

Our ref: 1950/PA/160120/DL



16th January 2020

Lesley Wells,
Planning Department,
Havant Borough Council
Public Service Plaza
Civic Centre Road
Havant
PO9 2AX

Dear Lesley,

Further to the conditional approval APP/19/00157 please find detailed below and attached the requested information to discharge the conditions.

Your Ref: APP/19/00157

Ref: information for the discharge of conditions (Eastleigh House, Bartons Road, Havant, PO9 5NA)

Condition 6 – Prior to the commencement of work, details shall be submitted to and improved in writing by the Local Planning Authority to show:-

- a) The means of upgrading the existing doors and frames to meet the prescribed fire safety standards and/or**
- b) The design and construction of any new fire doors/glazed screens.**
- c) The design location and method of fixing any new fire prevention/detection systems e.g smoke detectors, alarms.**
- d) The means of providing noise isolation between units.**

a) Existing doors and frames to be retained, The existing doors are of a solid timber construction, to accord with the requirements of approved Document B, retained doors that require fire rating will be removed fitted with intumescent seals (fitted into an 8mm machine routed rebate) and Re-hung in the original position.

b) No New Fire doors/ screens are proposed, If an existing door proves unservicable it will be replaced with a new purpose made hardwood timber door to the same style and dimensions of the door being replaced.

c) A new False ceiling will be utilised to hide any new Cabling and Containment, the ceiling will be set below the existing and offer both sound and Fire protection and protect and preserve the existing ceilings and plasterwork.(See Appendix A)

d) To accord with the requirements of approved document E whilst preserving the existing structure and finishes, an independent stud lining will be formed with in 70mm C stud

finished with 2 layers of sound bloc board with staggered joints, the resultant cavity will be part filled with Isover insulation.

We trust the above and attached are in order, however if you require any further information please let us know and we will provide without delay.



Derek Lindsay

Solent Design Ltd.

Appendix A

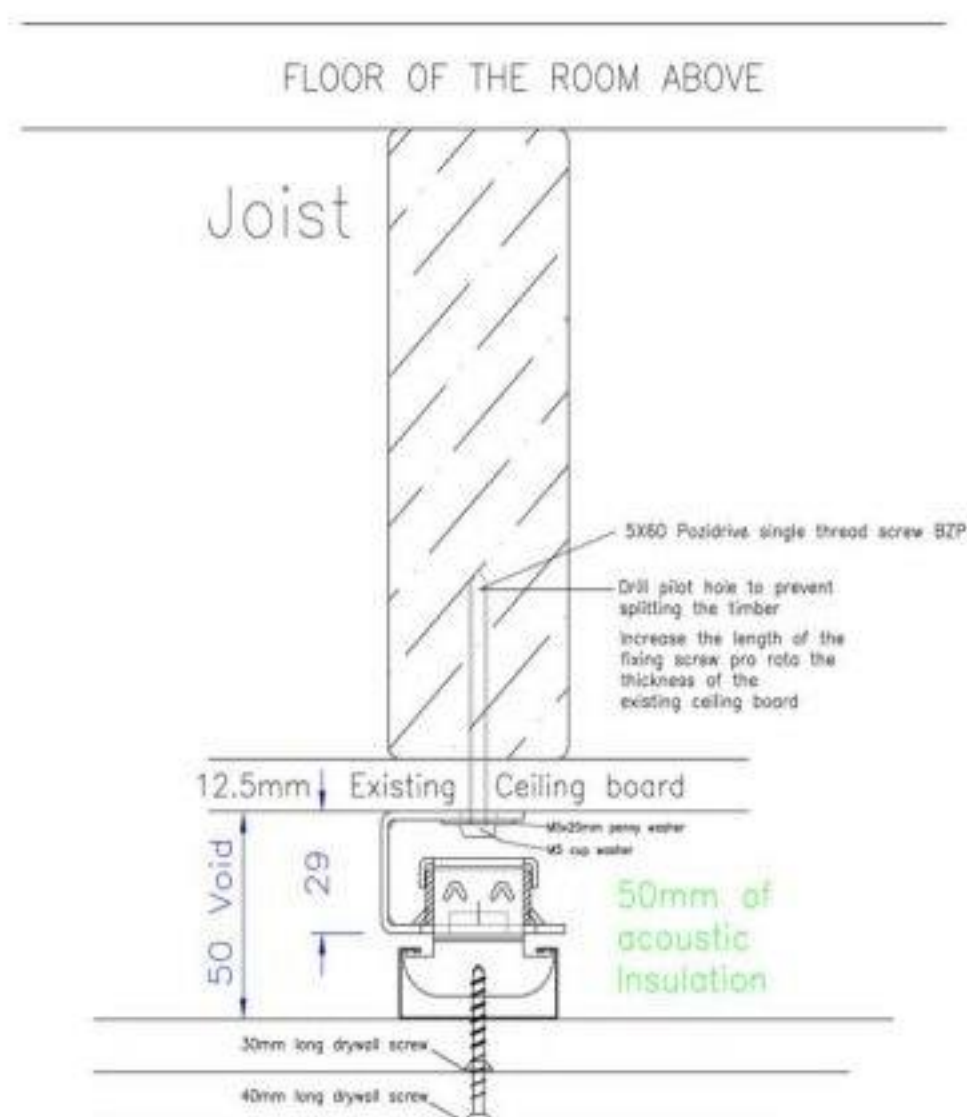
Iso-Mount Type2 Installation Guide - Option 2

