



# Neopor<sup>®</sup> HPE-150

## Tech Data Sheet

Innovation in Insulation  
Enhanced with Graphite.

### Product Description.

Neopor HPE-150 is an Innovation in insulation product with a maximum R-value enhanced with graphite.

Neopor HPE-150 is a premium grade insulation manufactured to provide builders and contractors all the features and benefits inherent in a high quality insulation.

### Applications.

- Exterior above and below grade insulation

### Technical Data.

#### Code Compliances.

Neopor HPE-150 is manufactured under an industry leading quality control programs monitored by ICC-ES and UL and further recognized in ICC-ES Evaluation Report 3463 and UL Evaluation Report UL ER5817-02.

### Applicable Standards.

Neopor HPE-150 meets ASTM C578, Type II, "Standard Specification for Rigid Cellular Polystyrene Thermal Insulation".

Applicable standards include:

- ASTM D1621 – Standard Test Method for Compressive Properties of Rigid Cellular Plastics
- ASTM C518 – Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus
- ASTM C203 – Standard Test Methods for Breaking Load and Flexural Properties of Block-Type Thermal Insulation
- ASTM E96 – Standard Test Methods for Water Vapor Transmission of Materials
- ASTM C272 – Standard Test Method for Water Absorption of Core Materials for Structural Sandwich Constructions
- ASTM D2126 – Standard Test Method for Response of Rigid Cellular Plastics to Thermal and Humid Aging

### Innovation in Insulation.

Neopor<sup>®</sup> is an advanced rigid thermal insulation material available locally and world-wide that allows builders to achieve energy code while still meeting client budget expectations.

## Neopor® HPE-150 Physical Properties.

Property		Unit of Measure	Result
Compressive Strength <sup>1,2</sup> @ 10% deformation, min. ASTM D1621		psi	15
R-value <sup>1</sup> , Thermal Resistance, ASTM C518	40°F	°F·ft <sup>2</sup> ·h/Btu	5.0
	75°F	°F·ft <sup>2</sup> ·h/Btu	4.7
Density, Nominal ASTM C303		lb/ft <sup>3</sup>	1.35
Flexural Strength <sup>1</sup> , min. ASTM C203		psi	35
Water Vapor Permeance <sup>1</sup> of 1.0 in. thickness, max., perm ASTM E96			3.1
Water Absorption <sup>1</sup> by total immersion, typical tested, volume % ASTM C272			1.1
Flame Spread Index ASTM E84			<25
Smoke Developed Index ASTM E84			<450
Maximum use temperature			165°F (74°C)
ASTM C578 Compliance, Type			II

<sup>1</sup> Please refer to ASTM C578 specification for complete information. R-values are based on 1-1/16" thickness.

<sup>2</sup> Compressive strength is measured at 10 percent in accordance with ASTM C578. A safety factor is required to prevent long-term creep for sustained loads. For static loads, a safety factor of 3:1 is recommended.

### Why Builders Rely on Neopor® High Performance Insulation.

- Graphite-enhanced R-5 performance
- Meets 2009, 2012 and 2015 International Residential Code (IRC) for Continuous Insulation (CI), Below Grade, Attics and Crawl Spaces
- Moisture-resistant and Vapor-open
- GREENGUARD Gold Indoor Air Quality
- Regional production and local availability
- No R-value loss over time (LTTR)

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