# SR.EPS <sup>™</sup>

# EXPANDED POLYSTYRENE LIGHTWEIGHT FILL BLOCK

The SR.EPS<sup>™</sup> lightweight fill blocks manufactured by Styro Rail Inc. are composed of expanded polystyrene [EPS] providing compressive strengths ranging from 40 kPa to 276 kPa [5.8 PSI to 40 PSI].

# **CHARACTERISTICS**

+

**HIGH COMPRESSIVE STRENGTH** 

**EXCELLENT STRUCTURAL STABILITY** 

INERT MATERIAL - NOT-AFFECTED BY SOIL OR GROUNDWATER

LOW WATER ABSORPTION - FREEZE | THAW RESISTANT

HELPS REDUCE MAINTENANCE AND REPAIR COSTS OF ROAD INFRASTRUCTURES

**PROVIDES VIBRATION DAMPING** 

VARIOUS COMPRESSIVE VALUES TO COMPLY WITH ALL PROFESSIONAL SPECIFICATIONS

ULTRA-LIGHT COMPARED TO OTHER BACKFILL MATERIALS

100% RECYCLABLE MATERIAL





#### SR.EPS™

#### EXPANDED POLYSTYRENE LIGHTWEIGHT FILL BLOCK

# **AVAILABLE DIMENSIONS**

1219 mm x 2438 mm x 610 mm	[48" x 96" x 24"]	1270 mm x 2540 mm x 635 mm	[50" x 100" x 25"]
610 mm x 2438 mm x 610 mm	[24" x 96" x 24"]	635 mm x 2540 mm x 635 mm	[25" x 100" x 25"]
610 mm x 2438 mm x 305 mm	[24" x 96" x 12"]	635 mm x 2540 mm x 318 mm	[25" x 100" x 12-1/2"]

Other dimensions available upon request.

#### **RECOMMENDED USE**

Install SR.EPS<sup>™</sup> lightweight fill blocks when soil conditions are unstable or sloped, to limit settlement, shifting, sliding or compressing underlying ground or when a higher compressive strength for existing conditions is necessary. Install SR.EPS<sup>™</sup> blocks to prevent uneven frost heave from causing cracking and premature deterioration on pavement or concrete exposed surfaces. Ideal for civil engineering projects such as road infrastructures, bridge abutments, bridges and overpasse access roads.

Install SR.EPS<sup>™</sup> lightweight fill blocks to reduce weight on underground structures such as road, rail and subway underpasses, and such as culverts, ducts and pipelines. Install SR.EPS<sup>™</sup> lightweight fill blocks for applications requiring a lightweight and durable filler material such as site filling around constructions and for landscape projects with considerable level variations.

# CERTIFICATION

Expanded polystyrene SR.EPS<sup>™</sup> lightweight fill blocks can be tested in accordance with the requirements of «Cahier des charges et devis généraux [CCDG] - Infrastructures routières» and according to the specifications of the Ministère des Transports du Québec [MTQ] 14301 «Tome VII, Polystyrène pour la construction routière» standard or with the requirements of the Ontario Ministry of Transportation Lightweight Material [MTO]. Certificate available upon request.

# SR.EPS™

# EXPANDED POLYSTYRENE LIGHTWEIGHT FILL BLOCK

# **PHYSICAL PROPERTIES**

SR.EPS™	EPS 12	EPS 15	EPS 19	EPS 22	EPS 29	EPS 39
<b>Compressive Strength Min.</b>	<b>40 kPa</b>	<b>70 kPa</b>	<b>110 kPa</b>	<b>135 kPa</b>	<b>210 kPa</b>	<b>276 kPa</b>
[ASTM D1621] 10% Deformation	[5.8 PSI]	[10.2 PSI]	[16.0 PSI]	[19.6 PSI]	[30.0 PSI]	[40.0 PSI]
<b>Compressive Strength Min.</b>	<b>35 kPa</b>	<b>55 kPa</b>	<b>90 kPa</b>	<b>115 kPa</b>	<b>170 kPa</b>	<b>241 kPa</b>
[ASTM D1621] 5% Deformation	[5.1 PSI]	[8.0 PSI]	[13.1 PSI]	[16.7 PSI]	[24.7 PSI]	[35.0 PSI]
<b>Compressive Strength Min.</b>	<b>15 kPa</b>	<b>25 kPa</b>	<b>40 kPa</b>	<b>50 kPa</b>	<b>75 kPa</b>	<b>103 kPa</b>
[ASTM D1621] 1% Deformation	[2.2 PSI]	[3.6 PSI]	[5.8 PSI]	[7.3 PSI]	[10.9 PSI]	[15.0 PSI]
<b>Density Min.</b>	<b>11.2 kg/m³</b>	<b>14.4 kg/m³</b>	<b>18.4 kg/m³</b>	<b>21.6 kg/m³</b>	<b>28.8 kg/m³</b>	<b>38.4 kg/m³</b>
[ASTM C303]	[0.7 lbs/ft³]	[0.9 lbs/ft³]	[1.1 lbs/ft³]	[1.3 lbs/ft³]	[1.8 lbs/ft³]	[2.4 lbs/ft³]

Others compressive strengths available to comply with your specific project needs.

#### SR.EPS™

#### EXPANDED POLYSTYRENE LIGHTWEIGHT FILL BLOCK

# **ENVIRONMENTAL DATA**

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

The STYRORAIL  $\ensuremath{^{\rm TM}}$  products can contribute to LEED credits.

Please send us your LEED Material Declaration Form at **projetleed(dstyrorail.ca**.

STORAGE, INSTALLATION AND

# COVERING

Store and install blocks in a location protected from ultraviolet rays, open flames or other sources of ignition. Blocks must be in good condition before installation.

In order to limit the color loss from extended periods of UV exposure, cover the blocks at the earliest opportunity with an tarpaulin, film or a material protecting from ultraviolet rays.

Provide lateral support for the stacked and uninstalled blocks in windy conditions. During installation, laterally protect the polystyrene mount with a granular covering material as specified in specifications.

If the installation consists of more than one layer of blocks, organize subsequent layers at 90 degrees from the previous layer or according to the installation layout provided. Stagger joints between blocks.

Once the blocks installed, limit vehicle, heavy machinery or tools that could damage the blocks.

# LIMITATIONS

Expanded polystyrene is combustible. Even if expanded polystyrene contains a flame retardant, limit use of open flame or ignition sources near product.

Expanded polystyrene may be affected by some oil based solvents.

The continuous service temperature limit of expanded polystyrene is 75°C [167°F]. Constant exposure to temperature above 75°C [167°F] will shrink and warp the product.

# **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<sup>™</sup> 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.