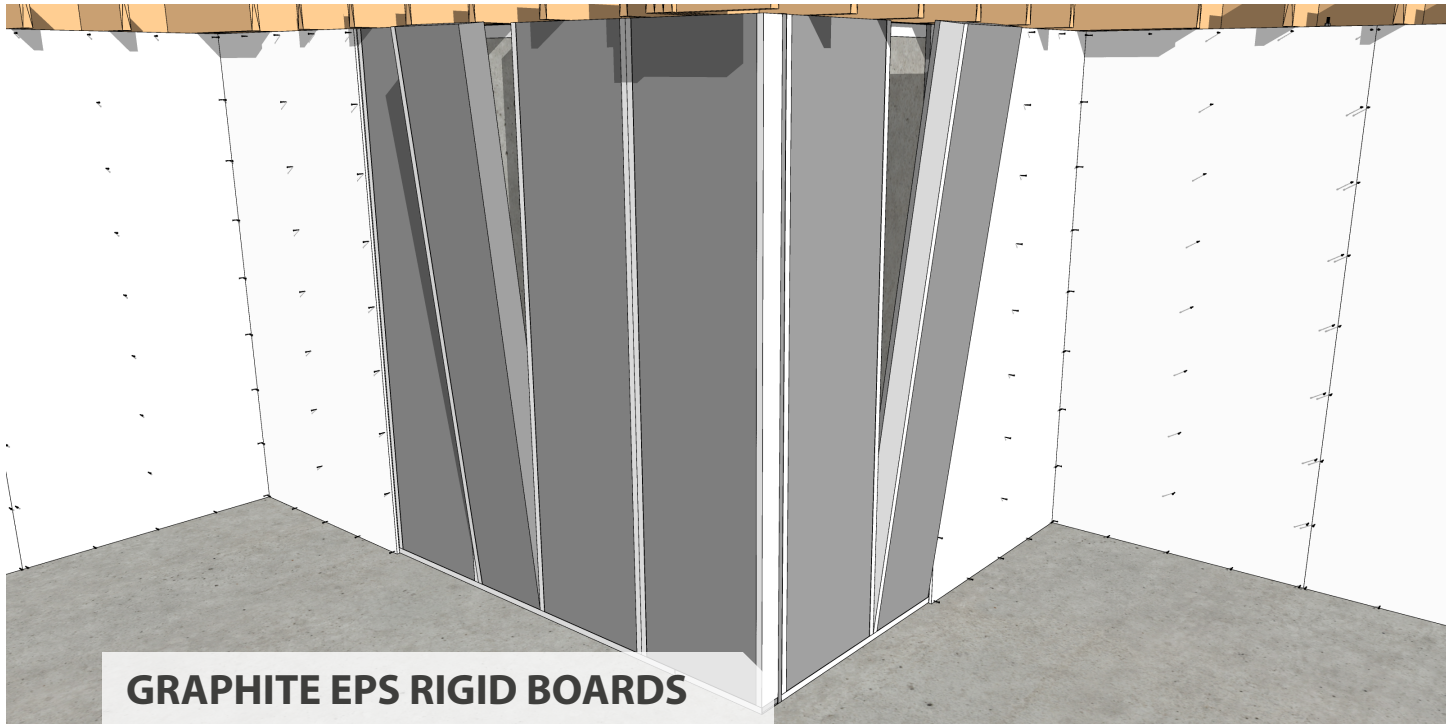


Envirosheet Graphite Insulation

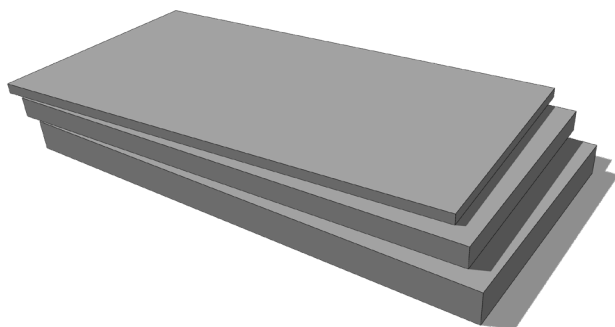


GRAPHITE EPS RIGID BOARDS

Envirosheet Graphite is a non-structural, closed cell, rigid insulation board made from graphite infused Expanded Polystyrene (EPS) offering superior performance when compared to standard EPS.

Designed to be installed as continuous insulation to reduce thermal bridging and directly improve building envelope performance.

The combination of the superior thermal properties with standard EPS cell structure creates a high performance rigid insulation board with great durability through exceptionally low, long term, in-service water absorption and high thermal resistance.



Alleguard Advantage

- More energy efficient than traditional Expanded Polystyrene (EPS) rigid insulation.
- Stable long term Thermal Resistance.
- Increased thermal resistance in lower temperatures.
- High vapor permeance allowing wall assemblies to dry over time.
- 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.
- The availability of larger panels help improve job site efficiency and reduce labor costs.

Availability

Envirosheet Graphite is available in a wide range of thicknesses ranging from 1" (25mm) to 4" (152mm). Standard board dimensions include 4x8', 4x9' and 4x10' (1.2x2.4m, 1.2x2.7m and 1.2x3.0m). Custom sizes are available for special order.

Applications

- Exterior above grade walls
- Building recladding
- Interior of foundation walls
- Cathedral roof
- Conventional flat roof

The maximum continuous operating temperature for Envirosheet Graphite is 158°F (70°C).

Warranty

Alleguard supports building owners, designers and contractors by offering a 20-year, limited thermal warranty on Envirosheet Graphite 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.

Physical Properties Table

	Standard	Units	ENG7	ENG12	ENG16 (HD)	ENG25 (HD)
Specification for Rigid Polystyrene Insulation	ASTM C578		Type XI	Type I	Type II	Type IX
	CAN/ULC-S701.1			Type 1	Type 2	Type 3
Thermal Resistance ¹	ASTM C518 @ 75°F (24°C)	F.ft ² .hr/Btu (m ² K/W)	4.4 (0.78)	4.7 (0.83)	4.7 (0.83)	4.7 (0.83)
Compressive Strength (Min.) @ 10% Strain	ASTM D1621	psi (kPa)	5 (35)	10 (70)	16 (110)	25 (172)
Water Absorption (Max.)	ASTM D2842	%	4.0	4.0	3.0	2.0
Water Vapor Permeance (Max.) ¹	ASTM E96	US perms (ng/Pa.s.m ²)	5.0 (286)	5.0 (286)	3.2 (200)	2.27 (130)
Flexural Strength (Min.)	ASTM C203	psi (kPa)	10 (70)	25 (174)	35 (240)	50 (345)
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)	0.7 (11)	1.0 (16)	1.35 (22)	1.80 (29)
Surface Burning Characteristics	ASTM E84 ²					
	Flame Spread Index (FSI)		≤25	≤25	≤25	≤25
	Smoke Developed Index (SDI)		≤450	≤450	≤450	≤450
	CAN/ULC-S102.2 ²					
Flame Spread Index (FSI)		≤210	≤210	≤210	≤210	
Smoke Developed Index (SDI)		≥500	≥500	≥500	≥500	

¹ Measurement per 1" (25mm) of thickness
² For thicknesses up to 4" or 100mm