

Guidance on Workmanship

for Better

Acoustic Performance

This booklet gives practical guidance to housebuilders on how to avoid the 'top ten' faults which can affect the sound insulation of party walls, party floors and their flanking constructions. Such faults can and often do lead to failure when constructions are tested to show compliance with Part E of the Building Regulations. It is therefore important to follow the guidance given. It applies equally to building conversions and new build projects. The various issues dealt with are as follows:

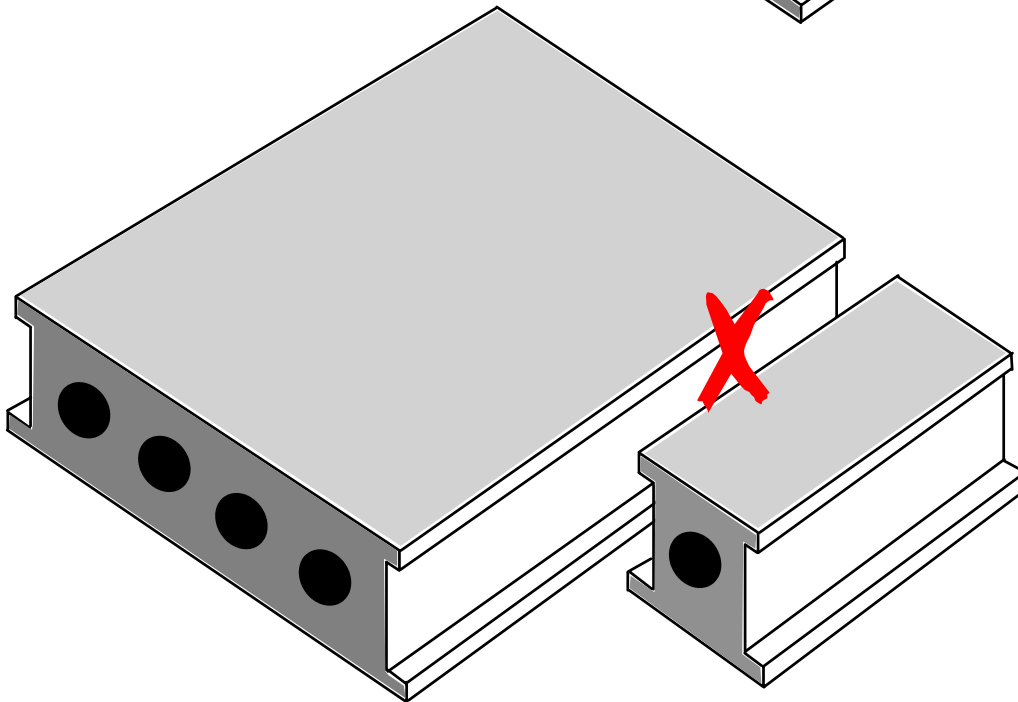
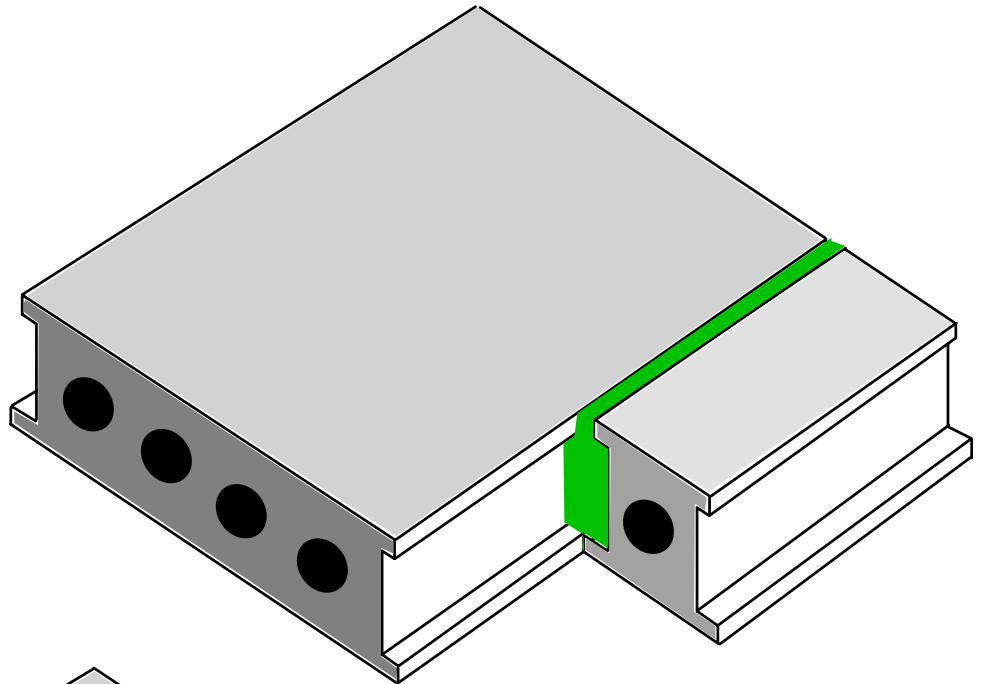
- precast Concrete Planks
- Plasterboard Partition Head Detail
- Building the Right Thing
- Timber Separating Floors - Floating Floors
- Cavity Masonry Separating Walls - Wall Ties
- Cavity Masonry Walls - Cavity Bridging
- Concrete Blockwork
- Materials
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- Resilient Bars

