



A1 FIRE  
RATED



WATER  
RESISTANT



RENDER  
READY



SOUND  
REDUCTION



TERMITE  
RESISTANT



STS Construction Board

# One Board Multiple Applications



**BUILDING  
BETTER**

sts-uk.com



# STS / Building Better

**WATER**  
RESISTANT



**RENDER**  
READY



**SOUND**  
REDUCTION



**TERMITE**  
RESISTANT



**EURO CLASS**  
NON COMBUSTIBLE



BS EN 1716 & 1182

**TIMBER FRAME**  
BURN TIME



BS EN 476 Part 22

**LGS FRAME**  
BURN TIME



BS EN 476 Part 22

## Professionals choose **STS Construction Board** for its range of uses and for peace of mind

STS fibre cement construction boards can be used in a wide range of applications both internally and externally, covering 4 key areas including fire protection, sound reduction, moisture resistance and render application.

A1 fire resistant board means that your structure will be safer in the event of a fire outbreak, potentially saving people's lives.

Makes ideal partition walling in damp or wet areas, such as bathrooms. It's also weather resistant, so can be exposed to poor weather on site during the construction phase without concern. A weather protective coating is required for permanent exposure.

Faster to fit than laying blocks, it's an ideal alternative to masonry substrates for domestic and commercial applications.

A stronger build means these boards can withstand surface impact, making the finish more durable and longer lasting, especially in high traffic areas prone to damage.

Made up of compacted cement with fibres, STS 12mm Construction Board has exceptional strength properties. It also accepts wall mounted fixings without the need to secure to stud beams.

Boards are easily fixed to timber or metal stud work, and to solid walls using STS fixing products.

Features	Benefits
100% recyclable	Easy to dispose of waste on site
High thermal mass	Capacity to store and release heat, according to surrounding
Non-combustible	Can be used as fire protection
Water resistant	Not effected when in contact with moisture
Heavy duty	Ideal for high traffic and vulnerable areas
Highly durable	Suitable for external and internal application





## Fire Protection

In a construction environment the STS fibre cement boards offer extensive fire protection, whether you are using as a high spec fire wall system for party walls or something simple like a backing board for a woodburning stove or boiler.

### Common Applications

- Internal party fire wall
- Roof space fire wall / spandrel panel
- Stove / boiler backer
- Oil tank surround
- Fire resistant ceiling board
- Timber cladding receiver

**Internal stud wall - 113mm, 400mm centres  
118 min (timber frame)/138 min (LGS frame) fire resistance,  
sound insulation 42dB  
Wall weight 50kg per sqm**



For technical support, call on 0113 202 2010



## Water Resistance

Ideal for floors and walls potentially exposed to moisture or requiring tiling. This could be anything from boarding out your basement, tiling your bathroom or using as an external cladding board.

It's also weather resistant, so can be exposed to poor weather on site during the construction phase without concern. A weather protective coating is required for permanent exposure.

### Common Applications

- Basement liner membrane
- Tile backing board
- External rain shield cladding
- Weather board
- Wetroom boarding
- External render board





## Render Carrier

Fibre cement provides a unique bonding surface for thick coat render systems and comes highly endorsed by industry leading render manufacturers such as K-Rend, Atlas and Ecorend.

As well as the great bonding surface of fibre cement, the high strength and rigidity of the STS board along with great weatherproof properties provides the perfect render board carrier.

### Common Applications

- External render carrier for timber or steel frames
- Dormer cheeks
- Bay windows
- Modular build
- Park homes



For technical support, call on 0113 202 2010



## Sound Reduction

The density of STS Construction Boards provides the perfect solution for decibel (dB) reduction for party wall partitioning.

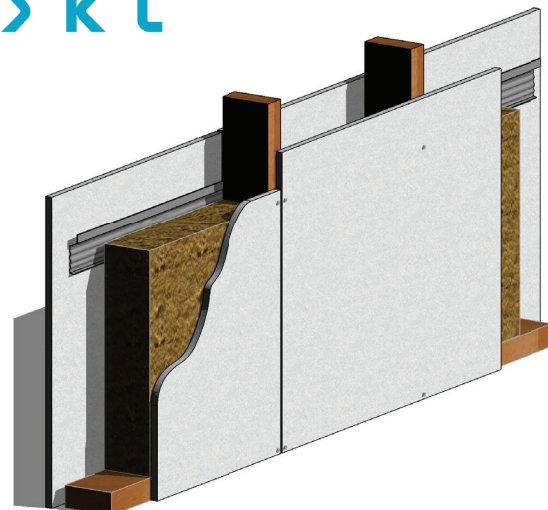
Often used in multi occupancy properties and buildings to ensure air borne sound is kept to a minimum. The STS Construction Board system offers up to 50dB reduction (lab tested).

### Common Applications

- Party walls
- Schools
- Student accommodation
- Flats and apartments
- Commercial buildings

**Internal stud wall - 128mm. Sound insulation 50 dB**  
15mm resilient bar SRE05 by Superior Sections  
@ 400mm centres

S R L



# STS Construction Board Q&A

## 1. When wet, do STS 12mm Construction Boards lose any strength, plus, when they dry, do they recover all their original strength?

STS 12mm Construction Boards will lose some strength when wet. Multiple tests have been carried out which included a pull through test at control conditions when the boards were dry and a pull through test after the boards were immersed in 23°C water for 7 days. There was a slight loss in strength when the boards were tested after immersion, however, when they reverted to their dry state, all strength had been retained.

## 2. What is the maximum length of time an STS 12mm Construction Board can be fitted and then exposed to weather prior to rendering?

