

GB ORDERLINE

For placing orders, delivery enquiries and local stockists etc.
T 0800 373636
F 01275 377700
E orderline@siniat.co.uk

LITERATURELINE

For Siniat literature.
T 01275 377582
E literatureline@siniat.co.uk

THE TRAINING CENTRE

For all drywall training needs from basic introduction to advanced skills and development.
T 01275 377581
F 01275 377402
E training@siniat.co.uk

IRELAND ORDERLINE

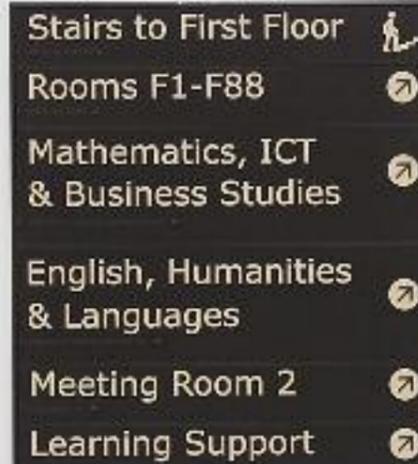
For placing orders, delivery enquiries and local stockists etc.
T +353 (0)1 6203114
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TECHNICAL ENQUIRYLINE

Technical advisory service.
T 01275 377789
F 01275 377456
E enquiryline@siniat.co.uk

GTEC® WASTELINE DIRECT

Plasterboard waste management enquiries.
T 01275 377579
F 01275 774950
E gtecwasteline@siniat.co.uk



Plus



breeam
responsible sourcing
'VERY GOOD' RATING

Plasterboard, jointing and associated products made in the United Kingdom by Siniat are manufactured in accordance with management systems certified to BS EN ISO 9001: 2008 (quality) and BS EN ISO 14001: 2004 (environment)

Photography and images used in this document are for reference purpose only and may not directly relate to the specific product and applications

Siniat Ltd Marsh Lane, Easton-in-Gordano, Bristol BS20 0NF
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an **etex** company

GTEC®

LaDura

**HIGH DENSITY,
MULTI-PURPOSE
PLASTERBOARD**

GTEC LaDura HIGH DENSITY, MULTI-PURPOSE PLASTERBOARD

*Severe duty from a
12.5mm plasterboard.*

*Extreme duty from a
15mm plasterboard.*

All the benefits of a gypsum fibre board without compromise:

- ✓ **Excellent impact strength** for use in high traffic areas, such as corridors and stairwells
- ✓ **Excellent pull out resistance** for fixture loading
- ✓ **Score and snap** - helping to reduce installation time and costs
- ✓ **Compatible with standard metal framing** - reducing material costs
- ✓ **Fully recyclable** - with low embodied carbon, helping to reduce environmental impact
- ✓ **Superior finish** - compared to gypsum fibre boards
- ✓ **Excellent fire, sound, impact and moisture performance** allowing specification of just one board type per project
- ✓ **Wood fibre composite technology** increases strength with minimal increase in weight for easier use on site

*"GTEC LaDura is ideal for
residential projects –
I will definitely
use GTEC LaDura again
in the future."*

Kevin Collins, RDK Drylining



HIGHAMS PARK

Sector:	Social housing
Project value:	£41 million
Client:	Spennyhill (Tesco)
Architect:	Collado Collins
Contractor:	McLaren
Sub-contractor:	RDK Drylining
Footprint:	10,000m ²
Finish date:	March 2012

APPLICATIONS

Developed specifically for severe and extreme duty applications, GTEC LaDura fulfils the most demanding technical requirements.

Ideal for use in busy, high traffic areas and areas which are intensively used and prone to vandalism, abnormal or rough use in sectors such as Healthcare, Schools, Detention Centres, Prisons and shopping centres. Each of these sectors have specific performance criteria in relation to fire resistance, sound insulation and impact resistance which must be met.

Guidance should be sought from the relevant technical documentation for each sector i.e. HTMs, Building Regulations, Approved Documents, Sport of England Design Guidance, British Standard etc.

However, we have a team of specification managers on hand who can guide you through sector specific requirements and help you specify the right products and systems to meet regulations.

GTEC LaDura's fixing capability means it can also be specified where console loading is paramount. With the correct fixing LaDura can support loads over 100kg. This strength allows it to replace pattresses in certain applications

GTEC LaDura is classified as Type D, E, F, H1, I and R to BS EN 520.

