

BUILDING PRODUCTS LISTING PROGRAM

Class: Thermal Insulation

Customer: Superform Products, Ltd.
Location: Box 2696, 1065 Willow Road, Pincher Creek, AB T0K 1W0

Listing No. B1051-2
Project No. B1051-2
Effective Date: April 17, 2014
Last Revised: **No Revisions to Date**
Expires: N/A

Product: Superform Expanded Polystyrene Thermal Insulation

Label: **Product is marked with labels supplied by Superform Products, Ltd. The label includes the manufacturer's name, trademark, or other recognized symbol of identification, the product model designation, month and year of manufacture or equivalent, QAI logo with the 'US' and "C" identifier, and CAN/ULC S701 Type, ASTM C578 Type (where applicable), CAN/ULC S102.2, and ASTM E84 FSI and SDI Rating. Labels are applied to palletized finished products to ensure visibility on the jobsite.**

Standard: CAN/ULC S701 "Thermal Insulation, Polystyrene, Boards and Pipe Covering".

 CAN/ULC S102.2 "Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Coverings, and Miscellaneous Materials and Assemblies".

 ASTM C578 "Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation".

 ASTM E84 - "Standard Test Method for Surface Burning Characteristics of Building Materials".

Ratings: The following outlines Superform Expanded Polystyrene Thermal Insulation Performance determined in accordance with the noted standards.

Superform Expanded Polystyrene Thermal Insulation Properties per CAN/ULC S701

PROPERTY	TYPE 1	TYPE 2	TYPE 3
Thermal Resistance Minimum at 25 mm Thickness (m ² *°C/W)	0.65	0.70	0.74
Water Vapour Permeance	300	200	130

Maximum at 25 mm Thickness (Ng/Pa*s*m ²)			
Dimensional Stability Maximum Linear Change (%)	1.5	1.5	1.5
Flexural Strength Minimum (kPa)	170	240	300
Water Absorption By Volume Maximum (%)	6.0	4.0	2.0
Compressive Strength Minimum at 10% Deformation (kPa)	70	110	140
Limiting Oxygen Index Minimum (%)	24	24	24

Superform Expanded Polystyrene Thermal Insulation Surface Burning Characteristics per CAN/ULC S102.2

SUPERFORM Insulation Type	DENSITY	MAXIMUM THICKNESS	FLAME SPREAD INDEX (FSI)	SMOKE DEVELOPED INDEX (SDI)
Type 1, Type 2, Type 3	Maximum 32 kg/m ³	100 mm Maximum	≤ 210	≥ 500

Superform Expanded Polystyrene Thermal Insulation Properties per ASTM C578

PROPERTY	TYPE I	TYPE VIII	TYPE II	TYPE IX
Compressive Strength Minimum @ 10% Deformation (psi)	10.0	13.0	15.0	25.0
Thermal Resistance Minimum @ 1 inch Thick (F*ft ² *h/Btu)	3.6	3.8	4.0	4.2
Flexural Strength Minimum (psi)	25.0	30.0	35.0	50.0
Water Vapor Permeance @ 1 inch Thickness Maximum (Perms)	5.0	3.5	3.5	2.5
Water	4.0	3.0	4.0	2.0

Absorption By Volume Maximum (%)				
Dimensional Stability Linear Change Maximum (%)	2.0	2.0	2.0	2.0
Oxygen Index Minimum (%)	24.0	24.0	24.0	24.0
Density Minimum (lbs/ft ³)	0.90	1.15	1.35	1.80

Superform Expanded Polystyrene Thermal Insulation Surface Burning Characteristics per ASTM E84¹

SUPERFORM COMPONENT	DENSITY	MAXIMUM THICKNESS	FLAME SPREAD INDEX (FSI)	SMOKE DEVELOPED INDEX (SDI)
Type I, Type VIII, Type II, Type IX	Maximum 2.20 lbs/ft ³	4.0 Inches Maximum	≤ 75	≤ 450

¹Ceiling Measurement Only. This measurement is conducted through determination of flame spread index and smoke developed index with the removal of any contribution of molten materials ignited on the floor of the tunnel assembly.

Note:

Final acceptance of the product in the intended application is to be determined by the authority having jurisdiction.

Product is to be installed in accordance with the manufacturer's published installation instructions by qualified installing personnel.

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