

Physical Properties

Data Sheet Extruded Polystyrene (XPS)						
Property		Test Standard	Units	XPS 320	XPS 380	XPS 450
Density, Min		ASTM D1622	Kg/m ³	32-35	38-42	45-48
Compressive Strength @ 10% Deformation, Min		DIN 53421 ASTMD1622	kPa psi	220-300 32-44	330-450 48-65	450-700 65-100
Water Absorption by Submersion		ASTM D2842 (28 days submersion)	Volume %	<0.2	<0.2	<0.2
Water Vapour Diffusion Resistance Factor μ		DIN 52612	μ	100-200	100-225	100-225
Water Vapour Permeability		ASTM C355	perm - inch	0.4-0.6	0.4-0.6	0.4-0.6
Linear Coefficient of Thermal Expansion and Contraction (Heat Soaking Condition)		DIN 52612	C° F°	70X10 ⁻⁶ 39X10 ⁻⁶	70X10 ⁻⁶ 39X10 ⁻⁶	70X10 ⁻⁶ 39X10 ⁻⁶
Thermal Conductivity (K Value)	Fresh as manufactured at 4.4°C (40°F) Mean Temperature Test	DIN 52612	W/m.K	0,016	0,016	0,016
	Laboratory Value @ 10 °C (50°F) Mean Temperature Test	ASTM C177		0,028	0,025	0,025
	5 years aged (design) value @ 24 °C as per QCS and ASTM C578			0,032	0,030	0,030
Fire Classification *	ASTM E84 UL 723			Class A	Class A	Class A
Flame Spread Index *				25	25	25
Smoke Development Index *				140	140	140

* Only Applicable for Fire Rated