

## Product Information Bulletin

### EnerSpan® M-24 Insulation Board

**EnerSpan® M-24** insulation is a rigid, closed cell, silver-gray insulation that meets or exceeds requirements for expanded polystyrene (EPS) insulation manufactured to CAN/ULC-S701.1<sup>1</sup>. **EnerSpan M-24** insulation is manufactured using **Neopor® F5300 GPS Plus**, a graphite-enhanced expandable polystyrene (GPS) raw material provided by BASF.

The graphite within the cellular structure of **EnerSpan M-24** insulation reduces radiation heat transfer and results in an enhanced thermal resistance compared to standard white EPS insulation.



Material Properties <sup>2</sup>	ASTM Test Method	Units	Values
<b>Thermal Resistance</b> <i>Minimum per 25 mm (1 inch)</i>	C518	m <sup>2</sup> ·°C/W (ft <sup>2</sup> ·h·°F/BTU)	0.82 (4.7)
<b>Compressive Resistance</b> <i>Minimum @ 10% Deformation</i>	D1621	kPa (psi)	110 (16)
<b>Compressive Modulus</b> <i>Minimum</i>		kPa (psi)	4,500 (650)
<b>Flexural Strength</b> <i>Minimum</i>	C203	kPa (psi)	240 (35)
<b>Water Vapour Permeance</b> <i>Maximum</i>	E96	ng/(Pa·s·m <sup>2</sup> ) (Perms)	200 (3.5)
<b>Dimensional Stability</b> <i>Maximum (7 Days @ 70 ± 2°C)</i>	D2126	% Linear Change	1.5
<b>Water Absorption</b> <i>Maximum</i>	D2842	% By volume	4.0
<b>Limiting Oxygen Index</b> <i>Minimum</i>	D2863	%	24
Standard Dimensions			
Width	Length	Thickness	
610 mm (2 ft.)	2440 mm (8 ft.)	38, 51 or 76 mm (1 ½, 2 or 3 in.)	
All four edges of boards are ship lapped to provide continuous insulation coverage.			

1. **EnerSpan M-24** material properties as per CAN/ULC-S701.1 (formerly CAN/ULC-S701), **Standard for Thermal Insulation, Polystyrene, Boards**.

2. **EnerSpan M-24** insulation material properties are third party certified to CAN/ULC-S701.1 under an Intertek third party certification program (see Intertek Code Compliance Research Report CCRR-1033 for additional information).

## Handling, Storage and Installation Recommendations for *EnerSpan M-24* Insulation

The following material handling, jobsite storage and installation recommendations have been provided by BASF for insulation material made from *Neopor® F5300 GPS Plus* graphite-enhanced expandable polystyrene (GPS) raw material.

### **Material Handling:**

Material handling and the flow of materials from manufacturing site to job site is a significant part of the construction process. Precautionary measures taken in packaging, storage, transportation and installation of insulation products made of *Neopor* can help minimize the potential for damage to the products.

### **Jobsite Storage:**

*Precautions taken when storing insulation products on the jobsite can help minimize the potential for damage. Keep product tarped or covered to protect from weather. Do not use clear plastic covering film. If possible, store indoors. Care should be taken to keep exposed foam protected from reflective sunlight or prolonged solar exposure.*

### **Installation:**

Precautions taken during the construction process can help minimize the potential for damage. Care should be taken to keep exposed foam protected from reflected sunlight or prolonged solar exposure. If deformation of the insulation product occurs due to excessive heat transferred from reflected and concentrated sunlight, remove the reflective surface or shield the insulation product.

A secondary method to protect the foam from direct sunlight and heat is to install sunscreen or tarp on the outside of the scaffolding, much the same that is used on building construction that protects the public when it is necessary for them to pass by construction site underneath the scaffolding. This is only needed until the finish coat of the foam is applied.

