® credits. For complete details of the potential contributions contact us.

INSTALLATION

ISOFOIL closed-cell thermal insulation panel is easy to handle and install. It can be cut with a utility knife.

- During residential construction, this product is installed directly over concrete, vertically or horizontally, throughout the height of the interior foundation, printed membrane facing inside the building.

Refer to Master Specifications and/or installation guide available on the website for more information as well as the requirements of the applicable building codes, according to the tested and compliant assemblies.

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TECHNICAL DATA

Safety Data Sheet (SDS) of ISOLOFOAM products is available on the website.

ISOFOIL Properties	METHODS	UNITS	RESULTS	
			ISOFOIL 2"	ISOFOIL 3"
Thermal Resistance	ASTM C1363	$\text{m}^2 \cdot ^\circ\text{C}/\text{W}/25 \text{ mm}$ ($^\circ\text{F} \cdot \text{ft}^2 \cdot \text{h}/\text{Btu}/\text{in}$)	See dimensions	See dimensions
Compressive Strength Min.	ASTM D1621	psi (kPa)	10 (70)	10 (70)
Flexural Strength Min.	ASTM C203	psi (kPa)	25 (170)	25 (170)
Water Vapour Transmission	ASTM E96	$\text{ng}/\text{Pa} \cdot \text{s} \cdot \text{m}^2$ (perms)	15 (0.26)	4.23 (0.07)
Water Absorption Max.	ASTM D2842	%	6	6
Dimensional Stability Max.	ASTM D2126	%	1.5	1.5
Coefficient of Thermal Expansion Max.	ASTM D696	$\text{mm}/\text{mm}/^\circ\text{C}$ ($\text{in}/\text{in}/^\circ\text{F}$)	6×10^{-5} (3.5×10^{-5})	6×10^{-5} (3.5×10^{-5})
Effective Temperature Range Max.	CONTINUOUS	$^\circ\text{C}$ ($^\circ\text{F}$)	75 (167)	75 (167)
	INTERMITTENT	$^\circ\text{C}$ ($^\circ\text{F}$)	82 (180)	82 (180)
Flame Spread	CAN/ULC-S102.2M	-	315	315

EVALUATIONS & WARRANTIES

Meets the standards and requirements of:

- Evaluated by CCMC, #12894-L: Compliant to ULC-S701.1:17, EPS Type 1
- Evaluated by CCMC, #13459-R: Effective thermal resistance of specific assemblies
- ISOFOIL 3" : Product certified for low chemical emissions: GREENGUARD - UL 2818 and GREENGUARD Gold - UL 2818



LIMITATIONS

Combustible if exposed to an open flame or other substantial and sustained source of ignition. Avoid contact with petroleum-based solvents or their vapours. Avoid prolonged exposure to direct sunlight.

STORAGE SPECIFICATIONS

If applicable, respect storage instructions specified on package.

MANUFACTURER

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