

aquaboard™

**water resistant plasterboard with
antimicrobial protection**

information on:

- design and installation benefits
- system performance
- installation guidance



product overview



The range of **Siniat Aquaboard™** plasterboard with **Sanitized®** has been developed specifically for damp and humid environments.

Sanitized® biocide is added to give antimicrobial protection which is **effective against bacteria, mould and fungi**.

Aquaboard™ contributes to a durable and healthy environment meeting the requirements of many buildings including homes, hospitals, care homes, retirement homes, nurseries, schools, washrooms, restaurants and sports & leisure facilities.

- Fully mould and fungus resistant, ideal as a tile backing board and for general drylining for wet or humid areas
- Resistant to extreme humidity, suitable for commercial applications such as swimming pools
- Score and snap, no need for power tools or a segregated cutting area, helping to reduce installation time and costs
- Lightweight gypsum based board ensuring ease of handling and fixing
- Smooth non-woven facer can be directly tiled or painted
- High fire and sound resistance from a single boarded system.



**Mould and
fungus resistant**



**Resistant to
extreme humidity**



**Fire
resistance**



**Sound
resistance**



Score and snap
(no need for power tools)



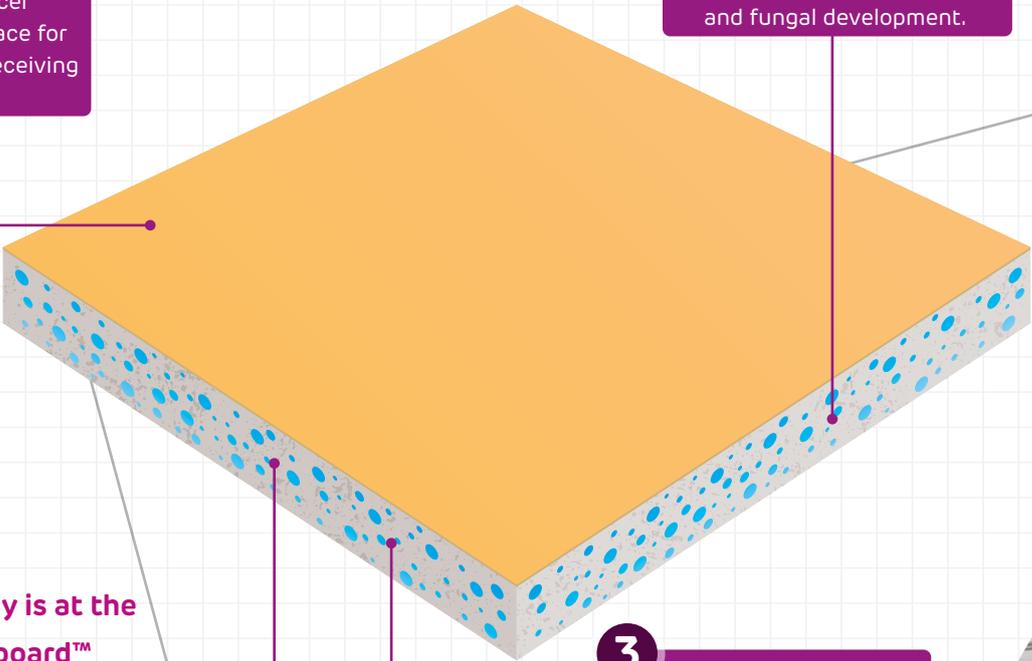
**Can be directly
tiled or painted**

how aquaboard™ works



1 Unique non-woven facer provides an ideal surface for smooth finish or for receiving tiles and repels water.

2 Sanitized® antimicrobial biocide is embedded within the gypsum core, and protects against mould and fungal development.



Advanced technology is at the heart of Siniat Aquaboard™

Its unique characteristics offer excellent water-resistance, fire performance and high sound insulation whilst Sanitized® antimicrobial protection provides high resistance to mould and fungal growth.

