

# SR.AIR™

EXPANDED POLYSTYRENE RIGID INSULATION COMBINED TO AN AIR | WEATHER BARRIER

The SR.Air™ boards manufactured by Styro Rail Inc. are composed of type 2 expanded polystyrene [EPS] rigid insulation laminated to an air and weather barrier.



## CHARACTERISTICS

COMPLETE AIR TIGHTNESS – 100% SEALED JOINTS BY THE 4" OVERLAPS ON TWO SIDES

ELIMINATES SEALING TAPES AT ALL JOINTS COVERED BY FURS

CONTINUOUS INSULATION – ELIMINATING THERMAL BRIDGES

BREATHABLE MEMBRANE: ALLOWING FOR MOISTURE VAPOR TO ESCAPE

MEMBRANE PUSHING THE WATER DROPLETS TOWARDS THE EXTERIOR

MEETS CAN/ULC-S701.1 STANDARD



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**AVAILABLE DIMENSIONS**

				200
1219 mm x 2438 mm	[48" x 96"]	25 mm	[1"]	R4.0*
1219 mm x 2743 mm	[48" x 108"]	38 mm	[1-1/2"]	R6.0*
		51 mm	[2"]	R8.0*
		57 mm	[2-1/4"]	R9.0*
		64 mm	[2-1/2"]	R10.0*
		76 mm	[3"]	R12.0

Other dimensions available upon request. Ship laped joints on two sides.  
 Higher R-values also available with Graphite EPS.

\* In stock

**RECOMMENDED USE**

Install SR.Air™ boards on the exterior surface of framed walls in order to obtain a continuous thermal envelope, a barrier against potential air infiltration beneath the exterior siding and in order to limit unforeseen water infiltrations.

**CERTIFICATION**

Warnock Hersey has certified the type 2 expanded polystyrene contained in SR.Air™ boards in accordance with the CAN/ULC-S701.1 standard. The type 2 expanded polystyrene produced by STYRORAIL™ is listed in the CCMC Registry of Product Evaluation under CCMC 13271-L.

The air and weather barrier contained in SR.Air™ boards is listed in the CCMC Registry of Product Evaluation under CCMC 13292-R and CCMC 13329-R.

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**PHYSICAL PROPERTIES**

INSULATING PANEL	
Type	2
Thermal Resistance Min. Regular [ASTM C518] Thickness of 25 mm [1"]	RSI 0,70 [R4.0]
Thermal Resistance Min. Graphite [ASTM C518] Thickness of 25 mm [1"]	RSI 0,84 [R4.75]
MVTR Max. [ASTM E96]	200 ng/Pa·s·m <sup>2</sup> [3.5 US Perms]
Compressive Strength Min. [ASTM D1621] 10% Deformation	110 kPa [16 PSI]
Flexural Strength Min. [ASTM C203]	240 kPa [35 PSI]
Water Absorption Max. [ASTM D2842] Volume	3 %
Dimensional Stability Max. [ASTM D2126] Linear Variation	1.5 %
Limiting Oxygen Index Min. [ASTM D2863]	24 %
Density Min. [ASTM C303]	20 kg/m <sup>3</sup> [1.2 lbs/ft <sup>3</sup> ]
Flame Spread Rating Regular [CAN/ULC S102.2]	145
Flame Spread Rating Graphite [CAN/ULC S102.2]	240

AIR AND WEATHER BARRIER MEMBRANE*	
Tensile Strength [ASTM D5034]	MD** 222 N [50 lbs-force]
	CD 178 N [40 lbs-force]
Tear Strength [ASTM D4533]	MD 89 N [20 lbs-force]
	CD 68 N [15 lbs-force]
Water Resistance - Hydrostatic Pressure [AATCC 127]	581 cm
Mullen Burst Strength [ASTM D3786]	703 kPa [102 PSI]
MVTR [ASTM E96]	629 ng/Pa·s·m <sup>2</sup> [11 US Perms]
Fire Resistance [ASTM E84]	Class A
Low Temperature Flexibility [ASTM D1970]	-50° C Pass
Air Permeance Max. [ASTM 2178] @ 75 Pa	0.0014 L/s·m <sup>2</sup> [0.003 cfm/ft <sup>2</sup> ]
Air Porosity [TAPPI T460]	>1800 s/100 cc
UV Resistance	6 months

\* Data provided by the manufacturer.

\*\* MD Machine Direction, CD Cross Machine Direction

SR.AIR™	
MVTR Min. [ASTM E96]	82.5 ng/Pa·s·m <sup>2</sup> [1.44 US Perm]

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## ENVIRONMENTAL DATA

The expanded polystyrene used in the making of the SR.Air™ boards are composed of 98% air and 2% plastic material. They are manufactured without HCFC, HFC gases and without HBCD flame retardant.

The STYRORAIL™ products can contribute to LEED credits.

Please send us your LEED Material Declaration Form at [projetleed@styorail.ca](mailto:projetleed@styorail.ca).

## STORAGE

Store SR.Air™ boards in a dry and ventilated location, protected from the outside elements, ultraviolet rays, open flames or other sources of ignition. Stack boards on pallets of minimum 100 mm [4"] over the ground.

## INSTALLATION

Boards must be dry and in good condition before installation.

To limit the color loss from UV exposure, cover the installed SR.Air™ boards with an exterior cladding protecting them from ultraviolet rays.

Refer to the *Installation Guide* for more information.

## LIMITATIONS

Expanded polystyrene is combustible. Even if expanded polystyrene contains a flame retardant, limit use of open flame or ignition sources near product. A protective barrier or thermal barrier is required as specified in the appropriate building code.

Expanded polystyrene may be affected by some oil based solvents.

## EXEMPTION OF LIABILITY

The information herein is based on the present state of our best scientific and practical knowledge. The user is responsible for checking the suitability of products for their intended use. STYRORAIL™ technical data sheets are updated on a regular basis; it is the user's responsibility to obtain and to confirm the most recent version. Information contained in this data sheet may change without notice.