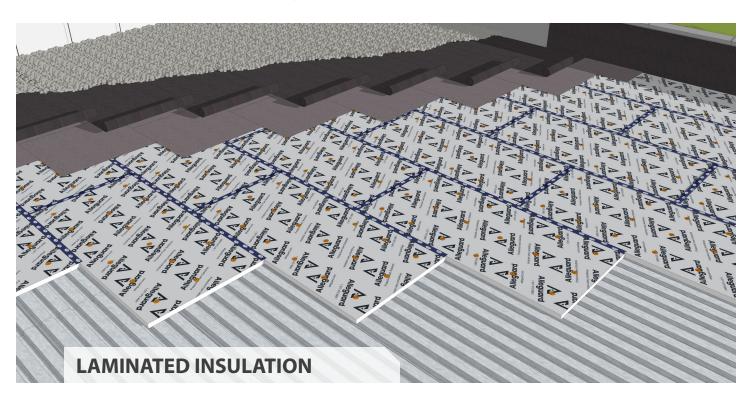
# Alleguard Poly Faced Insulation



Alleguard Poly Faced Insulation is a non-structural, rigid insulation board made from closed cell Expanded Polystyrene (EPS) with double-sided laminated facers that dramatically increases board strength and flexibility. Intended to be installed as a continuous insulation, reducing thermal bridging, and improving envelope performance. Alleguard Poly Faced Insulation can be used in both new and retrofit applications for commercial, residential, industrial and institutional applications.



## **Alleguard Advantage**

- Stable long term thermal resistance.
- Increased thermal resistance in lower temperatures.
- Does not promote growth of mold and mildew.
- No off-gassing and does not contain HFCs, CFCs or HCFCs.
- Each panel is easy to handle due to the low weight and can be easily cut.
- Functions as a vapor barrier when sealed and taped with an approved vapor barrier tape.
- Double sided film lamination creates durable and flexible boards reducing breakage and site damage.

Physical Properties Table							
	Standard	Units	PF12	PF20 (HD)	PF25 (HD)	PF40 (HD)	PF60 (HD)
Specification for Rigid	ASTM C578		Type I	Type II	Type IX	Type XIV	Type XV
Polystyrene Insulation	CAN/ULC-S701		Type 1	Type 2	Type 3	Type 3	Type 3
Thermal Resistance <sup>1</sup>	ASTM C518 @ 75°F (24°C)	F.ft <sup>2</sup> .hr/Btu (m <sup>2</sup> K/W)	3.9 (0.69)	4.2 (0.74)	4.3 (0.76)	4.4 (0.77)	4.4 (0.77)
Compressive Strength	ASTM D1621 @ 10% Strain	psi (kPa)	12 (83)	20 (138)	25 (172)	40 (276)	60 (414)
Water Absorption (Max.)	ASTM D2842	%	4.0	3.0	2.0	2.0	2.0
Water Vapor Permeance	ASTM E96	US perm (ng/Pa.s.m²)	5.00 (287)	3.50 (200)	2.27 (130)	2.27 (130)	2.27 (130)
Flexural Strength	ASTM C203	psi (kPa)	25 (173)	35 (242)	50 (345)	60 (414)	75 (517)
Dimensional Stability (Max.)	ASTM D2126	%	1.5	1.5	1.5	1.5	1.5
Limiting Oxygen Index (Min.)	ASTM D2863	%	24	24	24	24	24
Density	ASTM D1622	lb/ft³ (kg/m³)	1.00 (16)	1.50 (24)	1.80 (29)	2.50 (40)	3.50 (56)
Surface Burning Characteristics	ASTM E84/UL-723 <sup>2</sup> Flame Spread Index (FSI) Smoke Developed Index (SDI) CAN/ULC-S102.2 <sup>3</sup> Flame Spread Index (FSI) Smoke Developed Index (SDI)		≤25 ≤450 ≤210 ≥500	≤25 ≤450 ≤210 ≥500	≤25 ≤450 ≤210 ≥500		
	<sup>1</sup> Measurement per 1" (25mm) of thickness <sup>2</sup> For thicknesses up to 4" <sup>3</sup> For thicknesses up to 100mm						

#### **Availability**

Alleguard Poly Faced Insualation is available in a wide range of thicknesses ranging from 1/2" (13mm) to 6" (152mm). Standard board dimensions include 4x8', 4x9' and 4x10' (1.2x2.4m, 1.2x2.7m and 1.2x3.0m) with square edges. Additional panel compressive strengths are available for special order. Available facers include 1/3mil clear polypropylene, 3mil printed polypropylene and 3mil metalized (reflective) polypropylene film. Please contact your territory manager for more information.

### **Applications**

- Exterior above grade walls
- Below concrete slab (HD products only)
- Interior below grade insulation
- Freezers and cold storage
- Roof Retrofits

The maximum continuous operating temperature for Alleguard Poly Faced Insulation is 158°F (70°C). EPS exposure to ultra violet (UV) is limited to a thin layer causing slight discoloration and surface dusting. The material underneath remains unaffected maintaining its properties. Prolonged exposure may cause minimal reduction in thickness. To avoid adhesion issues, remove the UV affected material by brushing/rasping the surface to expose unaffected EPS (avoid hydrocarbons and petroleum based products).

#### Warranty

Alleguard supports building owners, designers and contractors by offering a 20-year, limited thermal warranty on Alleguard Poly Faced Insulation product line. This warranty is available to the building owner at the time the building is completed and is transferable to any subsequent owner during the 20-year period.

