

# ISO BOARD<sup>®</sup>

Produced by Isofoam SA (Pty) Ltd Reg no: CK 95/03958/07

*It's a whole new season*



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



Estimated by  
**billcost**<sup>®</sup>

**GRÉMENT**  
**SOUTH AFRICA**  
innovative construction product assessments

**Auto Spec**<sup>®</sup>  
Professional & .co.za  
intelligent specifications

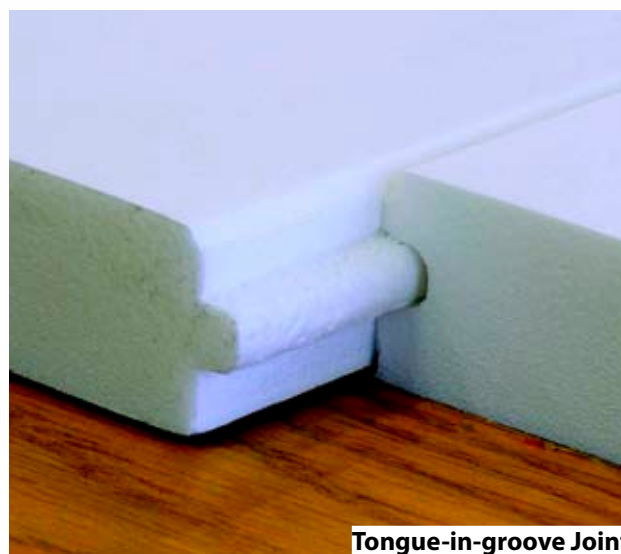


# PROPERTIES

| IsoBoard Physical Properties                                |  |   |                                 |
|---|--|---|---------------------------------|
|   | Standard   | Conditions                                    | IsoBoard                        |
| Density <sup>2</sup>  | ISO 845; 1988  | FDIS4898                                      | 32–36 kg m <sup>3</sup> (± 10%) |
| Compressive Strength <sup>5</sup>                           | ISO 844; 1978  | 10% Strain                                    | 160–310 kpa                     |
| Water Vapour Permeability <sup>2</sup>                      | ISO 1663; 1981   | 38°C / 88% RH                                 | 0.78 ng/Pa.s.m                  |
| Water Absorption <sup>6</sup>                               | ISO 2896; 1987   | See note 6 below                              | < 1% by volume                  |
| Coefficient of Linear Thermal Expansion <sup>2</sup>        | 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 <sup>3</sup><br>(average of two tests) | ISO 8302; 1991 (F)                                     | 20°C mean temperature.<br>Dry and 90 day aged | 0.024 W/m°C                     |
| Long term Thermal Conductivity                              |  | Five year aged                                | 0.028 W/m°C                     |
| Recommended Design Value                                    |  | 90% RH  | 0.030 W/m°C                     |
| Combustibility and Flame Spread <sup>4</sup>                | Class: B/B1/2/H&V. Refer SANS 428 Classification Table |   |                                 |

## Physical Properties of IsoBoard

- Determination of physical properties of IsoBoard rigid foam insulation, dated July 1996, by the Division of Building Technology of the CSIR
- Copies of test reports are available from Isofoam (South Africa) (Pty) Limited upon request, or on our website.
- 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.
- 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.)
- The compressive strength and density of IsoBoard increase with thickness of boards. Thermal conductivity is constant across the density range.
- Sample board immersed in water to 50 mm depth for 24 hours. Water absorption is expressed as an average percentage increase over the original volume.



**Tongue-in-groove Joint**



**Shiplap Joint**

### Gauteng Sales

t. 012 653 8204

f. 012 653 0782

northsales@isoboard.com

### Cape Sales

t. 021 983 1140

f. 021 981 6099

southsales@isoboard.com

### KzwaZulu Natal Sales

t. 031 700 3525

f. 031 700 2573

[www.isoboard.com](http://www.isoboard.com)

dbnsales@isoboard.com

**ISO BOARD**<sup>®</sup>  
Produced by Isofoam SA (Pty) Ltd. Reg no: CK 95/03958/07

*It's a whole new season*