We recommend rendering the fitted STS 12mm Construction Board as soon as conditions allow, although these boards can be left fully exposed for up to 3 months prior to rendering. Pay particular attention to preparation of boards to receive render base coat when boards have been exposed for a prolonged period. You must ensure boards have fully dried and that the surface is cleaned of any debris and dust that may have been attracted to the surface.

## 3. How does STS advise on render preparation?

Specific guidance for preparation of boards to receive render varies slightly from each render supplier, so STS recommends following your preferred render supplier's guidance to ensure validity of warranty.

## 4. What side of STS 12mm Construction Board do I render on to?

Use either side. Both accept render easily.

## 5. Can I apply sand & cement render onto STS Construction Board?

Although the bonding surface of STS boards is very good for any cement based products, the problem you may have with this type of render is cracking on the joints. Generally, a silicon thin coat render system is recommended for render boards because it is much more flexible and forgiving to movement. Cement, however, sets completely solid.

## 6. Do STS 12mm Construction Boards need to be hard fixed or can they be dot and dabbed?

STS always recommends mechanical fixings in addition to dot and dab onto solid surfaces.

## 7. Can STS 12mm Construction Boards be used in place of plasterboard?

Yes, STS 12mm Construction Boards have far superior properties in comparison with plasterboard such as fire resistance, impact resistance, strength, breathability, durability to damp and excellent thermal mass properties.

## 8. Can STS 12mm Construction Boards support wall fittings?

Yes, STS 12mm Construction Boards will support fittings such as toilet roll holders, shower curtain rails, vanity mirrors, shelves and pictures when appropriate fixings are used. Larger, heavier fittings such as grab rails and cabinets must always be fitted into supporting stud work.

## 9. Can STS 12mm Construction Boards be used behind a wood burning stove?

Yes, STS 12mm Construction Boards are A1 fire rated and an ideal board to use behind wood burning stoves.

## 10. Can STS 12mm Construction Boards be painted and plastered?

Yes. Before applying paint or plaster, STS 12mm Construction Boards require priming with SBR Primer.

## 11. Do STS 12mm Construction Boards require priming before applying tile adhesive?

Priming STS 12mm Construction Boards is always best practice before applying tile adhesive. Tests have proved the bond between tile adhesive and 12mm Construction Boards was significantly strengthened when Tilers SBR Primer was applied.

## 12. What mechanical fixings do I use?

For standard internal use onto timber or metal stud work, use STS 38mm torx screws to fix 12mm boards, 400mm centres. For external, fire and render applications, fixing methods vary by application. Please call our technical support line for best practice.

## 13. How should STS 12mm Construction Boards be stored?

STS boards are delivered on clearly labelled pallets, wrapped and packaged to prevent weathering and edge damage. They should be stored flat on a pallet, in dry conditions indoors. Boards should not be left upright for long periods of time and whilst stored, moisture should not be allowed to drip on to or infiltrate between stored sheets to prevent surface staining. Larger sized boards should be always lifted by 2 people and carried on their edge, so to avoid unnecessary damage.

## 14. What is fibre cement board made of?

**Portland Cement:** binds the ingredients and is made with limestone, clay and iron.

**Cellulose Fibres:** treated, organic fibres which act as a filler.

**Sand:** highly durable and creates all weather performance.

**Water:** dissolves the wood pulp; activates and hardens the cement.

STS Construction Boards have no need of fibreglass mesh for strengthening, which of course is almost impossible to recycle and very irritable when cutting.

## 15. Are STS Construction Boards recyclable? Yes, 100%

## 16. How do I cut the boards?

Use a hand held circular saw fitted with a PCD blade. Dust extractor recommended.



Cut it

Stick it

Screw it

Prime it

# Technical Data

The STS Construction Board is a heavy duty, fibre cement board manufactured to BS EN 12467. It is Suitable for internal and external applications and construction types including SFS, LGS, Timber Frame and Modular / Offsite build.

Board Information	12mm STS Construction Board
Board Dimensions & Weight	1200mm x 800mm 15.2 Kg 2400mm x 1200mm 45 Kg
Tolerance	0.2%
Test Standard	BS EN 12467:2016 + A1:2016
Performance	
Density	1.28g/cm <sup>3</sup>
Linear Variation (change in moisture)	0.16%
Bending Strength (dry)	12.46 MPa
Bending Strength (saturated in warm water)	12.91 MPa
Water Impermeability (unprimed)	No water formation after 24 hours Damp patch covers tested area
Water Impermeability (primed)	No water formation after 24 hours No damp patch in tested area after 192 hours
Reaction to Fire Test Standard	EuroClass A1 BS EN 13501-1 Class A1 Non-Combustible
Fire Insulation	BS 476 part 22 118 min burn time for timber frame/138 min burn time for LGS frame
Racking Strength Modules Of Elasticity	Category 1 (BS EN 5268-61 & BS EN 594:2011) 5600 N/mm <sup>2</sup>
Mechanical Characteristics – Bending Strength (MOR)	Class 2
Durability.	Complied (Freeze-Thaw, Soak-Dry & Warm Water)
Durability. Heat-Rain	Passed
Pull out test (render board screw)	Mean result: 1490 (Newtons)
<b>Wind Load Testing</b>	<b>3400 Pa</b>
<b>Test Standard</b>	BS EN 12467 : 2016 + A1 : 2016
Pull through testing	Mean result: 1650 (Newtons)
Pull out testing	Mean result: 840 (Newtons)
Thermal Conductivity	0.2435 W/M.k
R Value	0.0493 M <sup>2</sup> K/w
Durability/Min Life Expected	30 Years

## Compatible Renders



UK  
CA

NHBC



0113 202 2010  
sales@sts-uk.com  
visit: sts-uk.com

STS