SRL

Precast Concrete Planks

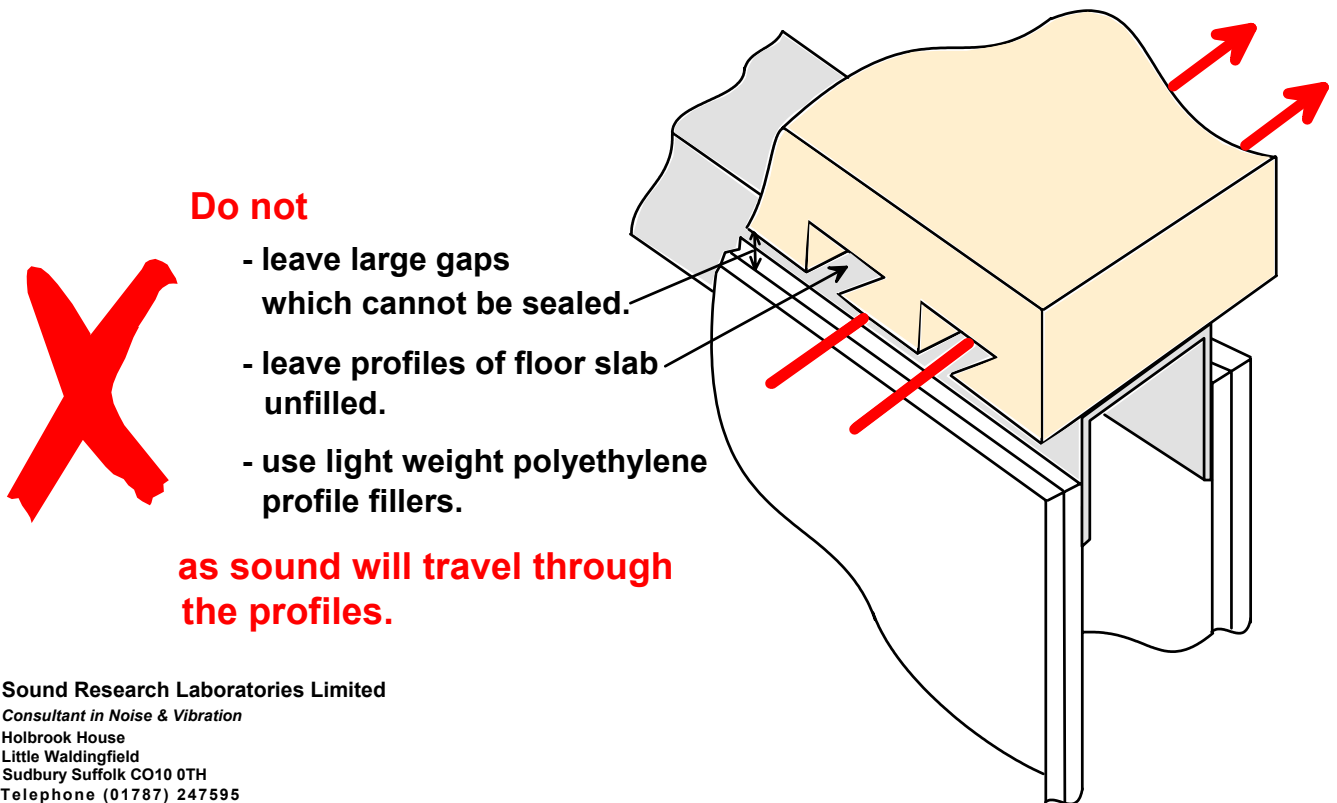
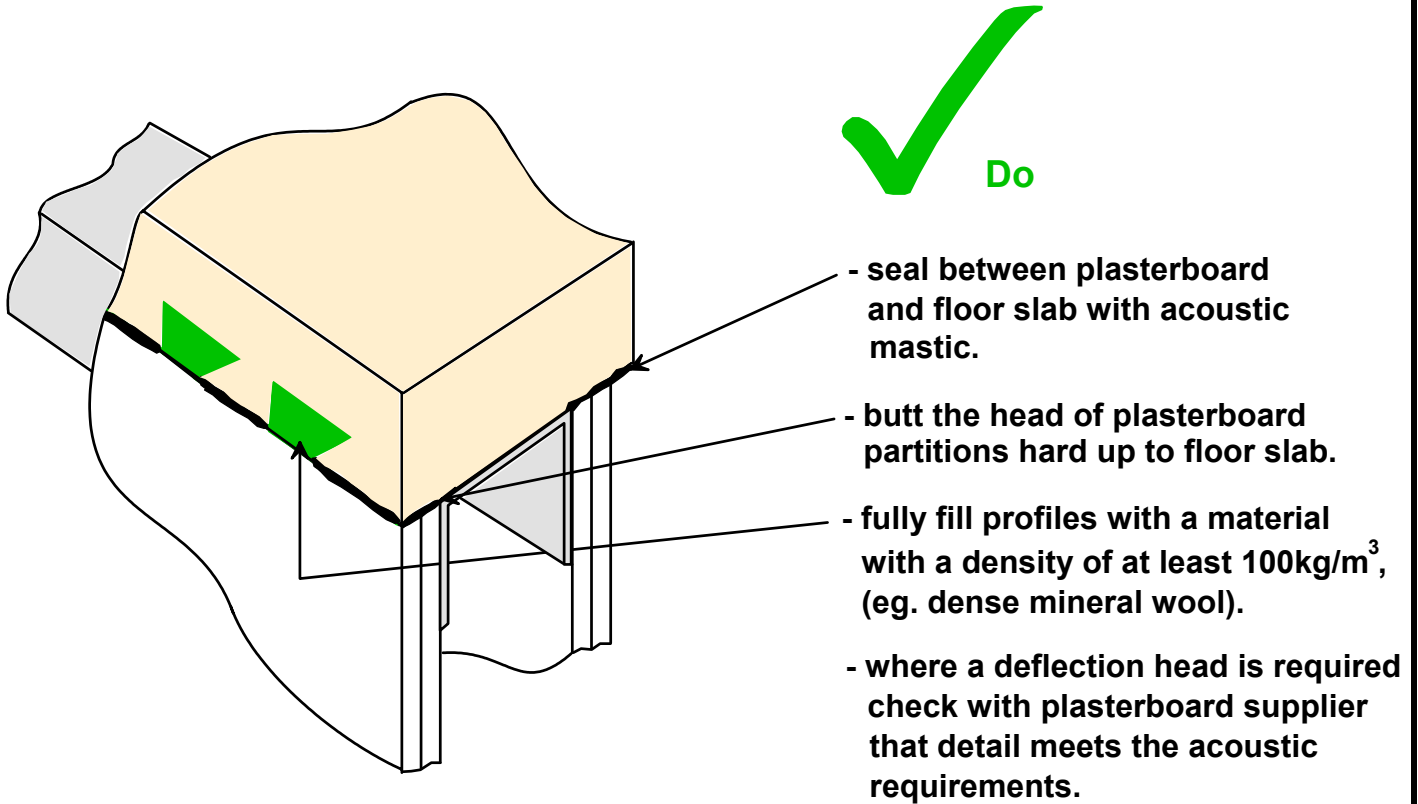


