



# Absorb-R ToughSound



## Datasheet



# Absorb-R ToughSound

## Product Description

Absorb-R ToughSound are panels made up of recycled natural wood fibres, cement and water. These panels are extremely durable making them ideally suited where a high-impact acoustic solution is required, they can be coloured to any RAL, NCS pantone. The panels are manufactured to EN 13168 harmonised European product standard for cement-bonded wood wool and EN 13964 standard for suspended ceilings.

**ToughSound** panels are commonly used on ceilings and walls in areas where busy footfall and resistance to ball impact is commonplace. Their hard wearing, tough, colourful and shapely designs makes them ideally suited for use in areas where reverberant noise levels are an issue and where that quirky design edge is required. These panels are high impact, suitable for use in sport halls and high traffic areas and have been manufactured to comply with EN15312 for impact against indoor ball activities.

Evoking the functionality of the product. **Absorb-R ToughSound** acoustic wall and ceiling panels have an open material structure that reduces sound reflections making this product an excellent sound absorber. ToughSound dampens noise, absorbs impact noise thus contributing to restful acoustics within leisure, residential, industrial and public spaces.

This innovative and complete solution can be adapted to a wide range of rooms, from home use, office space to conference halls, auditoria, theatres, recreational sports and educational areas. The Absorb-R ToughSound acoustic-panels are environment friendly, fully recyclable natural components that offer optimal sound absorption and extensive resistance to fire. Surface applications include ceiling and wall mounting.

The panels have 3 different strand widths Ultra Fine 1mm, Superfine 1.5mm, Fine 3mm as standard

The panels are available in 4 thicknesses as standard 15mm, 25mm, 35mm and 50mm.

Absorb-R ToughSound is a high performing **high impact** sound absorbing panel system, a panel concept with excellent **eco credentials**.

With an excellent fire rating of B1 s1 d0 and acoustic range of 0.5 - 0.9 aw it makes for the perfect choice on a wide range of projects.

## Benefits

The panels are suitable for use in premises with a wide range of temperature and air humidity and offer an aesthetic value - original surface texture and unlimited choice of colours. Due to the natural ingredients, the panels ensure the pleasant micro-climate, typical for the wood-made premises.

**Ecology** - the material is produced in a nature-friendly way

**Health** - provides a human-friendly, favourable environment

**Lifetime** - withstands deformation, are not damaged by rodents and insects

**Handiness** - easy to transport and assemble

**Insulation** - excellent insulation properties

**Acoustics** - excellent sound insulating and absorbing properties



## Applications

Absorb-R ToughSound panels are suited for installation in conference halls, classrooms, libraries, restaurants, bars, sports arenas, gymnasias, business areas and offices.

- Leisure Facilities
- Music Studios
- Showrooms
- Learning Areas
- Schools
- Music Venues
- Conference Centres
- Restaurants
- Hotels
- Sports Halls

### Sports Hall



Leisure Facilities

### Hotels



Restaurants



Learnings Areas



Conference Centres



# Absorb-R ToughSound

## Design Your Space

Our experienced team have a wealth of knowledge and can provide consultants, architects and contractors with expert advice on all aspects of reverberation control. We can perform noise surveys and will provide details of anticipated reverberation time improvements to help ensure that the maximum design specifications and performance can be achieved.

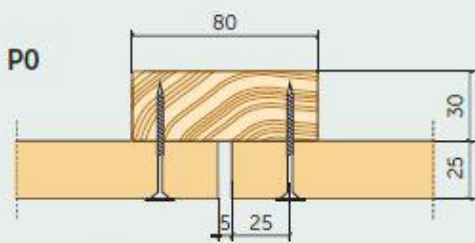
## Panel Finish & Colour

Available in 4 standard colours Natural(wood), white, grey and black, plus a large selection of colours available and can be picked from colour systems such as BS, NCS and RAL.