3 Water resistant additives prevent water absorption in the core.

4 Mineral fibre reinforced gypsum core provides excellent performance against water absorption, fire and sound.

Photograph courtesy of Graham Construction

design and installation benefits



benefits for the building designer:

- Ideal for a wide range of high humidity environments including swimming pools, spas, sports facilities, healthcare and food service sector
- Antimicrobial protection contributes towards healthy living spaces for building occupants
- Acoustic system performances suitable for residential, education and healthcare projects
- Fire system performances up to 120 minutes
- A2 limited combustibility suitable for high rise buildings.



benefits for contractors and installers:

- Lighter and easier to install than traditional cement boards helping to minimise install time and cost
- Smooth non-woven facer can be painted or directly tiled (tile weights up to 50kg/m²)
- Full supporting test evidence.

applications

Siniat Aquaboard™ has been developed for the most demanding environments including extremely humid environments such as swimming pools and spas as well as medium to high humidity areas such as commercial kitchens, changing rooms and showers.

Siniat Aquaboard™ is ideal as a tile backing board or can be painted to provide a decorated finish.



Residential & Multi Residential

- Kitchens and bathrooms
- Unheated spaces such as garages and cellars
- Wet rooms



Leisure

- Swimming pools
- Indoor pools and health spas
- Fitness and gyms
- Collective showers



Healthcare

- Operating theatres
- Maternity and neonatal services
- Analysis laboratories
- Shower and toilet facilities



Education

- School kitchens
- Communal toilets
- Changing rooms
- Nurseries



Commercial and retail

- Commercial kitchens
- Washrooms

choose a healthier
environment with
Siniat Aquaboard™

aquaboard™ with Sanitized®



**a new generation of
antimicrobial plasterboard**



In Europe, it is estimated that **between 10% and 50% of buildings where human beings live, work and play are damp.**

Occupants of damp or mouldy buildings are at increased risk of experiencing health problems such as respiratory symptoms, respiratory infections, allergic rhinitis and asthma.

**WHO Europe, Damp and mould, Health risks, prevention and remedial actions 2009.*



The antimicrobial property is validated by **SANITIZED AG** a world leader in the production of antimicrobials for over 80 years.

The certificate issued by **SANITIZED AG** is renewed every year thanks to strict tests and controls carried out in the laboratory.

Download our certificate at siniat.co.uk/aquaboard

Against mould and fungi

Tests according to EN ISO 846:

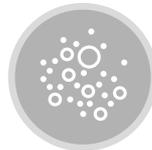
Fungi strains tested by EN ISO 846 A:

- *Aspergillus niger* – ATCC 6275
- *Penicillium funiculosum* – ATCC 36839
- *Chaetomium globosum* – ATCC 6205
- *Trichoderma virens* – ATCC 9645
- *Paecilomyces varioti* – ATCC 18502

Against bacteria

Bacteria strains tested by Sanitized®:

- *Staphylococcus aureus*
– (MRSA) ATCC 33592
- *Salmonella enteritidis* – ATCC 13076
- *Listeria monocytogenes* – ATCC 15313
- *Legionella pneumophila* – ATCC 33152
- *Escherichia coli* – ATCC 8739



Antimould

+



Antifungus

+



Antibacteria

=



Antimicrobial



Effectiveness tested and approved

- + **Triple action:** eliminates mould + fungi + bacteria
- + **Actively contributes** to the preservation of a healthy and hygienic space
- + **Long lasting protection** to wall and ceiling systems



Unprotected background

- 01** | Mould and fungal growth
- 02** | Unpleasant odour
- 03** | Damage and discolouration to surfaces.