SECTORS AND EXAMPLES



BOARD PERFORMANCE

Offering outstanding performance properties, GTEC LaDura is the natural choice for the most intensive applications.

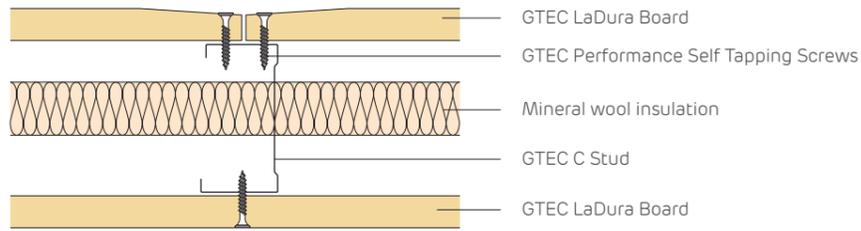
Topic	Description	12.5mm Performance	15. mm Performance
General	Mass	12.8 Kg/m ²	15.6 Kg/m ²
Mechanics	Young's Modulus E to DIN 18180	Longitudinal: ≥ 3500 N/mm ² Transversal: ≥ 4500 N/mm ²	Longitudinal: ≥ 3500 N/mm ² Transversal: ≥ 4500 N/mm ²
	Breaking load in longitudinal direction	>725N	>870N
	Breaking load in transverse direction	>300N	>360N
	Flexural Strength in longitudinal direction	≥ 8.1 N/mm ²	≥ 6.8 N/mm ²
	Flexural Strength in transverse direction	≥ 3.4 N/mm ²	≥ 2.8 N/mm ²
	Compressive Strength	≥ 16 N/mm ²	≥ 16 N/mm ²
	Surface hardness (Brinell)	≥ 35 N/mm ²	≥ 35 N/mm ²
	Recommended pull-out resistance, single layer	40kg per fixing (SPIT CC Hollow Wall anchor, diameter 6mm)	50kg per fixing (SPIT CC Hollow Wall anchor, diameter 6mm)
Recommended pull-out resistance, double layer	60kg per fixing (SPIT CC Hollow Wall anchor, diameter 6mm)	85kg per fixing (SPIT CC Hollow Wall anchor, diameter 6mm)	
Fire	Reaction to fire	A2-s1: d0 to BS EN 520:2005	A2-s1: d0 to BS EN 520:2005
Thermal	Thermal conductivity λ _g in accordance with DIN EN 12524	0.25 W/mK	0.25 W/mK
	Thermal resistance R	0.05 m ² K/W	0.06 m ² K/W
Permeability	Water vapour diffusion resistance factor to BS EN 12524	10	10
	Water uptake to BS EN 520	≤ 5% in total mass: 180 g/m ² on surface (Cobb)	≤ 5% in total mass: 180 g/m ² on surface (Cobb)
Moisture	Moisture content at 20°C	<1%	<1%
	Dimensional stability under moisture at 20°C	0.35mm/m from 65 to 95% RH	0.35mm/m from 65 to 95% RH

