

**PRO)))SOUND™**

Ceiling Soundproofing Systems

**REDUCTOCLIP™  
TIMBER JOIST  
CEILING SYSTEM**

Creating Peace and Quiet In Your Home



The ProSound™ ReductoClip™ ceiling system is the **slimmest** and **highest performing** independent ceiling system (60mm) on the market.

Delivering the highest level of soundproofing for your home against heavy footstep noise and loud airborne noise.

## PERFORMANCE

Excellent performance against noisy neighbours and the perfect solution for recording studio ceilings

## SAVES SPACE

The slimmest independent ceiling system on the market (60mm)

## INSTALLATION

Can be fitted by a good DIY'er, or tradesperson - with experience of fitting plasterboard

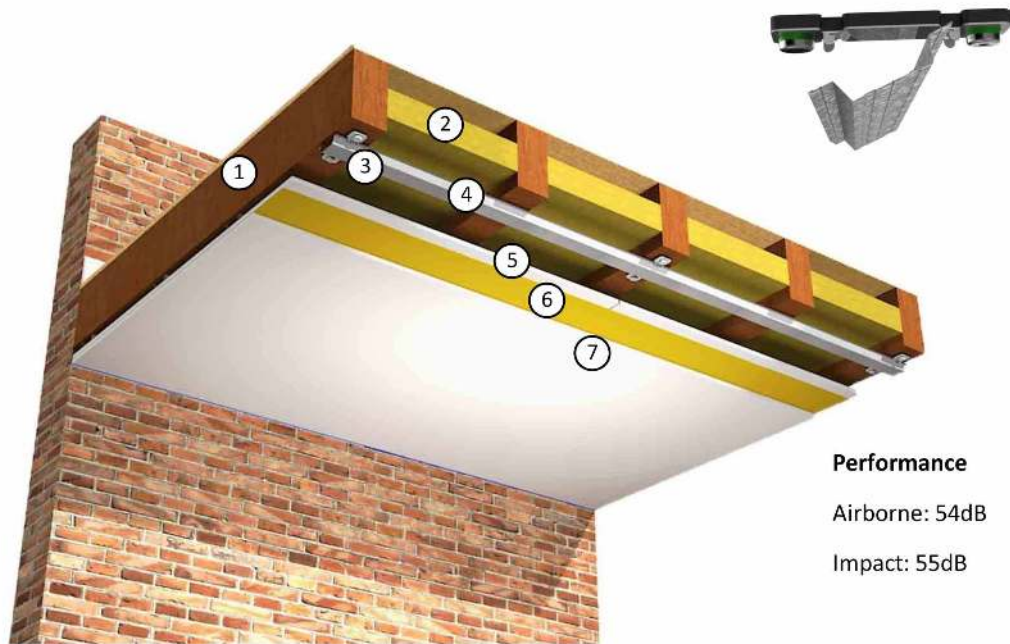
An innovative soundproofing solution designed to completely isolate ceilings. Delivering the highest possible level of soundproofing against impact noise such as heavy foot step noise from above, whilst also blocking loud airborne noise:

## BENEFITS

- High mass ceiling layers are decoupled from the structure - delivering exceptional performance against noisy neighbours through the ceiling
- Suitable for timber or concrete ceilings
- The perfect ceiling solution for recording studios, or band practice rooms
- Outperforms resilient bars by up to 7dB
- Space saving solution - minimal encroachment into living space (60mm)



## FEATURES



### Performance

Airborne: 54dB

Impact: 55dB

1. Timber Joist

2. 100mm 60kg Acoustic Mineral Wool

3. ReductoClip

4. Furring Channel

5. 15mm Acoustic Grade Plasterboard

6. Tecsound SY 100

7. 15mm Acoustic Grade Plasterboard

- 100mm Acoustic Mineral Wool added between the timber battens. This absorbs airborne sound in the cavity partitions of timber joists, significantly improving acoustic performance and reducing reverberation
- ReductoClips - able to withstand greater loads than standard clip systems, resulting in 1/3 less clips and a more cost effective system
- Reducto Furring Bar which outperforms standard resilient bar constructions by up to 7dB
- Acoustic grade plasterboard (15mm) - 50% denser than standard 12.5mm plasterboard. With a mass of 12.6kg per m<sup>2</sup> which reflects and converts high levels of sound energy into heat
- Tecsound SY 100 (self-adhesive) a specially developed thin 10kg per m<sup>2</sup> soundproofing material
- Acoustic grade (15mm) plasterboard - a further layer to increase airborne noise blocking capabilities