Protected background

- 01** | Lasting protection against mould and fungal attack
- 02** | Supports health and hygiene of the building
- 03** | Longer lasting wall and ceiling surfaces.

board performance

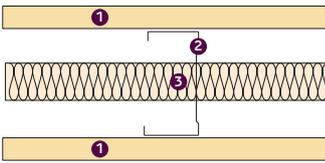
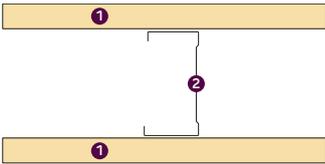
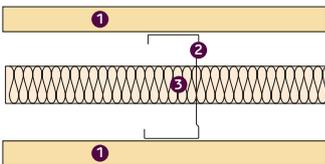
Compliant with relevant UK and European standards.

Siniat Aquaboard™ provides outstanding levels of performance in line with the ever increasing technical and commercial challenges faced by the construction industry.



	Description	12.5mm board performance	15mm board performance
General	Weight per square metre of board	10.8kg/m ²	13.0 kg/m ²
	Weight per sheet	1200mm x 850mm = 11kg	
		1200mm x 2400mm = 31.1kg	1200mm x 2400mm = 37.4kg
		1200mm x 2700mm = 35kg	
			1200mm x 3000mm = 46.8kg
Physical properties	Flexural breaking load in Longitudinal direction	>538N	>645N
	Flexural breaking load in Transverse direction	>210N	>252N
Fire	Reaction to fire in accordance with EN 13501-1	Euroclass A2- s1,d0	Euroclass A2- s1,d0
Thermal	Thermal conductivity λ _R to BS EN ISO 12572	0.25 W/mK	0.25 W/mK
	Thermal resistance R	0.05 m ² K/W	0.06 m ² K/W
Wet Area Properties	Water absorption class to EN 520	H1	H1
	Water vapour resistance μ factor in accordance with EN 12572	10	10
	Moisture content	<1%	<1%
	Size variation at 20°C and Humidity 65% RH to 85% RH (DIN EN318) in longitudinal direction	0.15mm/m	0.15mm/m
	Size variation at 20°C and Humidity 65% RH to 85% RH (DIN EN318) in transverse direction	0.11mm/m	0.11mm/m
Mould resistance	Mould resistance according to EN ISO 846 Section A	No mould growth	No mould growth

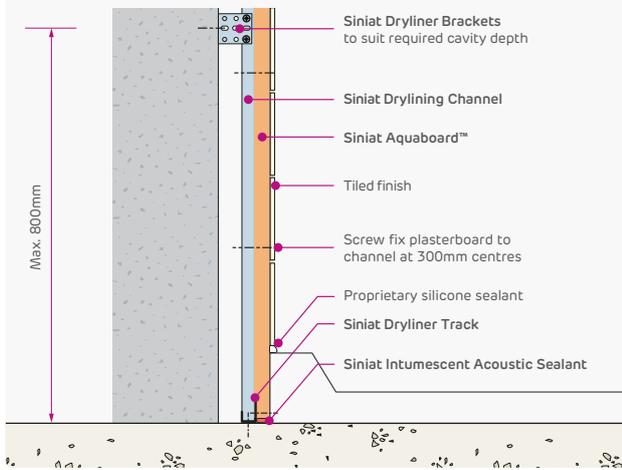
system performance

System reference and components	System weight (kg/m ²)	Maximum height (m)	Overall thickness (mm)	Fire performance BS 476-22 (mins) BS EN 1364-1	Strength duty rating to BS 5234-2	Acoustic performance R _w dB (C _{tr} if applicable)
<p>RAP 004: C stud partition</p>  <p> 1 1x 12.5mm Siniat Aquaboard™ 2 Single Siniat CS70/Rx C Studs at 600mm centres 3 25mm 16kg/m³ glass mineral wool insulation λ </p>	23	3.2	95	30 EI 30	Medium	46
<p>RAP 001: C stud partition</p>  <p> 1 1x 15mm Siniat Aquaboard™ 2 Single Siniat CS70/Rx C Studs at 600mm centres </p>	28	3.6	100	60 EI 60	Severe	40
<p>RAP 003: C stud partition</p>  <p> 1 1x 15mm Aquaboard™ 2 Single Siniat CS70/Rx C Studs at 600mm centres 3 25mm 16kg/m³ glass mineral wool insulation </p>	28	3.6	100	60 EI 60	Severe	46