GREATER RESISTANCE FOR SUPPORTING HUNG LOADS



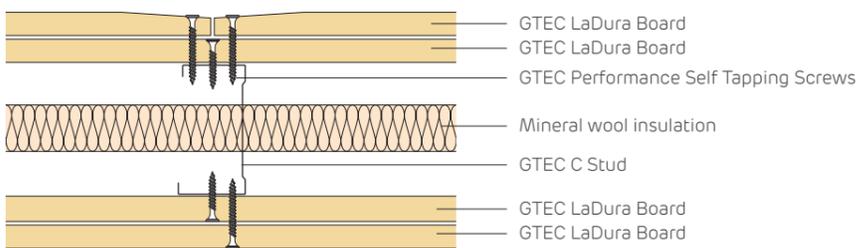
SYSTEM PERFORMANCE

SOUND INSULATION, ROBUSTNESS AND FIRE RESISTANCE



Single layer systems

System reference	Boarding	Stud	Mineral wool (mm)	Partition thickness R _w dB	Sound insulation grade	Robustness BS 5234-2 BS 476-22	Fire resistance to EN 1364-1	Fire resistance to (m)	Max height
LDP 008	LaDura 1x12.5	CS70RX	25mm 16kg/m ³	95	48	Severe	30	EI 30	3.7
LDP 001	LaDura 1x15	CS70RX	none	100	41	Severe	60	EI 60	4
LDP 003	LaDura 1x15	CS70RX	25mm 16kg/m ³	100	49	Severe	60	EI 60	4
LDP 004	LaDura 1x15	CS70RX	50mm 16kg/m ³	100	50	Severe	60	EI 60	4
ADP 003	LaDura 1x15	AS70RX	25mm 16kg/m ³	100	51	Severe	60	EI 60	3.8
LDP 128	LaDura 1x15	CS90RX	25mm 16kg/m ³	120	50	Severe	60	EI 60	5
LDP 138	LaDura 1x15	CS90RX	50mm 16kg/m ³	120	51	Severe	60	EI 60	5
ADP 138	LaDura 1x15	AS90RX	25mm 16kg/m ³	120	52	Severe	60	EI 60	5
LDP 013 Twin	LaDura 1x15	Twin CS50RX	50mm 16kg/m ³	170	56	Severe	60	EI 60	5



Double layer systems

System reference	Boarding	Stud	Mineral wool (mm)	Partition thickness R _w dB	Sound insulation grade	Robustness BS 5234-2 BS 476-22	Fire resistance to EN 1364-1	Fire resistance to (m)	Max height
LDP 050	LaDura 1x15 + 9Std	CS70RX	25mm 16kg/m ³	120	56	Severe	60	EI 60	4.6
LDP 011	LaDura 2x12.5	CS70RX	25mm 16kg/m ³	120	56	Severe	120	EI 90	5
LDP 130	LaDura 2x12.5	CS90RX	25mm 16kg/m ³	140	57	Severe	120	EI 90	6.4
ADP 130	LaDura 2x12.5	AS90RX	25mm 16kg/m ³	140	60	Severe	120	EI 90	6.4
LDP 024	LaDura 2x15	CS70RX	25mm 16kg/m ³	130	57	Severe	120	EI 120	5.6
LDP 140	LaDura 2x15	CS90RX	50mm 16kg/m ³	150	58	Severe	120	EI 120	7.2
LDP 038	LaDura 2x15	Twin CS50RX	25mm 16kg/m ³	200	65	Severe	120	EI 120	6.4

For further system configurations please see the GTEC Drywall Manual and online system selector. Increasing stud gauge or reducing stud centres can increase maximum heights, contact Technical Enquiryline for more information.

INSTALLATION

As with any gypsum-based plasterboard GTEC LaDura is quick and easy to install. The following steps outline partition installation details.

1. Framing

GTEC LaDura plasterboard can be installed on steel and timber framed structures, with the studs set at maximum 600mm centres.

2. Fixing

Screw fix the board to the frame at maximum 300mm. Cut the board 5mm to 8mm shorter than the floor to ceiling height, butt firmly against the ceiling and fix with GTEC Performance Self Tapping Screws for 0.52 and 0.7mm gauge metal and GTEC Self Drilling Drywall Screws for 0.9 and 1.2mm gauge metal. These screws have been developed specifically to meet the needs of fixing to standard gauge framing with high density board.

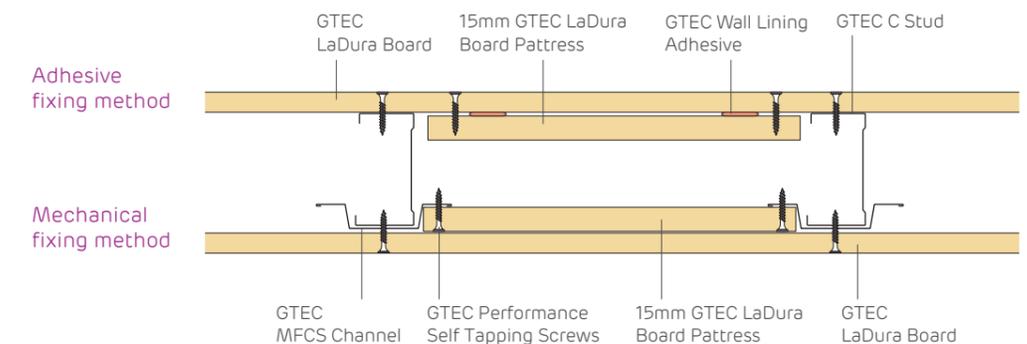
3. Skimming

If using skim plaster ensure the surface of the board has been sealed with a PVA bonding agent.

