

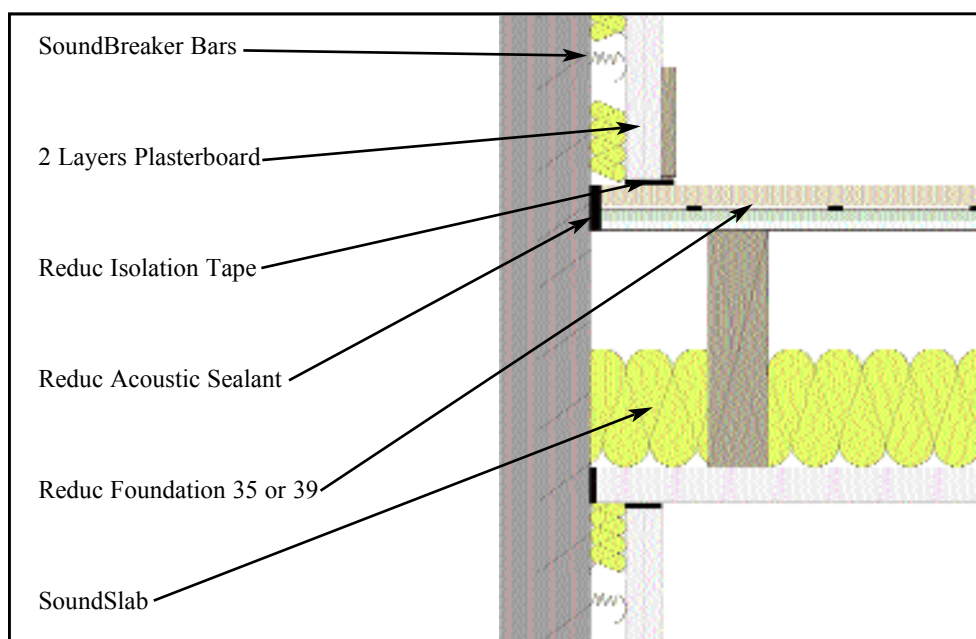
Trim Acoustics

Acoustic Floating Floor System



Reduc Foundation 35/39

Reduc Foundation 35 and 39 are high performance structural or overlay acoustic flooring products suitable for use on new and existing timber and concrete floors. They comprise two layers of moisture-resistant chipboard, separated by visco-elastic sound damping strips, with an acoustic felt on the underside.



Reduc Foundation 35 and 39 are 35mm and 39mm thick to suit up to 450mm and 600mm joist centres respectively. They are designed to damp vibration and attenuate airborne and impact noise passing through floors.

The moisture-resistant upper surface means **Reduc Foundation 35 and 39** can be used throughout the building, including kitchens and bathrooms. When used as an overlay on existing floors the acoustic felt on the underside will contour over minor irregularities on the floor surface.

Application

Reduc Foundation 35 and 39 are 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 Foundation 35 and 39 are suitable for use at normal building temperatures.

Fire Performance

Reduc Foundation 35 and 39 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
Foundation 35	35	2400mm x 600mm	1.44m ²	20.5kg	29.5kg
Foundation 39	39	2400mm x 600mm	1.44m ²	23.6kg	34kg

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	Lab Test 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	Lab Test Result R_w dB	Site Test Result $L'_{nT,w}$ dB
Reduc Foundation 35 and 39 fitted as a structural floor onto 50mm x 225mm timber joists with 100mm SoundSlab in the void and 2 layers of 12.5mm plasterboard on the underside to form the ceiling	55	47	*61	57
As above incorporating SoundBreaker Bars to de-couple the ceiling below	58	51	*64	47
Reduc Foundation 35 and 39 overlaid onto 22mm timber floorboards with 100mm SoundSlab between timber joists and 30mm lath and plaster ceiling in good condition or single layer plasterboard.	54	46	*60	56

* The R_w 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 Foundation 35 and 39 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.