OSCAR
Iso-Mount[®]



Fixing directly through existing plasterboard into timber joists without removing the old ceiling, using an extended hanger assembly

Buy Oscar Iso-Mount Type2 online



Calculate the weight of the ceiling

Ceiling boards, downlights etc, insulation, plaster and add 10% for fasteners etc.

NOTE: There will be a movement of several millimetres as the weight of the ceiling sits on the Iso-mount rubber blocks: if ceiling height is critical allow for up to 5mm. Do not fit heavy items to the ceiling boards without the approval of the board manufacturer. Increase the amount of Iso-Mounts appropriately to support the additional weight.

The maximum loading of each Type2 Iso-Mount is 18kg therefore 3 mounts per sq.mtr evenly spaced to spread the load, supports up to 54kg/sq.mtr.

A typical load calculation for 600mm void with insulation - kg/sq.mtr:

2 x layers of 12.5mm (0.5 inch) @ 10kg each - 20

200mm of 60kg/cu.mtr mineral wool insulation - 9

2 x mtrs of GL 1 'C' Channel - 0.5

3 x Iso Saddles - 0.1

Fixings, tape and plaster - nominal - 0.9

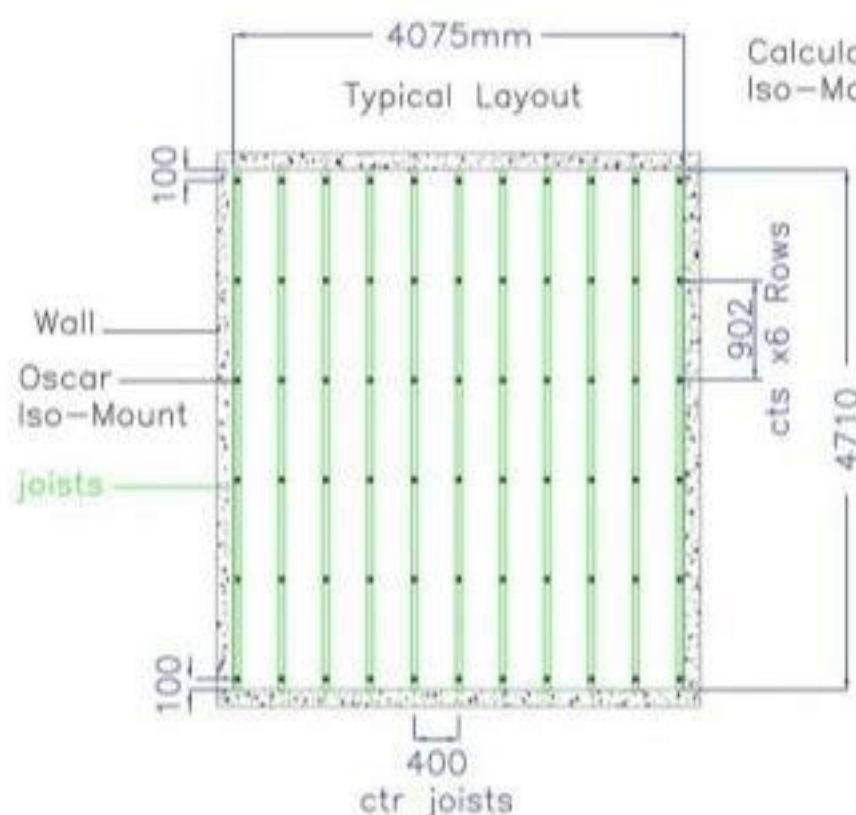
Total - 30.5

Calculating the positions and quantities of Iso-Mounts

This is easier if done to scale on paper first but for a quick calculation take the square meterage of the room and multiply by 3 + 15% for the quantity of Iso-Mounts. **E.g.** a 10m² room x 3 = 30 + 15% = 35 Iso-Mounts

NOTE: The 15% increase allows for the fixed joist positions reducing the flexibility of the Iso-Mount positioning.