PERFORMANCE

Timber Joist Ceiling



Airborne Performance: 54dB  
Impact Performance: 55dB

Concrete Ceiling



Airborne Performance: 61dB  
Impact Performance: 55dB

Building Regulations Part E (UK) Requirements  
(Resistance to the passage of sound)

Purpose built dwelling-houses and flats

Ceilings

Dwelling-houses and flats formed by  
material change of use

Ceilings

Impact Performance  
(The lower the figure the better)

(Less than) 62dB

(Less than) 64dB

Airborne Performance  
(The higher the figure the better)

(Higher than) 45dB

(Higher than) 43dB

ReductoClip Ceiling System Specifications

Acoustic performance on a timber joisted ceiling

Impact Performance  
(The lower the figure the better)

Airborne Performance  
(The higher the figure the better)

With two layers of 15mm acoustic grade  
plasterboard and one layer of Tecsound SY 100.  
With acoustic mineral wool between joists.  
(Passes building regulations)  
60mm loss of space

**55dB**

**54dB**

Acoustic performance on a 140mm solid concrete ceiling

With two layers of 15mm acoustic grade  
plasterboard and one layer of Tecsound SY 100.  
(Passes building regulations)  
60mm loss of space

**55dB**

**61dB**

## TOOLS / ACCESSORIES REQUIRED

- Sharp trimming knife
- Handsaw/Jigsaw
- Plasterboard Lifter
- Screw fixings for attaching the clips to the ceiling (not provided)
- Self-Drilling Drywall Screws 50mm
- Self-Drilling Screws 25mm
- Acoustic Sealant 900ml / Jumbo Applicator Gun

**Please Note: The Plasterboards and Tecsound are heavy and we recommend two men for installation**

## FIXINGS

The hole in the ReductoClip has a diameter of 7.5mm for your fixing to go through

**Wood:** timber use 5-6mm dia screws x 65mm long (10–12Gauge if imperial)

**Concrete:** concrete or masonry use 5-6mm dia x 60mm long screws with suitable plug

**Self tapping screws:** For furring bar joins

**First Layer of Plasterboard:** plasterboard screws suitable for self drilling into a metal stud system at 25mm in length.

**Second layer of Plasterboard:** should be affixed using 50mm long screw into the channel

\*If your self tapping screws are struggling to pierce the furring bar, use a pilot hole beforehand

Use Fasteners that will have a minimum of 120lbs pull out or sheer strength in the wood, steel or concrete substrate.

DO NOT OVER TIGHTEN

## LOAD SPECIFICATION

The ReductoClip is designed to carry a furring channel with one or more layers of acoustic plasterboard attached.

The maximum design load capacity for the ReductoClip in sheer (wall application) or in tension (ceiling application) is as follows. Design load calculations are based on tested loading to failure where the furring channel deforms and pulls out.

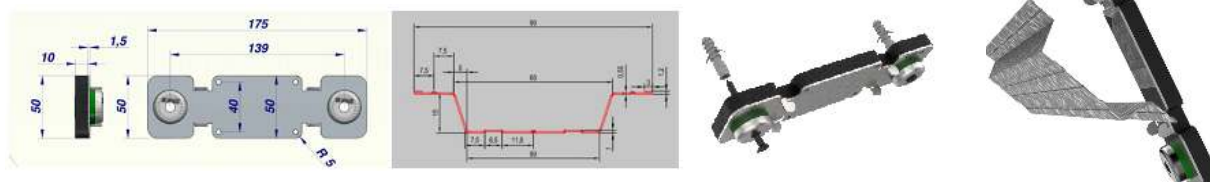
### **Design Load Maximum for Ceiling or Wall Application**

27kgs per ReductoClip when used with 0.6mm gauge furring bars

## REDUCTOCLIP REQUIREMENTS

To affix the ReductoClips to the joists/framing, secure ReductoClips with a single fastener on both ends only for timber. Use 5-6mm dia screws x 64mm long. For steel use the same 5-6mm dia self tapping screws, 40mm long. For concrete or masonry use 5-6mm dia x 60mm long screws into matching Rawlplug/Fischer fixing system.

Snap the Reducto furring channel into the ReductoClip by squeezing the furring bar. Or hand slide ReductoClips to proper location on the furring channel. Fasten both ends of the ReductoClip to secure the channel.



