



INSTALLATION GUIDE

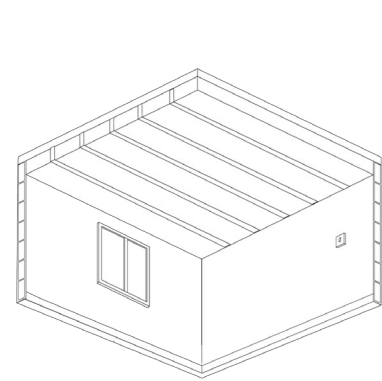
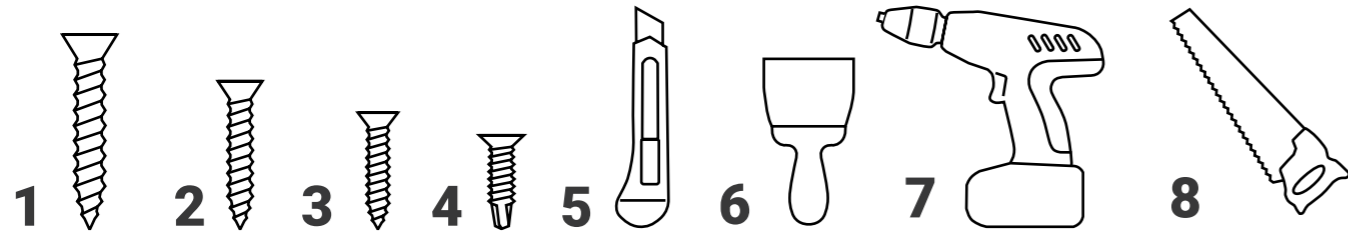
# Gold Ceiling System

Ceiling soundproofing solution for impact and airborne noise issues.

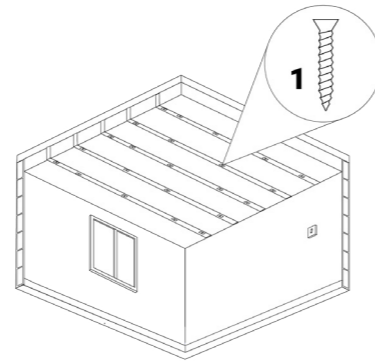


## Installation overview

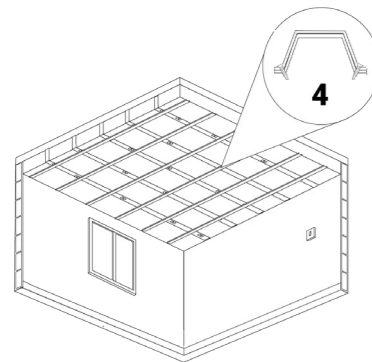
1. 60mm Wood Screws
2. 50mm Fine Thread Dry Wall Screws
3. 32mm Fine Thread Dry Wall Screws
4. 20mm Steel Self-Tapping Screws
5. Stanley Knife
6. Sealant Spatula and Gun
7. Drill
8. Saw or Serrated Knife



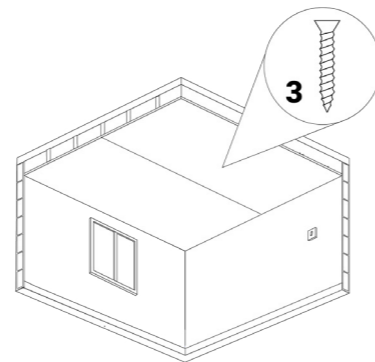
**1**  
Remove your current ceiling surface. Saw acoustic mineral wool to snugly fit in the cavity spaces between joists.



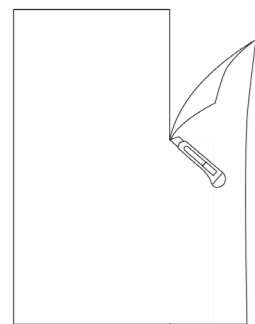
**2**  
Fix the MuteClips to the joists in our diamond formation. Clips should not be over tightened to the joists.