1. Using a joist/stud detector mark the positions and direction of the joists. All screw fixing must be through the plasterboard and securely into the joists, away from the edges.
2. The Iso-Mounts nearest the walls should be fixed at a nominal 100mm from the walls and no further than 150mm from the walls.



Calculating the position and quantity of Iso-Mounts through Plaster Board onto 400mm ctrs timber joists

This room size is 19.19sq.mts.
Multiply by x 3 Iso-Mounts
per sq.mtr = quick estimate
of 58 + 15% = 67 Iso Mounts.

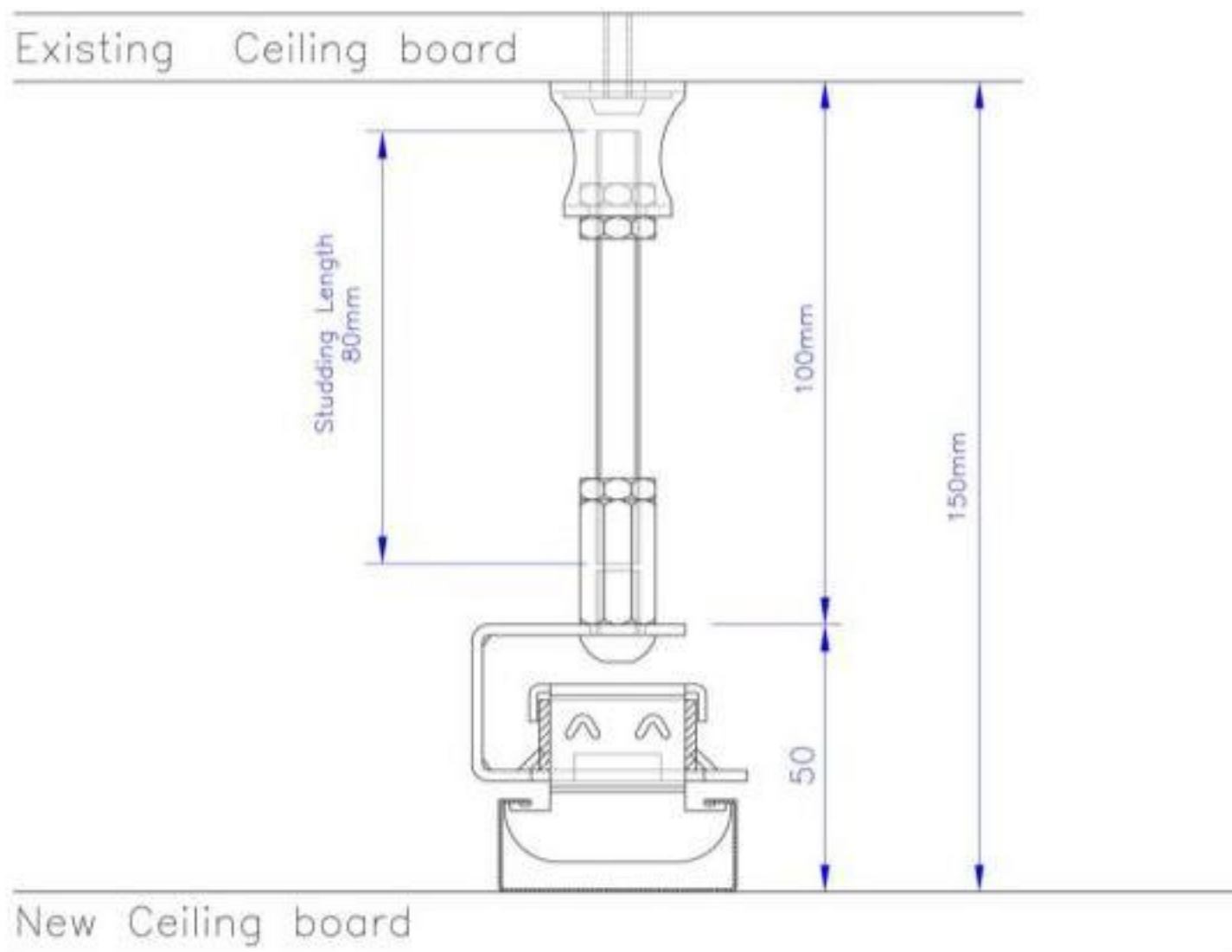
Nb 15% is added due to existing joist positions reducing the spacing flexibility.

