ISOBOARD®

Premier Thermal Insulation for • Roofs • Ceilings • Floors • Walls

Properties

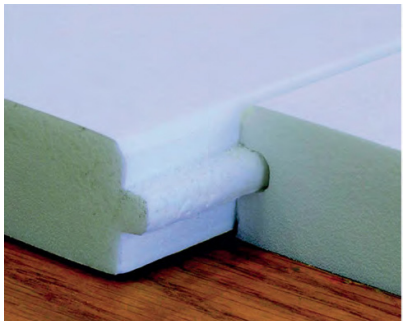
IsoBoard, high-density extruded polystyrene rigid thermal insulation board, having 100% closed cell structure!

Physical properties of IsoBoard

1. Determination of physical properties ofIsoBoard rigid foam insulation, dated July 1996, by the Division of Building Technology of the CSIR.
2. Copies of test reports are available from Isofoam (South Africa) (Pty) Limited upon request, or on our website.
3. Thermal conductivity reports by the general physical laboratory of the South African Bureau by Standards numbered 722/82397 /NK9, 10, confirmed by Guarded HB tests February 2010.
4. IsoBoard is combustible, with no flame spread characteristics. IsoBoard is suitable for all occupancy types in horizontal and vertical applications, except for buildings where non-combustible materials are prescribed by SANS 10400XA. (Reports on the fire propagation properties of IsoBoard dated July 1996, by the Division of Building Technology of the CSIR, and further assessments by Firelab to SANS 428 dated July 2007).
5. The compressive strength and density of IsoBoard increase with thickness of boards. Thermal conductivity is constant across the density range.
6. Sample board immersed in water to 50mm depth for 24 hours. Water absorption is expressed as an average percentage increase over the original volume.

IsoBoard Physical Properties

	Standard	Conditions	IsoBoard
Density[2]	ISO 845; 1988	FDIS4898	32-36 kg m3 (± 10 %)
Compressive Strength[5]	ISO 844; 1978	10% Strain	160-310 kpa
Water Vapour Permeability[2]	ISO 1663; 1981	38°C / 88% RH	0.78 ng/Pa.s.m
Water Absorption[6]	ISO 2896; 1987	See note 6 below	< 1 % by volume
Coefficient of Linear Thermal Expansion[2]	ISO 4897; 1985	-10°C to 60°C	0.067 mm per m per °C
Dimensional Stability	EN1604	-10°C to 60°C	<1.0%
Thermal Conductivity[3] (average of two tests)	ISO 8302; 1991 (F)	20°cmean temperature Dry and 90 day aged	0.024W/m°C
Long term Thermal Conductivity		Five year aged	0.028W/m°C
Recommended Design	Value Wetting Curve Paper	90%RH	0.030W/m°C
Combustibility and Flame Spread[4]	Class: B/B1/2/H&V. Refer SANS 428 Classification Table.		



Tongue-in-groove joint

Shiplap joint

AutoSpec®

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