











### **STS** Construction Boards

## One Board Multiple Applications



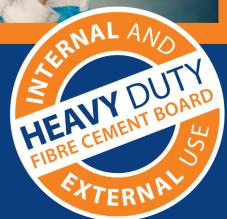






**BUILDING**BETTER

sts-uk.com



### STS / Building Better

A1 FIRE RATED



RENDER READY



WATER RESISTANT



**SOUND**REDUCTION



EURO CLASS NON COMBUSTIBLE



TIMBER 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 surroundings		
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		



### **STS Construction** Board Q&A

#### 1. Can the STS Construction Board be used outside?

Yes, the STS Construction Board can be used on applications both internally and externally. We generally recommend our 12mm board for external application as it is very heavy duty and weather resistant

### 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 stoyes.

#### 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 lent 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 always be 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?

We recommend either using our Fibre Cement Scoring Tool or a PCD cutting blade which fits into a hand held circular saw. Dust extraction is recommended for this.









Cut it / Stick it / Screw it / Prime it



### Fire Protection

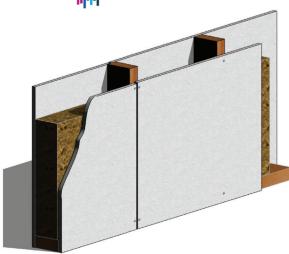
In a construction environment the STS fibre cement boards offer extensive fire protection, whether you are using as a high spec fire wall system for party walls or something simple like a backing board for a woodburning stove or boiler.

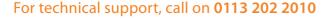
#### **Common Applications**

- 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 minute fire resistance, sound insulation 42dB Wall weight 50kg per sgm









### **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



### STS / Building Better



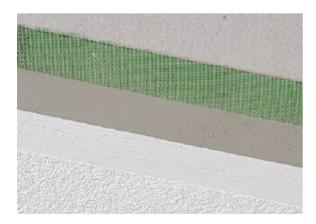
### **Render** Carrier

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

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



### **Technical** Data

Board Dimensions	6mm	9mm	12mm	
Board Dimensions	1200mm x 600mm 6.25kg	1200mm x 800mm 12.8 Kg	1200mm x 800mm 15.2 Kg	
& Weight	2400mm x 1200mm 28kg	2400mm x 1200mm 39.5 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)	17.56 MPa	17.27 MPa	12.46 MPa	
Bending Strength (saturated in warm water)	12.97 MPa	14.93 MPa	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	<b>EuroClass A1</b> Non-Combustible (A1fl)			
Test Standard	EN ISO 1182 & EN ISO 1716			
Fire Insulation			<b>BS 476 part 22</b> 118 min burn time for timber frame party wall	
Mechanical Characteristics – Bending Strength (MOR)	Class 2		Class 2	
Durability. Freeze-Thaw	Complied		Complied	
Durability. Heat-Rain	Passed		Passed	
Durability. Warm Water	Complied		Complied	
Durability. Soak-Dry	Complied		Complied	
Test Standard	BS EN 12467 : 2016 + A1 : 2016			
Pull through testing			Mean result: 1650 (Newtons)	
Pull out testing			Mean result: 840 (Newtons)	
Module of rupture (Dried Conditioning)			13 :13 Mpa	
Thermal Conductivity	≤0.35W/		≤0.25W/ (m•k)	
Density	1.35g/cm3		1.23g/cm3	

#### **Compatible Renders**



















A1 fire proofideal stove backer



**External foundation** cladding board



Heavy duty internal dry liner



Water resistantideal in wet areas

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