4. Finishing

GTEC LaDura board provides an outstanding finish. The board can be jointed and finished with standard GTEC taping and jointing products. The board requires sealing with GTEC Universal or Drywall Sealer prior to decoration.

LADURA PATTRESS ALTERNATIVES



For more detailed installation instructions, please contact the Technical Enquiry Line on 01275 377789 or visit www.siniat.co.uk.

FIXING PULL-OUT RESISTANCES

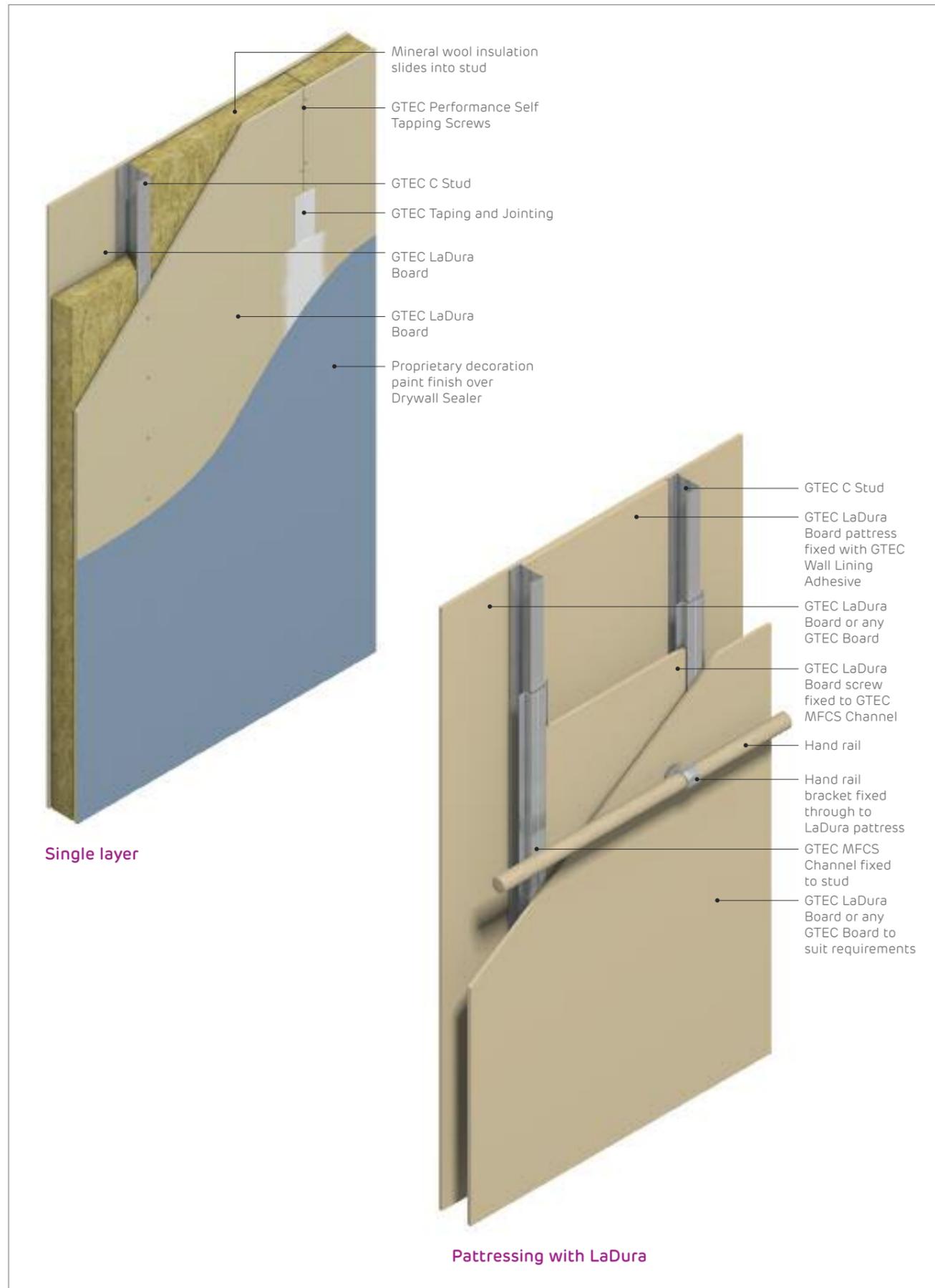
Design pull-out loads (kN) including safety factor