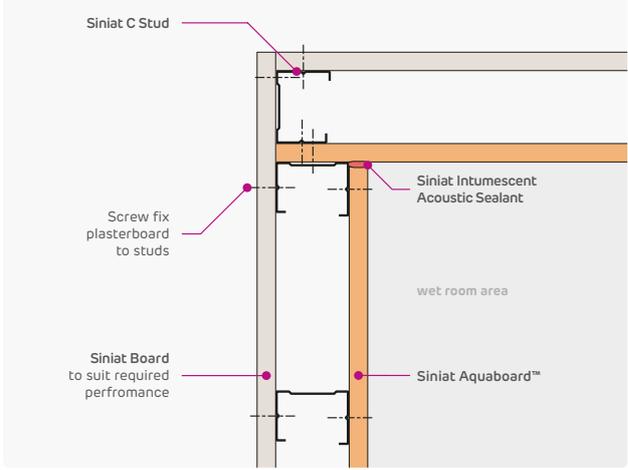


typical details

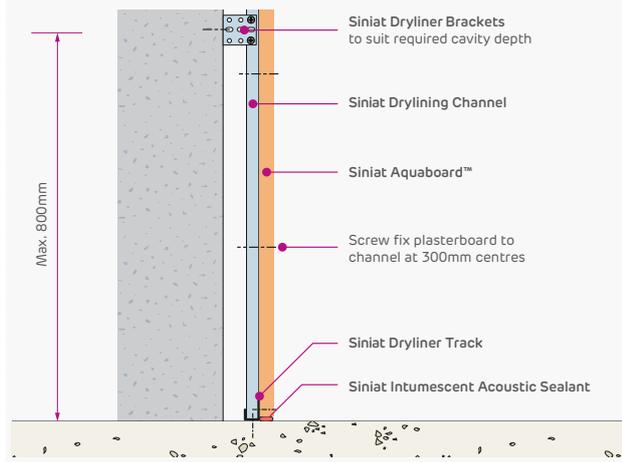
Lining base shower tray



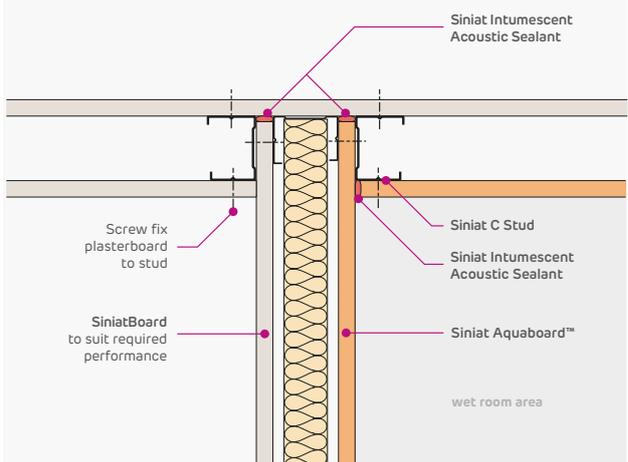
Partition corner



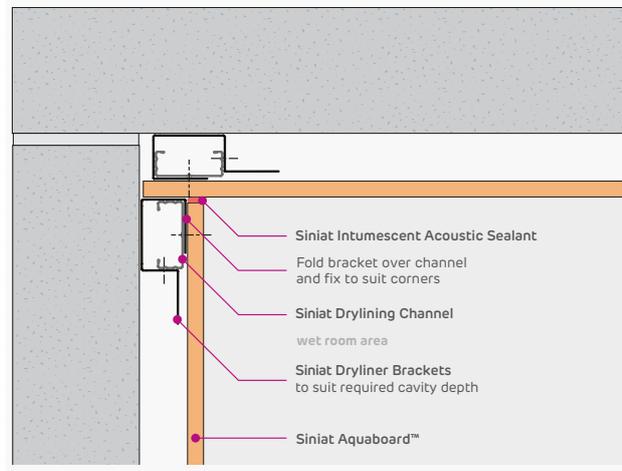
Lining base



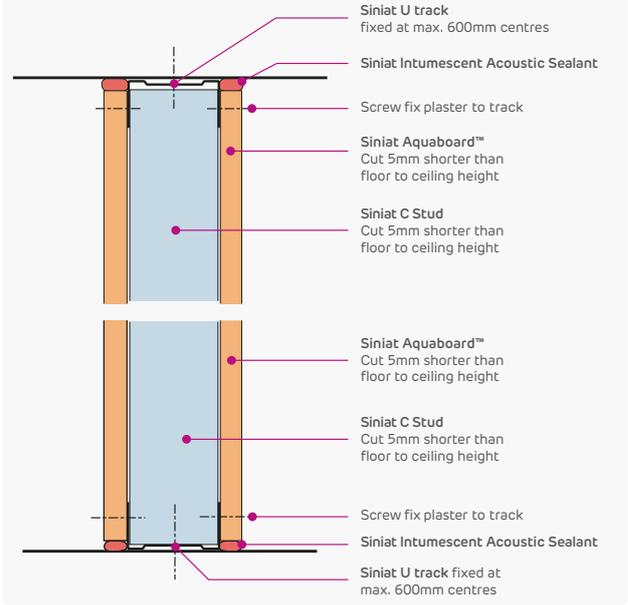
Partition acoustic tee



90° Inside Corner



Partition head and base



installation



Apply Siniat Aquamix compound to the **Siniat Aquaboard™** joint, covering the Siniat Joint Tape with approximately 1 mm of Siniat Aquamix compound. Strike off flush with the **Siniat Aquaboard™** face and allow to dry.

Once fully dry, apply a second coat of Siniat Aquamix compound over the first coat and feather out 50–60mm wider than the first coat of Siniat Aquamix compound and allow drying.

Once fully dry, apply a finish coat of Siniat Aquamix over the second coat and feather out 50–60mm wider than the second coat of Siniat Aquamix.

The beauty of **Siniat Aquaboard™** is that it installs just like standard plasterboard.

The following steps outline installation details.

1. Siniat studs and tracks

Siniat Studs and Tracks should be installed in accordance with the recommendations set out in the *Siniat Drywall Manual*. For tiled partitions, stud should be located at maximum 400mm centres.

2. Siniat Aquaboard™

Fix with Siniat Wet Area Screws to the framing at a maximum of 300mm centres.