Once layed out with 100mm gap to walls and evenly spaced the exact quantity of Iso-mounts required is 66 which is 3.44 mounts/sq.mt and over the minimum 3/sq.mt required for a 54Kg/sq.mt maximum loading.

3. Divide the space equally between the mounts positioned at the far ends of the joists (100mm in from the walls). The above example has 5 equal spaces of 902mm. Reducing to 4 equal spaces would result in less than 54kg/sq.mtr maximum loading capability.

4. With the position of the Iso-Mount marked on the existing plasterboard drill a pilot hole through the plasterboard and into the joist to prevent the timber from splitting when the screw is inserted.

NOTE: The top hole in the Oscar T2 ECJ Hanger is 10.1mm diameter and the screw is 5mm diameter, therefore it is essential to install an M5x20 steel penny washer to reduce the size of hole and an M5 cup washer to spread the load (all available from our shop - contact us for details). This feature gives some minor position adjustment before fixing.



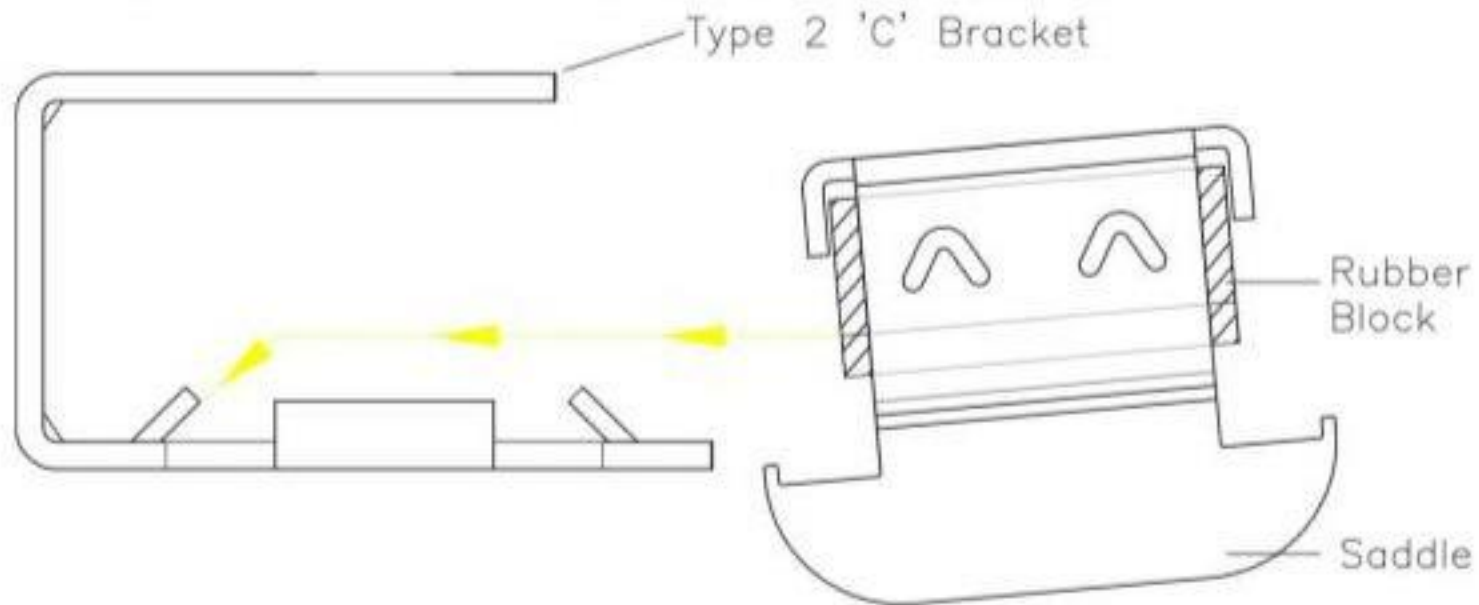
Using a 5 x 60mm pozidrive single thread screw, fix the Oscar T2 ECJ hanger through the single layer 12.5mm ceiling board and securely into the timber joist. If the ceiling board is thicker than 12.5mm; or more than 1 board used, adjust the length of screw used appropriately.

The length of studding will be approximately 70mm less than the depth of the void. **e.g.** 250mm void = 180mm long studding

- Insert the studding into the T2 ECJ Hanger with a locking (half) nut each side.
- Rotate a half locking nut onto the lower end of the studding followed by the M8x24 connector.
- The 'C' bracket of the Type2 Iso-Mount is then screwed to the M8x24 connector using an M8x12mm domed head socket screw.

