



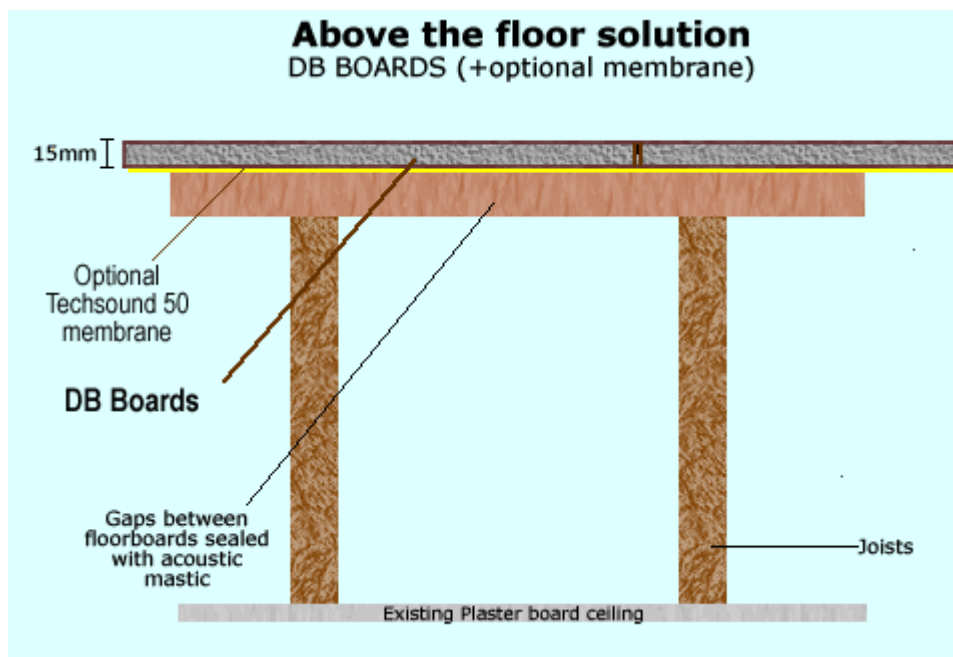
**SoundStop.co.uk**

UK Soundproofing Specialists for the Home

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## Soundstop Fitting Instructions - Under Floor Solutions

### Floor Solution 4a and 4b



Laying the SBX Boards and Tecsound is very straight forward.

#### Tecsound Layer

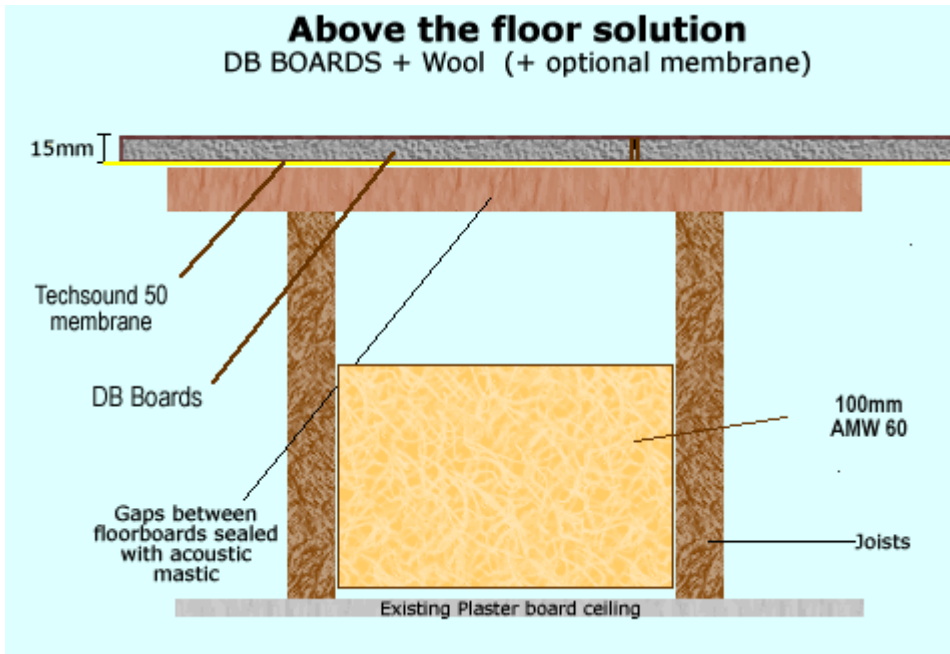
The Tecsound is simply rolled out across the floor with protective scrim side facing upward. The membrane should be run up the skirting boards by a 1cm or so to provide complete coverage. Overlap by 5-10cm at the joins.

