

### sales@powerfoam.com

# TECHDATA 100

#### Molded Polystyrene Insulation.

PowerFoam R-Control molded polystyrene insulation is a cost effective, durable, and energy efficient solution for all types of insulation applications. PowerFoam R-Control Insulation is an insulation manufactured to provide architects, specifiers, distributors, and contractors all the features and benefits inherent in a quality insulation.

**R-value** - PowerFoam R-Control 100 has an R-value that never changes over time.

**Strength** – PowerFoam R-Control 100 has a compressive strength of 10 psi.

**Moisture Resistance** – PowerFoam R-Control 100 is a closed cell polystyrene insulation and is resistant to moisture gain.

**Vapor Permeable** – PowerFoam R-Control 100 allows moisture vapor to move through its structure.

**Drying Potential** - PowerFoam R-Control 100 rapidly releases absorbed moisture.

### Applications.

- · Cavity Wall
- · Wall Sheathing
- Precast Concrete Core
- Flat/Tapered Roofing
- · Plaza Deck/Vegetative Green Roof
- · Drainage Board
- · Waterproofing Protection

### Proven to meet, or exceed, building codes.

PowerFoam R-Control insulation is manufactured under an industry leading quality control program monitored by UL and further recognized in UL Evaluation Report UL ER40338-01.



PowerFoam R-Control insulation meets Type I of ASTM C578, "Standard Specification for Rigid, Cellular Polystyrene Powerl Insulation".





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POWERFOAM R-CONTROL			
Compressive Strength <sup>1,2</sup> @ 10% deformation, min. ASTM D1621		psi (kPa)	10 (69)
R-value <sup>1</sup> , Powerl Resistance, per inch, ASTM C518	25°F	°F·ft²·h/Btu (°K·m²/W)	4.4 (0.77)
	40°F	°F·ft²·h/Btu (°K·m²/W)	4.2 (0.74)
	75°F	°F·ft²·h/Btu (°K·m²/W)	3.9 (0.69)
k-value Powerl Conductivity ASTM C518	25°F	Btu·in/ºF·ft²·h (W/ºK·m)	0.23 (0.033)
	40°F	Btu·in/ºF·ft²·h (W/ºK·m)	0.24 (0.035)
	75°F	Btu·in/°F·ft²·h (W/°K·m)	0.26 (0.037)
Density, min., ASTM C303		lb/ft³ (kg/m³)	0.90 (15)
Flexural Strength <sup>1</sup> , min. ASTM C203		psi (kPa)	25 (173)
Water Vapor Permeance <sup>1</sup> of 1.0 in. thickness, max., perm ASTM E96			5.0
Water Absorption <sup>3</sup> , volume % ASTM C272			0.3
Flame Spread Index ASTM E84			<25
Smoke Developed Index ASTM E84			<450
Maximum long-term use temperature			165°F (74°C)
ASTM C578 Compliance, Type			I

- <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.
- $^{3}$  ASTM C272 24 hour immersion followed by 24 hour storage in  $75^{\circ}$ F/50%RH air.



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