VANCOUVER, BC: 877.461.8378 ph. | 604.527.8368 fx.
LOS ANGELES, CA: 909.483.0250 ph. | 909.483.0336 fx.
TULSA, OK: 918.437.8333 ph. | 918.437.8487 fx.
TORONTO, ON 905.605.5444
WEBSITE: WWW.QAI.ORG

BUILDING PRODUCTS LISTING PROGRAM

Customer: Alleguard
Class: Thermal Insulation – Foam Plastic
Location: Brentwood, TN

Website: http://www.alleguard.com

Listing No. B1061-1
Project No. B1061-1
Effective Date: August 31, 2021
Last Revised September 22, 2025
Expiration: N/A

Standards:

ASTM C578-23	*Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation*.
CAN/ULC S701.1:2017	*Standard for Thermal Insulation, Polystyrene Boards.*
ASTM D6817/D6817M-17(2021)	*Standard Specification for Rigid Cellular Polystyrene Geofoam*.
ASTM E84-21a	*Standard Test Method for Surface Burning Characteristics of Building Materials*.
CAN/ULC S102.2:2019	*Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Coverings, and Miscellaneous Materials and Assemblies*.
ASTM E96-00	*Standard Test Method for Water Vapor Transmission of Materials*.
ASTM E2178-21a	*Standard Test Method for Air Permeance of Building Materials*.
ASTM E2430 /E2430M-19	*Standard Specification for Expanded Polystyrene ("EPS") Thermal Insulation Boards for Use in Exterior Insulation and Finish Systems ("EIFS").*

Product: Alleguard Expanded Polystyrene (EPS) Thermal Insulation including the following products:

- Thermal Insulation Type I, Type VIII, Type II, Type IX (Types 1, 2, 3).
- Insulated Subfloor.
- Radiant Panel.
- Radon Barrier.
- Geofoam EPS15, EPS19, EPS22, EPS29, EPS39, EPS46.

VANCOUVER, BC: 877.461.8378 ph. | 604.527.8368 fx.
LOS ANGELES, CA: 909.483.0250 ph. | 909.483.0336 fx.
TULSA, OK: 918.437.8333 ph. | 918.437.8487 fx.
TORONTO, ON 905.605.5444
WEBSITE: WWW.QAI.ORG

Markings: Products are marked in a permanent manner with the following:

a) Company Name: Alleguard
b) ASTM C578 / CAN/ULC S701.1 / ASTM D6817 Type as appropriate.
c) ASTM E84 Flame Spread Smoke Developed Index (FSI ≤ 25 / SDI ≤ 450) (where applicable).
d) CAN/ULC S102.2 Flame Spread Smoke Developed Index (FSI ≤ 290 / SDI ≥ 500) (where applicable).
e) RSI values (required for Canadian products per CAN/ULC S701.1).
f) Traceability code including date of manufacture.
g) QAI Mark as shown below:

Labels are applied to palletized finished products to ensure visibility on the jobsite.

Ratings:

EPS THERMAL INSULATION TYPES PER ASTM C578					
PROPERTY	**TYPE I[1]**	**TYPE VIII**	**TYPE II**	**TYPE IX**	**TYPE XIV**
Compressive Strength, Minimum @ 10% Deformation (psi)	10.0	13.0	15.0	25.0	40.0
Thermal Resistance, Minimum @ 1 inch Thick ($F*ft^2*h/Btu$)	3.6	3.8	4.0	4.2	4.2
Flexural Strength, Minimum (psi)	25.0	30.0	35.0	50.0	60.0
Water Vapor Permeance, @ 1 inch Thickness, Maximum (Perms)	5.0	3.5	3.5	2.5	2.5
Water Absorption By Volume, Maximum (%)	4.0	3.0	3.0	2.0	2.0
Dimensional Stability Linear Change, Maximum (%)	2.0	2.0	2.0	2.0	2.0
Oxygen Index, Minimum (%)	24.0	24.0	24.0	24.0	24.0
Density, Minimum (lbs/ft^3)	0.90	1.15	1.35	1.80	2.40

Note 1: Type 1 products are available for use in exterior insulation and finish systems (EIFS) compliant with ASTM E2430/E2430M specifications.

VANCOUVER, BC: 877.461.8378 ph. | 604.527.8368 fx.
LOS ANGELES, CA: 909.483.0250 ph. | 909.483.0336 fx.
TULSA, OK: 918.437.8333 ph. | 918.437.8487 fx.
TORONTO, ON 905.605.5444
WEBSITE: WWW.QAI.ORG

EPS THERMAL INSULATION TYPES PER CAN/ULC S701.1			
PROPERTY	**TYPE 1[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 Maximum at 25 mm Thickness (Ng/Pa*s*m^2)	300	200	130
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

Note 1: Type 1 products are available for use in exterior insulation and finish systems (EIFS) compliant with ASTM E2430/E2430M specifications.