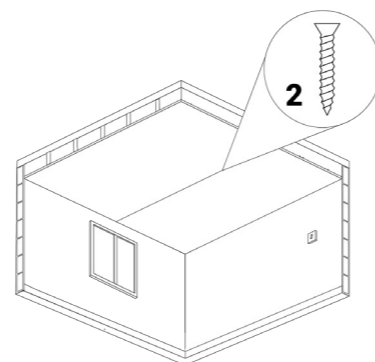
**3**  
Clip the furring channels to the MuteClips. Overlap lengths of channel by 200mm and secure with 2 screws in each shoulder.



**4**  
Fit panels to the joists, leave a 2-5mm gap around the perimeter of the whole ceiling. Fill all gaps with acoustic sealant.



**5**  
Adhere the membrane to the last layer of panels before fitting the panels. Cut membrane to panel size with a knife.



**6**  
Fix the panels, staggering the joins from the previous layer and retain the 2-5mm gap. Fill all gaps and crack with sealant.

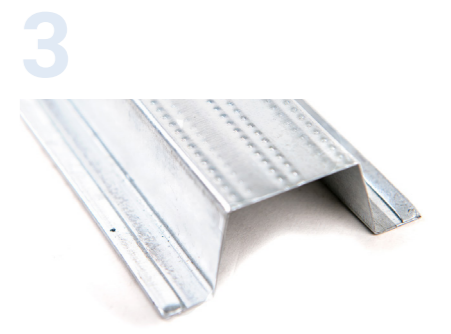
## System Components



**1**  
Acoustic mineral wool of 60kg/m<sup>3</sup> or more is best for ceilings. The high mass gives it acoustic properties thermal insulation doesn't have.



**2**  
MuteClips are mini shock absorbers that create a physical separation in a structure, offering our highest sound reduction from one intervention.



**3**  
MuteClip channels clip into the MuteClips to hold the soundproofing panels away from the existing structure. This is what panels are screwed into.



**4 & 6**  
Acoustic plasterboard has a higher mass than regular panels and will reflect airborne noises. These are screwed into the MuteClip frame work.



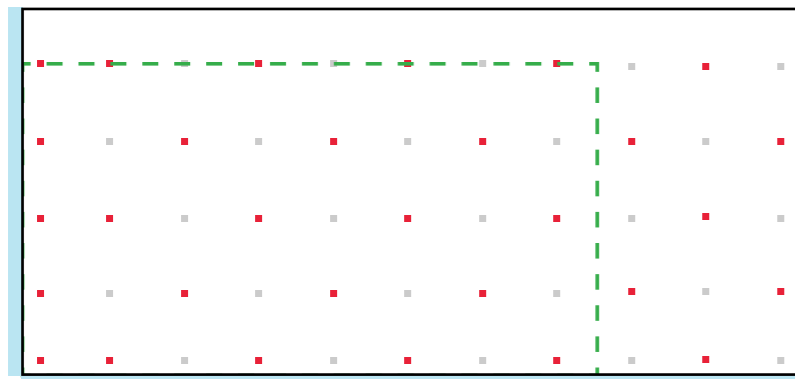
**5**  
Tecsound is a visco-elastic membrane with high mass and flex. This reflects more noise and help absorb vibrations in the structure, similar to our MuteClips.



**iKoustic**  
Creating Quieter Spaces Together

Find out more about soundproofing materials on our website where we have a full glossary of materials for you to read through.

# How to use the MuteClip Placement Template

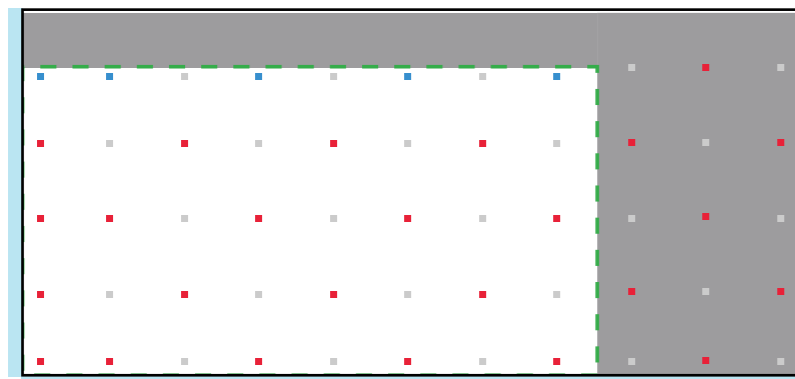


■ Clip placement   
 ■ No clip required

**1**

Accurately measure your ceiling. Mark your dimensions on the template, measuring out from the **bottom left corner**.

