

# Neopor<sup>®</sup> HPE-130 Product Data Sheet

## Innovation in Insulation Enhanced with Graphite.

### Why Builders Rely on Neopor<sup>®</sup> 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
- Attractive incentive program
- R-value Warranty

### Product Description.

Neopor HPE-130 is an Innovation in insulation product with a maximum R-value enhanced with graphite.

Neopor HPE-130 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-130 is manufactured under an industry leading quality control program monitored by UL and further recognized in UL Evaluation Report UL ER5817-02.

#### Applicable Standards.

Neopor HPE-130 meets ASTM C578, Type VIII, "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

### R-value.

Neopor HPE-130 has air in its closed cells and therefore has a stable R-value. Many other insulations use blowing agents that cause R-value loss and are harmful to the environment.

As temperatures drop, the R-value of Neopor HPE-130 increases significantly. Many other insulations lose R-value at low temperatures.

### 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.

## Installation.

Neopor HPE-130 boards are easy to handle, cut using a utility knife or serrated blade, and install.

## Moisture Resistance.

Neopor HPE-130 is manufactured to resist moisture absorption in wetting conditions and release absorbed moisture quickly during drying periods, which means Neopor HPE-130 maintains R-value. The drying potential of Neopor HPE-130 sets it apart from other insulation materials.

## Product Protection.

Neopor HPE-130 can be damaged by prolonged direct sunlight exposure or by reflected sunlight. Neopor HPE-130 must be protected during storage, transportation, and at the project with a light colored opaque material.

Please refer to the Neopor HPE-130 Handling Instructions.

## Flame Retardants

Although flame retardants present in Neopor HPE-130 provide an important margin of safety, all Neopor HPE-130 products must be considered combustible.

A protective barrier or thermal barrier is required as specified in the appropriate building code.

## Temperature Exposure.

Neopor HPE-130 is able to withstand the rigors of temperature cycling, assuring long-term performance. The maximum recommended long-term exposure temperature for Neopor HPE-130 is 165°F (74°C).

## Termites.

Neopor High Performance Insulation can be manufactured with Termiticide.

## Physical Properties of Neopor HPE-130.

Compressive Strength <sup>1,2</sup> @ 10% deformation, min. ASTM D1621		psi	13
R-value <sup>1</sup> , Thermal Resistance, ASTM C518	40°F	°F·ft <sup>2</sup> ·h/Btu	5.2
	75°F	°F·ft <sup>2</sup> ·h/Btu	5.0
Density, Nominal ASTM C303		lb/ft <sup>3</sup>	1.25
Flexural Strength <sup>1</sup> , min. ASTM C203		psi	32
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, max., 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			VIII

<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.

## Product and Packaging Data.

Product	Product Dimensions Thickness (in) x Width (in) x Length (in)	Pieces per Bundle
R-3	11/16 x 48 x 96	16
R-5	1-1/16 x 48 x 96	11
R-10	2-1/8 x 48 x 96	5

## Warranty.

Neopor HPE-130 is covered by a 50 year limited warranty ensuring thermal performance

everything they can to make sure your project goes smoothly and ends successfully.

## Product Availability and Support.

Neopor HPE-130 is supported by a team of experts who work with you to answer your questions, offer solutions, and do

Neopor HPE-130 is manufactured and sold by a network of locations throughout North America.

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