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# GTEC® Aqua Board

## Technical Data Sheet

### 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

The 12.5mm and 15mm Aqua GTEC Board are CE marked with EN15283 part 1 Type GM-H1, GM-I. They also complies with EN520 Type, D, E, F, H1, I (isn't marked on the board).

#### Physical Properties / System Performances

|   |  |
|---|--|
| <b>Strength (acc. EN 15283 – 1):</b>  | Breaking load longitudinal: 12.5mm > 500 N<br>Breaking load transverse: 12.5mm > 250 N<br>Breaking load longitudinal: 15mm > 650 N<br>Breaking load transverse: 15mm > 300 N |
| <b>Compressive Strength 12.5mm:</b>   | ≥ 10 MPa   |
| <b>Fire Performance / Sound insulation index <math>R_w</math> *<br/>12.5mm GTEC Aqua Board:</b> | EI60 for single layer standard partition with 50mm rock MW   |
| <b>Fire Performance / Sound insulation index <math>R_w</math> *<br/>15mm GTEC Aqua Board:</b>   | EI60 for single layer standard partition without MW  |
| <b>Reaction to Fire:</b>  | Euroclass A2-s1, d0 acc EN 13501-1   |
| <b>Moisture Content:</b>  | < 1%   |
| <b>Board Mass 12.5mm:</b>   | 10.8 Kg/m <sup>2</sup>   |
| <b>Board Mass 15mm:</b>   | 13 Kg/m <sup>2</sup>   |
| <b>Thermal Conductivity:</b>  | $\lambda_r = 0.25$ W/mK acc EN12524  |
| <b>Thermal Resistance R:</b>  | 12.5mm = 0.05m <sup>2</sup> K/W<br>15mm = 0.06m <sup>2</sup> K/W   |

\* Depends on the system. Call Technical Enquiryline for advice.

#### Wet Area Properties

|  |   |
|--|---|
| <b>Moisture Resistance Maximum water uptake after 2h total immersion in water:</b> | < 3%  |
| <b>Water vapour Permeability 12.5mm:</b>   | 220 g/m <sup>2</sup> /day                                   |
| <b>Water vapour resistance factor 12.5mm:</b>                                      | $\mu = 11$ acc EN12572                                      |
| <b>Size variation at 20°C and Humidity 65% RH to 90% RH (DIN EN 318):</b>          | Longitudinal direction 0.15mm/m<br>Cross direction 0.11mm/m |
| <b>Freeze -20°C:</b>   | No loss of integrity and no crack in the core               |
| <b>Mould Resistance:</b>   | Maximum resistance 10/10 acc ASTM D3273                     |

## Fixation resistance

|  |  |
|--|--|
| <b>Shear resistance to BS EN 520 section 5.13: breaking load per fastener, b 12.5mm board:</b> | 0.85kN (38x6mm GTEC High Thread Screw)   |
| <b>Recommended pull-out resistance, single layer 12.5mm board:</b>                             | 30kg per fixing (SPIT CC Hollow Wall anchor, diameter 6mm), 60 kg max per linear meter of wall, 45kg with Isomet CC wall anchor for insulation pannels |
| <b>Maximal ultimate pull-out resistance, 12.5mm:</b>   | 90kg per fixing using SPIT Isomet CC for insulation pannels, 100kg per fixing using SPIT CC Hollow Wall  |

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

|  |  |
|--|--|
| <b>Approved service classes and strength modification factors to BS EN 1995-1-1:1996 (Eurocode 5):</b> | Service class 1, $k_{mod}$ : 0.9 (short term action), 1.1 (instant action)<br>Service class 2, $k_{mod}$ : 0.7 (short term action), 0.9 (instant action)<br>Service class 3, $k_{mod}$ : 0.5 (short term action), 0.7 (instant action) |
| <b>Racking performance to BS EN 594:1996:</b>  | F max : 12.2kN, R: 1.78 kN/mm, for C16 timber frame panel to BS EN 1995-1-1 (Eurocode 5), dimension: 2.4 x 2.4m lined on one side with 1 layer of 12.5mm GTEC Aqua Board   |

## Handling and fixing

The instructions for handling, fixing, cutting and screwing are the same as those for 12.5mm and 15mm GTEC Fire MR Board.

## 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 Data Sheet available on our website or at Enquiryline.

The 2400 x 1200 x 12.5mm board weighs 31kg.  
The 2700 x 1200 x 12.5mm board weighs 35kg.  
The 2400 x 1200 x 15mm board weighs 37.5kg.  
The 2700 x 1200 x 15mm board weighs 42kg.

## Applications

The 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 maximal period of 6 months (when buildings may not be weather tight yet).

## Authority



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\* Subject to Lafarge Plasterboard Limited terms and conditions of sale

## Technical Enquiryline

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Certificate No. FM 13594



Certificate No. EMS 75024

Plasterboard, jointing and associated products made in the United Kingdom by Lafarge Plasterboard are manufactured in accordance with management systems certified to BS EN ISO 9001:2000 (quality) and BS EN ISO 14001:2004 (environment)



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