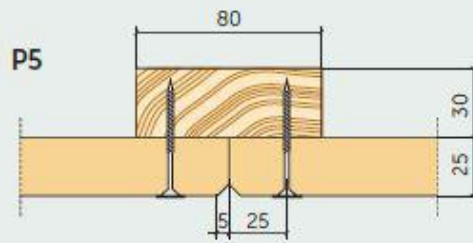
## Edge Profile

3 profiles are available square edge and 2 chamfered profiles 5mm and 11mm

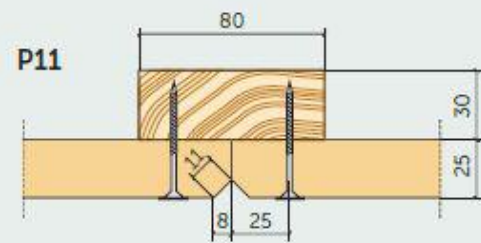
## Profiles



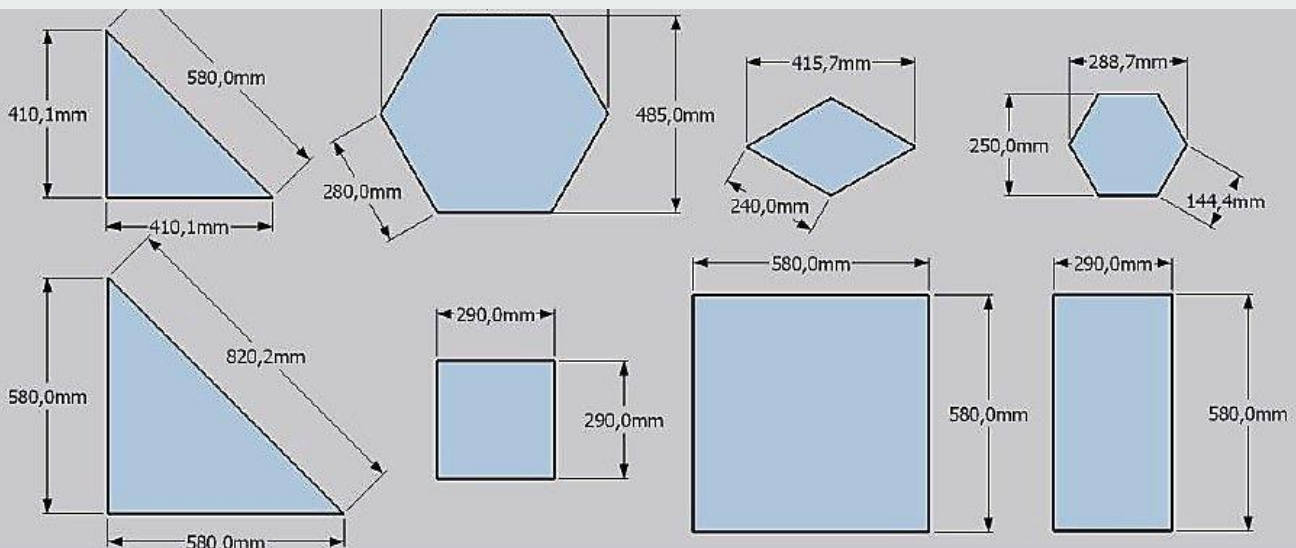
Panel with even edges



Panel with 5 mm chamfer



Panel with 11 mm chamfer

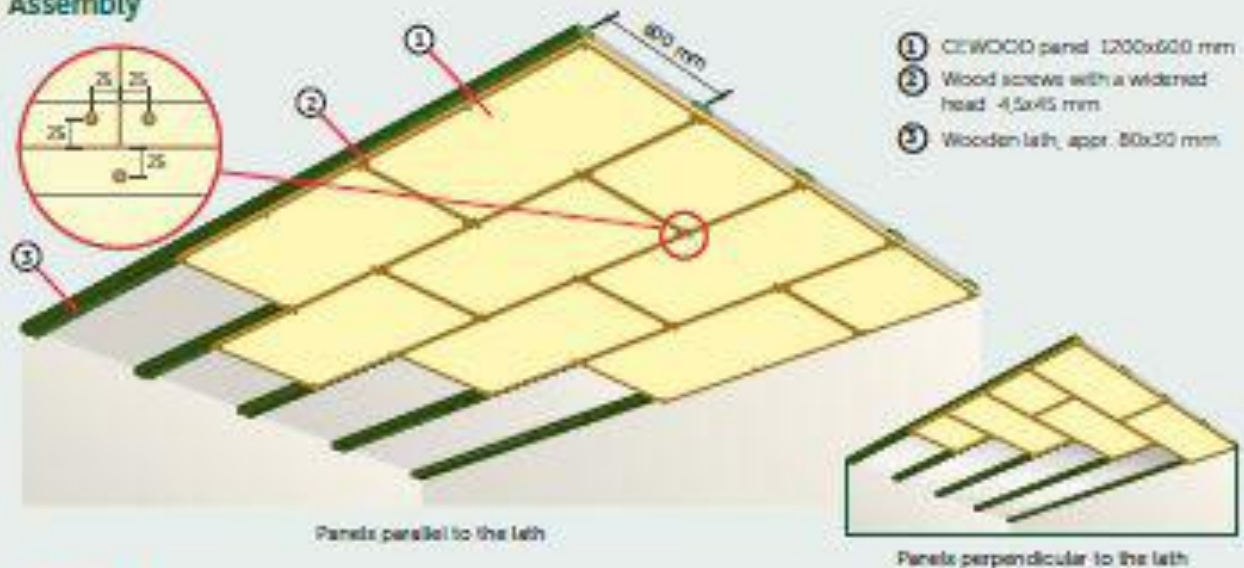


# Absorb-R ToughSound

Decorative / Acoustic panels

## DECORATIVE CEILING

### Assembly



### Important

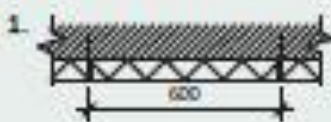
The panels can be fixed to wooden laths (80x30 mm) and metal (CD) profiles or other construction providing strength and load-bearing capacity.

The assembling is carried out using appropriate screws, size 4,5x45 mm (self-cutting screws for CD profiles, wood screws for wooden constructions).

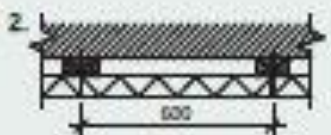
The construction steps are 600 mm, according to the panel width. The mounting should be carried out starting from the middle of room, gradually moving to the sides.

The screw mounting steps are >600 mm. In the corners the mounting should be 25 mm from the side of the panel.

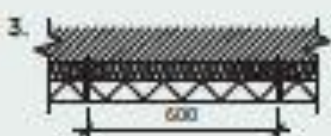
### Variants of assembly



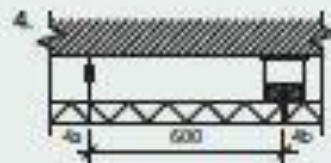
1. The panels are assembled to the ceiling or walls. Assembling to concrete or stone walls is done with plug nails (5 pcs/m<sup>2</sup>), to wood – wood screws with widened head or washer.



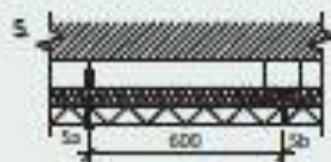
2. A wooden lathing (appr. 80x30 mm) or metal (CD) profile is constructed on the ceiling or wall, to which the CEWOOD panels are assembled.



3. 3rd variant is the same as 2nd, but a layer of mineral wool is inserted between the laths above the panels.