**Delete** a row or column that runs through the perimeter outline of the ceiling. In our example this applies to the top row. Note that these columns are based on a normal joist spacing of 400mm as all MuteClips must be screwed into joists.

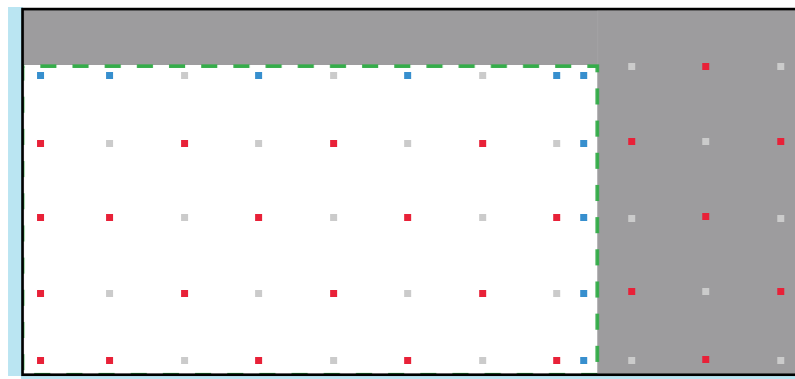


■ Mark your own new clips

**2**

Create a new row of MuteClips **<100mm** from the **top edge**. This might place the two top rows closer together than normal, which is not an issue.

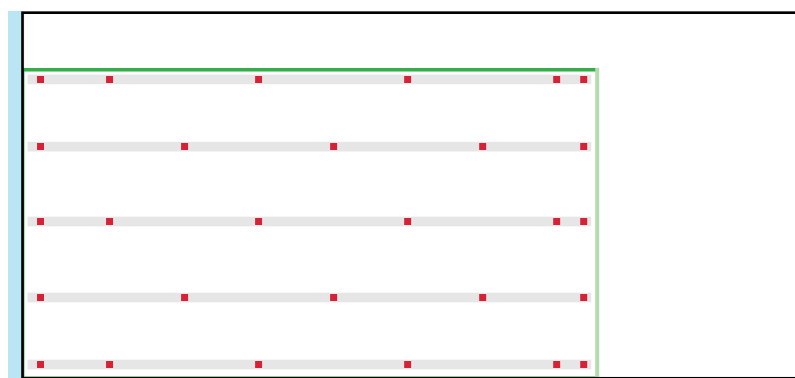
Note that the MuteClip row layout **alternates every other row**. Copy the layout from the **deleted row** above to retain the pattern.



