

# TOUGHSORBA™

## Robust Acoustic Panels



### DESIGNER ACOUSTIC SOLUTIONS

TOUGHSORBA™ acoustic panels are made with natural wood fibres from 100% sustainable sources. These acoustic panels are tough and available in any RAL colour, depending on quantity.

They can be used on ceilings and high level walls where resistance from ball impact is important. This robustness, along with multi-colours, makes them ideal for use in reducing reverberant noise levels in a wide variety of buildings such as schools, gymnasiums, restaurants, offices, leisure centres, cinemas, community halls, churches, swimming pools, etc.

TOUGHSORBA™ acoustic panels are Class A sound absorbers.

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TOUGHSORBA™ high performance impact resistant noise absorbing panels are ecologically friendly and used to reduce reverberant noise levels inside buildings. Their special fine rustic finish gives them a unique design feature as well as providing maximum open area for sound absorption. The choice, depending on quantity, to have the surface of the panels to any colour, such as RAL, NCS, BS makes the TOUGHSORBA™ panel the perfect choice for creative design, combined with good acoustics as they achieve Class A acoustic absorption performance, which is the highest class.

### APPLICATION

TOUGHSORBA™ acoustic panels are especially suitable where colours on the face of the panels will add design flair and a robust and durable product is required. The panels are generally used on indoor high level wall areas, normally above door height upwards, and ceiling areas. Their high acoustic performance makes them suitable for gymnasiums, offices, schools, colleges, universities, cinemas, restaurants, community halls, swimming pools, factories, atriums, etc.

### MANUFACTURE

Made from natural wood fibres from 100% sustainable sources. Wood, magnesite and water are all the principal components of the TOUGHSORBA™ acoustic panels (fibre width 1mm) and they are completely harmless in terms of building biology. They are flame and termite resistant. The panels are bevelled on all four face edges with 5mm bevel to give a nice visually pleasing finish. TOUGHSORBA™ panels are not classified as hazardous according to the criteria of the National Occupational Health and Safety Commission (HOHSC).



5mm beveled edge on all sides

**The "swimming pool" version has additives which inhibit mould and bacteria growth when used in swimming pool environments. Make sure to order "swimming pool" version if panels are going to be used in a swimming pool.**

### STANDARD NOMINAL SIZES

Nominal Panel Size: 1200 x 600 x 25mm

Dimensional tolerances +/- 3mm

Maximum dimensional changes in a standard climate of 23° C / 50% relative humidity is +/-1%

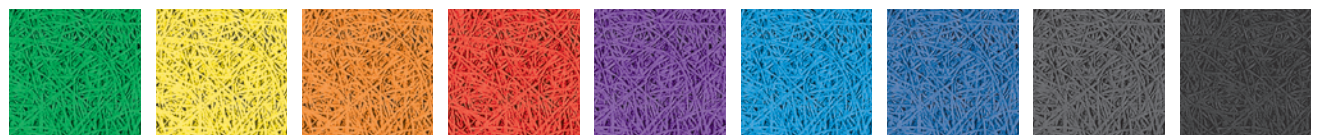
### NOMINAL WEIGHT

11 Kg/m<sup>2</sup>

### COLOURS

An almost unlimited range of colours are available – almost every colour tone from popular colour systems such as RAL, NCS or BS colour, subject to minimum single batch order quantity.

**Deviations in colour tone from the colour chart and colour perception are possible due to the rough fibre or panel surface.**



These colours are for guidance only to demonstrate the wide range of colours options available.



Sports Arena - Abu Dhabi



Sports Centre - Birmingham

### HUMIDITY

Suitable for rooms with a constant relative humidity of up to 80%.

For suitably ventilated indoor swimming pools, please order "swimming pool" version as this version will have special additives during the production process which adds an anti-micro biological agent into the paint to resist the potential for bacteria, mould growth, etc., in such environments.

### SURFACE FINISH

The face surface of the TOUGHSORBA™ acoustic panels has an appealing rustic cobweb appearance.

**Beige and White finishes are standard colour finishes.**



Beige



White

**FIRE SAFETY**

TOUGHSORBA™ has a Euroclass B-s1,d0 fire rating. This is equivalent to BS Class 0 fire rating in the United Kingdom.

