

Unibloc Geofoam® X39 Grade

Technical Data Sheet

Unibloc Geofoam® X39 Grade Expanded Polystyrene (EPS), is a rigid cellular plastic material that is strong, but has very low density. It is made in block and sheet form and is produced in Australia to meet Australian Standards, AS1366, Part 3. Unibloc Geofoam® is tested against these minimum requirements.

Quality Assurance

Unibloc Geofoam® X39 Grade exceeds the requirements of AS1366, Rigid cellular plastic sheets for thermal insulation Part 3: Rigid Cellular Polystyrene-Moulded.

Size and Shape

Unibloc Geofoam® X39 Grade is produced in block form and sheet form to meet customer requirements. Standard sizes:

- 1.2 metre width
- 2.5, 3.0, 5.0, 6.0 metre lengths
- 20 mm up to 1.2 metre thickness

Other sizes and fabrications can be provided by Unipod® upon request.

Design

For most applications, long term design loads should not exceed the linear elastic range of Unibloc Geofoam®. Combined live and dead load stresses should not exceed the compressive resistance at 1% deformation.

Physical Property	Test Method	Requirement/Result	Performance
Nominal Density	ISO 845	39 kg/m ³	N/A
Compressive strength at 1% deformation	AS 2498.3:1993	82 kPa	Pass
Cross Break Strength	AS 2498.4:1993	460 kPa (min)	Pass
k-Value (thermal conductivity) 50mm sample at 23°C	AS 4859.1:2018	0.035W/mK (min)	N/A
R-Value (thermal resistance) 50mm sample at 23°C	AS 4859.1:2018	1.43 m ² K/W (min)	N/A
Flame Propagation	AS 2122.1:1993	2 SD (max)	Pass
Median flame duration		3 SD (max)	Pass
Eighth value		50% (min)	Pass
Median volume retained		47% (min)	Pass
Eighth value			
Dimensional Stability – length, width, thickness	AS 2498.6:1993	1% (max)	Pass
Water Vapour Transmission, measured parallel to rise at 23°C	AS 2498.5:1993	350 µg/m ² s (max)	Pass
Elastic Modulus, min	ASTM D6817	10200 kPa	Pass