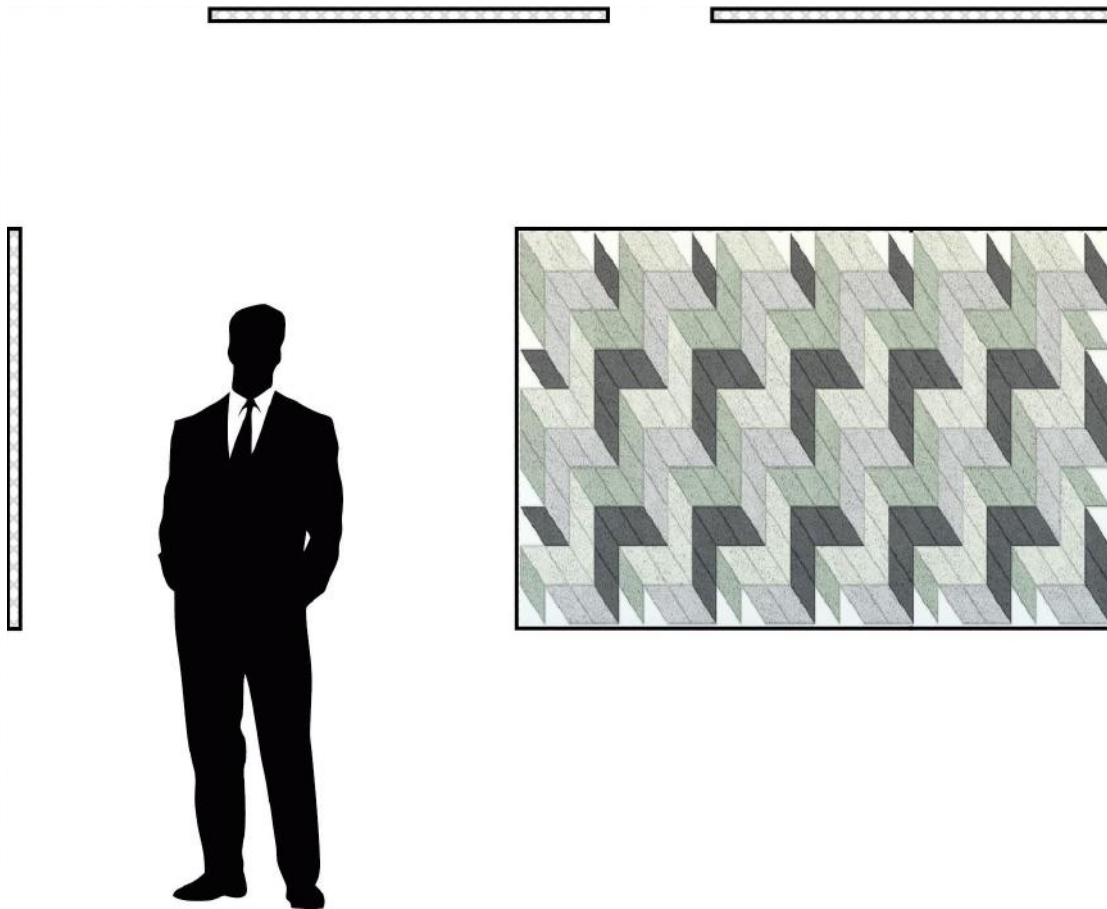
4. A suspended ceiling system (4a; 5a) or laths construction (4b; 5b) is attached to the ceiling with the „quick“ suspension, then the CEWOOD panels are assembled.



5. 5th variant is the same as 4th, but a layer of mineral wool is inserted over the CEWOOD panels.

# Absorb-R ToughSound

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## Care and Maintenance

Absorb-R ToughSound panels are simple to maintain by vacuuming periodically. Any minor damage can simply be spray painted or touched up with a matching RAL, NCS or BS colour. This panel system ages naturally under U.V. light conditions.

## Working Temperature

Absorb-R ToughSound panels are suitable for use at normal building temperatures, 23° C with 50% relative humidity. Possible dimensional change is +/-1%

## Fire Performance

Absorb-R ToughSound has a Euroclass B-s1, d0 fire rating. Equivalent to BS 476 Parts 6 & 7 Class '0' surface spread of flame.