Board arrangement	With 15mm LaDura pattress			Without pattress		
	Spit Driva®	Spit Hollow wall anchor	Spit Satelis	Spit Driva®	Spit Hollow wall anchor	Spit Satelis
Single layer 15mm GTEC Standard Boards*	0.35	0.7	1.25	0.15	0.35	0.4
Single layer 15mm GTEC Technical Boards**	0.35	0.75	1.4	0.2	0.4	0.5
Single layer 15mm GTEC LaDura	0.4	0.85	1.8	0.25	0.5	0.85
Double layer 15mm GTEC Standard Boards*	0.4	0.85	1.55	0.25	0.55	0.7
Double layer 15mm GTEC Technical Boards**	0.45	1.0	2.05	0.3	0.65	1.1
Double layer 15mm GTEC LaDura	0.5	1.15	2.85	0.4	0.85	1.8

* Standard boards are those up to 10kg/m² for 15mm boards

** Technical boards are those up to 13kg/m² for 15mm boards

Stud centres may need to be reduced for greater pull out loads.



GTEC

GTEC represents quality, durability and assured performance across all our products and system solutions. Products include standard, performance and specialist boards, as well as finishing compounds, metal framing and fixings to satisfy the practical and performance needs of all new-build and refurbishment projects.

GTEC Systems are built from four key component groups:

GTEC Board

Standard, performance and specialist boards specifically designed for a wide range of construction applications, giving impact, moisture, vapour, sound and fire resistance.

GTEC Frame

A range of metal framing components for use in combination with GTEC Boards. From basic studwork to suspended ceilings and intricate curves.

GTEC Fix

A comprehensive range of screws, adhesives and other fixing components for attaching boards and connecting components.

GTEC Finish

Taping and jointing systems used for the seamless jointing of plasterboard for creating a high performance system with a perfect finish.

GTEC LIFETIME SYSTEM WARRANTY

GTEC products and components are tested together to ensure compatibility and system performance. By completing this rigorous testing we are able to guarantee the technical performance of our systems; giving piece of mind to users, contractors, engineers and architects alike.

When systems are built entirely with GTEC components and materials, by qualified professionals, in accordance with our latest literature and relevant standards, we can offer our invaluable Lifetime System Warranty. In the unlikely event of failure, provided the system is unaltered, as originally designed and built, we will reinstate the system to its originally specified performance level. This warranty gives the confidence that Siniat GTEC systems will perform as intended throughout the life of the building.

Warranties for products and systems in wet or severe humidity environments are available separately on request.

For full details of the Lifetime System Warranty, please visit www.siniat.co.uk.



IMPORTANT INFORMATION

Siniat is committed to the highest levels of safety at all times. This commitment extends outside our own operations to all involved in the use of our products on site.

Handling and storage

When manually handling plasterboard, consideration of the correct manual handling technique has to be made to limit risk, according to the Manual Handling Operations Regulations 1992. Plasterboard is supplied on a wooden pallet system. Packs should be moved using a fork lift truck or hydraulic trolley. Care should be taken to ensure that the machinery is safely capable of such movements and that the operator is trained and competent.

Plasterboard should be stored in dry, flat conditions.

Pack sizes

Board thickness (mm)	Width (mm)	Length (mm)	Boards per pallet	Board weight (kg/m ²)	Pallet weight (tonnes)	Max.height incl. pallet (mm)	Code
12.5	1200	2400	40	12.8	1.50	600	90452
12.5	1200	3000	40	12.8	1.87	900	90460
15	1200	2400	40	15.0	1.80	600	90453
15	1200	3000	30	15.0	1.69	600	90461

N.B. Plasterboard is not a suitable product to be used as a platform or deck.

Composition

Aerated calcium sulphate di-hydrate with fillers and fibres enclosed inside a tough paper with bound edges. Core and papers are bonded with starch. Edge glue is PVA.

Physical and chemical properties

Appearance: Coloured grey paper faced flat sheets that are available in a range of thicknesses and lengths, with edge profiles being taper edged.

Plasterboard is not a suitable product to be used as a platform or deck, it will not support body weight and therefore it is important that installers use an independent support mechanism.

Exposure controls/ Personal protection

Occupational Exposure Limits: Workplace Exposure Level (WEL)

Substance	Total inhalable	Total respirable
Gypsum	10mg/m ³	4mg/m ³
Limestone	10mg/m ³	4mg/m ³
Quartz	-	0.3mg/m ³
Man Made Mineral Fibre	-	5mg/m ³

Note: Based on 8 hour TWA period

Personal protection

Respiratory: The area should have adequate ventilation and/or dust extraction, if not a half face mask to EN 149 Class FFP1S should be used.