To maximise the acoustic and fire performance of the system use Siniat intumescent acoustic sealant and seal between the perimeters and **Siniat Aquaboard™** at the vertical abutments, the head and base.

2.1 Jointing

Apply Siniat Aquamix compound to the tapered joint. Cut the Siniat Joint Tape to the required length, centre the Siniat Joint Tape over the **Siniat Aquaboard™** joint and bed tape into the Siniat Aquamix compound.

2.2 Jointing external vertical corners

Cut the Siniat Corner 90° External (tape on bead) to the required length. Apply a 50mm wide band of Siniat Aquamix compound on each side of the external corner. Bed the Siniat Corner 90° External into the Siniat Aquamix compound. Once bedded, cover each side of the Siniat Corner 90° External with a 100mm band of Siniat Aquamix, feathered out onto the **Siniat Aquaboard™** face, and allow to dry.

Once fully dry, apply a second coat of Siniat Aquamix compound over the first coat and feather out 50–60mm wider than the first coat of Siniat Aquamix compound and allow drying. Once fully dry, apply a finish coat of Siniat Aquamix over the second coat and feather out 50–60mm wider than the second coat of Siniat Aquamix.



Did you know?

Siniat Aquaboard™ is suitable for tile weights up to 50kg/m²

For tiling, studs must be installed at maximum 400mm centres.



