Unipoly SL Grade

Technical Data Sheet

Unipoly® 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. Unipoly® is tested against these minimum requirements.

Quality Assurance

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

Size and Shape

Unipoly® 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.

Additional Information

Please consult Unipod® for design considerations and technical information on the full range of products available.

Physical Property	Test Method	Requirement	Performance
Nominal Density	ISO 845	13.5 kg/m³	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 smaple at 23°C	AS 4859.1:2018	0.404 m ² K/W (min)	N/A
R Value (thermal resistance) 50mm sample at 23°C	AS 4859.1:2018	1.23 m ² K/W (min)	N/A
Flame Propagation Median flame duration	AS 2122.1:1993	2 SD (max)	Pass
Eighth value		3 SD (max)	Pass
Median volume retained		18 % (min)	Pass
Eighth value		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/m²s (max)	Pass
Elastic Modulus, min	ASTM D6817	2000 kPa	Pass