- The distance from the underside of the existing ceiling to the top of the 'C' bracket should be 50mm less than the required void depth, when the required positioning is achieved tighten the locknuts.

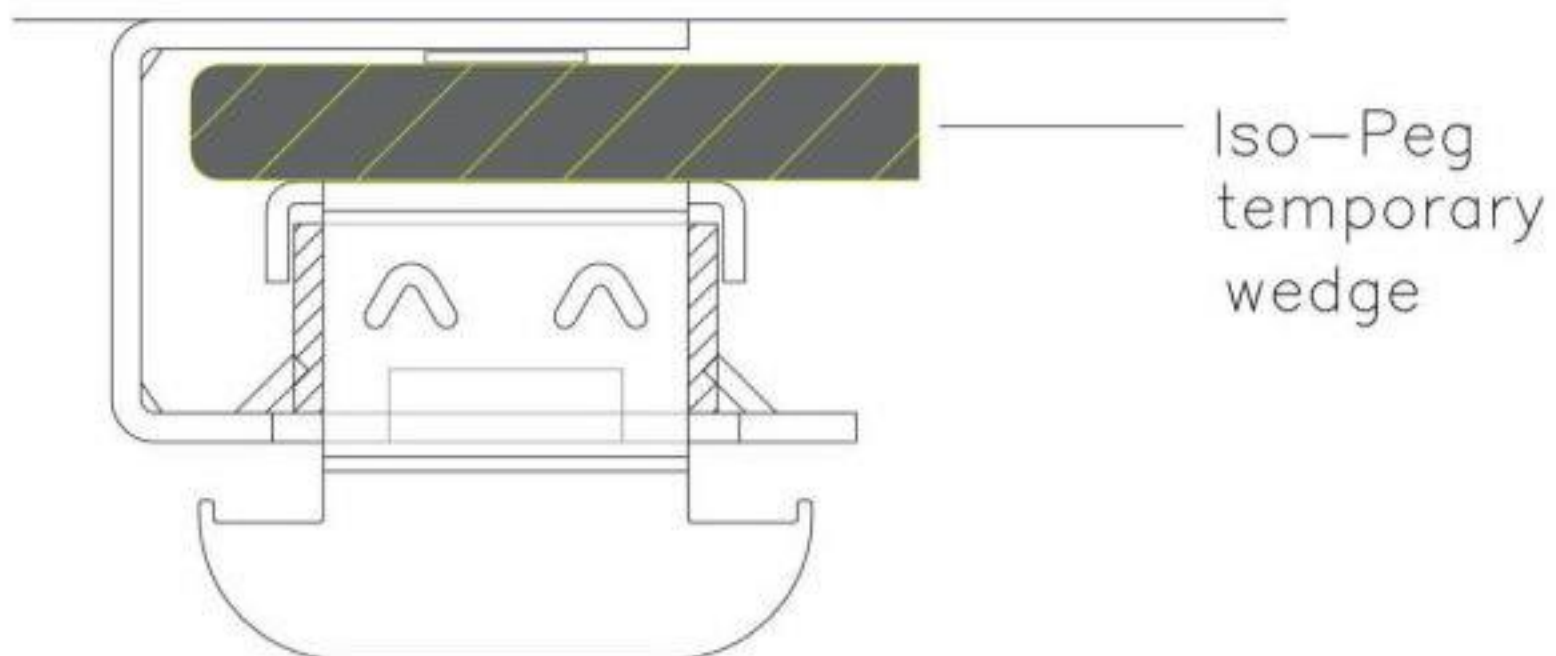
5. Ensure the 'C' Brackets are firmly fixed and levels are satisfactory.



Push the rubber block into the saddle. Then slide them into the 'C' bracket, compressing the rubber between the pronged upstands.

6. When all of the Iso-mount 'C' brackets are in position you are ready to assembly the other 2 components of the Iso-Mount: the rubber block and the saddle. Entry of these into the 'C' bracket is restricted so assemble the rubber block into position on the saddle first and then slide the assembly into position on the 'C' bracket.

THERE IS A TECHNIQUE to doing this which is quickly mastered, it involves compressing the rubber against the pronged upstands to achieve good location.



7. Once assembled and seating correctly slide the Iso-Wedge into position, this will prevent the Iso-Mount coming apart when the 'C' channel is installed.

NOTE: The Iso-Wedges are removed after the 'C' Channel is installed.

