

iFLEXFOAM 160 | 200 | 300

1 | Product Name

iFLEXFOAM 160
iFLEXFOAM 200
iFLEXFOAM 300

2 | Manufacturer

iFLEXFOAM panels are manufactured by Isofoam Group, a premier manufacturer of insulation products for over 40 years.

Isofoam Group


1346, boul. Vachon Nord
Sainte-Marie (Québec) G6E 1N4
T: 418 387-3641 | F: 418 387-4039
info@isofoam.com


3 | Product Description

Patent pending, **iFLEXFOAM** panels are made of high-density expanded polystyrene with a laminated polypropylene membrane on each side. The bottom membrane is micro-perforated.

The panels integrate a four-sided unique design clipping system named **ISOCLICK**.

4 | Dimensions

Dimensions	Thicknesses	R Value (RSI)
iFLEXFOAM 160		
48" x 96" IC4 	1 1/4"	5.05 (0.89)
	1 7/8"	7.55 (1.33)
	2 1/2"	10.1 (1.77)

Dimensions	Thicknesses	R Value (RSI)	R Value (RSI)
iFLEXFOAM 200 iFLEXFOAM 300			
48" x 96" IC4 	1.2"	5 (0.88)	5.1 (0.90)
	1.8"	7.55 (1.33)	7.65 (1.35)
	2.4"	10 (1.76)	10.2 (1.80)

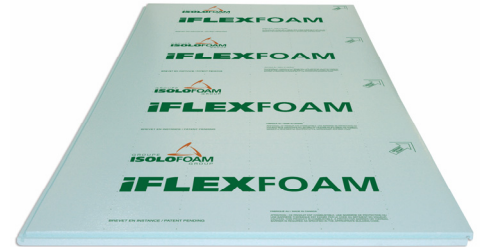
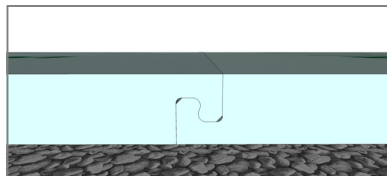
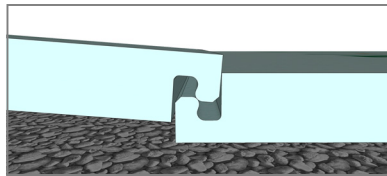
IC4 : **ISOCLICK** 4 sides

Contact us for more information.

5 | Applications

Below grade insulation

- **iFLEXFOAM** panels are mainly suitable for residential or light commercial applications such as:
 - Basement under slab insulation.
 - Garage under slab insulation.
- Panels can be used for heated slab insulation.
- Ensures a high performance insulation under a concrete slab.
- The unique design of the **ISOCLICK** clipping system ensures continuity of insulation.



6 | Environmental Data

Containing between 95% and 98% air and only 2% to 5% of plastics, **iFLEXFOAM** panels present risks of toxicity lower than those from conventional building materials and it does not and has never contained HCFCs or HFCs that damage the ozone layer.

The product **iFLEXFOAM** has been certified to meet the third-party chemical emissions standards for **UL-GREENGUARD** and **UL-GREENGUARD Gold** Certifications (UL.COM/GG).

Isofoam Group products contribute to obtaining LEED® credits (see table 1).

For complete details of the potential contributions of the product for a LEED® Canada-NC-CS 2009 or a LEED® Canada for Homes 2009 project, contact us or fill out the form on our website.

Table 1. Contribution of **iFLEXFOAM** insulation to LEED® Canada-NC 2009, LEED® Canada-CS 2009 certification.

Categories	LEED® Canada NC & CS 2009
SS Sustainable Sites	28 points for LEED® Canada-NC 2009
WE Water Efficiency	
EA Energy and Atmosphere	
MR Materials and Resources	
EQ Indoor Environmental Quality	
IDP Innovation & Design Process	30 points for LEED® Canada-CS 2009
RP Regional Priority	

7 | Warranty

iFLEXFOAM panels meet the standards and requirements:

- CAN/ULC-S701
Type 2 (iFLEXFOAM 160)
Type 3 (iFLEXFOAM 200 | 300)
- CCMC # 12895-L (iFLEXFOAM 160)
- CCMC # 13638-L (iFLEXFOAM 200 | 300)
- Product certified for low chemical emissions: GREENGUARD - UL 2818 and GREENGUARD Gold - UL 2818.

