

	Foil Faced Polyisocyanurate (Polyiso)	Mineral Wool Board (Roxul)	Extruded Polystyrene (XPS)	Quik-Therm (EPS Core with Metallic Polymer Facers)
Above Grade Testing	R-Value and Thermal Performance			
1" Thick R-Value (ASTM C518)	R-5.7 plus	R-4	R-4.88 (CCMC)	Type 1: R-3.8 Type 2: R-4.18
1/2" R-Value on Concrete Wall (ASTM C1363)	Unknown	Unknown	Unknown	R-3.83
1" R-Value on Concrete Wall (ASTM C1363)	Unknown	Unknown	Unknown	R-5.9
Long Term Thermal Resistance (LTTR)	Decreases	Unknown	Decreases	Stable
Performance in Cold Climates	Decreases	Unknown	Improved	Improved
Below Grade Performance	Physical Characteristics			
Compressive Strength	Not Recommended Below Grade	Poor	Excellent	Excellent
Water Vapour Transmission		Permeable	Semi-Permeable	Effectively Impermeable
Below Grade R-Value Modelling - Intertek		Unknown	Unknown	Yes
R-Value Performance Below Grade		Decreases	Decreases	Stable
Meets Vapour and Radon Barrier Requirements		No	Unknown	Yes
Durability - Does not easily chip or break		No	No	Yes
Cost Effectiveness	Moderate	Variable	Expensive	Reasonable
Product Ingredients	Isocyanate, Polyether Variable Facers	Mineral fibers & phenol-formaldehyde resin	Polystyrene / Gas Blowing Agent	5% Polystyrene / 95% Air Inert Polymer Facer

NOTES: *Third Party Research:* National Research Council Canada below grade testing determined EPS retained 94% of its stated R-Value and its compressive strength remained stable.
US Department of Energy (ORNL) determined XPS below grade systems can experience a 10-44% loss of energy savings performance when subjected to moisture accumulation in the range of 8% - 16%.
EPS Bulletin 104: Compared to XPS, EPS exhibited superior drying potential in extreme conditions (ASTM C1512).

Quik-Therm Typical Physical Properties

Property	Above Grade (Quik-Therm MPI)	Below Grade (Quik-Therm SGI)	Interior Concrete Walls (Quik-Therm CIS)
R-Value Testing	Quik-Therm R-Value Testing available in Technical Data Sheets or at www.quiktherm.com		
Nominal Density (pcf)	1	1	1
Compressive Strength (psi)	13	Type 1 - 12.7 psi Type 2 - 19.2 psi Type 3 - 26.7 psi	13
Water Vapour Transmission (perms)	<1.0	<1.0	<1.0
Flame Spread	250	—	250
Smoke Density	410	—	410
Flexural Strength (psi)	—	202	—
Dimensional Stability (maximum %)	—	< 1.5%	—