INSULATED SUBFLOOR TYPES PER ASTM C578	
PROPERTY	**TYPE II**
Compressive Strength, Minimum @ 10% Deformation (psi)	15.0
Thermal Resistance, Minimum @ 1 inch Thick (F*ft^2*h/Btu)	4.0
Flexural Strength, Minimum (psi)	35.0
Water Vapor Permeance, @ 1 inch Thickness, Maximum (Perms)	3.5
Water Absorption By Volume, Maximum (%)	3.0
Dimensional Stability Linear Change, Maximum (%)	2.0
Minimum Oxygen Index, Minimum (%)	24.0
Density, Minimum (lbs/ft^3)	1.35

INSULATED SUBFLOOR TYPES PER CAN/ULC S701.1	
PROPERTY	**TYPE 2**
Thermal Resistance Minimum at 25 mm Thickness, (m^2*°C/W)	0.70
Water Vapour Permeance Maximum at 25 mm Thickness, (Ng/Pa*s*m^2)	200
Dimensional Stability Maximum Linear Change (%)	1.5
Flexural Strength, Minimum (kPa)	240
Water Absorption By Volume Maximum (%)	4.0
Compressive Strength Minimum at 10% Deformation (kPa)	110
Limiting Oxygen Index Minimum (%)	24

RADIANT PANEL TYPES PER ASTM C578		
PROPERTY	**TYPE II**	**TYPE IX**
Compressive Strength Minimum @ 10% Deformation (psi)	15.0	25.0
Thermal Resistance Minimum @ 1 inch Thick (F*ft^2*h/Btu)	4.0	4.2
Flexural Strength, Minimum (psi)	35.0	50.0
Water Vapor Permeance @ 1 inch Thickness, Maximum (Perms)	3.5	2.5
Water Absorption By Volume, Maximum (%)	3.0	2.0
Dimensional Stability Linear Change, Maximum (%)	2.0	2.0
Limiting Oxygen Index, Minimum (%)	24.0	24.0
Density, Minimum (lbs/ft^3)	1.35	1.80

VANCOUVER, BC: 877.461.8378 ph. | 604.527.8368 fx.
LOS ANGELES, CA: 909.483.0250 ph. | 909.483.0336 fx.
TULSA, OK: 918.437.8333 ph. | 918.437.8487 fx.
TORONTO, ON 905.605.5444
WEBSITE: WWW.QAI.ORG

RADIANT PANEL TYPES PER CAN/ULC S701.1		
PROPERTY	**TYPE 2**	**TYPE 3**
Thermal Resistance Minimum at 25 mm Thickness, (m^2*°C/W)	0.70	0.74
Water Vapour Permeance Maximum at 25 mm Thickness (Ng/Pa*s*m^2)	200	130
Dimensional Stability Maximum Linear Change (%)	1.5	1.5
Flexural Strength Minimum (kPa)	240	300
Water Absorption By Volume Maximum (%)	4.0	2.0
Compressive Strength Minimum at 10% Deformation (kPa)	110	140
Limiting Oxygen Index Minimum (%)	24	24

RADON BARRIER PANEL TYPES PER ASTM C578	
PROPERTY	**TYPE II**
Compressive Strength Minimum @ 10% Deformation (psi)	15.0
Thermal Resistance Minimum @ 1 inch Thick (F*ft^2*h/Btu)	4.0
Flexural Strength, Minimum (psi)	35.0
Water Vapor Permeance @ 1 inch Thickness, Maximum (Perms)	≤ 0.1[1]
Water Absorption By Volume, Maximum (%)	3.0
Dimensional Stability Linear Change, Maximum (%)	2.0
Limiting Oxygen Index, Minimum (%)	24.0
Density, Minimum (lbs/ft^3)	1.35

Note 1: Radon Barrier products Type II / Type 2 EPS foam water vapor permeance values noted.

RADON BARRIER PANEL TYPES PER CAN/ULC S701.1	
PROPERTY	**TYPE 2**
Thermal Resistance Minimum at 25 mm Thickness (m^2*°C/W)	0.70
Water Vapour Permeance Maximum at 25 mm Thickness (Ng/Pa*s*m^2)	≤ 5.4[1]
Dimensional Stability Maximum Linear Change (%)	1.5
Flexural Strength, Minimum (kPa)	240
Water Absorption By Volume Maximum (%)	4.0
Compressive Strength Minimum at 10% Deformation (kPa)	110
Limiting Oxygen Index Minimum (%)	24

Radon Barrier finished product water vapor permeance values are outlined below.