**IMPACT RESISTANCE**

TOUGHSORBA™ has been tested vigorously to assess its durability in sports situations. TOUGHSORBA™ remains intact and unaffected when impacted by indoor footballs and basketballs. It is certified as "safe against ball throwing" according to DIN 19032/Part 3

(When the panels are used in sport halls where they may be hit by balls, then the panels must be fixed with 9 screws per panel, instead of the normal 6 screws per panel).

**MAINTENANCE**

TOUGHSORBA™ is simple to maintain by just vacuuming periodically. Any damage can be spray painted. Ask for painting guide.

Panels age naturally under U.V. light conditions like all natural products.

**SUSTAINABILITY**

TOUGHSORBA™ panels are manufactured from Spruce wood and water and a bonding agent of Magnesite. The Spruce wood is from sustainable forests and FSC and PEFC approved.



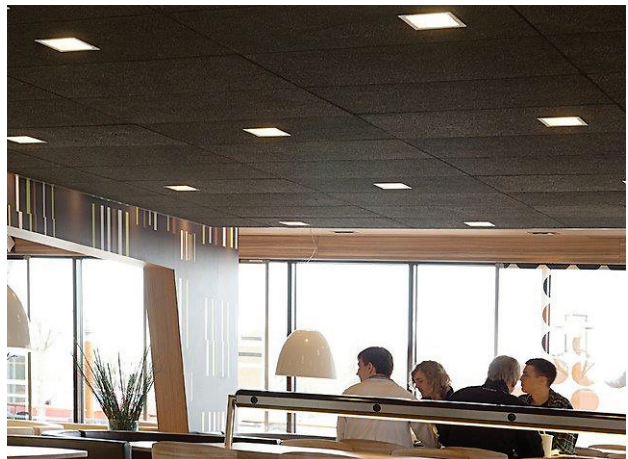
Ball Impact Resistance



Sports Halls



Showrooms

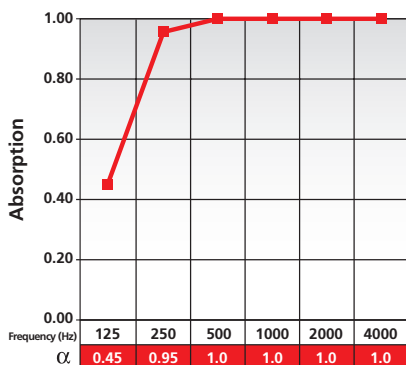


Restaurants

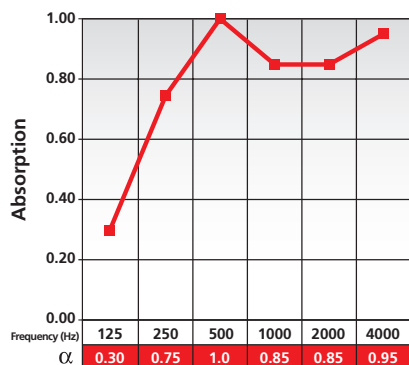
**ACOUSTIC PERFORMANCE**

**CLASS A**

**A** Fixed with 175mm air gap + 25mm 90kg/m<sup>3</sup> density mineral wool  
NRC = 1.0 Class = A

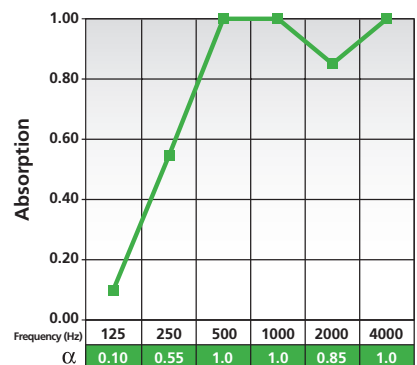


**B** Fixed with 60mm air gap + 30mm 40kg/m<sup>3</sup> density mineral wool  
NRC = 0.85 Class = A



**CLASS B**

**C** Fixed with 25mm air gap + 25mm 90kg/m<sup>3</sup> density mineral wool  
NRC = 0.85 Class = B



Note: a small difference in density (e.g. +/-10 kg/m<sup>3</sup>) will not make any difference to the overall absorption.

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## INSTALLATION

The installation of TOUGHSORBA™ acoustic panels is part of the final interior lining and may only be carried out under controlled humidity and temperature conditions. All dust causing measures must be completed before starting the installation. As the panels are made from natural product, make sure you acclimatise them for 48 hours before use.