## Availability

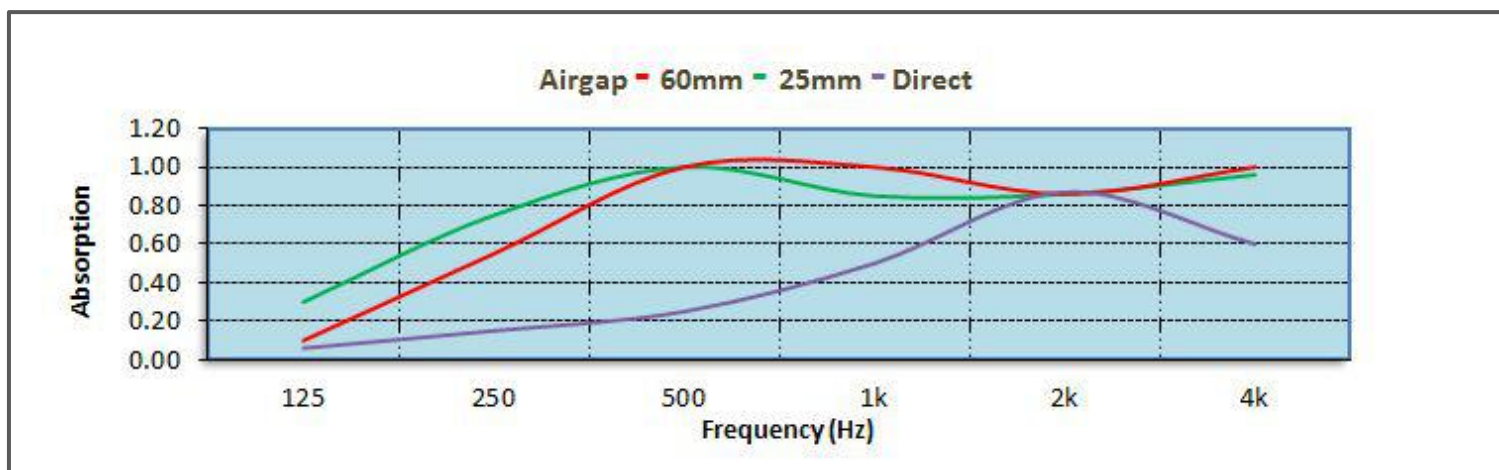
Panels are available to order and should be fitted by skilled tradesmen or specialist contractors.

## Limitations of use

Suitable for rooms with a constant humidity of up to 90%. For installations where there is a constant humidity of 80% and above. Construction physics advice is recommended!

**Acoustic Performance Data**

| Product Type      | Sound Absorption Coefficient (tested in accordance with BS EN ISO 354) |      |      |      |      |      |      |            |             | Building Regulations Absorber Classification<br>(In accordance with BS EN ISO 11654-1997) |
|-------------------|--|------|------|------|------|------|------|------------|-------------|---|
|                   | Octave Band (Hz)   |      |      |      |      |      |      |            |             |   |
|                   | Airgap* (mm)   | 125  | 250  | 500  | 1k   | 2k   | 4k   | $\alpha_w$ | NRC         |   |
| ToughSound Panels | 60   | 0.30 | 0.75 | 1.00 | 0.85 | 0.86 | 0.96 | 0.90       | <b>0.87</b> | <b>A</b>  |
|                   | 25   | 0.10 | 0.55 | 1.00 | 1.00 | 0.86 | 1.00 | 0.85       | <b>0.85</b> | <b>B</b>  |
|                   | Direct   | 0.06 | 0.15 | 0.25 | 0.50 | 0.87 | 0.60 | 0.70       | <b>0.44</b> | <b>C</b>  |



**Product Weight and Dimensions**

| Dimensions | Thickness (mm) | Width (mm) | Nominal Weight of Absorber (Kg) /m <sup>2</sup> |
|------------|----------------|------------|---|
|            | 25             | 600 & 1200 | 11.00   |