8. Before Clipping the 'C' Channel Into Position: The 'C' channel clips into place in seconds but is difficult to remove if you find that you need to reposition some Iso-Mounts. You may have to cut a section of 'C' Channel away to allow the rest to slide off the hangers – if 'C' Channel becomes distorted **DO NOT** re-use it.

9. Check again that you are happy with the fixed positions of all the Iso-Mounts.

10. With the mounts in position fix the GL1 Channel.

Fixing the 'C' Channels

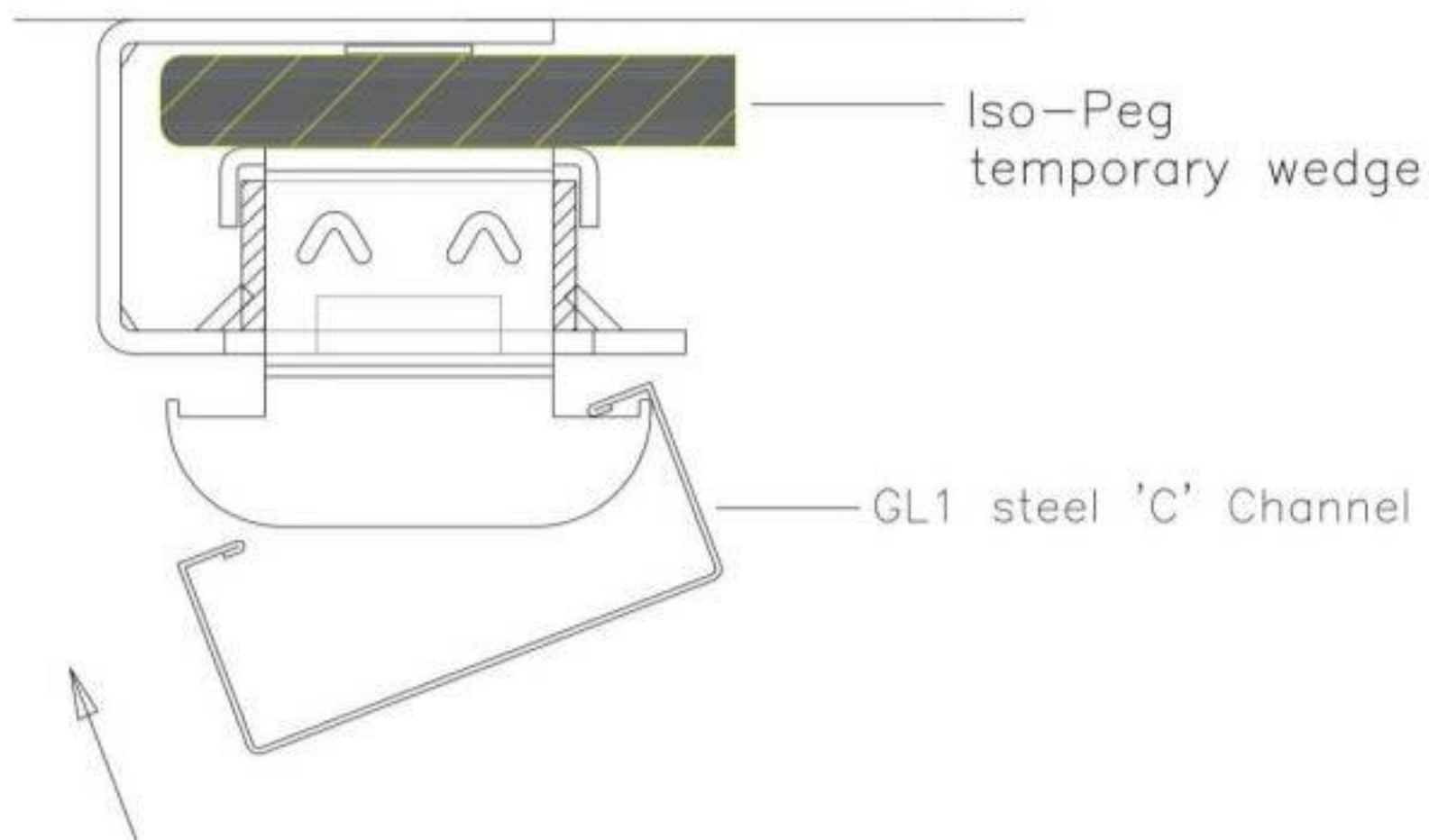
(Proprietary 48mm drylining channel)

These are the channels that the plasterboard will fix to with proprietary screws. Our preferred channel is British Gypsum GL1 and GL3 Channel connectors.

NOTE: Do not snap-fix the channel into position until you are satisfied it will not have to be removed again.