■ Mark your own new clips

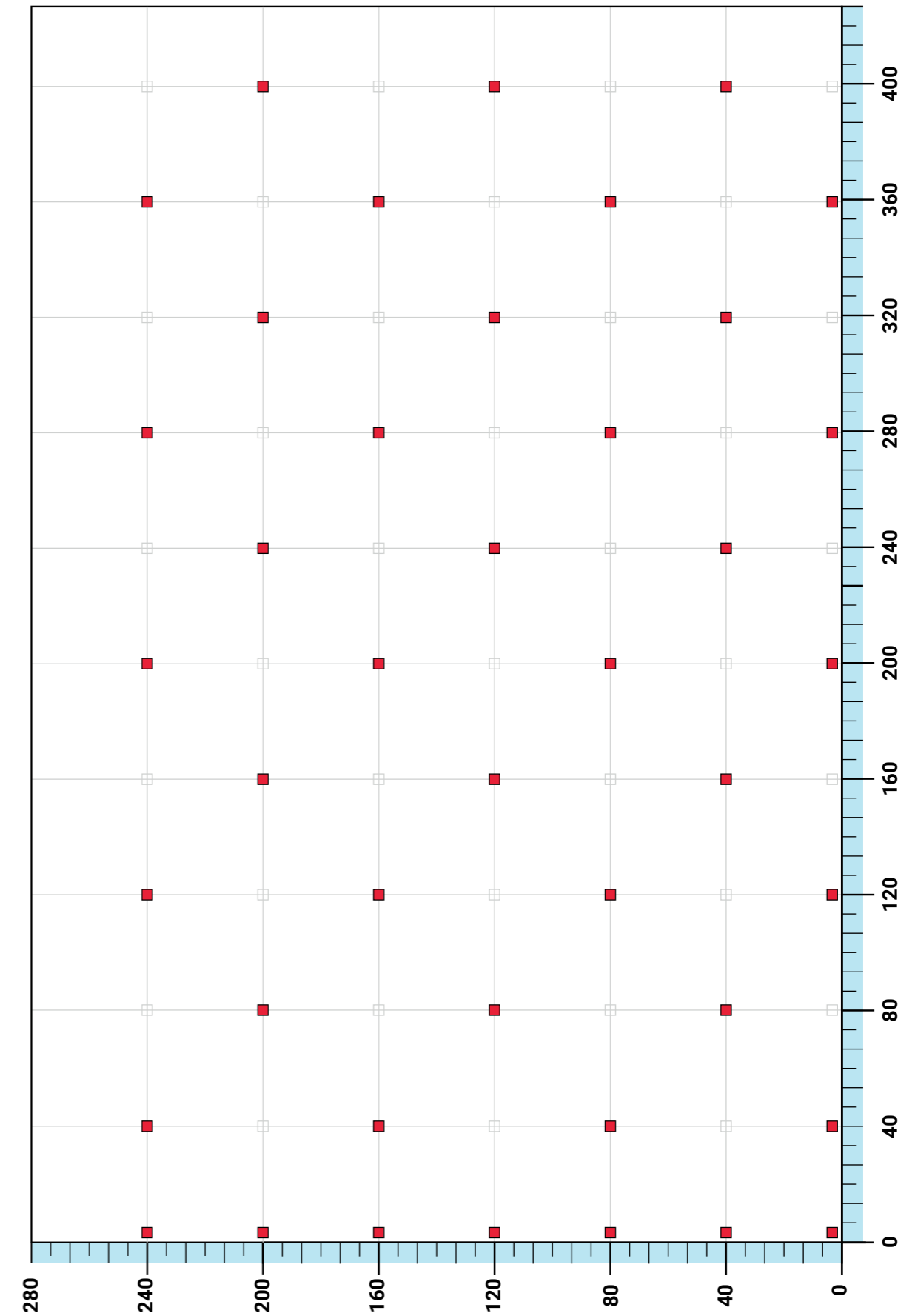
**3**

Finally, add an extra MuteClip to the end of every row down the right hand side. Mark these **<100mm** away from the perimeter. It is fine for this clip to be closer to the previous fixing than normal.



The red dots show where MuteClips need to be fixed to your wall. Through the clips, metal furring channels will be placed. Use the sheet opposite to create your own template and the instructions over leaf for detailed installation method.

## MuteClip Placement Template



## Ancillaries required

- **Acoustic sealant**, this is needed to seal gaps and cracks between layers. Making a system airtight improves the soundproofing quality and this sealant also dissipates vibrations.
- **Scrim tape**, this is used over joins between acoustic plasterboards and offers good adhesion with a skim plaster layer.
- **60mm wood screws**, these are used to screw the MuteClips to the wooden joists
- **20mm self tapping screws**, these are used to secure two lengths of furring channel together.
- **32mm fine thread dry wall screws**, these are used to join the first layer of plasterboard to the furring channels.
- **50mm fine thread dry wall screws**, these are used to join the second layer of plasterboard to the furring channels.