#### The SBX Boards layer

Essentially the boards are cut to size and laid down butt jointed together. The following provide a guide as to how exactly the boards are cut and how different walking surfaces can be applied to the boards

The following youtube video is a good starting point. (<http://www.youtube.com/watch?v=K-UTEvhiaGQ>)  
Please note that the SBX Board is known as a "Phonewell" board in Germany

## Floor Solution 4b



To further augment the SBX Board solution we recommend the use of mineral wool

When fitting the mineral wool cut widths slightly large such that the wool friction fits between the joists and there are no gaps between the slabs. Where you meet pipes etc work a double layer of mineral wool to make sure that you are leaving no gaps. Excess mineral wool can be doubled up at the perimeters of the room. Of course you don't need to lift every floor board, often only 2 of every five will allow access to the void beneath the floor allowing you to slide the mineral wool in.

## Cutting SBX Boards

SBX Boards are a cross fluted engineered carcass with a finely compacted loose filler material inside and as such must be taped, to reseal, when cut. Simply run the tape as shown below and the board is sealed. The boards themselves can most easily be cut with a stanley knife, jigsaw or a hand saw. It is always best to cut the SBX Board laid flat. Post cutting immediately seal the edges to minimise filler spillage. Any lost silica be filled from the waste piece by "pouring" it in and topping up any lost sand.





## Fitting Floor finishes over SBX Boards

Where the developer has opted for a traditional 18mm or 22mm tongue & groove overlay then all flooring finishes are treated conventionally and the following instructions are redundant.

### *Fitting Solid Wood, Engineered Wood, Parquet & Laminate Floors Directly over SBX Boards*

1. Wood flooring must be acclimatised in the fitting location prior to fitting for the length of time specified by the flooring manufacturer. This prevents shrinkage, cupping and warping at a later date.
2. Prior to installation, the installer has the final responsibility to inspect the finished flooring as to grade, manufacture and factory finish. The installer must use reasonable selectivity and discard or cut off pieces with deficiencies.
3. It is imperative that the expansion gap is carefully adhered to, as this is also necessary to prevent the transmission of sound from the wood flooring to the adjoining walls which in turn would transmit flanking noise. This gap is usually 6mm (12mm when floating) around all vertical objects and the whole perimeter of the room.

#### *Mechanical fixing (usually 6mm expansion gap):*

- a. Solid wooden flooring must not be nailed directly to SBX Boards or through to the sub-deck, which would cause a sound bridge. For 'Hidden Nail Technique' glue 9mm (minimum) plywood, OSB or chipboard on top of SBX Boards with wood flooring glue. Leave a 6mm gap between the wooden layer and the walls (and any other vertical structures) to reduce vibration and flanking noise.
- b. Then nail the timber flooring directly into 9mm top layer only, leaving expansion gaps as per manufacturer's instructions. Leave a 6mm gap between the flooring and the walls and any other vertical structures. The gap at the perimeter can be sealed with flexible acoustic sealant.

#### *Bonding (usually 6mm expansion gap):*

- a. If the installer requires the option of being able to remove the wood flooring at a much later date without damaging the SBX Boards acoustic layer, then a wooden overlay must be laid and bonded to SBX Boards - 3mm to 6mm thick plywood is common. It is important to leave a 6mm expansion gap around vertical objects and the whole perimeter of the room.
- b. For bonding wooden flooring, use the wooden flooring adhesive as recommended by the flooring manufacturer (usually rubberised wood flooring glue) which should be spread evenly on the floor with a medium notched trowel, as per the flooring manufacturer's instructions.
- c. Always check for an adequate adhesive bond before proceeding.

