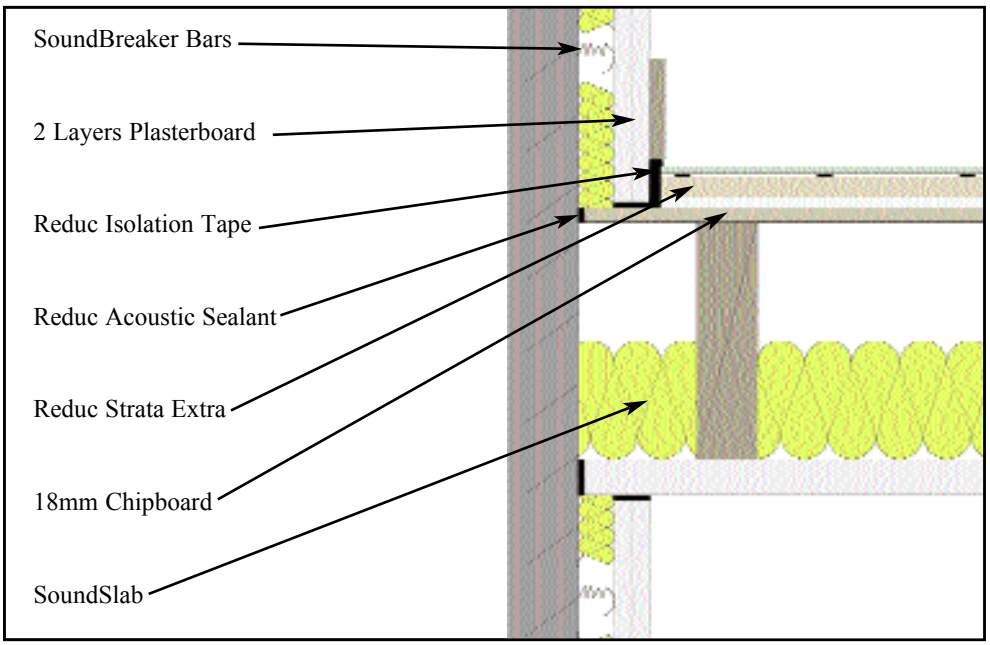
Trim Acoustics

Acoustic Floating Floor System

Reduc Strata Extra

Reduc Strata Extra is a high performance acoustic overlay flooring product suitable for use on new and existing timber and concrete floors. It comprises an upper layer of moisture-resistant MDF isolated from a layer of dense cement particle board by visco-elastic sound damping strips. The underside incorporates a resilient layer of acoustic felt, which provides mechanical isolation from the existing floor structure.



Reduc Strata Extra is 35mm thick and is designed to damp vibration and attenuate both airborne sound and impact noise passing through floors.

The moisture-resistant upper surface means **Reduc Strata Extra** can be used throughout the building, including kitchens and bathrooms, whilst the acoustic felt on the underside will contour over minor irregularities in the surface of the floor being treated.

Application

Reduc Strata Extra is used extensively in the refurbishment and conversion of existing buildings into apartments to upgrade the separating floor, and in all manner of new build projects by those looking to exceed Building Regulation requirements.

Technical Advice and Acoustic Testing

Highly qualified and experienced building and acoustic engineers are available to discuss all aspects of acoustic performance requirements and can prepare specifications and effective installation instructions to ensure optimum performance is achieved. They can also undertake pre- and post-installation testing for airborne and impact sound insulation, if required. Further details are available on request.

Operating Temperature

Reduc Strata Extra is suitable for use at normal building temperatures.

Fire Performance

Reduc Strata Extra will not add significantly to any existing fire hazard when properly installed

Dimensions and Weight

Reduc	Installed Thickness mm	Overall Board Dimensions Excluding Lap Joint	Laid Area per Board Allowing for Lap Joint	Weight	
				Per m^2	Per Board
Strata Extra	35	1175mm x 575mm	0.675m^2	27.9kg	20.1kg

Building Regulation Requirements

Building Regulations Approved Document E (England and Wales) and Building (Scotland) Regulations Section 5 call for the following standards to be achieved for all timber and concrete floors:

Building Regulations Approved Document E (England and Wales) 2003	Airborne Sound		Impact Sound
	Site Test Result $D_{nT,w} + C_{tr}$ dB	LabTest Result R_w dB	Site Test Result $L'_{nT,w}$ dB
Separating Floors - Conversions	43 or greater	n/a	64 or less
Separating Floors - New Build	45 or greater	n/a	62 or less
Internal Floors - Conversions and New Build	n/a	40 or greater	n/a

Building (Scotland) Regulations 2004 Section 5	Airborne Sound	Impact Sound
	$D_{nT,w}$ dB	$L'_{nT,w}$ dB
New Build and Conversions	52 or greater	61 or less

Acoustic Performance

Detailed below are acoustic test results for a typical timber floor construction. Performance data for other floor constructions together with more detailed technical advice is available on request.

Typical Floor Construction	Airborne Sound			Impact Sound
	Site Test Result $D_{nT,w}$ dB	Site Test Result $D_{nT,w} + C_{tr}$ dB	LabTest Result R_w dB	Site Test Result $L'_{nT,w}$ dB
Reduc Strata Extra overlaid onto 18mm chipboard with 100mm **SoundSlab** fitted between 50mm x 225mm timber joists at 400mm centres and 2 layers of 12.5mm of plasterboard on the underside to form the ceiling	57	48	*63	57
As above incorporating **SoundBreaker Bars** to de-couple the ceiling below	60	53	*66	48
Reduc Strata Extra overlaid onto 22mm timber floorboards with 100mm **SoundSlab** between timber joists and 30mm lath and plaster ceiling in good condition or single layer plasterboard.	53	45	*59	56

* The Rw figures quoted above apply to domestic applications only. Details for commercial applications are available on request.

Flanking Transmission

The performance figures quoted above are based on test results for timber floors and can only be expected if the building design and construction has followed good practice to ensure all potential flanking paths have been eliminated. In order for wall and floor constructions to be fully effective, extreme care should be taken to correctly detail the junctions between the separating wall or floor and the associated elements such as external walls and any penetrations. If junctions are incorrectly detailed, the acoustic performance will be limited and Building Regulation requirements may not be achieved in practice.

Packaging and Handling

Reduc Strata Extra boards are packed on non-returnable pallets. Boards should be stored inside and under cover in a dry, well-ventilated area. They should be laid flat and kept off the ground. Extreme care should be taken when handling to avoid damage.

Application and Fixing

- See separate sheet.