Do butt planks tightly together and fully grout all joints between planks.



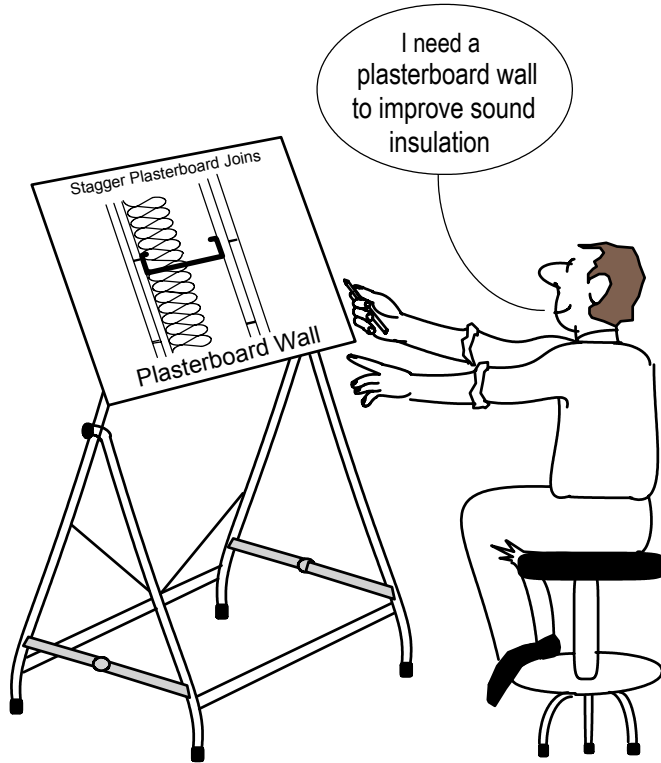
Do not leave large gaps between planks or leave out grout because sound will go through here.