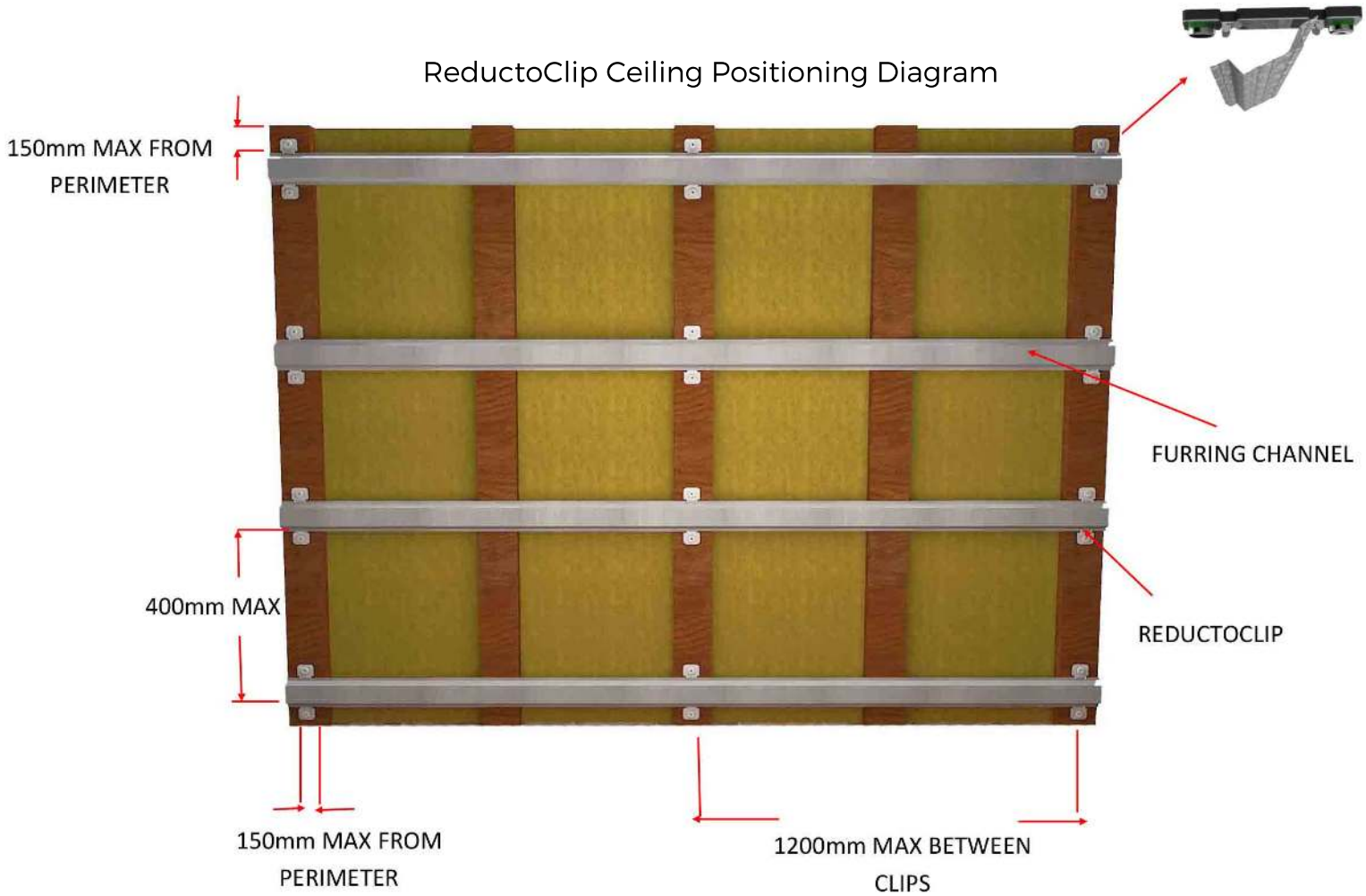
## FURRING CHANNEL REQUIREMENTS

Minimum 0.6mm ga with hemmed edge. Standard – 16mm deep channel. Splice furring channel with a 150mm overlap and secure overlapped pieces with wire or screws per standard industry practice.

To affix the 15mm acoustic plasterboard to the furring channels; for one layer use plasterboard screws suitable for self drilling into a metal stud system at 25mm in length.

When using two layers of plasterboard the first layer should be affixed using a 25mm long screw, the second layer should be affixed using 50mm long screw into the channel.

## REDUCTOCLIP CEILING POSITIONING DIAGRAM



## INSTALLATION - TIMBER JOIST CEILING

1. First Install 100mm Acoustic Mineral Wool between timber joists to stop sound resonating in the void space between joists. We recommend 60kg Acoustic Mineral Wool. Acoustic Mineral Wool should friction fit between joists with no fixing needed.



2. Position and fix the ReductoClips on the bottom of the timber joists, following the spacing guidelines (as shown on the positioning diagram on p7).

