

SR.P600™

ULTRA-HIGH COMPRESSIVE STRENGTH EXPANDED POLYSTYRENE RIGID INSULATION

The SR.P600™ panels manufactured by Styro Rail Inc. are composed of type 3 expanded polystyrene [EPS] rigid insulation and offers a ultra high compressive strength of 414 kPa [60 PSI].

+ **CHARACTERISTICS**

- SR.P600™: INSULATING VALUE OF RSI 0.81/25 MM [R-VALUE 4.6/INCH]
- MEETS CURRENT BUILDING CODE REQUIREMENTS
- CLOSED CELL - MOISTURE RESISTANT
- NON VAPOUR BARRIER
- PERMANENT R-VALUE – DOES NOT DIMINISH WITH TIME
- MEETS CAN/ULC-S701.1 STANDARD



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AVAILABLE DIMENSIONS

1219 mm x 2438 mm		[48" x 96"]		SR.P600™ REGULAR
25 mm	[1"]	R4.6		
28 mm	[1-3/32"]	R5.0		
51 mm	[2"]	R9.2		
56 mm	[2-3/16"]	R10.1		
76 mm	[3"]	R13.8		
83 mm	[3-1/4"]	R15.0		
102 mm	[4"]	R18.4		
111 mm	[4-3/8"]	R20.1		

Other dimensions available upon request. Square joints by default.. Ship lap joints available on four sides.

RECOMMENDED USE

Install **SR.P600™** insulation panels when applications require a maximum compressive strength insulating material. Ideal to insulate concrete footings of all types of construction, more specifically footings of concrete structures. Insulate underneath industrial and agricultural garage concrete slabs. Used as an insulating material under pavements for road infrastructures, parking and drainage pipes underneath parking spaces of industrial and agricultural buildings.

CERTIFICATION

Warnock Hersey has certified the type 3 expanded polystyrene contained in **SR.P600™** panels in accordance with the CAN/ULC-S701.1 standard. The type 3 expanded polystyrene produced by STYRORAIL™ is listed in the CCMC Registry of Product Evaluation under CCMC 13277-L.

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PHYSICAL PROPERTIES

INSULATING PANEL	SR.P100™	SR.P200™	SR.P300™	SR.P350™	SR.P400™	SR.P600™
Type	1	2	3	3	3	3
Thermal Resistance Min. Regular [ASTM C518] Thickness of 25 mm [1"]	RSI 0,65 [R3.7]	RSI 0,70 [R4.0]	RSI 0,74 [R4.2]	RSI 0,76 [R4.3]	RSI 0,76 [R4.3]	RSI 0,81 [R4.6]
Thermal Resistance Min. Graphite [ASTM C518] Thickness of 25 mm [1"]	RSI 0,83 [R4.7]	RSI 0,84 [R4.75]	RSI 0,85 [R4.8]	RSI 0,85 [R4.8]	RSI 0,85 [R4.8]	N/A
MVTR Max. [ASTM E96]	300 ng/Pa-s-m ² [5.24 US Perms]	200 ng/Pa-s-m ² [3.5 US Perms]	130 ng/Pa-s-m ² [2.27 US Perms]	130 ng/Pa-s-m ² [2.27 US Perms]	130 ng/Pa-s-m ² [2.27 US Perms]	130 ng/Pa-s-m ² [2.27 US Perms]
Compressive Strength Min. [ASTM D1621] 10% Deformation	70 kPa [10 PSI]	110 kPa [16 PSI]	140 kPa [20 PSI]	210 kPa [30 PSI]	276 kPa [40 PSI]	414 kPa [60 PSI]
Flexural Strength Min. [ASTM C203]	170 kPa [25 PSI]	240 kPa [35 PSI]	300 kPa [44 PSI]	345 kPa [50 PSI]	414 kPa [60 PSI]	517 kPa [75 PSI]
Water Absorption Max. [ASTM D2842] Volume	4 %	3 %	2 %	1.8 %	1.5 %	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. [ASTM C303]	16 kg/m ³ [1.0 lbs/ft ³]	20 kg/m ³ [1.2 lbs/ft ³]	25 kg/m ³ [1.5 lbs/ft ³]	29 kg/m ³ [1.8 lbs/ft ³]	39 kg/m ³ [2.4 lbs/ft ³]	53 kg/m ³ [3.3 lbs/ft ³]
Flame Spread Rating Regular [CAN/ULC S102.2]	145	145	145	145	145	145
Flame Spread Rating Graphite [CAN/ULC S102.2]	240	240	240	240	240	N/A

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ENVIRONMENTAL DATA

The expanded polystyrene used in the making of the SR.P600™ panels 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@styrorail.ca.

STORAGE

Store SR.P600™ panels in a dry and ventilated location, protected from the outside elements, ultraviolet rays, open flames or other sources of ignition. Stack panels on pallets of minimum 100 mm [4"] over the ground.

INSTALLATION

Panels must be dry and in good condition before installation.

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.