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Building the Right Thing



Do look at the drawings and make sure that's what is built.



Do not assume all details are the same or the acoustics may suffer.



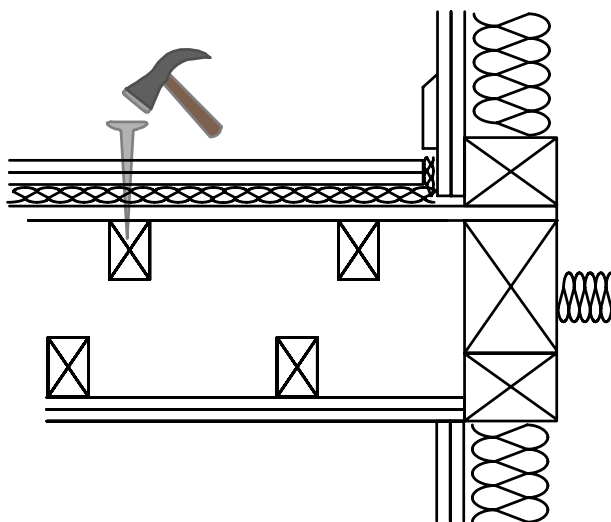
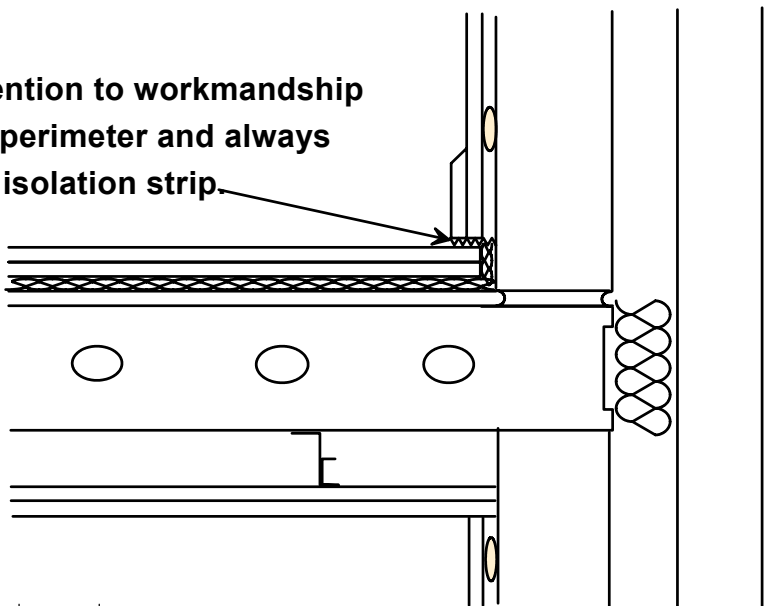
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Timber Separating Floors Floating Floors



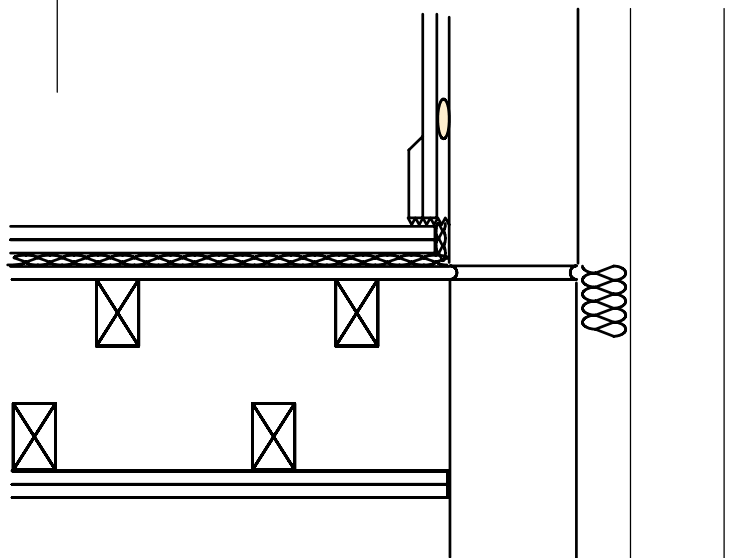
Do give special attention to workmanship and detailing at the perimeter and always include a perimeter isolation strip.