RADON BARRIER PERFORMANCE PROPERTIES	
PROPERTY	**CLASSIFICATION**
Water Vapor Permeance per ASTM E96	Class I Vapor Retarder: ≤ 0.1 Perms (≤ 5.4 ng/Pa*s*m^2)
Air Leakage @ 75 Pa per ASTM E2178	Air Barrier: ≤ 0.02 L/s*m^2

Note: Radon Barrier radon gas mitigation panels, when installed per the manufacturer's instructions and the 2015 National Building Code of Canada (NBC) meet the requirements for an air barrier system properties per section 5.4.1.2 and 9.25.3.6(1) when used for under slab applications, including providing resistance to the ingress of soil gasses including radon.

GEOFOAM TYPES PER ASTM D6817

VANCOUVER, BC: 877.461.8378 ph. | 604.527.8368 fx.
LOS ANGELES, CA: 909.483.0250 ph. | 909.483.0336 fx.
TULSA, OK: 918.437.8333 ph. | 918.437.8487 fx.
TORONTO, ON 905.605.5444
WEBSITE: WWW.QAI.ORG

PROPERTY	EPS15	EPS19	EPS22	EPS29	EPS39	EPS46
Density Minimum kg.m^3(lbs/ft^3)	14.4 (0.90)	18.4 (1.15)	21.6 (1.35)	28.8 (1.80)	38.4 (2.40)	45.7 (2.85)
Compressive Strength kPa (psi) at:						
1% Compression:	25 (3.6)	40 (5.8)	50 (7.3)	75 (10.9)	105 (15.2)	128 (18.6)
5%Compression:	55 (8.0)	90 (13.1)	115 (16.7)	170 (24.7)	282 (40.9)	300 (43.5)
10% Compression:	70 (10.2)	110 (16.0)	135 (19.6)	200 (29.0)	308 (44.8)	345 (50.0)
Flexural Strength Minimum kPa (psi)	172 (25.0)	207 (30.0)	276 (40.0)	345 (50.0)	414 (60.0)	517 (75.0)
Oxygen Index Minimum (%)	24.0	24.0	24.0	24.0	24.0	24.0

EPS products have been evaluated and found to have the following surface burning characteristics evaluated per ASTM E84:

AMVIC EPS THERMAL INSULATION TYPES PER ASTM E84[3]				
TYPES	**DENSITY**	**MAXIMUM THICKNESS**	**FLAME SPREAD INDEX**	**SMOKE DEVELOPED INDEX**
Type I, VIII, II, IX thermal insulation. EPS15, EPS19, EPS22, EPS29 geofoam.	Maximum 2.0 lbs/ft^3	≤ 4 inches	≤ 25	≤ 450

Note 3: Ceiling 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.

EPS products have been evaluated and found to have the following surface burning characteristics evaluated per CAN/ULC S102.2:

AMVIC EPS THERMAL INSULATION TYPES PER CAN/ULC S102.2				
TYPES	**DENSITY**	**MAXIMUM THICKNESS**	**FLAME SPREAD INDEX**	**SMOKE DEVELOPED INDEX**
Type 1, Type 2, Type 3 thermal insulation. EPS15, EPS19, EPS22, EPS29 geofoam.	Maximum 32 kg/m^3	≤ 100 mm	≤ 290	≥ 500

Note: The product must be installed in accordance with the code enforced by the authority having jurisdiction. Final acceptance of the product in the final installation is subject to inspection by the authority having jurisdiction.

The materials, products or systems listed herein have been qualified to bear the QAI Listing Mark under

VANCOUVER, BC: 877.461.8378 ph. | 604.527.8368 fx.
LOS ANGELES, CA: 909.483.0250 ph. | 909.483.0336 fx.
TULSA, OK: 918.437.8333 ph. | 918.437.8487 fx.
TORONTO, ON 905.605.5444
WEBSITE: WWW.QAI.ORG

The conditions stated with each Listing. Only those products bearing the QAI Listing Mark are considered to be listed by QAI.

Visit the QAI Online Listing Directory located at www.qai.org for the most up to date version of this Listing and to validate that this QAI Listing is active.

Questions regarding this listing may be directed to info@qai.org. Please include the listing number in the request.

***