# TECHNICAL DATA SHEET

## GTEC LaDura



**Description**
GTEC LaDura is classified as a gypsum hard board (GHB). It is to be used where high performances with regards to strength, robustness, impact, finishing quality, acoustics insulation, fire resistance and moisture resistance are required. The board is stronger, harder and heavier than standard plasterboards.

**Appearance**
The GTEC LaDura is coloured white/ grey on both faces and has tapers down the long edges. The wood particles (size from 0 to 3 mm) are visible in the core. The board is available in 12.5 mm and 15 mm thickness.

**Composition**
Aerated calcium sulphate di-hydrate with fillers, glass fibers, wooden fibers (8% of dry mass) and silicone oil enclosed inside a tough paper with bound edges. Core and papers are bonded with starch. Edge glue is PVA.

**Compliance Authority**
The board complies with BS EN 520:2004+A1:2009 Type D, E, F, H1, I & R.

**Physical Properties**
Strength to EN 520:2004+A1:2009
12.5 mm board
Longitudinal breaking load ≥ 725 N
Transverse breaking load ≥ 300 N
15 mm board
Longitudinal breaking load ≥ 870 N
Transverse breaking load ≥ 360 N

*Young's Modulus E to DIN 18180:*
Longitudinal: ≥ 3500 N/mm²
Transversal:≥ 4500 N/mm²

*Compressive Strength:*
12.5 mm and 15 mm boards:
≥ 16 N/mm²

*Surface hardness (Brinell):*
≥ 35 N/mm²

*Reaction to fire:*
A2-s1, d0 to BS EN 520:2005;

*Moisture Content at 20°C:*
0.6 to 1% in mass

*Water vapour diffusion resistance factor:*
μ = 10 to BS EN 12524 standard

Water uptake to BS EN 520:
≤ 5%

*Dimensional stability under at 20°C:*
0.35 mm/m from 65 to 95 % RH.

*Mass:*
12.6 kg/m$^2$ for 12.5mm board
15.4 kg/m$^2$ for 15mm board

*Thermal Conductivity, $\lambda_R$:*
0.25 W/mK

*Thermal Resistance,R:*
12.5 mm = 0.05 m$^2$ K/W
15 mm = 0.06 m$^2$ K/W

**Fixing Resistance**
*Shear resistance to BS EN 520:*
Breaking load per fastener, b,
12.5 mm board: 0.91 kN (38x6 mm GTEC High Thread screw)

Recommended pull-out resistance:
- single layer 12.5 mm board: 40 kg per fixing (SPIT CC Hollow Wall anchor, diameter 6 mm), 60 kg max per linear meter of wall.-
- double layer 12.5 mm boards: 60 kg per fixing (SPIT CC Hollow Wall anchor, diameter 6 mm), 140 kg max per linear meter of wall.
- single layer 15 mm board: 50 kg per fixing (SPIT CC Hollow Wall anchor, diameter 6 mm), 70 kg max per linear meter of wall.-
- double layer15 mm boards: 85 kg per fixing (SPIT CC Hollow Wall anchor, diameter 6 mm), 200 kg max per linear meter of wall.

Maximal ultimate pullout resistance,
- single layer 12.5 mm :
1.26 kN per fixing using SPIT CC Hollow Wall.
1.82 kN per fixing using SPIT Satellis.
- single layer 15 mm:
1.30 kN per fixing using SPIT CC Hollow Wall.
2.1 kN per fixing using SPIT Satellis.

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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).

Racking Resistance: Refer to GTEC LaDura – Racking Test data.

**Handling and fixing**
The instructions for handling and cutting are the same as those for GTEC Universal Board.
GTEC Performance Self Tapping screws to be used for thin metal gauge (≤ 0.7mm).
GTEC Self Drilling screws to be used for thick gauge metal (09-1.5mm).
GTEC High Thread screws to be used for timber substrates.

**Jointing Finishing & Painting**
GTEC LaDura can be jointed and finished with any of the GTEC Jointing systems.

**Health & Safety**
Please read the Plasterboard Health and Safety Datasheet available on our website or from the Enquiryline.

*Board weight:*
38 kg for 2500 mm x 1200 mm x 12.5mm board
45 kg for 2500 mm x 1200 mm x 15mm board

**Applications**
- Impact resistant walls and ceilings with improved robustness, fire performance (up to EI120 to EN1364-1 with double layer 15 mm), acoustics performance (up to Rw 65 dB for partition with double layer 15 mm), moisture resistance, high pull-out resistance and outstanding finishing,
- racking resistant panel for timber frame construction.

**Authority**

Dr Ali Arasteh
BU Technical Manager
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