Store the panels flat and protect against moisture and dirt. The panels must be kept dry and should be stacked clear of the floor and care must be taken not to damage edges or the surface of the board.

The packaging does not protect the product against rain. The panels are not resistant to direct, prolonged effects of water like rain, condensation and ground moisture.

The panels have a "directional" grain on the face pattern and therefore make sure that you check the grain run on each panel, to ensure that they all run in the same direction.

**Cutting:** Use a circular saw with dust extractor to cut the panels. Bevels can be formed afterwards with a saw blade set at an angle, if required. Cut the panels from the face side up. The rear surface of the panel is unfinished.



1. Before starting installation, check substrate base for sufficient load bearing capacity. Backing substrate should be flat and level.
2. Fasten the timber battens to the ceiling/wall surface at the required centres (not greater than 600mm) with suitable fixings to suit the substrate. Use timber framing with a minimum 60mm width fixing face. This will enable easy fixing 20mm minimum from edges as required. Check initial panel installation for secure fixing before carrying on with the rest of the installation.
3. Install additional timber framing around any openings which may be required.
4. Start the panel installation from the centre of the room and work outwards.
5. Rust protected, universal drywall screws are used to fixing the panels to timber batten support framing. For standard 25mm thick panels, screw length of minimum of 50mm should be used (head diameter 9mm). However, the contractor must check the suitability of the screw fixing for his particular project as each project is different.

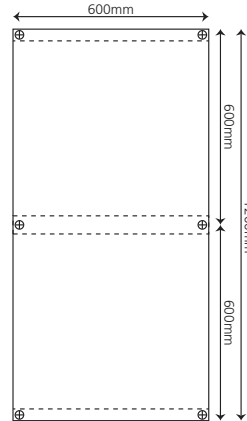


Make sure that the screw head stay flush with the surface face of the panel. Do not NOT sink the screw head below the surface of the panel. After installation, touch up the screw heads with same colour paint as the panels.

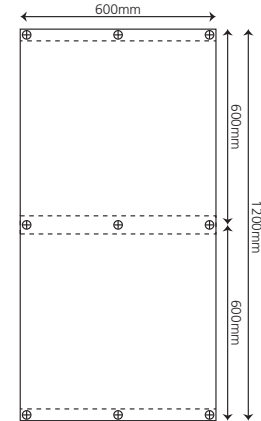
### Prices and Conditions of Sale

Our standard terms and conditions (copy available on request) apply to all orders. Since Soundsorba Limited exercise no control over the use of its products, no legal responsibility is accepted for any application of their products. We reserve the right to change specifications without notice as our policy is one of continuous improvement.  
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For normal areas:  
**6 screws per board**



For ceilings and walls in indoor swimming pools, vibrating constructions, sports hall areas: **9 screws per board**



6. Observe any necessary corrosion protection requirements.
7. Mineral wool is inserted piece by piece with the installation of the acoustic panels.
8. Damaged or soiled panels or panels with colour deviations must not be installed.

Install Panels perpendicular to the framing. Short edge joints must be backed by a framing member.



## GUIDE SPECIFICATION

### A. General

1. All TOUGHSORBA™ designer acoustic panels should be installed in accordance with the manufacturers recommendations.
2. All necessary hardware and accessories for a complete job installation are to be furnished by the contractor.
3. Installation of the panels should not begin until all wet work, such as plastering, concrete, etc. is completely dry. The panels are designed for storage and installation under standard occupancy conditions from 10° C to 20° C and not more than 75% RH in an enclosed building.
4. The contractor shall be responsible for the examination and acceptance of all surfaces and conditions prior to the acoustical panel installation.
5. The acoustic panels should be acclimatised to the room where the panels are to be installed for 48 hours prior as they are made from natural wood based ingredients and therefore can be susceptible to undue moisture.

### B. Product

1. Install TOUGHSORBA™ panels using screws as recommended in the manufacturers installation instructions. Panel size: 1200 x 600 x 25mm
2. TOUGHSORBA panels to be finished in ..... colour.

### C. Supplier

1. TOUGHSORBA™ acoustic panels are supplied by:  
Soundsorba Ltd  
27-29 Desborough Street, High Wycombe, Bucks HP11 2LZ UK  
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