NOTE: The ends of the 'C' Channel must be no closer than 20mm (0.75inch) to the walls: the ceiling does not touch the walls, this could transmit sound.



1. Place Iso-Pegs between the top of the saddles and the 'C' brackets to hold the saddles in position whilst the 'C' channel is clipped on.
2. Hook a length of C Channel onto 1 side of the saddle of 2 Iso-Mounts that are at least 1 metre apart, then squeeze the C Channel and saddle between your thumb and fingers and the channel will snap-fix into position.
3. Repeat this along the rows of fixed Iso-Mounts.

Finally check

- The fixed C Channel is level and clear of the walls at both ends
- The Iso-Mounts are still correctly assembled
- The Iso-Pegs have all been removed

Fixing Oscar Foam

This fixes around the walls and the plaster board abuts to it, isolating the soundproof ceiling.

1. Mark a horizontal line around the wall at the calculated level of the underside of the floating ceiling, i.e. level with the underside of the plasterboard. When using 2 layers of 12.5mm plasterboard this will be 25mm, (1 inch), below the underside of the 'C' Channels.
2. Install 25mm wide x 10mm thick (1x3/8") self-adhesive Oscar Foam along this line with the bottom of the foam on top of and sitting 5 mm (3/16 inch) above the line – this allows for the foam to distort when compressed by the plasterboard and space for a bead of Oscar Seal flexible acoustic sealant.

NOTE: This will prevent direct contact between the plasterboard, and the wall: a potential path for vibration and noise transfer. Oscar foam and the Oscar Iso-Mount combined create the floating soundproofing ceiling.



Installing insulation – for smaller areas up to 100m²

Rockwool RW3 (60kg/cu.mtr (3.75Lbs/cu.ft) high density mineral wool slab.

Advantages:

- Can be purchased locally to the job
- Can be cut with a wood saw
- Does not require specialist installation machinery

1. Order material 100mm thick to part fill the depth of the void plus give an air gap between the insulation boards and the new ceiling board/s.

Mineral Wool is available in slab form in various thicknesses.

2. Cut the width to be a tight fit between the 'C' channels, butt joints tightly and fill all gaps.

3. Hold the boards in place using the manufacturers recommended adhesive to adhere the boards to the underside of the old ceiling.

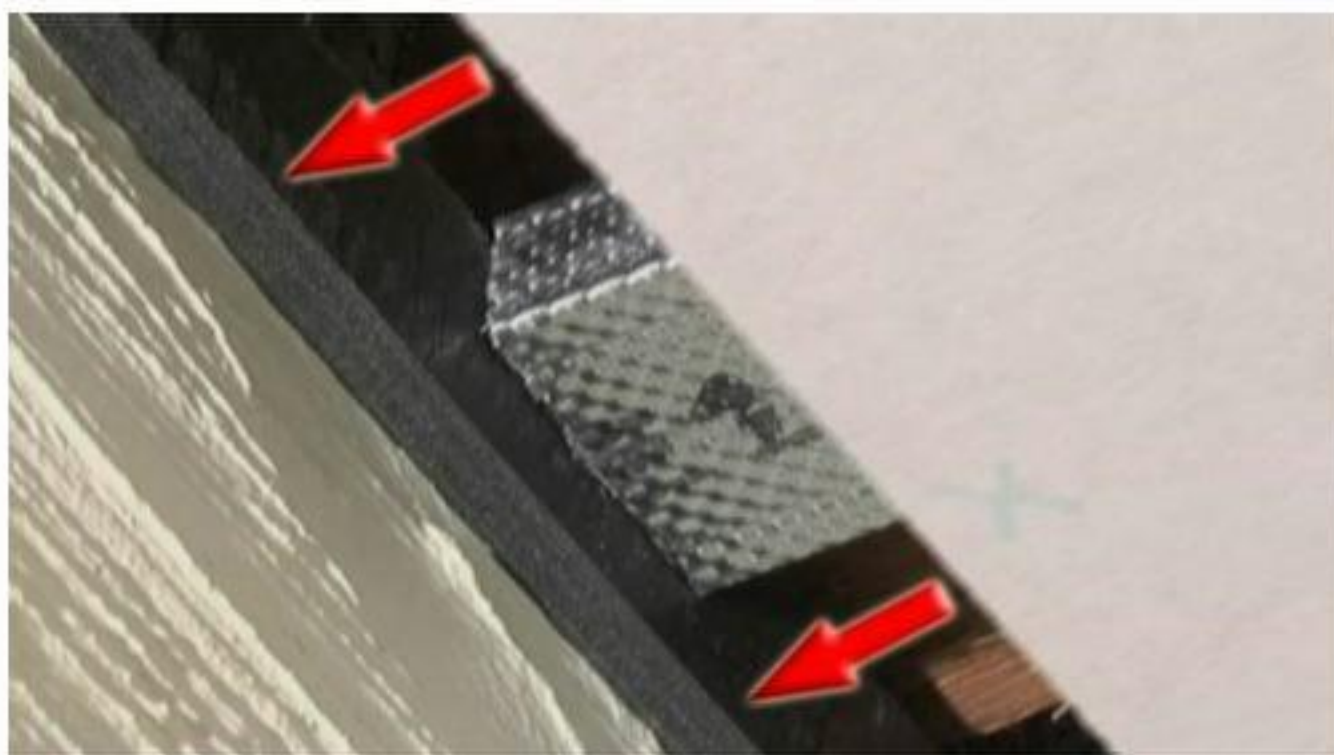
For large areas we recommend Celbar blown insulation – see Celbar section below