9 | Advantages & Benefits

ISOCLICK clipping system

- Clipping system ensuring continuity of insulation. Once installed iFLEXFOAM panels are clipped together and remain in place during installation.
- Easily repositionable panels.
- Allows a fast and easy installation.

Laminated membrane on each side

- Laminated on each side for higher resistance and maximum flexibility. Reduces breakage during installation.
- The resistance of the membranes ensures product's integrity in all phases of installation.
- Even if the ISOCLICK clipping system is damaged during installation, the laminated membranes ensure that everything remains in place.
- Water absorption is limited due to iFLEXFOAM's laminated membranes on each side. If water would enter the panel, the bottom micro-perforated membrane would allow it to drain out.

High resistance and flexibility

- The panel's resistance and flexibility reduce the need to make a path for the wheelbarrow when concrete is poured.
- The product adapts to uneven ground.
- Provides continuous and uniform insulation.

8 | Technical Data

Table 2. Physical Properties of iFLEXFOAM

PROPERTIES	METHODS	UNITS	iFLEXFOAM 160	iFLEXFOAM 200	iFLEXFOAM 300
THERMAL RESISTANCE	ASTM C-518	m ² ·°C/W/25 mm (hr·ft ² ·°F/Btu/in)	0.71 (4.05)	0.74 (4.20)	0.75 (4.25)
COMPRESSIVE STRENGTH MIN.	ASTM D-1621	kPa (psi)	110 (16)	140 (20)	210 (30)
FLEXURAL STRENGTH MIN.	ASTM C-203	kPa (psi)	240 (35)	300 (44)	350 (50)
AIR PERMEABILITY	ASTM E-2178	L/s·m ²	0.02	0.02	0.02
WATER VAPOR TRANSMISSION MAX.	ASTM E-96 (DRY CUP)	ng/Pa·s·m ² (perms)	15 (0.25)	15 (0.25)	15 (0.25)
	ASTM E-96 (WET CUP)	ng/Pa·s·m ² (perms)	10 (0.17)	10 (0.17)	10 (0.17)
WATER ABSORPTION MAX.	ASTM D-2842	%	4	2	1.8
DIMENSIONAL STABILITY MAX.	ASTM D-2126	%	1.5	1.5	1.5
COEFFICIENT OF THERMAL EXPANSION	ASTM D-696	mm/mm/°C (in/in/°F)	6 X 10 ⁻⁵ (3.5 X 10 ⁻⁵)	6 X 10 ⁻⁵ (3.5 X 10 ⁻⁵)	6 X 10 ⁻⁵ (3.5 X 10 ⁻⁵)
EFFECTIVE TEMPERATURE RANGE MAX.	CONTINUOUS	°C (°F)	75 (167)	75 (167)	75 (167)
	INTERMITTENT	°C (°F)	82 (180)	82 (180)	82 (180)
FLAME SPREAD	CAN/ULC S102.2M	-	240	240	240

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

10 | Installation

iFLEXFOAM panels are easy to handle and install. They can be cut with a utility knife. Follow the installation instructions on panel before starting.

Respect storage instructions specified on package. To prevent breakage of the ISOCLICK clipping system, keep the panels packaged until installation.

Refer to Master Specifications available on the website for more information.

11 | Maintenance

No maintenance is required after iFLEXFOAM panels are properly installed.

12 | Technical Services

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

13 | Availability & Cost

Availability: Throughout eastern Canada.
Cost: 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.

14 | Limitations

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

Isofoam Group

1346, boul. Vachon Nord, Sainte-Marie (Québec) G6E 1N4
T: 418 387-3641 – 1 800 463-8886 | F: 418 387-4039
info@isolofoam.com | www.isolofoam.com

N.B.: The information and data contained in the present document are offered in good faith based on information we believe to be reliable. This document contains no representations or warranties expressed or implied as to the information data or suggestions, or as to the absence or infringement of any patent or rights of third parties. Reference is made to the terms and conditions under which above mentioned products are sold. All suggestions must be adapted as to their application and consequently modified, if necessary, to conform to local conditions and materials use. Consult the website for the latest version.