



# **REDUC<sup>®</sup>** FireFloor

The REDUC® FireFloor system comprises two components, FireMesh and FireWool. Its primary purpose is to upgrade an existing 30 minute fire rated ceiling i.e. lath and plaster or a single 12.5mm plasterboard layer to 60 minutes. FireFloor provides the perfect solution when access to the ceiling below is not available.

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# **Key Features and Benefits**

- Creates a one hour fire rating
- No access to ceiling required
- Upgrade fire rating from floor level
- No increase in floor height
- improved acoustic performance
- Simple installation

Data Sheet: 2015 Issue 02

# **REDUC<sup>®</sup> FireFloor**

# Applications

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

# Fire Performance

Achieves Euroclass Reaction to Fire Class A1 when tested in accordance with BS EN 13501-1

The REDUC® FireFloor system was tested by TRADA in 1985 in accordance with the provisions of BS 476: Part 8: 1972, and achieved the fire resistance periods stated below, based on a uniformly distributed load of 1.623 kN/m2 for the duration of the test and 24 hours thereafter.

Stability	:	60 minutes
Integrity	:	60 minutes
Insulation	:	60 minutes

Building Regulations Part B (2000) states that BS 476: Part 8 is still valid for products tested before 1988. Applications made to Building Control AFTER 6th April 2007 should follow the guidance contained in the latest Approved Document B (Volumes 1 and 2).

# Dimensions and Weight

Component	Unit	Nominal Dimensions/Coverage		
		Thickness	Length/ Coverage	Width
REDUC <sup>®</sup> FireWool	Slabs	100 mm	1000 mm	880 mm
REDUC <sup>®</sup> FireMesh	Rolls	Nominal	50 mm	1200 mm

### m Acoustic Performance

Elear Construction / Test Data	Airborne Sound		Impact Sound
Floor Construction / Test Data	D <sub>nT,W</sub>	D <sub>nT,W</sub> + C <sub>tr</sub>	L <sub>nT,W</sub>
Existing untreated structure: 30mm lath and plaster ceiling in good condition or single layer of 12.5mm plasterboard direct fixed to the ceiling below with 22mm tongue and grooved flooring.	43 dB	35 dB	70 dB
<u>Treated Structure:</u> improvement to untreated structure using 100mm FireFloor fitted between the timber joists and REDUC <sup>®</sup> Micro 17 overlaid on the floor boards.	51 dB	43 dB	58 dB
Treated Structure: with REDUC® Micro 21 / 1175 x 575 x 21mm.	52 dB	44 dB	57 dB
Treated Structure: with REDUC <sup>®</sup> Strata Extra / 1175 x 575 x 35mm.	53 dB	45 dB	56 dB
<u>Treated Structure:</u> with REDUC <sup>®</sup> Soundmat / 1200 x 1000 x 12mm. *indicative test data	*50 dB	*43 dB	*45 dB
<u>Treated Structure:</u> with REDUC <sup>®</sup> Foundation 35 / 2400 x 600 x 35mm T&G board laid directly on to the floor ioists.	54 dB	46 dB	56 dB

### **Flanking Transmission**

The acoustic performance figures quoted on the data sheet are based on 225mm depth timber joisted floors and the ceiling construction indicated using the components suggested. These performance figures 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.

H&H Acoustic Technologies Ltd., **Earlstrees Industrial Estate** Corby, Northamptonshire, NN17 4AP T: 01536 270450 E: info@acoustictechnologies.co.uk www.acoustictechnologies.co.uk

# Technical Advice

# **Main Stallation and Fixing**

Strata Extra 35mm.

Please consult our website for product information and fitting instructions or contact us for more detailed guidance.

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.

Remove existing floorboards above the ceiling to be treated. Mechanically fix FireMesh around the profile of the existing timber joists and the ceiling to form a supporting cradle. Friction fit FireWool between the joists at ceiling level ensuring that there are no gaps between the joists or FireWool joints. Re-instate the original floor boards onto the joists, or consider installing REDUC® Foundation 35 directly onto the joists providing a high performing acoustic upgrade with a minimal 17mm height increase. Alternative REDUC® acoustic overlay products and accessories are also available, SoundMat 12mm, Micro 17mm, Micro 21mm or Reduc®

Acoustic Technologies