Do not nail or screw through the resilient layer as it will short circuit the floating floor.



Do not use timber floors with masonry separating walls as they do not work for noise (unless the masonry leaf is very heavy).



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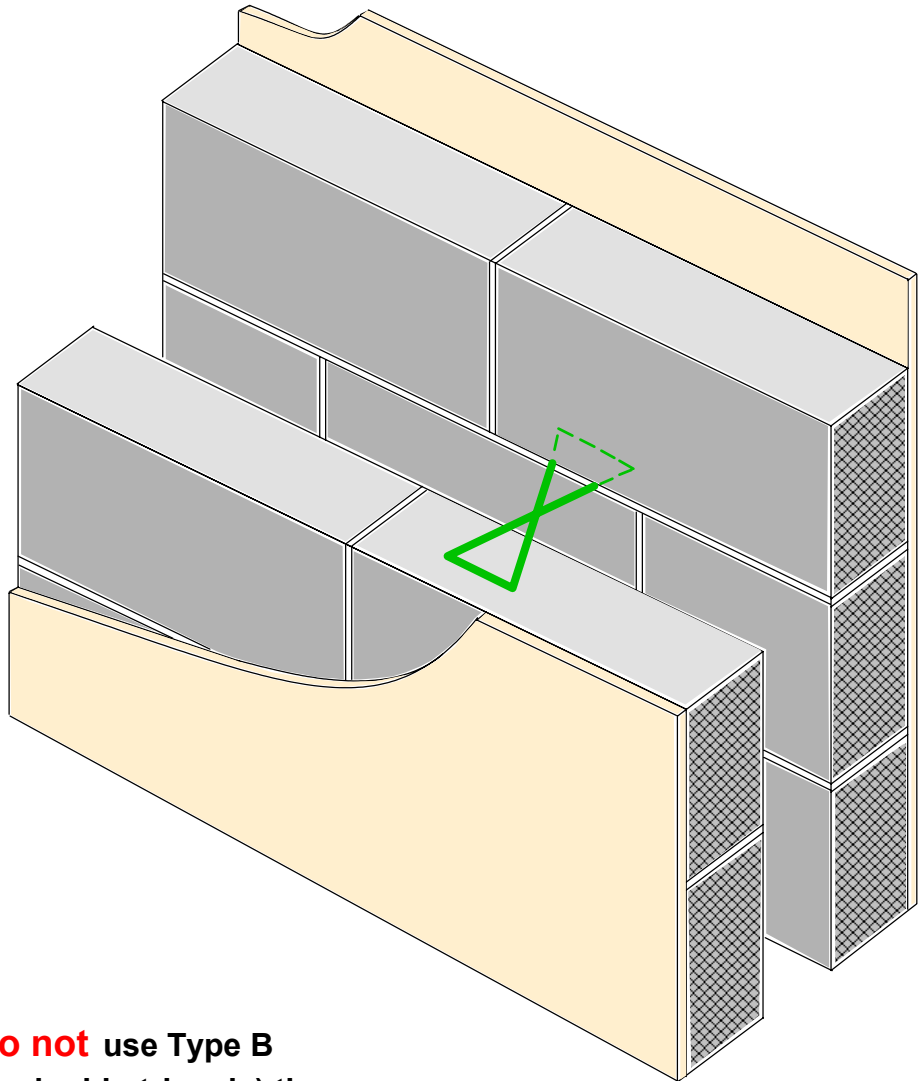
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Cavity Masonry Separating Walls Wall Ties



Do use Type A (eg.butterfly) wall ties in party walls (as defined by Approved Document E).



Do not use Type B (eg.double-triangle) ties.