Fixing the plasterboard

1. Fix the first layer of 12.5mm plasterboard with 30mm (1.1/4inch) drylining screws which will self-tap into the 'C' channel.

Do not position screws under the joists or the Iso-Mounts where they may make contact and form a path for sound transmission. Keep the outer boards compressed into the Oscar Foam at the perimeter of the room. Keep gaps to the minimum and seal gaps with Oscar Seal.

2. For best results fix a second layer of plasterboard repeat the operation but stagger joints and use 38mm (1.1/2inch) drywall screws, seal gaps with Oscar seal keeping level or below the surface of the board, then tape and joint the ceiling ready for plastering.



Plastering

1. Plaster to the walls, i.e. plaster over the Oscar Foam that runs around the perimeter of the ceiling separating the acoustic ceiling from the walls.

2. Before the plaster is fully dry run a flat trowel or blade flat against the wall and through the new plaster to create a gap of 3mm minimum and break all direct contact between the new 'floating' ceiling and the walls

3. When the plaster is dry, tidy any nibs caused by creating the gap and seal the gap with Oscar Seal. Oscar Seal is an intumescent flexible acoustic sealant that can be painted over when dry.

The recycled non-hazardous, cellulose insulation that is blown into the void with special machines
For larger areas of 100m² plus

Full Celbar details

Celbar advantages:

- The best performing acoustic insulation.
- Non-itchy.
- Fire retardant.
- Up to 85% Recycled.
- The lowest embodied energy (the energy used to manufacture) in the insulation industry.
- Non-hazardous.
- Blown into the void completely filling all gaps
- A very effective thermal insulator and where there are multiple habitations very little heat energy will be lost to adjoining units. Thermal transmittance through a typical ceiling will be better than $U = 0.20\text{W/m}^2\text{K}$.
- Very economical for larger areas.
- Holiday Inn, Sheraton and Intercontinental Hotels use Celbar ceiling and wall insulation for minimum sound transmission between rooms ensuring guest comfort.

Contact us for a Celbar quote

**Celbar is manufactured by International Cellulose Corporation, Houston, Tx
ISO 9001: 2000 certification**

For non UK installations visit Celbar.com or email info@celbar.com for your local installer

Component Suppliers

Oscar Acoustics:

- Oscar Iso-Mount Assemblies
- 25x10x 10mtr rolls Oscar-Foam (1x 3/8 inches x 32.8ft)
- Oscar-Seal Acoustic Sealant
- Celbar Acoustic Void Fill (our recommended insulation for large areas)

Builders merchants:

- Plasterboard
 - 48mm GypLiner type GL1 lining channel and GL3 Channel connectors.
 - Fasteners
 - Mineral wool
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Important Safety Warnings

- Mineral Wool and Celbar are also thermal insulators. Bring this to the attention of your qualified electrician who may have to allow for heavier cables to prevent cables overheating and ventilation gaps around downlighters etc.
- Fix cables securely and note the positions to avoid drilling into them later.
- Use a suitable detector to avoid cutting into electrical cables and water pipes.
- Consult the manufacturers of the plaster board for fixtures to be fixed directly to the plasterboard. Use fastenings as recommended by the plasterboard manufacturer.
- Locate the joists (various tools are available from DIY stores for this purpose) and ensure that all screws that are fixing the Iso-Mounts are fixed through the plasterboard and securely into the timber joists away from the joist edges. Do not fix to plasterboard alone, this will not support the weight and is likely to lead to a failure of the ceiling, with injury or worse.
- Only competent persons fully conversant with the use of Personal Protective Equipment should carry out the soundproofing ceiling insta