## Tools required

- **Saw or serrated knife**, either tool can be used to cut through acoustic mineral wool with ease.
- **Drill**, use to attach MuteClips and layers of boarding.
- **Cutting tool**, a Stanley knife, or similar, is used to cut both plasterboard and Tecsound.
- **PPE**, gloves, mask and goggles are suggested when handling acoustic mineral wool.
- **Tin snips**, can be used to cut the furring channels to the correct size.
- **Sealant gun and spatula**, these are needed to correctly apply the acoustic sealant.
- **Plasterboard lift**, optional, but relatively inexpensive to hire. This is a very safe and easy way to lift and position your boards.

## FAQ's

### Can I soundproof over my existing ceiling?

No, you shouldn't soundproof over directly your existing ceiling as it causes issues with the system. You can soundproof over the ceiling only if you add a wood batten frame first, however, your soundproofing is less effective and this takes up far more headroom.

### Can I use ordinary fiber glass insulation instead of acoustic mineral wool?

No, this won't work as standard wall and ceiling insulation has thermal properties, not acoustic. To be acoustic it needs a density of 45kg/m<sup>3</sup> or more. For ceilings we always recommend 60kg/m<sup>3</sup> or more.

### Can I reinstate my coving?

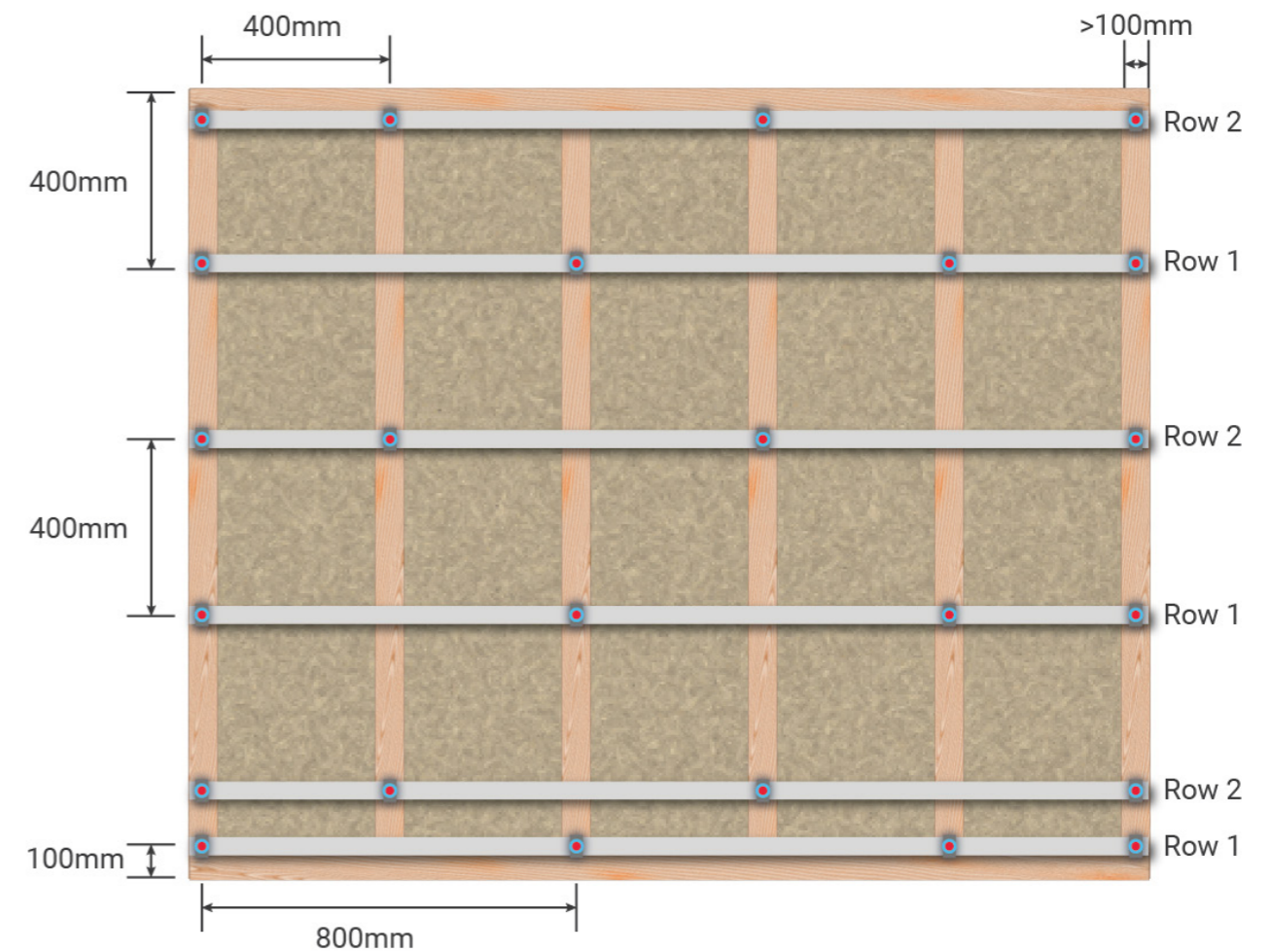
Best practice is not to reinstate ceiling coving when you are soundproofing a wall or your ceiling. However, we understand that many people enjoy this feature and so we have a simple method for reinstating it after your soundproofing has been completed. It's a simple process and is outlined in this installation guide for you.