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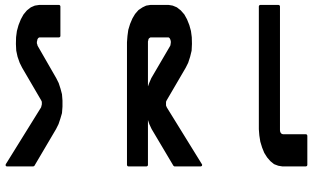
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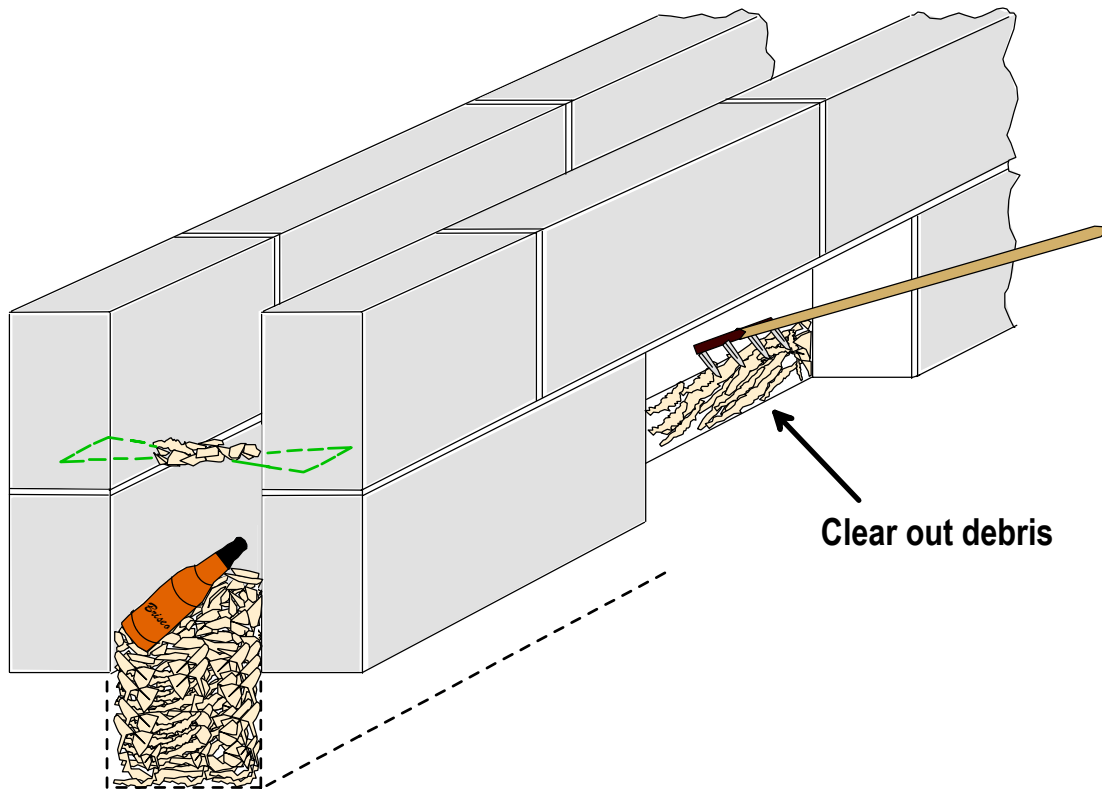
Cavity Masonry Walls Cavity Bridging



Do keep cavity and wall ties free from mortar droppings and other debris.

Regularly clean off ties as building progresses.

Clean out base by removing blocks when wall is complete unless a cavity board has been used.



Clear out debris



Do not allow mortar to build up on wall ties or on cavity stops or at the wall base or sound will travel through it.

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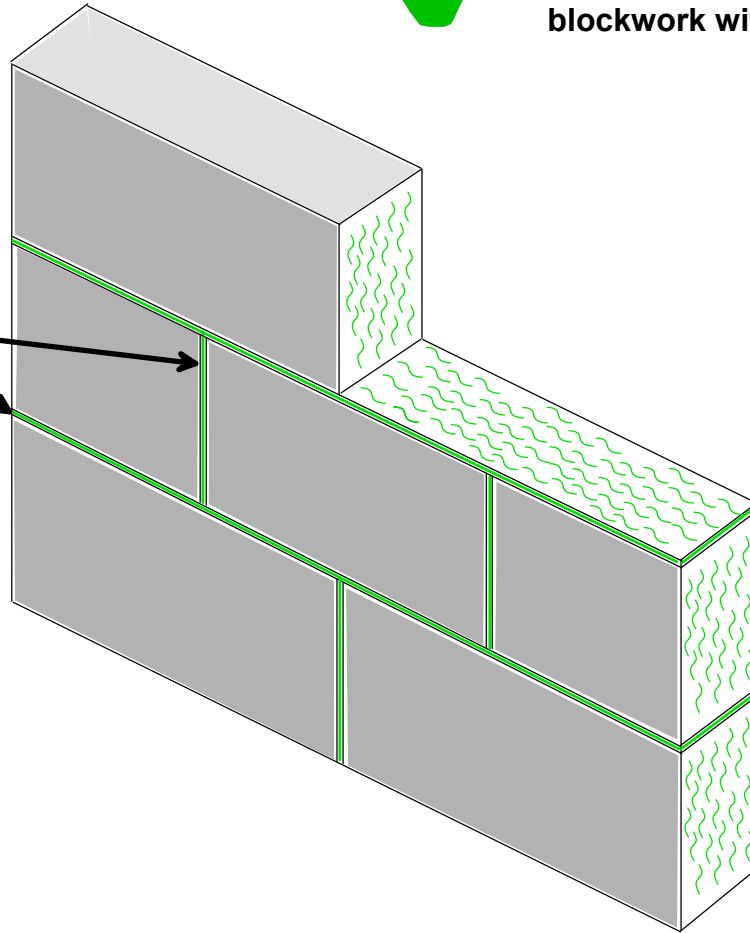


Concrete Blockwork



Do fully fill all joints between blockwork with mortar.

