SR.**HYDROPEX**™

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Radiant Heat Flooring Expanded Polystyrene Rigid Insulation

TECHNICAL: DATA::SHEET:

MASTEREORMAT® # 07 21 13 13 Foam Board Insulation



The **SR.HydroPex**[™] panels manufactured by Styro Rail[™] are composed of type 2 [200 series] expanded polystyrene [EPS] rigid insulation or type 3 [300 to 600 series]. A honeycomb-layout creates a spacing with intervals of 762 mm [3"] for the placement of the pipes. The system is compatible with all pipes dimensions: 13 mm [1/2"], 16 mm [5/8"], 20 mm [3/4"] and 25 mm [1"].

RECOMMENDED USE

Install **SR.HydroPex**[™] panels as a insulating material that offers a support to fix water or glycol radiant heat floor pipes. Install 200 series prior to the pouring of finished concrete of basement slabs and residential garages; 300 to 600 series for commercial, industrial and agricultural concrete slabs.

AVAILABLE DIMENSIONS



ADVANTAGES

Polyvalent multidirectional system allowing spacing of 76 mm [3"], 152 mm [6"], 229 mm [9"] and 305 mm [12"]

Various compressive values for all uses [between 110 kPa and 414 kPa | 16 PSI and 60 PSI]

Large format panel – Faster installation

Compatible with all pipe dimensions

Honeycomb layout holding the pipes securely in position, without ties — Allows a «standing» installation

Eliminates wire mesh installation when it is not required for slab reinforcement

Thermal barrier limiting heat losses through soil

1219	mm	Χ	2438	mm	[48''	Χ	96	"]

64 mm	[2-1/2'']	R10	R10.5	R10.8	R10.8	R11.5
76 mm	[3"]	R12	R12.6	R12.9	R12.9	R13.8
89 mm	[3-1/2'']	R14	R14.7	R15.1	R15.1	R16.1
102 mm	[4'']	R16	R16.8	R17.2	R17.2	R18.4
114 mm	[4-1/2'']	R18	R18.9	R19.4	R19.4	R20.7
127 mm	[5'']	R20	R21.0	R21.5	R21.5	R23.0
140 mm	[5-1/2'']	R22	R23.1	R23.7	R23.7	R25.3
152 mm	[6"]	R24	R25.2	R25.8	R25.8	R27.6

special order

200

19 mm [3/4"] four sides ship lap joints.

CERTIFICATION

Warnock Hersey has certified the type 2 and type 3 expanded polystyrene contained in **SR.HydroPex**[™] panels in accordance with the CAN/ULC-S701-11 standard. The type 2 and type 3 expanded polystyrene produced by Styro Rail[™] are respectively listed in the CCMC Registry of Product Evaluation under CCMC 13271-L and CCMC 13277-L.



600

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ENVIRONMENTAL DATA

Expanded polystyrene included in **SR.HydroPex**[™] panels are composed of 98% air and 2% plastic material. They are manufactered 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 panels in a dry location, protected from the outside elements, ultraviolet rays, open flames or other sources of ignition. Stack panels on pallets of minimum 100 mm [4"] above the ground. If provided packaging has been damaged during shipping, cover panels with a weather and ultraviolet tarp. Panels must be dry and in good condition before installation.

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.



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TECHNICAL DATA

> PHYSICAL PROPERTIES

SR.HydroPex™	200	300	350	400	600
Thermal Resistance Min. [ASTM C518]	RSI 0,70	RSI 0,74	RSI 0,76	RSI 0,76	RSI 0,81
Thickness of 25 mm [1'']	[R4.0]	[R4.2]	[R4.3]	[R4.3]	[R4.6]
MVTR Max.	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)	[3.5 Perm]	[2.27 Perm]	[2.27 Perm]	[2.27 Perm]	[2.27 Perm]
Compressive Strength Min. [ASTM D1621] 10% Deformation	110 kPa	140 kPa	207 kPa	276 kPa	414 kPa
	[16 PSI]	[20 PSI]	[30 PSI]	[40 PSI]	[60 PSI]
Flexural Strength Min.	240 kPa	300 kPa	345 kPa	414 kPa	517 kPa
[ASTM C203]	[35 PSI]	[44 PSI]	[50 PSI]	[60 PSI]	[75 PSI]
Water Absorption Max. 0.02 % [24 [ASTM D2842] Volume	.h] 4 %	2 %	2 %	2 %	0.7 %
Dimensional Stability Max. [ASTM D2126] Linear Variation	1.5 %	1.5 %	1.5 %	1.5 %	1.5 %
Limiting Oxygen Index Min. [ASTM D2863]	24 %	24 %	24 %	24 %	24 %
Density Min. [ASTM C303]	20 Kg/m³	25 Kg/m³	29 Kg/m³	39 Kg/m³	53 Kg/m³
	[1.25 lbs/ft³]	[1.5 lbs/ft³]	[1.8 lbs/ft³]	[2.4 lbs/ft³]	[3.3 lbs/ft³]

