

## FOAM-CONTROL™ MAXX

Powered by Graphite

Foam-Control MAX™ (graphite enhanced expanded polystyrene) rigid board foam plastic is for all types of industrial, packaging, and construction uses. Foam-Control MAX is manufactured in conformance with numerous standards.

- ASTM C578 for Thermal Insulation
- ICC ES AC12 for Foam Plastic Insulation

Product			<b>MAX 100</b>	<b>MAX 150</b>	<b>MAX 250</b>
Density, Nominal ASTM C303		lb/ft <sup>3</sup> (kg/m <sup>3</sup> )	1.0 (16)	1.5 (24)	2.0 (32)
R-value <sup>1,2</sup> , Thermal Resistance, ASTM C518	40°F	°F·ft <sup>2</sup> ·h/Btu (°K·m <sup>2</sup> /W)	5.2 (0.91)	5.2 (0.91)	5.3 (0.93)
	75°F	°F·ft <sup>2</sup> ·h/Btu (°K·m <sup>2</sup> /W)	5.0 (0.88)	5.0 (0.88)	5.0 (0.88)
Compressive Strength <sup>1,3</sup> @ 10% deformation, min. ASTM D1621		psi (kPa)	10 (69)	15 (104)	25 (173)
Flexural Strength <sup>1</sup> , min. ASTM C203		psi (kPa)	25 (173)	35 (242)	50 (345)
Water Vapor Permeance <sup>1</sup> of 1.0 in. thickness, max., perm ASTM E96			5.0	3.5	2.5
Water Absorption <sup>1</sup> by total immersion, max., volume % ASTM C272			2.0	2.0	2.0
Flame Spread ASTM E84			<25	<25	<25
Smoke Developed ASTM E84			<450	<450	<450
ASTM C578 Compliance, Type			Type I	Type II	Type IX

<sup>1</sup> Please refer to ASTM C578 specification for complete information.

<sup>2</sup> R-values are based on 1-1/16" thickness.

<sup>3</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.

## Design Options.

Cost effective design is among the highest priorities for industrial, packaging, and construction applications. Foam-Control MAX products are available in a range of Types necessary to provide control of structural integrity, thermal resistance (R-value), and cost effectiveness.

## Thermal Performance.

The R-value of Foam-Control MAX remains constant and does not suffer from R-value loss. The closed cell structure of Foam-Control MAX contains air and not blowing agents which deplete over time.

## Powered by graphite.

Foam-Control MAX is comprised of many small pockets of air within a polymer matrix containing graphite. The graphite reflects radiant heat energy like a mirror, increasing the material's resistance to heat flow or R-value.

## Exposure to Water and Water Vapor.

The mechanical properties of Foam-Control MAX are unaffected by moisture. Exposure to water or water vapor does not cause swelling.

## Temperature Exposure/Flame Retardants.

Foam-Control MAX is able to withstand the rigors of temperature cycling, assuring long-term performance.

Although flame retardants used in the manufacture of Foam-Control MAX provide an important margin of safety, all EPS products must be considered combustible.

The maximum recommended long-term exposure temperature for Foam-Control MAX is 165°F (74°C).

## Adhesives, Coatings, and Chemicals.

Solvents which attack Foam-Control MAX include esters, ketones, ethers, aromatic, and aliphatic hydrocarbons and their emulsions, among others. If Foam-Control MAX is to be placed in contact with materials (or their vapors) of unknown composition, pretest for compatibility at maximum exposure temperature.



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FOAM TECHNOLOGIES


For further information about

Foam-Control EPS

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Do not install or use Foam-Control MAX with coal tar pitch, highly solvent-extended mastics, or solvent-based adhesives without adequate separation.

## Quality Assurance/Building Code Compliance.

Foam-Control MAX exceeds the requirements of ASTM C578, "Standard Specification for  Rigid, Cellular Polystyrene Thermal Insulation." Foam-Control MAX is monitored for Quality Control and Listed by UL. UL also recognizes Foam-Control MAX for building code compliance. Please see UL ER11812-05.

Note: Local Building Codes must be followed regarding thermal barriers.

## Resistance to Termites, Mold, and Mildew.

Foam plastic insulations have been shown to become termite infested under certain exposure conditions. Foam-Control MAX with Perform Guard® provides resistance to termite infestation.

Foam-Control MAX will not decompose and does not support mold or mildew growth. Foam-Control MAX provides no nutrient value to plants or animals.

## Product Protection.

Foam-Control MAX can be damaged by prolonged direct sunlight exposure or by reflected sunlight. Foam-Control MAX must be protected during storage, transportation, and at the project with a light colored opaque material. Please refer to the Foam-Control MAX Handling Instructions.

## Warranty.

Foam-Control MAX Licensees offer a product warranty ensuring thermal performance, physical properties, and termite resistance.



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MAXX

NEXT GENERATION  
INSULATION POWERED  
BY GRAPHITE.