Fully fill all perpend and bed joints

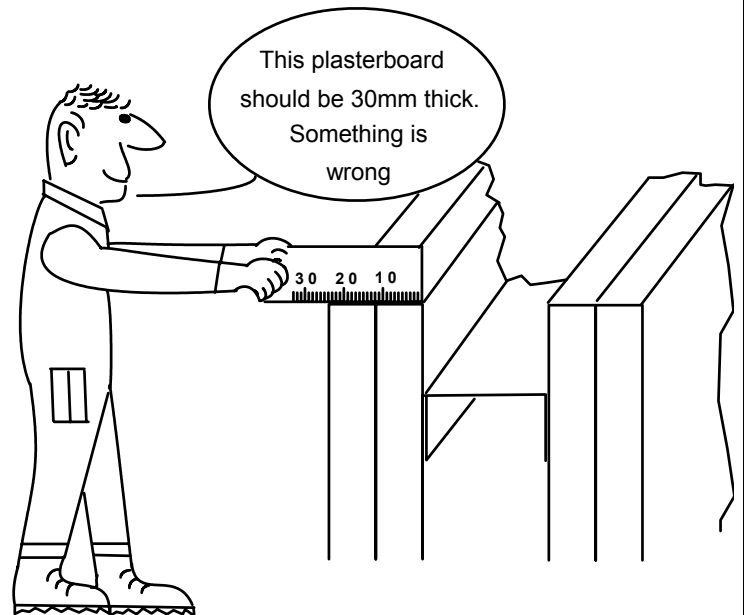


Do not partially fill joints because the sound will go through the gaps.

SRL Materials



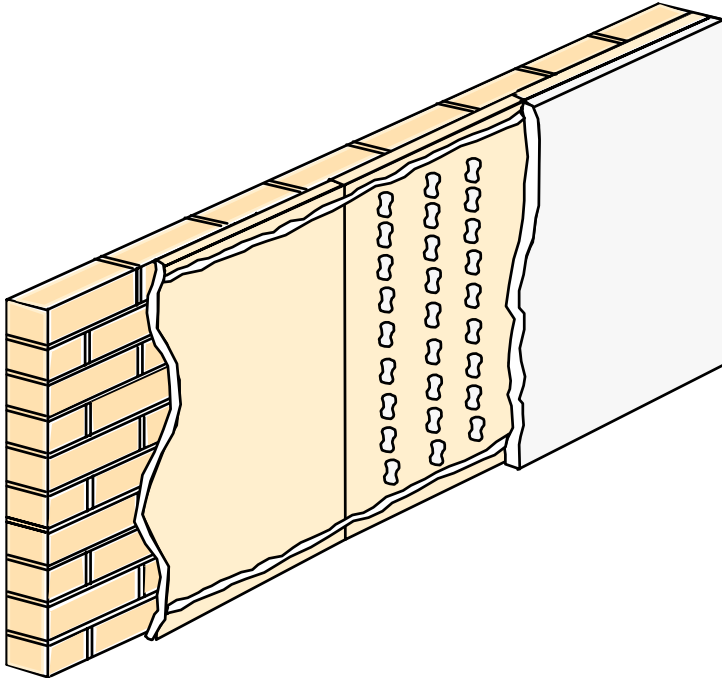
Do check that materials are correct.
If in doubt weigh and measure blockwork
and check plasterboard thickness and
density.



Do not use any old block or plasterboard without checking that density and thicknesses are correct as noise goes easily through light materials. A 7N block may not have the specified weight.



