

Neopor® GPS Insulation



Neopor® GPS (Graphite Polystyrene) rigid foam is today's energy-efficient and cost-effective insulation solution for architects, builders and contractors. The table shows actual test data of Neopor® GPS F5300 Plus and ASTM C578 physical requirements for EPS and XPS.

Property	Unit	Neopor® GPS Plus vs EPS/XPS ⁴⁾								
Polystyrene type ¹⁾		EPS	GPS +	EPS	GPS +	XPS	GPS +	XPS	GPS +	XPS
ASTM C578 Classification ²⁾		Type I	Type I	Type VIII	Type VIII	Type X	Type II+	Type IV	Type IX	Type VI
Compressive Resistance	at yield of 10% deformation in psi (min)	10.0	10.0	13.0	14.0	15.0	20.0	25.0	25.0	40.0
Thermal Resistance (R-value) ³⁾	°F·ft ² ·h/BTU (°C·m ² /W) 75 ±2°F (23.9 ±1°C)	3.6	4.7	3.8	4.7	5.0	4.7	5.0	4.7	5.0
Water Vapor Permeance	Max perm (ng/Pa·s·m ²)	5.0	4.0	3.5	3.1	1.5	3.1	1.5	2.5	1.1
Water Absorption by Total Immersion	Max volume % absorbed	4.0	1.1	3.0	1.1	0.3	1.1	0.3	1.1	0.3
Flexural Strength	psi	25.0	25.0	30.0	32.0	40.0	40.0	50.0	50.0	60.0
Density	lbs/ ft ³	0.90	0.90	1.15	1.15	1.30	1.45	1.45	1.80	1.80

1) GPS is Graphite Polystyrene. XPS is extruded Polystyrene

2) Neopor® GPS meets and exceeds ASTM C578-13, "Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation"; published by ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959

3) R means resistance to heat flow. The higher the R-value, the greater the insulating power. Ask your seller for the fact sheet on R-values.

4) The technical and physical metrics provided in this table are reference values for insulation products made of Neopor GPS. The values and properties may vary depending on how they are processed and produced.