

# Unibloc Geofoam® SL Grade

## Technical Data Sheet

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

### Size and Shape

Unibloc Geofoam® SL 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	Performance
Nominal Density	ISO 845	13.5 kg/m <sup>3</sup>	N/A
Compressive strength at 1% deformation	AS 2498.3:1993	20 kPa	Pass
Compressive Strength at 10% deformation	AS 2498.3:1993	70 kPa (min)	Pass
Cross Break Strength	AS 2498.4:1993	135 kPa (min)	Pass
k-Value (thermal conductivity) 50mm sample at 23°C	AS 4859.1: 2018	0.404 m <sup>2</sup> K/W (min)	N/A
R Value (thermal resistance) 50mm sample at 23°C	AS 4859.1:2018	1.23 m <sup>2</sup> K/W (min)	N/A
Flame Propagation	AS 2122.1:1993	2 SD (max)	Pass
Median flame duration		3 SD (max)	Pass
Eighth value		18 % (min)	Pass
Median volume retained		15% (min)	Pass
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	630 µg/m <sup>2</sup> s (max)	Pass
Elastic Modulus, min	ASTM D6817	2000 kPa	Pass