#### *Floating (usually 12mm expansion gap, 6mm for Laminate):*

- a. Flooring suitable for fitting as a floating layer, as per manufacturer's guidance, (usually over 7mm thick), should be laid directly over SBX Boards without underlay for the best acoustic performance.
- b. It is important to leave a 12mm expansion gap, as recommended by flooring manufacturer, around vertical objects and the whole perimeter of the room. For laminate use the manufacturers recommended 6mm gap.
- c. Joint Sealant for Laminate Flooring can be used to permanently protect laminate from moisture effects, if necessary.

### *Fitting Ceramic Tiles Directly over SBX Boards*

- a. It is recommended to use marine plywood as your sub floor, if possible.
- b. If floor height is not an issue it is recommended to lay a Tile Backing Board or a 6mm Marine (WBP) Plywood board over SBX Boards which is bonded to SBX Boards using a grab adhesive. This will protect the SBX Boards acoustic floor should you wish to change the tiles in the future. It is imperative to leave a 6mm expansion gap between the tile backing board / plywood and any vertical objects, as well as the whole perimeter of the room, and fill the gap with a permanently flexible and waterproof sealant, to reduce flanking noise.
- c. If floor height is an issue, place a 100mm wide fibre glass mesh 'scrim tape' over all SBX Boards joints. Then lay the tiles in a thin bed of rapid setting flexible cement based tile adhesive, suitable for wooden floors. The scrim tape ensures no movement will take place due to vapour in bathrooms and kitchens. If

tiling a wet room, please see the next section.

### ***Fitting Ceramic Tiles Directly over SBX Boards in Wet Rooms***

- a. It is recommended to use marine ply as your sub floor, if possible.
- b. SBX Boards is moisture resistant and its performance will not deteriorate in these applications. Do not knock boards tightly together - simply lay lightly butted allowing for minimal expansion.
- c. In high moisture areas it is important to lay a vapour barrier, or else it is recommended that a Tile Backing Board or a 6mm Marine (WBP) Plywood board should first be laid and bonded over SBX Boards using a grab adhesive. It is imperative to leave a 6mm expansion gap between the tile backing board and any vertical objects, as well as the whole perimeter of the room, and fill the gap with a permanently flexible and waterproof sealant, to reduce flanking noise.

### ***Fitting Carpet Directly over SBX Boards***

Carpets requiring an independent underlay:

- a. SBX Boards is not an 'underlay'; a good quality carpet underlay is still required to protect the carpet and SBX Boards.
- b. Carpet grippers can be bonded to SBX Boards in the same manner as for solid concrete floors; using a rapid set grab adhesive recommended for carpet grippers. The nails are hammered through the carpet and into the carpet gripper - however it is imperative that the nails do not pass through into the sub-deck below. Common carpet gripper nails are insufficient length to pass through the 15mm SBX Boards, but it is the installer's responsibility to confirm this on site.

### ***Carpets with a pre-bonded foam or felt underlay:***

- a. These carpets usually incorporate a thin foam or felt backing, insufficient to spread point pressure load, and therefore require a 3mm to 6mm plywood bonded to SBX Boards prior to fitting the carpet.
- b. The plywood is bonded to the SBX Boards leaving a 6mm expansion gap around all vertical objects and the whole perimeter of the room, which can be filled with permanently flexible acoustic sealant.
- c. Foam backed carpets should always have a brown building paper laid prior to fitting which prevents the foam from sticking to the floor when its glue seeps out.

### ***Fitting Linoleum & Vinyl Directly over SBX Boards***

- a. Linoleum or Vinyl cannot be fitted directly on the surface of SBX Boards. For commercial applications use a hard Linoleum and Vinyl subfloor system floating over SBX Boards or 6mm plywood bonded to SBX Boards. For domestic applications, bond 3mm to 6mm plywood or similar to SBX Boards.
- b. The plywood is bonded to the SBX Boards leaving a 6mm expansion gap around all vertical objects and the whole perimeter of the room, which can be filled with permanently flexible acoustic sealant.