



## Architectural Insulation



Foam-Control® PLUS+® is an architectural insulation product line having high compressive strength and R-value. Foam-Control PLUS+ is a premium grade insulation manufactured to provide architects, specifiers, distributors, and contractors all the features and benefits inherent in a high quality architectural insulation.

Foam-Control PLUS+ is manufactured under an industry leading quality control program monitored by UL and further recognized in UL Evaluation Report UL ER11812-04.

FOAM-CONTROL PLUS+			PLUS+ 150	PLUS+ 250	PLUS+ 400	PLUS+ 600
Compressive Strength <sup>1,2</sup> @ 10% deformation, min. ASTM D1621	psi (kPa)		15 (104)	25 (173)	40 (276)	60 (414)
R-value <sup>1</sup> , Thermal Resistance, per inch, ASTM C518	25°F	°F·ft <sup>2</sup> ·h/Btu (°K·m <sup>2</sup> /W)	4.8 (0.84)	5.0 (0.88)	5.0 (0.88)	5.1 (0.90)
	40°F	°F·ft <sup>2</sup> ·h/Btu (°K·m <sup>2</sup> /W)	4.6 (0.80)	4.8 (0.84)	4.8 (0.84)	4.9 (0.86)
	75°F	°F·ft <sup>2</sup> ·h/Btu (°K·m <sup>2</sup> /W)	4.2 (0.73)	4.4 (0.77)	4.4 (0.77)	4.5 (0.78)
Density, Nominal ASTM C303	lb/ft <sup>3</sup> (kg/m <sup>3</sup> )		1.5 (24)	2.0 (32)	2.5 (40)	3.0 (48)
Flexural Strength <sup>1</sup> , min. ASTM C203	psi (kPa)		35 (242)	50 (345)	60 (414)	75 (517)
Water Vapor Permeance <sup>1</sup> of 1.0 in. thickness, max., perm ASTM E96			3.5	2.5	2.5	2.5
Water Absorption <sup>3</sup> volume % ASTM C272			0.3	0.3	0.3	0.3
Flame Spread ASTM E84			<25	<25	<25	<25
Smoke Developed ASTM E84			<450	<450	<450	<450
ASTM C578 Compliance, Type			II	IX	XIV	XV

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

<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.

<sup>3</sup> ASTM C272 24 hour immersion followed by 24 hour storage in 75°F/50%RH air.

## Strength.

Foam-Control PLUS+ has high compressive strengths of 15, 25, 40, or 60 psi to meet specific project requirements.

## R-value.

Foam-Control PLUS+ 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 Foam-Control PLUS+ increases significantly. Many other insulations lose R-value at low temperatures.

## Moisture Resistance.

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

The mechanical properties of Foam-Control PLUS+ are not affected by moisture exposure. Foam-Control PLUS+ does not swell with exposure to water.

## Temperature Exposure.

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


## Flame Retardants

Although flame retardants present in Foam-Control PLUS+ provide an important margin of safety, all Foam-Control PLUS+ products must be considered combustible.

## Weathering.

Long-term exposure to sunlight causes yellowing and a slight embrittlement of the surface due to ultraviolet light. This has little effect on mechanical properties. If stored outdoors, cover Foam-Control PLUS+ with opaque polyethylene film, tarps, or similar material.

## Resistance to Termites, Mold, and Mildew.

One of the most destructive forces anywhere is termites. Foam-Control PLUS+ can be manufactured with Perform Guard,  a proven and safe additive, that effectively resists termites.

Foam-Control PLUS+ with Perform Guard meets ICC ES AC239, "Acceptance Criteria for Termite-Resistant Foam Plastics".

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

## Adhesives, Coatings, and Chemicals.

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

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

## Warranty.

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

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AN ARCHITECTURAL  
INSULATION LIKE NO OTHER