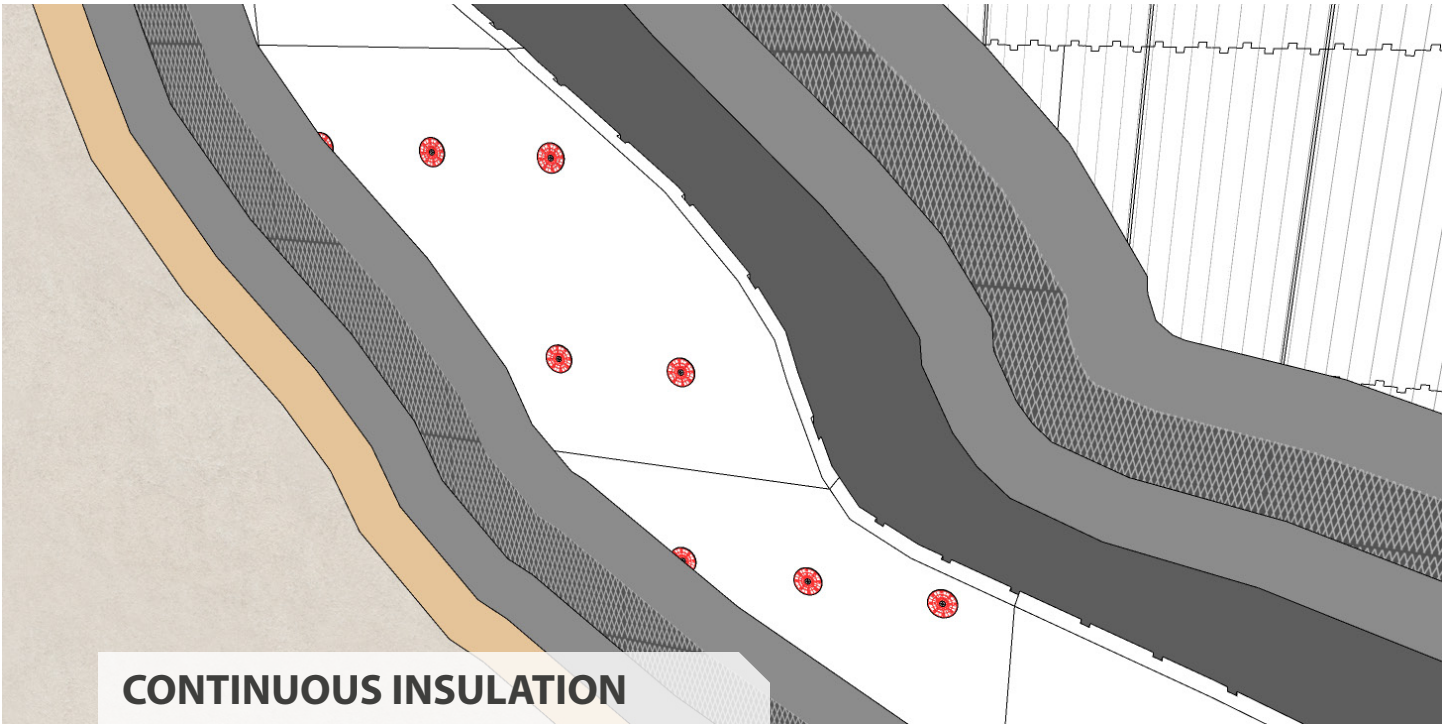


EPS Insulation for EIFS and Stucco

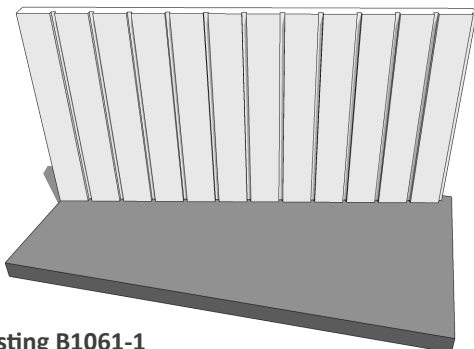


CONTINUOUS INSULATION

Alleguard's EPS is non-structural, rigid insulation boards made from 100% virgin, closed cell, Expanded Polystyrene (EPS). Boards are either aged in ambient air for five weeks or kiln-dried.

