



# REDUC<sup>®</sup> Foundation 39

Structural and overlay acoustic flooring product suitable for use on new and existing timber floors. It comprises two layers of moisture-resistant chipboard, separated by visco-elastic sound damping strips with an acoustic felt on the underside. REDUC<sup>®</sup> Foundation 39 is 39mm thick. It is designed to damp vibration and attenuate airborne and impact noise passing through floors.

## Key Features and Benefits

- Structural acoustic flooring to suit up to 600mm joist centres
- Excellent impact and airborne noise reduction
- Ideal for conversion, refurbishment and new build projects
- Can be used in kitchens and bathrooms
- Tongue and Groove - quick and easy to install
- Provided with full technical back up



# REDUC® Foundation 39

## Applications

- Flats and apartments
- Hotels and hostels
- Sheltered housing
- Social housing
- Nursing and care homes
- Student accommodation
- Shops
- Offices

## Environmental Consideration

Ensuring sustainability has always been a key factor in the development of REDUC® acoustic flooring. The upper substrate layer of chipboard is manufactured using 70% recycled and responsibly sourced timber accredited by the FSC (forestry Stewardship Council). The lower layer of chipboard is manufactured using 60% recycled timber certified by the PEFC (Programme for the Endorsement of Forest Certification). The resilient layer of acoustic felt is fully recyclable and is manufactured from 80% recycled polyester fibres.

## Operating Temperature

Suitable for use at normal building temperatures.

## Fire Performance

REDUC® Foundation 39 will not add significantly to any existing fire hazard when properly installed.

## Acoustic Performance

## Technical Advice

It is recommended that all individual projects are discussed with H&H Acoustic Technologies. A team of highly qualified technical engineers and acoustic consultants are available to offer assistance and advice to clients, architects and contractors on all aspects of noise control to ensure design specifications and acoustic performance requirements are achieved. They can also undertake noise surveys and provide details of anticipated reverberation times pre and post installation.

## Packaging, Handling and Storage

REDUC® Foundation 39 is supplied as individual boards packed onto timber pallets. They should be stored flat and kept indoors in a dry well-ventilated area and care should always be taken when handling boards to avoid damage.

## Installation and Fixing

REDUC® Foundation 39 is laid as a floated floor (no fixings) onto levelled joists up to 600mm centres or a flat supporting deck. All board joints must be fully bonded using REDUC® Joint Adhesive and all wall edges should be isolated using REDUC® 5mm Isolation Tape. Please consult our website where fitting instructions are available or contact us for more detailed guidance.

## Dimensions and Weight

Board Length:	2400mm
Board Width:	600mm
Overall Thickness:	39mm
Area Per Board:	1.44m <sup>2</sup>
Weight Per Board:	34kg
Weight Per m <sup>2</sup>	23.6kg/m <sup>2</sup>

Floor Construction	Airborne Sound		Impact Sound
	Site Test Result D <sub>nT,W</sub> dB	Site Test Result D <sub>nT,W</sub> + C <sub>tr</sub> dB	Site Test Result L <sub>nT,W</sub> dB
<u>Approved Document E: REDUC® Foundation 39 laid onto joists with 100mm REDUC® SoundSlab continuously between 225mm x 50mm timber joists. Resilient Bars to be directly fixed to the ceiling joists to support 2 layers of 12.5mm acoustic plasterboard (60mins Fire Rated).</u>	58 dB	51 dB	47 dB
<u>Acoustic improvement (where no access to plaster boarded ceiling below) of an existing ceiling with 2 layers of direct fixed 12.5mm plaster board: Fit 100mm REDUC® SoundSlab continuously between the joists and float REDUC® Foundation 39 onto the joists.</u>	55 dB	47 dB	57 dB
<u>Acoustic improvement (where no access to Lath &amp; Plaster ceiling below) of an existing 30mm Lath &amp; Plaster ceiling: Fit 100mm REDUC® SoundSlab continuously between the joists and float REDUC® Foundation 39 onto the joists.</u>	54 dB	46 dB	56 dB

## Flanking Transmission

The performance figures quoted above are based on test results for 225mm timber floors using the components indicated 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 not detailed correctly, the acoustic performance will be limited and Building Regulation requirements may not be achieved in practice.

The information contained in this data sheet is believed to be correct at the date of publication. The information is based on our general experience and is given in good faith but because of the many factors outside our knowledge and control which may affect the product no warranty is given or is to be implied with respect to such information. H&H Acoustic Technologies Ltd reserves the right to alter or amend the specification of their products without notice as their policy is one of constant improvement.