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Resilient Bars- Fitting to Independent stud wall or upgrading a stud wall

Fitting Instructions

Independent Stud Wall

Where you are creating an independent stud wall the wall can be created in timber or metal. For creating a metal stud wall you will see detailed instructions under the instructions marked creating a metal stud wall. Where you are creating a wooden stud wall the frame should not come into contact with the existing wall at an point. Ideally leave at least a 15mm gap. It should be securely fastened to side walls floor and ceiling with a bead of acoustic mastic squeezed under the wood to ensure a good seal. The noggin timbers (verticals) should have a space of 595mm between them this will allow the 600mm wide mineral wool to fit snugly in place.

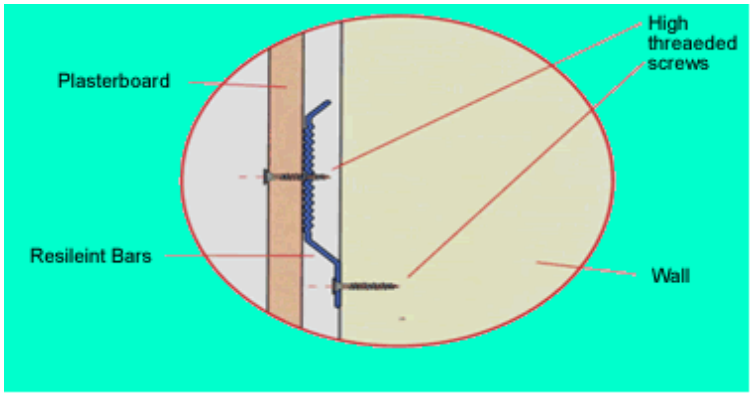
The only element that will be unfamiliar to most builders or DIYers is the use of resilient bars and it is important to read the instructions below. Given the resilient bars provide around a third of the soundproofing its important to install them correctly. The ideally wanted to be fastened on the bottom edge so that they hang outwards.

Cutting

Resilient Bars can be cut with tin snips or a hack saw.

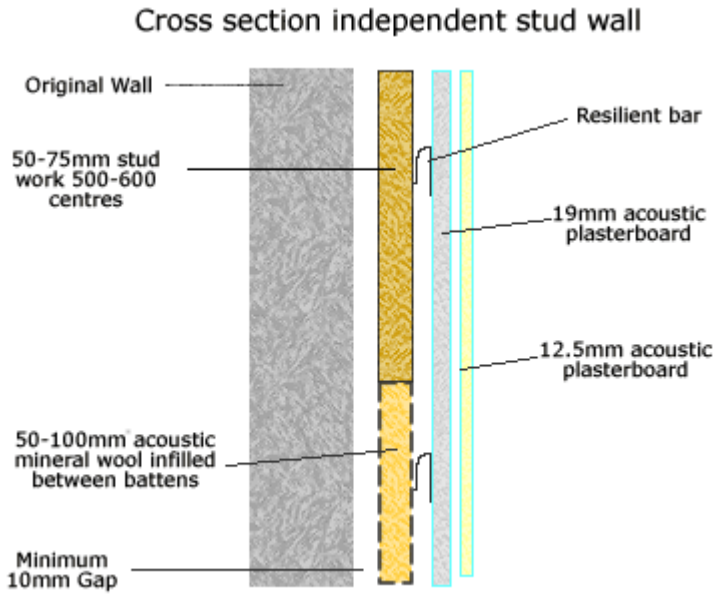
Starting at approximately 50-100mm from the floor level, screw resilient bars to battens at 400- 600mm horizontal centres along the wall. You will thus create a series of horizontal bars that run across the entire width of the wall) The final resilient bar should be approximately 50mm from the ceiling). If bars need joining just overlap and nest corrugated metal flange by about 10-15cm.

19mm Acoustic plasterboard should now be fixed to the metal flange part only using **32mm** drywall screws. Note that the screws should penetrate the metal flange section only and not come into contact with the wall.



(in above diagram read batten for wall)

A second layer of 12.5mm plasterboard should then be affixed to this using 42mm screws again taking care not to touch the wall, or battens with screw tips). Take care to leave a small (2-3mm gap at the perimeter that can be filled with acoustic sealant.
The wall should be sealed around the perimeter using acoustic sealant such that no gaps remain. You can use the acoustic sealant at the first layer of plasterboard and second if you wish. As with all soundproofing think of the analogy of water entering a leaky boat, seal all gaps!



Acoustic membrane upgrade.

If you wish to upgrade this construction further these can be achieved by sandwiching Acoustic membrane Tecsound 50 between the two laters of

plasterboard. This can be achieved by affixing the membrane at the top of the wall. If you are using the self adhesive variety it is recommend that two people carefully roll the membrane down. You can alternatively use the non self adhesive variety which can be stapled into position at the top of the first layer of plasterboard. letting the membrane drape down the wall (like a blanket). Any join in the membrane should be achieved overlapping the membrane by 5cm at the joins). The membrane should be sandwiched between the plasterboard and the wall and any excess trimmed with a Stanley knife. In this way a seal is affected. The plasterboards should then be screwed onto the resilient bars as described above.