

# TECHNICAL DATA SHEET

## GTEC Aqua Board

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### Description

GTEC Aqua Board is for use in areas exposed to humidity where high performance is expected. The board is stronger, harder and heavier than standard plasterboard and has superior fire resistance, sound insulation and impact resistance.

### Appearance

The GTEC Aqua Board is coloured orange on both faces and has tapers down the long edges.

### Composition

Aerated Calcium sulphate di-hydrate with liners made from non woven tissue with fillers and fibres enclosed inside the gypsum core.  
Core and papers are bonded with starch. Edge glue is PVA. The water resistant additive is silicone oil. The core contains a biocide to prevent mould growth.

### Compliance Authority

12.5mm and 15mm GTEC Aqua Board are CE marked to EN15283-1, Type GM-H1, GM-I and GM-F. They also comply with EN520 Type, D, E, F, H1, I (not marked on board).

### Physical Properties / System performances

*Strength to BS EN 15283 – 1:*

12.5 mm board

Longitudinal breaking load  $\geq$  538 N

Transverse breaking load  $\geq$  210 N

15 mm board

Longitudinal breaking load  $\geq$  645N

Transverse breaking load  $\geq$  252N

Compressive strength, 12.5 mm  $\geq$  10 MPa

Fire Performance and Sound Insulation depend on the system, Call Technical Enquiryline for advice.

12.5mm GTEC Aqua Board: EI60 for single layer standard partition with 50mm rock mineral wool

15mm GTEC Aqua Board: EI60 for single layer standard partition without mineral wool.

*Reaction to fire :*

Euroclass A2-s1, d0 to EN 13501-1

*Moisture Content:*

< 1%

*Mass:*

10.8 kg/m<sup>2</sup> for 12.5mm board

13 kg/m<sup>2</sup> for 15mm board

*Thermal Conductivity,  $\lambda_R$ :*

0.25 W/mK to BS EN ISO 12572

*Thermal Resistance, R:*

12.5mm = 0.05 m<sup>2</sup> K/W, 15mm = 0.06 m<sup>2</sup> K/W

### Wet Area Properties

*Moisture Resistance:*

Maximum water uptake after 2h total immersion in water:  
< 3%

*Water vapour Permeability:*

220 g/m<sup>2</sup>/day (for 12.5mm board)

*Water vapour resistance factor:*

$\mu$  = 11 to BS EN ISO 12572 (for 12.5mm board)

*Size variation at 20°C and Humidity 65% RH to 90% RH (DIN EN 318)*

Longitudinal direction 0.15 mm/m

Cross direction 0.11 mm/m

*Freeze -20°C:*

No loss of integrity and no crack in the core

*Mould Resistance:*

Maximum resistance 10/10 to ASTM D3273

### Fixing Resistance:

*Shear resistance to BS EN 520 section 5.13:*

breaking load per fastener, B, 12.5 mm board:

0.85 kN (38x6 mm GTEC High Thread screw)

*Recommended pull-out resistance: single layer*

12.5 mm board: 30 kg per fixing (SPIT CC Hollow Wall anchor, diameter 6 mm), 60 kg max per linear meter of wall, 45 kg with Isomet CC wall anchor for insulation panels

*Ultimate pullout resistance, 12.5mm:*

90 kg per fixing using SPIT Isomet CC for insulation panels,

100 kg per fixing using SPIT CC Hollow Wall.

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### **Performance to BS EN 1995-1-1:1996 (Eurocode 5) and BS EN 594:1996**

Approved service classes and strength modification factors to BS EN 1995-1-1:2004 (Eurocode 5):

Service class 1, kmod: 0.9 (short term action), 1.1 (instant action).

Service class 2, kmod: 0.7 (short term action), 0.9 (instant action).

Service class 3, kmod: 0.5 (short term action), 0.7 (instant action).

Racking Resistance: Refer to GTEC Aqua Board – Racking Test Technical Data Sheet.

### **Handling and fixing**

GTEC Aqua Board may be cut using the 'score and snap' method as used with plasterboards. No power tools are required.

Fixings must be suitable for the intended substrate. GTEC Wet Area Self Drilling Screws are appropriate for steel thicknesses between 0.9mm and 1.5mm and GTEC Wet Area High Thread Screws for timber substrates.

### **Jointing, Finishing & Painting (internal applications)**

GTEC Aqua Board can be jointed and finished with GTEC Aqua Mix jointing system.

In wet areas, the boards require priming with GTEC Drywall Sealer prior to decorating.

### **Health & Safety**

Please read the Aqua Board Health and Safety Datasheet available on our website or from Enquiryline.

### **Board weight:**

31 kg for 2400 x 1200 x 12.5 mm board

35 kg for 2700 x 1200 x 12.5 mm board

37.5 kg for 2400 x 1200 x 15 mm board

42 kg for 2700 x 1200 x 15 mm board

### **Applications**

GTEC Aqua Board can be used:

- as tile backer for bathrooms and shower rooms,
- for partition, wall lining and ceiling for severe wet areas,
- as an external sheathing board substrate for the adhesion of insulation panels (see BBA certificate 10/4725 ps2),
- as lining for external unexposed eaves, soffits and canopies,
- for any partition and lining exposed to direct weather exposure for a maximum period of 6 months (when buildings may not be weather tight)

### **Authority**



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