

# ISOFOIL

## 1 | Product Name

**ISOFOIL**

## 2 | Manufacturer

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


### Isofoam Group

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## 3 | Product Description

**ISOFOIL** is a rigid insulation panel of expanded polystyrene with a laminated reflective vapour barrier membrane.

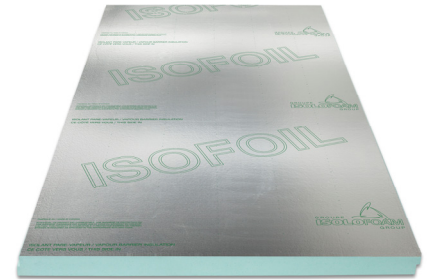
## 4 | Dimensions

| Dimensions  | Thicknesses | R Value (RSI)    |
|---|-------------|------------------|
| 48" x 96"<br>or<br>48" x 100"<br>Shiplapped 2 sides                                 | 2"          | 11*<br>(1.94)*   |
|  | 3"          | 15.5*<br>(2.73)* |

\* Thermal resistance in a wall system, according to installation recommendations.

Refer to the Info Products - R Value of assemblies for more details about the different wall assemblies certified to CCMC or tested by external laboratories and conform to requirements of the Building Code effective in Quebec (August 30<sup>th</sup>, 2012) and certain high energy efficiency building and renovation programs.

Contact us for more information.



## 5 | Applications

### Insulation for interior foundation walls

- **ISOFOIL** is a rigid insulation panel of expanded polystyrene with a laminated reflective vapour barrier membrane.
- Ideal for residential, commercial, industrial and institutional buildings.
- Both new construction and retrofit.
- **ISOFOIL** creates a barrier that prevents water vapour and moisture from inside to pass through the insulation to the cold concrete.
- No need to add another vapour barrier membrane.
- During residential construction, this product is installed directly over concrete, vertically or horizontally, throughout the height of the interior foundation.

## 6 | Environmental Data

Containing 98% air and only 2% of plastics, **ISOFOIL** presents lower risks of toxicity than those from conventional building materials and it does not and has never contained HCFCs or HFCs that damage the ozone layer.

The product **ISOFOIL** has been certified to meet the third-party chemical emissions standards for **UL-GREENGUARD** and **UL-GREENGUARD Gold** Certifications ([UL.COM/GG](http://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 **ISOFOIL** insulation to LEED® Canada-NC 2009, LEED® Canada-CS 2009 certification.

| Categories                             | LEED® Canada NC & CS 2009                 |
|--|---|
| <b>SS</b> Sustainable Sites            |   |
| <b>WE</b> Water Efficiency             |   |
| <b>EA</b> Energy and Atmosphere        | <b>30 points for LEED® Canada-NC 2009</b> |
| <b>MR</b> Materials and Resources      | <b>&amp;</b>                              |
| <b>EQ</b> Indoor Environmental Quality | <b>32 points for LEED® Canada-CS 2009</b> |
| <b>IDP</b> Innovation & Design Process |   |
| <b>RP</b> Regional Priority            |   |

### 7 | Warranty

**ISOFOIL** meets the standards and requirements of:

- CAN/ULC-S701, Type 1
- **CCMC # 13459-R**
- Product certified for low chemical emissions: **GREENGUARD - UL 2818** and **GREENGUARD Gold - UL 2818**.

### 9 | Advantages & Benefits

#### Superior insulation

- With its reflective vapour barrier membrane, **ISOFOIL** creates a barrier that prevents water vapour and moisture from inside to pass through the insulation to the cold concrete which would result in condensation and unfortunately cause an appropriate environment for mould growth.
- Keeps the walls dry and increase the effectiveness of insulation.
- Stable and permanent insulating values.

#### Reflect heat

- The reflective effect of its vapour barrier transfers 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.

### 8 | Technical Data

**Table 2. Physical Properties of ISOFOIL**

| PROPERTIES                              | METHODS             | UNITS  | ISOFOIL  |
|---|---------------------|--|--|
| <b>THERMAL RESISTANCE</b>               | ASTM C-1363         | m <sup>2</sup> ·°C/W/25 mm<br>(°F·ft <sup>2</sup> ·h/Btu/in) | See dimensions' table on page 1                              |
| <b>COMPRESSIVE STRENGTH MIN.</b>        | ASTM D-1621         | kPa<br>(psi)   | <b>70</b><br><b>(10)</b>                                     |
| <b>FLEXURAL STRENGTH MIN.</b>           | ASTM C-203          | kPa<br>(psi)   | <b>170</b><br><b>(25)</b>                                    |
| <b>WATER VAPOR TRANSMISSION</b>         | ASTM E-96           | ng/Pa·s·m <sup>2</sup><br>(perms)                            | <b>4.23</b><br><b>(0.07)</b>                                 |
| <b>WATER ABSORPTION MAX.</b>            | ASTM D-2842         | %  | <b>6</b>   |
| <b>DIMENSIONAL STABILITY MAX.</b>       | ASTM D-2126         | %  | <b>0.5</b>   |
| <b>COEFFICIENT OF THERMAL EXPANSION</b> | ASTM D-696          | mm/mm/°C<br>(in/in/°F)                                       | <b>6 X 10<sup>-5</sup></b><br><b>(3.5 X 10<sup>-5</sup>)</b> |
|   | CONTINUOUS          | °C<br>(°F)   | <b>75</b><br><b>(167)</b>                                    |
| <b>EFFECTIVE TEMPERATURE RANGE</b>      | INTERMITENT         | °C<br>(°F)   | <b>82</b><br><b>(180)</b>                                    |
|   | <b>FLAME SPREAD</b> | CAN/ULC S102.2M  | -<br><b>240</b>  |

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

### 10 | Installation

**ISOFOIL** is easy to handle and install. It can be cut with a utility knife.

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

### 11 | Maintenance

No maintenance is required after **ISOFOIL** 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.

### 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.

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