3. Sealing the base of partitions or linings in high and severe exposure areas

3.1 Aquastrip installation

Cut the Siniat Aquastrip reinforcement strip to the required length. Using a long haired roller apply a generous coat of Siniat Drywall Sealer to the bottom of the partition or lining approximately 100mm from the floor and a generous coat of Siniat Drywall Sealer to the floor, approximately 200mm. Note: The floor may require an adhesive primer.

Apply the length of Siniat Aquastrip reinforcement tape into the Siniat Drywall Sealer, folding along the joint approximately 50/50mm. The Siniat Aquastrip reinforcement strips are applied using a scraper or plasterer's trowel, being careful to avoid creases.

When two lengths of Siniat Aquastrip meet, ensure they are overlapped by at least 50 mm. Allow 3 to 4 hours, and then apply a second generous coat of Siniat Drywall Sealer to cover the first.

3.2 Additional application required in severe exposure areas only

Apply two coats of Siniat Drywall Sealer to entire surface of Siniat Aqua Board. Allow 3 to 4 hours to dry, then apply the second coat.

4. Siniat Aquaboard™

4.1 Tiling finish

Ceramic and glazed tiles can be fixed directly onto the **Siniat Aquaboard™** system. The tile adhesive should be waterproof and suitable for plasterboard substrates. Tiles with less than 5% water absorption are recommended.

4.2 Paint finish

For non-tiled areas, where a paint finish is required, a suitable proprietary paint for that area can be applied directly.

5. Additional Detailing

Water tightness around frames

To ensure water tightness around door frames and/or any apertures, a proprietary silicone sealant should be used.

Pipes passing through partition should be sleeved and a proprietary silicone based sealant should be used to ensure water tightness between the sleeve and pipe, and sleeve and tiling.

Suspended washroom appliances

Suspended washroom appliances may be fixed to partitions using a suitable fixing and method (see the [Siniat Drywall Manual](#)). A proprietary silicone based sealant may be required around any penetrations.

Baths and showers

A proprietary silicone sealant must be used at the junction of the shower base and/or the bath edges to the vertical walls. Follow the bath and/or shower manufacturer's recommendations for fixing requirements.

For more detailed installation instructions please contact:
Siniat Technical Services
 on **01275 377 789** or
 visit **siniat.co.uk**

typical system construction details

Low and medium exposure

e.g. domestic bathrooms and wet rooms



High and severe exposure area

e.g. areas with persistent humidity and repeated moisture exposure



1 Siniat **Aquaboard™**

2 Siniat board to suit requirements

3 Siniat Joint Tape

4 Siniat Aquamix

5 Siniat Wet Area Screws
(as per specification)

6 Siniat Drywall Sealer

7 Siniat Aquastrip

8 Waterproof tile adhesive

9 Tiles

system and warranty

Siniat

Siniat 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.

Siniat Systems are built from four key component groups:

Siniat boards

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

Siniat frame

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

Siniat fix

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

Siniat finish

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

Technical support

Siniat offers specification customers a range of dedicated support services to help you with compliance.

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 Services

The dedicated Technical Enquiry Line 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 provides instruction in drywall installation and management for contractors and installers.

Warranty

Siniat Aquaboard™ is offered with up to 10 years product warranty according to installation instructions.

Please contact Technical Services for full warranty details.



Siniat Boards



Siniat Frame



Siniat Fix



Siniat Finish



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

Siniat Aquaboard™ should be stored in dry flat conditions. For more information, please refer to the Safety Data Sheet available on our [website](#).

When manually handling gypsum boards, consideration of the correct manual handling technique to limit risk, according to the Manual Handling Operations Regulations 1992.

Packs should be moved using a fork lift truck or hydraulic trolley, care should be taken to ensure that the machine is safely capable of such movements and that the operator is fully trained and competent.

Composition

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

Technical information

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

For more technical information, you can refer to the Technical Data Sheet available on our [website](#).

