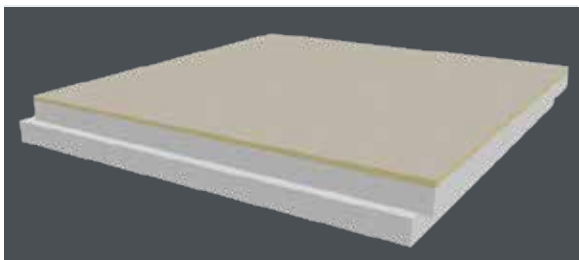


# IZOLON

**IZOLON® R+  
TYPE HD**

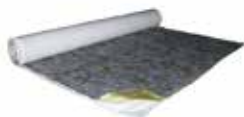
**FLAT EXPANDED POLYSTYRENE  
INSULATION BOARD**



## COMPLEMENTARY PRODUCTS



ADPHALT®  
Adhesive



LEXCOR PERMATE STICK  
Vapour Barrier

## PHYSICAL PROPERTIES

HD (type 2) Expanded Polystyrene

<b>Thermal Resistance</b> (ASTM C518 C177) Thickness of 25 mm (1")	<b>RSI-0.73</b> R-4.17
<b>Vapour Permeability</b> (ASTM E96) Thickness of 25 mm (1")	<b>2.25 perm</b> 130 ng/Pa·s·m²
<b>Compressive Strength</b> (ASTM D1621) Thickness of 38 mm (1 1/2")	<b>140 kPa</b> 20.31 lbs/in²
<b>Flexural Strength</b> (ASTM C518 C203) Thickness of 38 mm (1 1/2")	<b>300 kPa</b> 43.71 lbs/in²
<b>Water Absorption</b> (ASTM D2842) Thickness of 38 mm (1 1/2")	<b>3%</b>
<b>Density</b> (ASTM D1621)	<b>24.02 kg/m³</b> 1.5 lbs/ft³
<b>Limiting Oxygen Index</b> (ULC S-701) % minimum	<b>24%</b>
<b>Dimension Stability</b> (ASTM D2126) % max. of linear change	<b>1.5%</b>

## DESCRIPTION

Expanded polystyrene insulation board, shiplapped on four sides, factory laminated to a 13 mm (1/2") cover board, square end cut, designed to insulate flat or low slope roofs.

## CERTIFICATIONS



## INSTALLATION

1. If adhered with adhesive, refer to the technical data sheet of the adhesive used for application recommendations.
2. Place the panels in close contact, in parallel rows and without deformation or empty space, as indicated in the shop drawing.
3. Fill joints more than 5 mm (3/16").
4. If mechanically attached, use the appropriate LEXCOR LEXGRIP screws and plates. Follow FM recommendations for the number of mechanical fasteners to be used per panel.

## ADVANTAGES

### *Fast Installation*

One step is saved on site since the insulation panel is already laminated to the cover board.

### *Low Water Absorption*

The closed cell walls are waterproof and as such, water can only penetrate in channels located between polystyrene cells that are held together.

### *High-Dimensional stability*

According to industry standards, EPS is one of the leaders in terms of size maintenance. This helps the system to remain fully waterproof at all times.

### *Captive Gas; 98% Air and 2% Plastic*

This formula has been used for more than 50 years. It does not contain any VOC, CFC's, HCFC's, Formaldehyde or any gas that can impact the ozone layer. Furthermore, this provides the product with premium features including its light weight and the maintenance of R-value.

### *Meets High Standards*

Helps to reach Novoclimat (in Quebec if applicable), EnergyStar (Ontario and the Maritimes) and R-2000 (Canada) insulation levels.

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# IZOLON® R+

## TYPE HD

### FLAT EXPANDED POLYSTYRENE INSULATION BOARD

#### PHYSICAL PROPERTIES

Cover Board

Min. requirement as per ASTM C1289 or CAN/ULC S704

<b>Nominal Thickness</b>	<b>12.5 mm</b> 0.5"
<b>Thermal Resistance</b> (ASTM C518)	<b>RSI-0.44</b> R-2.5
<b>Water Vapour Transmission</b> (ASTM E96)	<b>&lt; 1.5 perm</b> < 85.8 ng/Pa·s·m <sup>2</sup>
<b>Water Absorption</b> (ASTM C209) (ASTM C1763) (ASTM D2842)	<b>&lt; 4.0%</b> <b>&lt; 4.0%</b> <b>&lt; 3.5%</b>
<b>Compressive Strength</b> (ASTM D1621)	<b>90<sup>1</sup></b>
<b>Dimensional Stability</b> (ASTM D2126)	<b>&lt; 0.5%</b>
<b>Tensile Strength</b> (ASTM D1623)	<b>&gt; 95 kPa</b> > 2000 psf
<b>Smoke Development</b> (ASTM E84/UL723)	<b>&lt; 450<sup>2</sup></b>
<b>Flame Spread</b> (ASTM E84/UL723)	<b>&lt; 75<sup>2</sup></b>
<b>Service Temperature</b>	<b>-73°C to 121°C</b> (-100°F to 250°F)

<sup>1</sup>551 kPa (80 psi) minimum, up to 758 kPa (110 psi)

<sup>2</sup>Numerical ratings are not intended to reflect performance under actual fire conditions. Flame spread index of ≤75 and smoke development ≤450 meet code requirements for foam plastic roof insulation. Physical properties listed above are presented as typical average values as determined by referenced ASTM test methods and are subject to normal manufacturing variation.



#### PRODUCT WARRANTY

**Thermal Value is 100% Guaranteed**

The thermal resistance of the product is 100% guaranteed free of charge for a period of at least 40 years.

#### SIZES

<b>Width x Length*</b>	<b>1219 mm x 1219 mm</b> 48" x 48"
<b>Thickness - Straight Edge</b>	<b>25 mm to 610 mm</b> 1" to 24"
<b>Thickness - Shiplapped Edge</b>	<b>51 mm to 305 mm</b> 2" to 12"
<b>Shi lap</b>	<b>13 mm to 16 mm</b> 1/2" to 5/8"
<b>Number of Panels per Skid</b>	Varies according to thickness

\*Order sizes available on special order

