

Unibloc Geof foam® H Grade

Technical Data Sheet

Unibloc Geof foam® H 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 Geof foam® is tested against these minimum requirements.

Quality Assurance

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

Size and Shape

Unibloc Geof foam® H 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 Geof foam®. 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	24 kg/m ³	N/A
Compressive strength at 1% deformation	AS 2498.3:1993	55 kPa	Pass
Compressive Strength at 10% deformation	AS 2498.3:1993	135 kPa (min)	Pass
Cross Break Strength	AS 2498.4:1993	260 kPa (min)	Pass
k-Value (thermal conductivity) 50mm sample at 23°C	AS 4859.1:2008	0.037W/mK	N/A
R Value (thermal resistance) 50mm sample at 23°C	AS 4859.1:2008	1.37 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		40% (min)	Pass
Median volume retained		37% (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	460 µg/m ² s (max)	Pass
Elastic Modulus, min	ASTM D6817	5500 kPa	Pass