

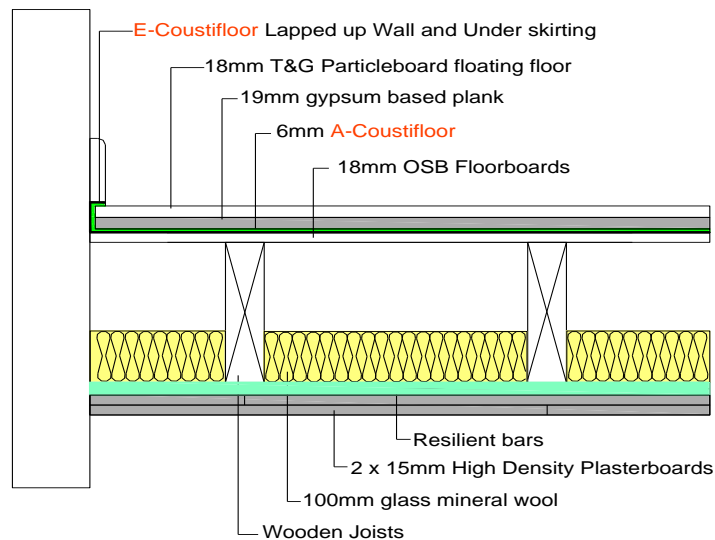
## Technical Installation Guide Number 7

# A-Cousti FF Solution

### Description

A-Cousti FF Solution meets the performance requirements for Document E floating floor treatment for a timber separating floor. The resilient layer is a laminate of 5mm closed cell resilient foam and 1.2mm A-Cousti membrane. It is fitted with the membrane face downwards.

The construction includes a layer of 19mm gypsum based plank over the resilient layer with 18mm P5 moisture resistant tongue and groove chipboard floor over the plank.



### Specification

Components:	18 mm P5 moisture resistant T&G Particle board. 19 mm gypsum plank or similar. 6 mm A-Coustifloor.
Floating Floor Thickness	43 mm (Reduces batten system by 44.8mm)
Board Size:	18mm x 2400mm X 600mm
Board weight/m <sup>2</sup> :	12.60 Kg
Gyp plank weight/m <sup>2</sup>	14.5 Kg
Laminate weight/m <sup>2</sup>	1.825 Kg.

### Test results

Airborne (Rw+Ctr)	54dB	(Timber floors <b>minimum</b> required to comply is 45dB for new and 43 dB for refurbishment)
Impact (Lnw)	54dB	(Timber floors <b>maximum</b> to comply is 62dB for new build, and 64dB for refurbishment). (Test Report numbers L205-064 and L205-065 refer)

### Build Variations

If 45kg/m<sup>2</sup> mineral batt is substituted for the glass mineral wool performance will be improved by up to 4dB  
If Standard plasterboard is used performance is reduced by 3-4 dB

### Downlighters

Where a metal frame ceiling is used with A-Coustiquilt laid over the top it is recommended that only fire protected and acoustic rated products are fitted. Always fit as per the manufacturer's instructions, but in addition where A-Coustiquilt (or any other mineral fibre product) is fitted in the ceiling system ensure there is sufficient airflow around the downlighters. This is achieved by cutting away a hole in the A-Coustiquilt of 60mm greater diameter than the downlighter diameter.

In order to accurately locate the holes measure up the position of the hole using the grid of the metal frame as the reference point to establish the co-ordinates for each hole. There should be a minimum of 30mm clearance between the downlighter and the quilt in all directions. When using proper acoustic rated downlighters there will be no reduction in the acoustic performance of the system. However, downlighters do create an obvious flanking path if not correctly fitted with adequate care.

## A-Coustifloor resilient layer

Feature	Benefit
* Comfortably exceeds Approved Document E requirements	* Removes the fear factor from testing
* Only 43mm thick	* Up to 45mm less than batten systems
* Closed cell resilient layer	* moisture resistant and hygienic
* Supplied in roll form	* Easy to lay with minimal wastage * Easy to fit in refurbishments
* Integral Flanking strip	* Reduces potential for flanking sound

### Fixing Instructions

#### Installation

1. Take A-Coustifloor out of polyethylene wrapper
2. Roll out ensuring that the black membrane is face down.
3. Where it butts a wall allow approx 75-100mm overlap at each edge and cut using a sharp knife or scissors.
4. Where it butts push tightly together and tape along edge using suitable carpet tape.
5. Where the floor surface is uneven, or the shape of the room causes "bagging" of the A-Coustifloor it can be glued to the substrate using a general purpose contact adhesive in order to give a flat even surface to lay the floating floor, laminate or carpet over. Where the A-Coustifloor needs to be cut around irregular shaped rooms, around corners or through openings use tape to ensure that any over sized cut is repaired.
6. At the room corners notch the A-Coustifloor by accurately cutting out a square
7. Lay the flooring finish of choice over the A-Coustifloor preferably at right angles, or alternatively if joints are running in the same direction stagger the joints. Glue the T&G joints at the joints where present or ensure that the click system is properly located. Whatever the jointing system ensure that it is securely jointed. In order to comply with Approved Document E when used with removable laminate flooring the A-Coustifloor must be adhered to the substrate.
8. Mitre the A-Coustifloor by turning down each flap in turn and trimming off at a 45 degree angle
9. Turn the A-Coustifloor over the top of the floor board and fit skirting so as to trap the overlap underneath.
10. Where the floor construction does not permit the end detail described above to be used, alternatively leave an 8-10mm gap between the edge of the laminate and the wall and fill with A-Cousti Fix and Seal and finish with an appropriate edging strip.
11. Trim the excess with a sharp knife.
12. Finish off by applying A-Cousti Fix and Seal to the joint. The A-Cousti brand sealer must be used.
13. You have now created a floating floor which is decoupled from the base floor and surrounding walls reducing the transmission of sound through the structure, and by flanking and leakage helping you to meet the requirements of Approved Document E

#### A-Coustifloor as a sound reduction carpet underlay

- steps 1 and 2 as above
- where it butts a wall allow enough to lap up the A-Coustifloor up the wall to the thickness of the carpet i.e. to meet the underside of the skirting
- step 4 as above
- glue to base floor using a general purpose contact adhesive in order to comply with the requirements of Approved Document E (if there is no need to meet the requirements of ADE there is no need to glue)
- Fix carpet grippers, minimising the number of fixing points.
- Lay carpet as per supplier's instructions.

#### Finishing

- Trim doors to required height
- Refit skirting etc
- Dispose of waste in accordance with local regulations

Updated April 2010