

## Molded Polystyrene Insulation.

ThermaFoam R-Control molded polystyrene insulation is a cost effective, durable, and energy efficient solution for all types of insulation applications. ThermaFoam 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** - ThermaFoam R-Control 50 has an R-value that never changes over time.

**Strength** - ThermaFoam R-Control 50 has a compressive strength of 5 psi.

**Moisture Resistance** - ThermaFoam R-Control 50 is a closed cell polystyrene insulation and is resistant to moisture gain.

**Vapor Permeable** - ThermaFoam R-Control 50 allows moisture vapor to move through its structure.

**Drying Potential** - ThermaFoam R-Control 50 rapidly releases absorbed moisture.

### Applications.

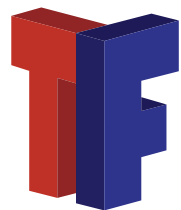
- Precast Concrete Core
- Void Fill
- Flotation
- Protective Packaging

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

ThermaFoam 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.



ThermaFoam R-Control insulation meets Type XI of ASTM C578, "Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation".



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<b>50</b>			
Compressive Strength <sup>1,2</sup> @ 10% deformation, min. ASTM D1621		psi (kPa)	5 (35)
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)	3.6 (0.63)
	40°F	°F·ft <sup>2</sup> ·h/Btu (°K·m <sup>2</sup> /W)	3.4 (0.60)
	75°F	°F·ft <sup>2</sup> ·h/Btu (°K·m <sup>2</sup> /W)	3.2 (0.56)
k-value Thermal Conductivity ASTM C518	25°F	Btu·in/°F·ft <sup>2</sup> ·h (W/°K·m)	0.28 (0.040)
	40°F	Btu·in/°F·ft <sup>2</sup> ·h (W/°K·m)	0.29 (0.042)
	75°F	Btu·in/°F·ft <sup>2</sup> ·h (W/°K·m)	0.31 (0.045)
Density, min., ASTM C303		lb/ft <sup>3</sup> (kg/m <sup>3</sup> )	0.70 (12)
Flexural Strength <sup>1</sup> , min. ASTM C203		psi (kPa)	10 (69)
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			XI

<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.