



# ISOLEX MACH 12

## POLYISOCYANURATE INSULATION BOARD (4' X 12')

ROOFING

### DESCRIPTION & USE

LEXCOR ISOLEX MACH 12 is a closed-cell polyisocyanurate foam core panel, integrally laminated to heavy, black (non-asphaltic) fibre reinforced felt facers. It is recommended for use as an insulation board under single ply, modified bitumen and built-up roof systems. ISOLEX MACH 12 is available in 122 cm x 366 cm (4' x 12').

Note: Only available in combination with IZOLON insulation in the MACH 12 roofing system.

### FEATURES & BENEFITS

#### ISOLEX MACH 12

4.46 m<sup>2</sup> (48 ft<sup>2</sup>) Panel resulting in:

- Saving 30% on application time thanks to less panels required to cover your roof area.
- 30% less thermal bridging with a more continuous and uninterrupted layer of insulation/cover board
- Reduced costs of material handling with faster loading, off-loading and crane/boom time

#### ISOLEX IN GENERAL

##### High R-Value

Polyisocyanurate is one of the most thermally efficient insulation on the market today. It's high R-Value "per inch" means a cost-effective solution for any building application.

##### Dimensionally Stable

With high compressive strength and dimensional rigidity, ISOLEX MACH 12 provides a stable building panel that helps resist installation traffic, supports fasteners loads and reduces thermal deck movement.

##### Highly Compatible

ISOLEX MACH 12 may be used with virtually all types of roofing systems and is a key component of a fire resistive roof assembly.

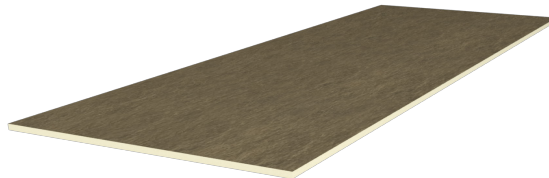
##### Environmentally Friendly

ISOLEX MACH 12 is HCFC free and has zero ozone depletion potential.

### TECHNICAL DATA

Many features that designers need when specifying insulation board are offered by polyisocyanurate:

- Excellent fire test performance
- Dimensional stability
- Compressive strength
- Moisture resistance
- Extensive building codes approval
- Cost-effective insurance rating
- Superior R-Values and Thermal Performance
- Compatibility with commonly used construction adhesives and solvents



AVAILABLE THICKNESS & LTTR-VALUES			
Inches	mm	LTTR <sup>1</sup>	RSI <sup>2</sup>
1.5	38	R-8.6	1.50
2.5	63	R-14.4	2.54

<sup>1</sup>LTTR (long-term resistance) values were determined in accordance with CAN/ULC-S770-09. Test samples were third party selected and tested by an accredited material testing laboratory. The LTTR result was reviewed by FM Global and certified by PIMA Quality Mark Program.

<sup>2</sup>RSI is the metric expression of R-Value (m<sup>2</sup>K/W).

LEXCOR ISOLEX MACH 12 meets or exceeds the following physical properties:

PHYSICAL PROPERTIES		
PROPERTY	ASTM TEST	TYPICAL RESULTS
Dimensional Stability:	D 2126	<2% linear change
Compressive Strength:	D 1621	140 kPa (20 psi)
Tensile Strength:	ASTM D 1623	>35 kPa (730 psf)
Water Absorption:	D 2842, C 209	<1%, <3.5%
Moisture Vapour Transmission:	E 96	<1.5% Perm (86 ng/Pa*s*m <sup>2</sup> )
Flame Spread:	E 84 (10 min.)	20-75 <sup>1</sup>
Smoke Development:	E 84 (10 min.)	20-250 <sup>1</sup>
Service Temp.:		-73°C to 121°C (-100°F to 250°F)

<sup>1</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. Codes exempt foam plastic insulation when used in FM 4450 or UL 1256. Physical properties listed above are presented as typical average values as determined by accepted ASTM Test methods and are subject to normal manufacturing variation.

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### APPROVALS & COMPLIANCE

- ASTM C1289, Type II, Class 1, Grade 2
- CAN/ULC-S704, Type 2, Class 3 or Type 3, Class 3
- UL Certified for Canada - Insulated Roof Deck Assemblies Construction No. C38 and 52, Meet CAN-ULC-S126, CAN / ULC-S101 and CAN ULC-S107
- UL Standard 1256 Classification - Construction No. 120, 123 & 292
- UL Standard 790 (ASTM E108) Roofing Systems Classification
- UL Standard 263 (ASTM E119) Fire Resistance Classification
- UL Standard 1897 Uplift Resistance
- IBC Chapter 26 & NBC Sections on Foam Insulation
- Miami-Dade County Approved

### STORAGE

Factory-applied packaging is only intended for protection during transit. When stored outdoors, or on the job site, packages should be stacked on pallets at least 10 cm (4") above ground level and completely covered with a weatherproof covering such as a tarpaulin. The temporary factory applied packaging should be slit or removed to prevent accumulation of condensation. Roof insulation which has become wet and/or damaged should be removed and replaced with solid, dry insulation.

### PRODUCT INSTALLATION

The joints of ISOLEX MACH 12 should be offset from the previous insulation layer in order to avoid a vertically continuous joint through the total insulation thickness. Two layers (or more) with joints staggered improve insulation performance by eliminating thermal bridges. This method also reduces condensation potential and thermal stress on the roof membrane.

### Mechanical Attachment

Mechanical fastening is the mandatory method of securement. Fastener frequency and spacing may vary depending on regional wind uplift criteria. Refer to local FM and CSA requirements for more information.

### CAUTIONS & LIMITATIONS

This product is a polyisocyanurate organic plastic foam and will burn if exposed to an ignition source of sufficient heat and intensity, or open flame, such as a welder's torch. Like other organic materials, this product will release smoke if ignited. Do not apply flame directly to LEXCOR ISOLEX MACH 12 insulation products. This product should be used only in strict accordance with your local code agencies recommended uses and application instructions.

### WARRANTY

Project specific warranties are available. Contact your local Sales Representative for more information.

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