

## Molded Polystyrene Insulation.

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

**R-value** – Branch River 100 has an R-value that never changes over time.

**Strength** – Branch River 100 has a compressive strength of 10 psi.

**Moisture Resistance** – Branch River 100 is a closed cell polystyrene insulation and is resistant to moisture gain.

**Vapor Permeable** – Branch River 100 allows moisture vapor to move through its structure.

**Drying Potential** – Branch River 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.

Branch River insulation is manufactured under an industry leading quality control program monitored by UL and further recognized in UL Evaluation Report UL ER40326-01.



Branch River insulation meets Type I of ASTM C578, “Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation”.

 <b>100</b>		
Compressive Strength <sup>1,2</sup> @ 10% deformation, min. ASTM D1621	psi (kPa)	10 (69)
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) 4.4 (0.77)
	40°F	°F·ft <sup>2</sup> ·h/Btu (°K·m <sup>2</sup> /W) 4.2 (0.74)
	75°F	°F·ft <sup>2</sup> ·h/Btu (°K·m <sup>2</sup> /W) 3.9 (0.69)
k-value Thermal Conductivity ASTM C518	25°F	Btu·in/°F·ft <sup>2</sup> ·h (W/°K·m) 0.23 (0.033)
	40°F	Btu·in/°F·ft <sup>2</sup> ·h (W/°K·m) 0.24 (0.035)
	75°F	Btu·in/°F·ft <sup>2</sup> ·h (W/°K·m) 0.26 (0.037)
Density, Nominal ASTM C303	lb/ft <sup>3</sup> (kg/m <sup>3</sup> )	1.0 (16)
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.

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