### What about my lights?

We recommend installing a pendant light fixing as this only creates one small hole in your soundproofing layer. Downlights create many weak areas and are not ideal. If you want to keep your downlights, use the acoustic downlight covers to seal the holes up better.

### Alcoves and chimney breasts

If you have awkward features, such as alcoves and chimney breasts, then you can find out how to soundproof around these with our additional guide which can be found on our website, or click here.



## MuteClip Configuration - Timber Ceiling

To create your new soundproofing frame we need to install the clips in a specific pattern we call the 'diamond formation' this formation can be scaled up or down to suit practically any wall.

- Begin by marking out the spacing for each channel row.
- Starting from one end and measure in **<100mm for the first row**.
- For the second row, start from the **perimeter of the ceiling** again and measure in **400mm**.
- For the third row, start from the **perimeter of the ceiling** and measure in **800mm**.
- Rows are spaced **400mm** apart but it is most accurate to measure from the ceiling perimeter.
- The final row should be **<100mm** from the ceiling perimeter but no more than **400mm** from the previous row, (sometimes this places two rows closer together, this is not a problem.)
- Now mark the first and last MuteClip position for each row **<100mm** from the perimeter of the ceiling.
- To create a diamond layout for the clips, the second clip changes position every other row.
- For the first row, (Row A layout), mark the second clip at **400mm** from the first clip.
- To complete this row, mark the remaining clips **800mm** apart. (This will likely place the last two clips closer together than 800mm which is fine. Never place clips further than 800mm apart).
- For the second row, (Row B layout), the second clip is spaced **800mm** from the first clip, (onto the second vertical stud), **not** 400mm away. This will create the diamond layout you can see.
- Space the rest of the clips **800mm** apart as normal.
- For the third row return to Row A layout. The layouts should alternate Row A, Row B until the wall is complete.
- To fix the MuteClips to the wall, use 5mm x 60mm wood screws.

## GOLD CEILING Installation Video

Follow the step by step installation video below to see how this system is installed. Scan the QR code, or, click the image below to get started.



## GOLD CEILING Written Installation Guide

We recommend hiring a plasterboard lift for this installation as it's the easiest, and safest, way to move the heavy boards. Use the MuteClip installation guide on the previous page to measure and mark your layout.

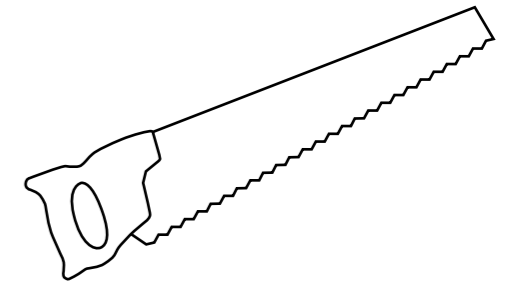
### Step 1

- Remove your current ceiling surface.
- Strip it back to the joists and remove any thermal insulation.
- If you have dot and dab plasterboards on your walls, cut into the top of these by the system depth of **74mm**.



