

Type 1 Expanded Polystyrene Rigid Insulation

TECHNICAL: DATA::SHEET:

MASTERFORMAT® # 07 21 13.13 Foam Board Insulation

expanded polystyrene [EPS] rigid insulation.



RECOMMENDED USE

Install **SR.P**™100 boards on the interior surface of foundation walls and on flat and sloped roofs in order to obtain a continuous thermal envelope. Can be used for levelling non-aligned walls. Ideal for insulating the interior surface of foundations walls, before the installation of a wool insulated wall.

The SR.P™100 boards manufactured by Styro Rail™ are composed of type 1

AVAILABLE DIMENSIONS

610 mm x 2438 mm	[24'' x 96'']
1219 mm x 2438 mm	[48'' x 96'']
Other dimensions available upor	n request. Square joints by

default. Ship lap joints available on two sides for 25 mm [1"] thick panels. For panels with a minimum thickness of 38 mm [1-1/2"], ship lap joints available on two or four sides or G-LockTM system available on two sides.

25 mm	[1"]	R3.7	R4.4
38 mm	[1-1/2'']	R5.6	R6.6
51 mm	[2"]	R7.4	R8.8
64 mm	[2-1/2'']	R9.3	R11.0
76 mm	[3"]	R11.1	R13.2

Regular Neopor®

ADVANTAGES

Permanent R-value - Does not diminish with time

Best R-value/cost ratio of the Styro Rail™ available product range

More than 4 times more stable dimensionally than the requirements*

Excellent moisture resistance within the walls

Non vapour barrier - Enclosed rigid plastic cells that allows water vapour diffusion while maintaining the insulating value

Versatile, lightweight, easy to transport and install

100% recyclable material

* According to the requirements of CAN/ULC-S701-11 standard

CERTIFICATION

Warnock Hersey has certified the type 1 expanded polystyrene contained in SR.P™100 boards in accordance with the CAN/ULC-S701-11 standard. The type 1 expanded polystyrene produced by Styro Rail™ is listed in the CCMC Registry of Product Evaluation under CCMC 13276-L.







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ENVIRONMENTAL DATA

Expanded polystyrene included in **SR.P**[™]100 boards are composed of 98% air and 2% plastic material. They are manufactured without HCFC or HFC gases.

The Styro Rail[™] products can contribute to LEED credits for Optimizing Energy Performance, Recycled Content, Regional Materials, Low-Emitting Materials [Adhesives and Sealants], Construction Waste Management and IAQ Management Plan for the Pre-Occupancy Phase.

Please send us your LEED Material Declaration Form at projetleed@styrorail.ca.

STORAGE AND COVERING

Store boards in a dry location, protected from the outside elements, ultraviolet rays, open flames or other sources of ignition. Stack boards on pallets of minimum 100 mm [4''] above the ground. If provided packaging has been damaged during shipping, cover boards with a weather and ultraviolet tarp. Boards must be dry and in good condition before installation.

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

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. Styro Rail™ 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.







TECHNICAL DATA

> PHYSICAL PROPERTIES

Insulating Panel	SR.P™100	SR.P™200	SR.P™300	SR.P™350	SR.P™400	SR.P™600
Thermal Resistance Min. Regular [ASTM C518] Thickness of 25 mm [1"]	RSI 0,65	RSI 0,70	RSI 0,74	RSI 0,76	RSI 0,76	RSI 0,81
	[R3.7]	[R4.0]	[R4.2]	[R4.3]	[R4.3]	[R4.6]
Thermal Resistance Min. Neopor® [ASTM C518] Thickness of 25 mm [1"]	RSI 0,77 [R4.4]	RSI 0,79 [R4.5]	RSI 0,81 [R4.6]	RSI 0,81 [R4.6]	RSI 0,81 [R4.6]	n/a
MVTR Max.	300 ng/Pa·s·m²	200 ng/Pa·s·m²	130 ng/Pa·s·m²	130 ng/Pa·s·m²	130 ng/Pa·s·m²	130 ng/Pa·s·m²
(ASTM E96)	[5.24 Perms]	[3.5 Perms]	[2.27 Perms]	[2.27 Perms]	[2.27 Perms]	[2.27 Perms]
Compressive Strength Min.	70 kPa	110 kPa	140 kPa	207 kPa	276 kPa	414 kPa
[ASTM D1621] 10% Deformation	[10 PSI]	[16 PSI]	[20 PSI]	[30 PSI]	[40 PSI]	[60 PSI]
Flexural Strength Min.	170 kPa	240 kPa	300 kPa	345 kPa	414 kPa	517 kPa
[ASTM C203]	[25 PSI]	[35 PSI]	[44 PSI]	[50 PSI]	[60 PSI]	[75 PSI]
Water Absorption Max. [ASTM D2842] Volume	6 %	4 %	2 %	2 %	2 %	0.7 %
Dimensional Stability Max. [ASTM D2126] Linear Variation	1.5 %	1.5 %	1.5 %	1.5 %	1.5 %	1.5 %
Limiting Oxygen Index Min. [ASTM D2863]	24 %	24 %	24 %	24 %	24 %	24 %
Density Min.	16 Kg/m³	20 Kg/m³	25 Kg/m³	29 Kg/m³	39 Kg/m³	53 Kg/m³
[ASTM C303]	[1.0 lbs/ft³]	[1.25 lbs/ft³]	[1.5 lbs/ft³]	[1.8 lbs/ft³]	[2.4 lbs/ft³]	[3.3 lbs/ft³]



