

secondary wall structures



Acoustic Improvement to Existing Walls

The system comprises a dry wall structure, decoupled from the substrate over which it is applied, providing additional sound transmission loss where existing walls are acoustically weak. Used in conjunction with floor and ceiling treatments, the system can provide an economic and practical means of acoustically upgrading a variety of spaces.

Construction

Walls must be clear of fixtures and fittings prior to installation, although electrical services can be extended through the secondary wall and subsequently refitted. Isolated battens are fixed to the substrate at nominally 600mm centres in the vertical plane. The space between these is filled with high density mineral fibre, prior to fitting an initial layer of 'Soundbloc' plasterboard. During installation, this is isolated around the perimeter interface, using a neoprene rubber strip. A dense barrier material is stapled over the entire face of the 'Soundbloc' to provide additional mass and a means of acoustically decoupling the second layer of 'Soundbloc', which is fixed to ensure a staggered joint arrangement.

Acoustic Performance

This is entirely dependant on the density of the existing wall structure. Where the mass of the secondary system significantly exceeds the density of the substrate, the additional sound reduction could be between 5-12dBA. If, however, the mass of both structures is similar a reduction of 3-5dBA is more likely.

Finish Treatment

The plasterboard surfaces can be conventionally decorated following plaster skimming and the fitting of skirting. As an alternative we can fit a fabric finished sound absorbent surface as detailed in our product data sheet: [sound absorbers: walls](#) - Fabric Covered Sound Absorbent Wall Treatment.

Complimentary Products

In order to provide a complete solution, it can sometimes be necessary to treat other areas, such as ceilings, floors, doors and windows. For further details please see the following product data sheets:

- suspended acoustic ceilings
- overlay acoustic flooring
- acoustic doors
- acoustic glazing