Maximum space between clips  
1200mm.

Maximum space between furring bars  
400mm.



3. Attach the furring channels to the ReductoClips making sure to overlap channels by 150mm and securing with 4 self tapping screws.



4. Tip! Before installing plasterboard layers, mark the locations of the furring channels on the surrounding walls in chalk or pencil. This will help you to locate the position of the furring channels later once the first layer of plasterboard is on and channels are no longer visible.



5. Install first layer of 15mm acoustic plasterboard using 25mm Self-Drilling screws..

Start in one corner ensuring to leave a 5mm gap around the perimeter between any boards and the surrounding walls. Secure the plasterboard to the furring bars with dry wall screws. (Do not screw through to the timber and short circuit the furring bars.)



6. (If not using an acoustic membrane between plasterboards). Finish installing the plasterboards. If necessary join two plasterboards in line with the furring bars to enable secure fixing of the plasterboard where they join.

Fill in any small gaps with acoustic sealant. Cut any holes as necessary for electrics.

7. Installing Tecsound SY100. Tecsound is self adhesive and requires no fixings or secondary adhesive. Lay plasterboard for the second layer flat on the floor. Stick Tecsound to the top of the plasterboard, making sure to cover the entire board. TIP! You may find it easier to cut the Tecsound into smaller, more manageable pieces, rather than trying to stick the entire piece down in one go. Tecsound is very sticky and is difficult to remove if stuck down incorrectly.



8. Apply the final layer of plasterboard, (once the board has been fully covered with Tecsound). You can then lift the board up to the ceiling and fix in position, sandwiching the Tecsound between the two plasterboards. Make sure to start the second layer from the opposite side, so that plasterboard joints are staggered. Remember to leave a 5mm gap around the perimeter.

9. Fill the gap around the 5mm perimeter with acoustic sealant. Any small gaps between plasterboard sheets can also be filled with sealant.

Acoustic Sealant



10. If installing downlighters, use acoustic downlighter covers to minimize the weakness created by holes in the plasterboard. Alternatively, use new LED fire rated downlighters.

You are now ready for a plaster skim finish, or standard plasterboard finish

## CROSS SECTION OF THE INSTALLED SYSTEM ON A TIMBER JOISTED CEILING

Diagram 10 of 10



## INSTALLATION SYNOPSIS

- Spacing of clips on the furring channel shall be a maximum of 1200mm
- Spacing between furring channels shall be a maximum of 400mm
- Only use the supplied Reducto furring channel
- The ReductoClips should be within 150mm of the ceiling perimeter at the end of the furring channel run
- The first row of furring channels at the ceiling perimeter should be a maximum of 150mm from the wall
- Do not overtighten the clips.. The clips should feel secure, without moving and without compressing the foam layer more than 1mm
- All potential sound leaks; gaps around outlets, pipe penetrations and the like should be sealed with a non-hardening acoustic sealant.



For a video overview  
**click here**

## REDUCTOCLIP™ SYSTEM CUSTOMER TESTIMONIALS

"From advice through purchase to delivery, I can thoroughly recommend this company. The delivery was a challenge due to it's location, however they persevered and got it here. Everyone is helpful and friendly. Customer service is key and every aspect of the supply chain has it in barrow loads!"

"Installed the ReductoClip system and had the first full night's sleep in two years! There is zero noise coming from next door. This is seriously life changing! Thanks so much! Highly recommend this company and the ReductoClip product."



**Excellent**

"Excellent product. Achieved a significant reduction in unwanted noise. Everything in the kit for the job. Very good overall experience."



"Fantastic advice from Phil and all the team especially when I had a few questions when installing the system."

"Really pleased - it has done exactly what we wanted - noisy neighbours are no longer noisy!!! Thank you."

"Can not fault product or service. Friendly knowledgeable and always answer any questions promptly. I would highly recommend soundproofing store, it's made a huge difference in our house."

## PLEASE NOTE

- If you are employing fitters, please do not schedule or start any installation work until you have received your order
- Delivery will be on a pallet and will be wheeled as close to your property as possible. (Unfortunately our haulier cannot take the goods into your property)
- Due to the weight of the materials, they will require two people to carry them indoors
- Please note that our products have a great deal of mass, and will add weight to your structure. You may need to check with a structural engineer to ensure compatibility

## SPECIFICATIONS



Size - 60mm build up from the bottom of the timber joist to the final layer of plasterboard



Thermal - thermal conductivity 0.24W/mK / thermal resistance:  
15.0mm = 0.06.m2 K/W



Fire - fire rating 60 minutes



Weight - 35.7kg per m2