The boards are designed to be installed as part of Exterior Insulation and Finish System (EIFS) or under stucco for residential and commercial applications.

The combination of foam and cementitious coating(s) gives great flexibility in shape and color while providing excellent thermal performance by acting as continuous insulation and reducing the impact of thermal bridging.



QAI Listing B1061-1

Alleguard Advantage

- Available in both drained or non-drained configurations.
- Can be manufactured with virtually any drainage pattern or design.
- Compliant with ASTM E2430/E2430M.
- Stable long term thermal resistance.
- Increased thermal resistance in lower temperatures.
- Each panel is easy to handle due to the smaller size and low weight and can be easily cut.
- Alleguard is an approved component supplier for Exterior Insulation and Finish System (EIFS) manufacturers, meeting the guidelines outlined by the EIFS Council of Canada (ECC).

Availability

Alleguard is able to manufacture insulation boards in variety of sizes with the most common one being 2x4' (610x1219mm) with thicknesses ranging from 1.5-5" (38-127mm). Boards are available in white foam (EPS) or graphite infused gray foam (GPS).

Applications

- Commercial and residential EIFS applications
- Low rise residential stucco applications
- Building recladding
- Continuous rigid insulation
- Architectural moldings
- Can be used as general purpose insulation for above grade exterior walls or below grade

The maximum continuous operating temperature for Expanded Polystyrene (EPS) is 158°F (70°C). Board exposure to ultra violet (UV) is limited to a thin layer causing a slight discoloration and surface dusting. The material underneath remains unaffected maintaining its physical properties. This is usually mitigated by applying the first coat of the EIFS system (or stucco base coat) shortly after panel installation, thus limiting UV exposure.

The UV affected material can be removed by brushing/rasping the surface to expose unaffected EPS/GPS followed by typical application of the rest of the components. Avoid hydrocarbons and petroleum based products.

Physical Properties Table

	Standard	Units	EPS 1	EPS 2	EPS 3	GPS 1
Specification for Rigid Polystyrene Insulation	ASTM C578		Type I	Type II	Type IX	Type I
	CAN/ULC-S701		Type 1	Type 2	Type 3	Type 1
Thermal Resistance ¹	ASTM C518 @ 75°F (24°C)	F.ft ² .hr/Btu (m ² K/W)	3.9 (0.69)	4.2 (0.74)	4.4 (0.77)	4.7 (0.83)
Compressive Strength (Min.)	ASTM D1621 @ 10% Strain	psi (kPa)	10 (70)	16 (110)	20 (140)	10 (70)
Water Absorption (Max.)	ASTM D2842	%	4.0	3.0	2.0	4.0
Water Vapor Permeance (Max.) ¹	ASTM E96	US perm (ng/Pa.s.m ²)	5.00 (286)	3.50 (200)	2.27 (130)	5.00 (286)
Flexural Strength (Min.)	ASTM C203	psi (kPa)	25 (172)	35 (241)	50 (345)	25 (172)
Dimensional Stability (Max.)	ASTM D2126	%	1.5	1.5	1.5	1.5
Limiting Oxygen Index (Min.)	ASTM D2863	%	24	24	24	24
Density	ASTM D1622	lb/ft ³ (kg/m ³)	1.00 (16)	1.50 (24)	2.00 (32)	1.00 (16)
Surface Burning Characteristics	ASTM E84 ²					
	Flame Spread Index (FSI)		≤25	≤25	≤25	
	Smoke Developed Index (SDI)		≤450	≤450	≤450	
	CAN/ULC-S102 ³					
	Flame Spread Index (FSI)		≤210	≤210	≤210	235
Smoke Developed Index (SDI)		≥500	≥500	≥500	210	

¹ Measurement per 1" (25mm) of thickness

² For thicknesses up to and including 4"

³ For thicknesses up to and including 100mm