### Step 2

- Cut acoustic mineral wool for the cavities.
- Use a serrated knife, or, cut the slabs all together whilst still in the wrap with a saw.
- A tip is cut them slightly wider than the joist gap to create a snug fit.
- This prevents slipping and avoids the need to wire them in.



### Step 3

- Pack the cavities with acoustic mineral wool.
- They will hold by friction.
- If they are cut too small and slip, use wire to hold it in.



### Step 4

- Use the installation diagram to mark out the MuteClip placement in a diamond formation.
- Screw into the joists with **60mm wood screws**.
- Don't over tighten the screws as this reduces the performance by making them rigid.
- The clips should be able to twist, slightly.



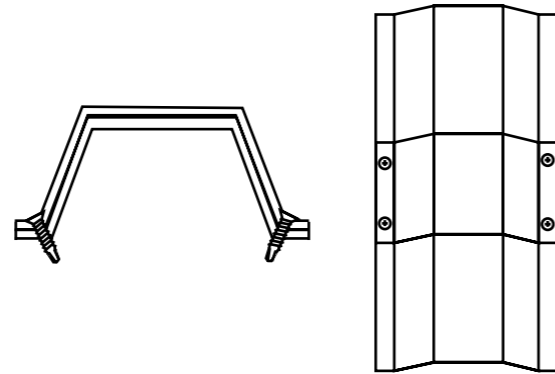
### Step 5

- Compress the furring channel and fit it into the MuteClip claws.
- The channels should not touch the adjacent walls, leave a **2-5mm** gap at either end. Packers can be helpful to ensure this.



#### Step 6

- Cut channel lengths that are too long with tin snips.
- To join two lengths, create an overlap of **200mm**.
- Through the shoulder, screw two **20mm** self tapping screws on each side. A total of four.
- This join **must not** occur through a Muteclip.
- Mark the central location of each channel row on the adjacent walls to help you line up screws later on.



#### Step 7

- Mark the location of your joists on the walls so you can find them after the first layer of plasterboard is installed.
- Measure your ceiling to calculate the number of boards. If the final piece will be very small, cut the penultimate board smaller to fit two medium sized boards instead.
- To cut these to size, score and snap with a sharp blade.



#### Step 8

- Use packers between the boards and walls to create a **2-5mm gap** around the ceiling perimeter.
- Screw the boards to the joists with **32mm fine thread drywall screws**.
- A plasterboard lift is best for this situation as soundproofing materials have a lot of mass.
- Fill the gap, and joins between boards, with acoustic sealant.



#### Step 9

- Before installing the membrane layer, measure, score and snap the second layer of acoustic plasterboards.
- The visco-elastic membrane (layer 2), should be bonded to the back of these boards.
- This makes the membrane easier to install as it is heavy and flexible.



#### Step 10

- Peel back the clear film and press the membrane onto the brown side of the acoustic plasterboards.
- Smooth along it to expel air bubbles as you go. Should one become stuck, release the air with a small slit.
- Trim the edges to fit with a sharp blade.



#### Step 11

- Use the plasterboard lift to install this final double layer.
- This should be screwed into the furring channels. Use the marks on the walls to create guide lines.
- Leave a **2-5mm** gap around the perimeter of the ceiling, use packers to assist you.
- This layer requires **50mm fine thread dry wall screws**.



#### Step 12

- Use acoustic sealant to fill the perimeter gap and gaps between boards.
- Do not use a caulk because it has an inflexible set.
- Cover joins between boards with scrim tape, ready for a skim plaster layer.



#### Step 13

- Skim plaster straight over the boards.
- To reinstate coving, adhere it to the wall only.
- Create another **2-5mm** gap from the ceiling.
- Fill this gap with acoustic sealant.

