



# EXPANDED POLYSTYRENE (EPS)

## ASTM C578 TECHNICAL DATA SHEET

Expanded Polystyrene (EPS) manufactured in accordance with ASTM C578 provides lightweight, closed-cell rigid foam insulation with stable long-term thermal performance, low water absorption, and a wide range of compressive strengths for commercial, civil, and building applications.

PROPERTY	TYPE I	TYPE VIII	TYPE II	TYPE IX	TYPE XIV	TYPE XV
Minimum Density (pcf)	0.90	1.15	1.35	1.80	2.40	3.00
Compressive Resistance @10% (psi)	10	13	15	25	40	60
Flexural Strength (psi)	25	35	50	60	75	100
Water Absorption (% Vol.)	4.0	3.0	2.0	2.0	1.0	1.0
R-Value @ 75°F	3.85	3.90	4.20	4.30	4.40	4.50
R-Value @ 40°F	4.10	4.15	4.45	4.55	4.65	4.75
R-Value @ 25°F	4.30	4.35	4.65	4.75	4.85	5.00
Oxygen Index (%)	24	24	24	24	24	24

### THERMAL PERFORMANCE NOTE

R-values shown are long-term thermal resistance values per inch of thickness. Thermal resistance increases as mean temperature decreases. Values listed at 75°F, 40°F, and 25°F mean temperatures.

### TYPICAL APPLICATIONS

- Geof foam lightweight fill
- EIFS and continuous insulation
- Below-grade insulation
- Roof insulation systems
- Cold storage and freezer slabs
- Structural void fill applications

### GENERAL NOTES

- EPS insulation shall conform to ASTM C578.
- Physical properties shown are minimum typical values.
- Long-term thermal performance remains stable over time.
- Protect EPS from petroleum-based solvents and prolonged UV exposure.
- Consult project specifications for final design requirements.