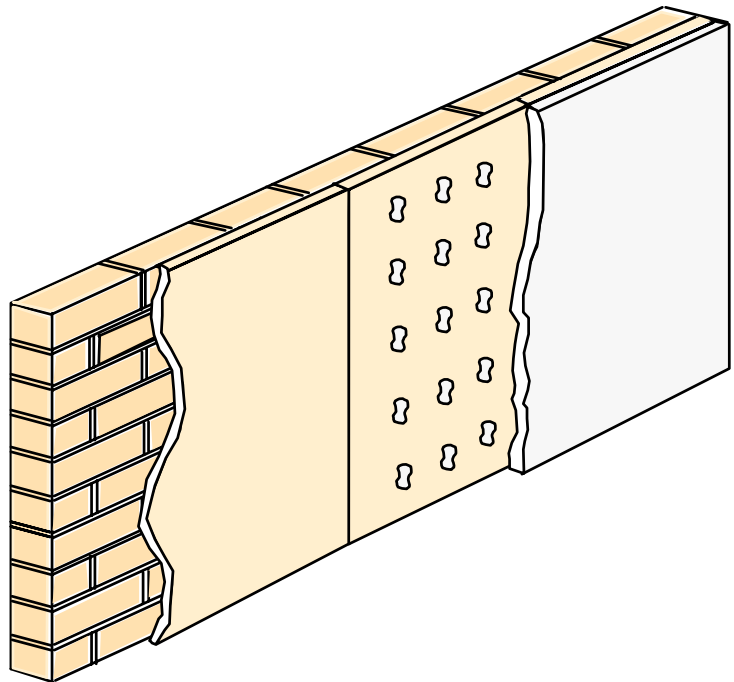
Plasterboard on Dabs



Do apply dabs to plasterboard suppliers instructions including a continuous ribbon of adhesive around the wall perimeter.



Do not skimp on the area of dabs used. They should always have a contact area of at least 20% of the board area otherwise the plasterboard will drum.



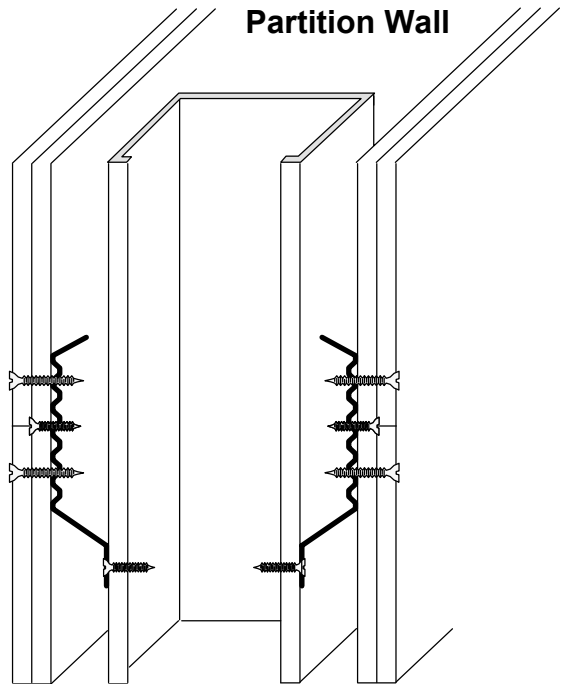
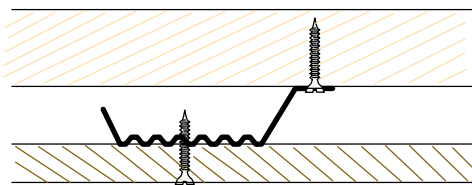


Resilient Bars

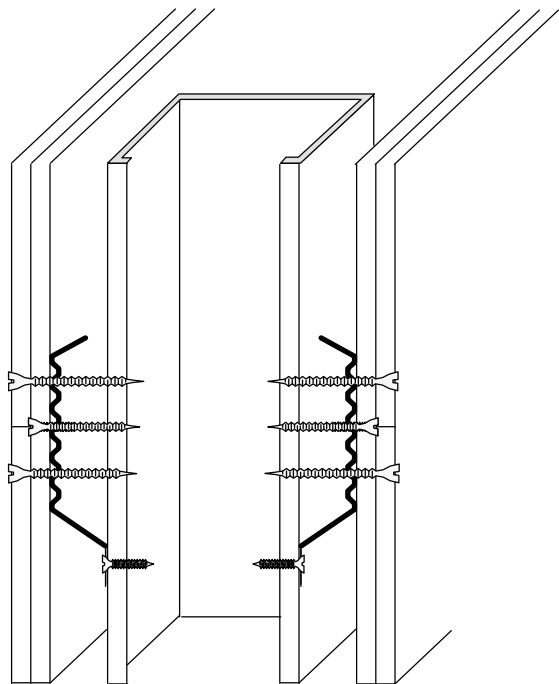
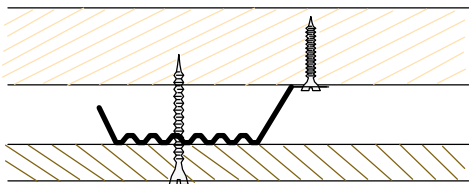


Do fix resilient bars with correct length screws so they do not bridge between plasterboard and floor joist or partition channels.

Partition floor



Do not use long screws which bridge between plasterboard and floor joists or partition channels as this will short circuit the resilient bar.



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