Exposure controls/ personal protection

Occupational Exposure Limits: Workplace Exposure Level (WEL)

Substance	Total inhalable	Total respirable
Gypsum	10mg/m ³	4.0mg/m ³
Limestone	—	4.0mg/m ³
Silica (Quartz)		0.1mg/m ³
Man-made mineral fibre	—	5.0mg/m ³

Note: Based on 8 hour TWA period

Personal protection

Respiratory: Use appropriate respiratory protection complying with BS EN Standards. A dust mask of type at least FFP2 will be required (use type FFP3 for high concentrations of dust).

Eyes: Use appropriate eye protection complying with BS EN Standards.

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.

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	850	52	10.8	0.63	900	301320
12.5	1200	2400	52	10.8	1.62	900	301311
12.5	1200	2700	52	10.8	1.82	900	301315
15	1200	2400	40	13.5	1.59	900	301331
15	1200	3000	32	13.5	1.59	900	301333

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

Sustainability

- **Siniat Aquaboard™** comes from Siniat, the leading innovator of sustainable solutions for dry construction
- **Siniat Aquaboard™** has a fully recyclable core
- Lower embodied carbon than cement boards and free of the chemical hazards of these materials.

Resource efficiency

- **Siniat Aquaboard™** 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 **Siniat Aquaboard™**
- Easily handled lightweight product and 'score and snap' cutting makes for safe, quick and cost effective installation

Recycling and re-use

- **Siniat Aquaboard™** is recyclable and accepted by Siniat 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.

*Specification for the Production of Recycled Gypsum

system overview

Siniat Aquaboard™

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



Siniat Aquaboard™

Siniat code	Sizes
301320	12.5 x 1200 x 850
301311	12.5 x 1200 x 2400
301315	12.5 x 1200 x 2700
301331	15 x 1200 x 2400
301333	15 x 1200 x 3000

Siniat Wet Area Screws

Siniat Wet Area High Thread Screws for fixing to timber. Siniat Wet Area Self Drilling Screws and Siniat Wet Area Self Tapping Screws for fixing to metal.



Siniat C Stud

Siniat code	Sizes
Various	Available in a variety of sizes and gauges to suit all applications.



Siniat U Track

Siniat code	Sizes
Various	Available in a variety of sizes and gauges to suit all applications.



Siniat Joint Tape

Siniat code	Sizes
4079803	150m roll size

Siniat Aquamix

A water resistant ready-mixed joint cement. For use with Siniat Aquaboard™ System in all wet applications.



Siniat Wet Area Self Tapping Screw

Siniat code	Sizes
4042969	Length 32mm, Gauge 3.5mm
4042970	Length 42mm, Gauge 3.5mm



Siniat Wet Area Self Drilling Screw

Siniat code	Sizes
4042967	Length 25mm, Gauge 3.5mm
4042968	Length 38mm, Gauge 3.5mm



Siniat Wet Area High Thread Screw

Siniat code	Sizes
4042971	Length 42mm, Gauge 3.5mm

Siniat Aquastrip

A mesh strip used in the Siniat Aquaboard™ System to protect exposed drylining perimeters for severe wet applications.



Siniat Aquamix

Siniat code	Size
90321	20kg bucket



Siniat Aquastrip

Siniat code	Size
4041743	50m roll size



Siniat Intumescent Acrylic Sealant Foil Roll

Siniat code	Size
4041739	0.6ltr foil tube



Our technical support for your next project

**Our Architectural Specification Managers and
Technical Services Teams are on hand to help you
select the right solutions for your project.**

@ technical@siniat.co.uk

☎ 01275 377 789 or 0800 145 6033
(select option 1)



GB Orderline

For placing orders, delivery enquiries,
local stockists etc.

0800 373 636 (select option 1)
orderline@siniat.co.uk

Technical Services

Advisory service.

01275 377 789 or **0800 145 6033**
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