PRODUCT INFORMATION

IsoBoard thermal insulation is a high density, extruded polystyrene rigid insulation board, having a 100% closed cell structure. IsoBoard has been tried and tested internationally since 1970, and manufactured in South Africa since 1995, using a fully automated extrusion process, in accordance with international specifications and standards.

Attributes:

The use of advanced, state of the art manufacturing technology makes it possible to guarantee exceptional attributes, such as:

- Long term low thermal conductivity/High thermal resistance;
- High resistance to water vapour diffusion and water absorption;
- Uniform density
- High compressive strength
- Ageing resistance as well as resistance to bacteria and micro organism growth.

These and many other features make IsoBoard an innovative and cost effective thermal insulation product. This versatility means that IsoBoard is used in various applications in numerous different markets. IsoBoard contains gases which have been accepted in terms of the Montreal Protocol with minimal ozone depletion potential.

Properties:

Heat Flow: IsoBoard provides excellent resistance to heat flow. IsoBoard reduces heat flow into buildings in summer and reduces internal heat outflow during winter. The heat flow resistance will reduce over time when exposed to air and will also be influenced by water content. Accordingly, a design heat flow value of 0.03 W/m°C is appropriate. (Confirmed by SAFIERA RGHB)

Water: IsoBoard will only absorb 1% maximum water by volume. Heat flow resistance will reduce by a maximum of 3%.

Water Vapour: IsoBoard's closed cellular structure provides exceptional resistance to water vapour permeability. Heat flow resistance due to vapour penetration (including water absorption) can reduce by a maximum of 8%.

Fire: IsoBoard contains self-extinguishing fire retardants, non-flammable blowing gasses and will not propagate fire in exposed roof applications. See reports on website.

Sound Insulation: IsoBoard is a thermal insulator and should not be used in isolation to achieve noise reduction. Consult a specialist with respect to noise reduction systems.

Operating Range: -30 to +60°C.

Density: IsoBoard has a high density of 32-36 Kg/m^3. The compressive strength ranges from 160 to 310 kPa, dependant on the thickness of the board. The thicker the board, the higher the compressive strength.

Chemically Inert: IsoBoard is odourless, chemically inert and does not supply nutrition for pests, or support micro organism growth.

Heat Flow inwards reduction compared with uninsulated systems		
Application	**Board Thickness**	**% Reduction**
Inverted Roof	50 mm	80 %
Cavity Wall	30 mm	64 %
Ceilings	30 mm	70 %
Over Purlin	40 mm	70 %

Installation Alternatives:

Resisting thermal heat flow inwards through the roof is the primary purpose of insulation. IsoBoard can be installed in a variety of applications to effectively meet this objective:

- **Over purlin** for retail, commercial, industrial and residential steel frame roof applications.
- **Inverted Roof** for concrete roofing systems where insulation is installed over waterproofing.
- **Under soffit** installed below a concrete deck where an inverted roof is inappropriate.
- **Nail up ceilings** replacing existing ceiling systems with an insulated ceiling.
- **Over rafter** for residential and low cost housing applications.
- **Over truss** for retail, commercial and residential exposed wooden truss applications.

IsoBoard is employed in other building applications with the objectives of energy cost savings and comfort:

Within Cavity wall to maintain a constant internal building temperature.
Under surface bed to insulate floors (with or without heating/cooling systems) from the effect of the surrounding earth temperature.
Under soffit above exposed parking areas to insulate retail and residential environments from "cold foot syndrome".

Order Options and Tolerances:

Surface Finishes: Plain, IsoPine (100 mm centre grooved) or edge bevelled.
Width: standard 600 mm with ± 2 mm tolerance.
Stock Lengths: from 4.8 m to 7,2 m in 0,6 m increments, and in 8m for 25, 30, 40, 50 mm boards. Tolerance ± 5 mm. Enquire availability of thicker board and shorter lengths.
Thickness: up to 50 mm stock tolerance ± 2 mm, >60 mm ± 3 mm.
Edge Profiles: Tongue & Groove, Straight edge or Shiplap.
Colour: White.

Storage and Handling:

Consult the appropriate application guide or your IsoBoard supplier for specific storage and handling advice.

D&D ROOF INSULATIONS
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WEB: www.roofinsulation.co.za

INSULATION SOLUTIONS

Applications for every building insulation requirement.

IsoBoard is exceptionally versatile. Most building and construction thermal insulation applications are catered for by IsoBoard.

The various fixing methods available for IsoBoard are detailed on Application Guides as listed below.

IsoBoard Fixing Methods — Application Guides

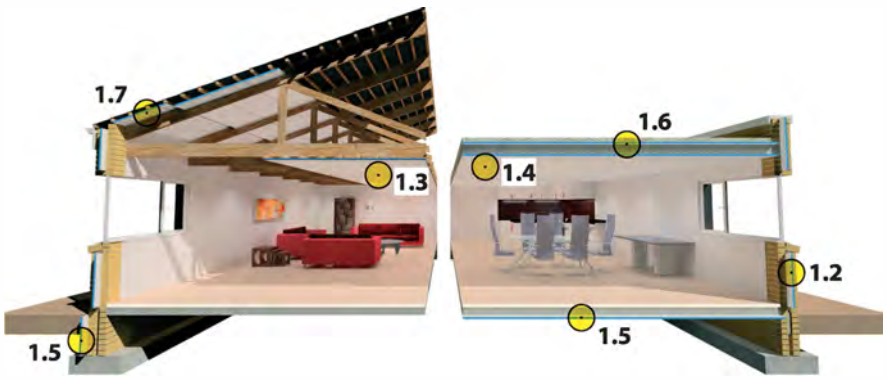
1.1 Over-purlin and Side cladding.
1.2 Cavity Wall.
1.3 Nail-up Ceiling.
1.4 Under Soffit Ceilings.
1.5 Under Floor or Foundation Perimeter.
1.6 Inverted Roof.
1.7 Over Truss.
1.8 Over Rafter.

Technical Assistance

For assistance with other fixing methods contact IsoBoard at your nearest regional office.

Website Information

For further information consult our website: **www.isoboard.com**



ISOBOARD®
Fit for Purpose Thermal Insulation
ZERO ODP