

PRODUCTS INFO

TECHNICAL DATA SHEET 200-2.0

07.21.13.13

1 | Product Name iFLEXFOAM 160 iFLEXFOAM 200 iFLEXFOAM 300

2 | Manufacturer

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

160 | 200 | 300

Isolofoam Group

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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 microperforated.

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" | 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).

Isolofoam 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 | |
| WE | Water Efficiency | 20 points for LEED® |
| EA | Energy and Atmosphere | Canada-NC 2009 |
| MR | Materials and Resources | & |
| EQ | Indoor Environmental Quality | 30 points for LEED [®] |
| IDP | Innovation & Design Process | Callaua-CS 2009 |
| RP | Regional Priority | |



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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 | | iFLEXFOAM 160 | iFLEXFOAM 200 | iFLEXFOAM 300 |
|----------------------------------|---------------------------|--|---|---|---|
| THERMAL RESISTANCE | ASTM C-518 | m ² •°C/W/25 mm (hre•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 | ASTM E-96 (DRY CUP) | ng/Pa•s•m ² (perms) | 15 (0.25) | 15 (0.25) | 15 (0.25) |
| TRANSMISSION MAX. | ASTM E-96 (WET CUP) | ng/Pa•s•m² (perms) | 10 (0.17) | 10 (0.17) | 10 (0.17) |
| WATER ABSORPTION MAX. | ASTM D-2842 | % | 2 | 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 | CONTINUOUS | °C (°F) | 75 (167) | 75 (167) | 75 (167) |
| RANGE MAX. | INTERMITTENT | °C (°F) | 82 (180) | 82 (180) | 82 (180) |
| FLAME SPREAD | CAN/ULC S102.2M | - | 240 | 240 | 240 |

The Material Safety Data Sheet of Isolofoam 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 petroleumbased solvents or their vapours. Avoid prolonged exposure to direct sunlight.



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