Eyes: Safety goggles to BS EN 166 2B5 are recommended when dust is likely to occur.

Skin: Wear overalls and suitable clothing to avoid repeated skin contact.

Hands: To limit the effect, wear protective gloves. A barrier cream can also be applied.

SYSTEM OVERVIEW

As with all GTEC plasterboards special lengths are available on request to ensure that you can specify the most efficient board size for your project, reducing waste and maximising cost savings.

Technical support

Whilst our suite of literature covers most typical uses and situations, we understand that every installation is different and there are bound to be situations that are not covered.

For this reason, Siniat offers specification customers a range of dedicated support services.

Field Based Specification Manager

Our field based specification managers are able to help with design, system selection, construction details and project specifications. Highly experienced, they can develop solutions to improve speed of installation, fire, sound and thermal performance, as well as guiding you through sector-specific requirements.

Technical Enquiryline

The dedicated Technical Enquiryline offers an immediate response to your technical queries including installation advice, product guidance, and acoustic and U-value calculations.

Technical Training Centre

We also provide a purpose-designed training centre, which has been accredited by the CITB and provides instruction in drywall installation and management for contractors, merchants and housebuilders.

Components	Siniat Code	Sizes
GTEC LaDura Plasterboard 	90452 90460 90453 90461	12.5 x 1200 x 2400mm 12.5 x 1200 x 3000mm 15 x 1200 x 2400mm 15 x 1200 x 3000mm Custom lengths available to order
GTEC Performance Self Tapping Screw For attaching board to 0.52 and 0.7 gauge metal framing 	4042964 4042965 4042966	Length 32mm, Gauge 3.9mm Length 38mm, Gauge 3.9mm Length 45mm, Gauge 3.9mm
GTEC Self Drilling Screw For attaching board to 0.9 and 1.2 gauge metal framing 	4041670 4041680 4041700	Length 25mm, Gauge 3.5mm Length 32mm, Gauge 3.5mm Length 42mm, Gauge 3.5mm
GTEC C Stud 	Various	Available in a variety of sizes and gauges to suit all applications. Please refer to www.siniat.co.uk.
GTEC U Track 	Various	Available in a variety of sizes and gauges to suit all applications. Please refer to www.siniat.co.uk.
GTEC MFCS Shallow Wall Channel 	4041922	2400mm x 0.52mm
GTEC Joint Tape 	90451	150m roll size
GTEC Joint Cement Xtra 	90449	22.5kg
GTEC Joint Filler Xtra 	90450	12.5kg
GTEC Wall Lining Adhesive 	4041939	5ltr

SUSTAINABILITY

- GTEC LaDura comes from Siniat, the leading innovator of sustainable solutions for dry construction.
- The low environmental impact of the board composition is further enhanced by the addition of wood particles. This zero carbon renewable material is sourced sustainably and backed with PEFC Chain of Custody certification.
- Manufacture is certified to BES6001 Responsible Sourcing Very Good (15mm) and ISO14001 (all LaDura) so GTEC LaDura is eligible for credits under BREEAM and the Code for Sustainable Homes.

RESOURCE EFFICIENCY

- In line with other EN520 plasterboards, GTEC LaDura comprises mainly of gypsum, a non-hazardous material, enclosed in a liner produced from 100% recycled paper.
- GTEC LaDura is manufactured in the same low energy process as standard plasterboard with closed loop recycling of water and process wastes.
- BRE Green Guide ratings of A and A+ are typically achieved using GTEC LaDura; due to high product performance light metal systems can be employed, leading to savings in cost, materials and embodied carbon compared with gypsum fibreboards.
- Often a single layer will satisfy project requirements, saving on materials, costs, waste and installation time

RECYCLING AND RE-USE

- GTEC LaDura is fully recyclable and accepted by the GTEC Wasteline Direct service for recycling into new plasterboard.
- Gypsum powder from recycled board fully meets the quality criteria of BSI PAS109* in relation to composition, paper fibre content and purity. This provides for diversion from landfill into recycling markets.
- Off-cuts can be re-used on site for pattress applications so minimising waste and reducing materials and recovery costs.
- Specification for the Production of Recycled Gypsum

