



NOISE TRANSMISSION REDUCTION

Reducing Noise Transmission

Megasorber's range of noise barrier materials are ideally suited to reduce noise transmission through walls, floor, and ceilings in commercial and residential properties. This treatment is suitable for various applications: boardrooms, meeting rooms, healthcare settings, treatment rooms, bedrooms, party walls etc.

A noise barrier will reduce noise transfer between rooms – when applied to walls and ceiling, between layers of plasterboard, due to its high density and viscoelastic properties.

In any room, noise will find the 'weak' areas and try to get through, potentially disturbing those in neighbouring rooms. Imagine a plastic bag with water inside... no matter how strong the plastic is; if there are any holes the water will leak. Similar with noise – if there are any gaps, the sound will enter or escape. In short, to reduce noise being heard outside the room office, you need to 'seal' the ceiling and walls.

Note that any windows should be double, or triple glazed for best acoustic effect, and doors should be solid and well-sealed, to reduce noise leakage from these traditionally "weaker" points in the room.

Recommended Treatments

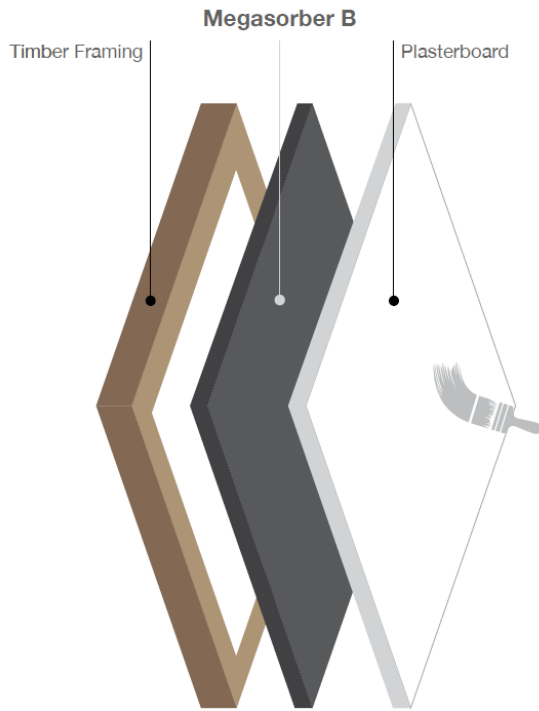
Noise Barrier - Walls

We recommend applying Megasorber B8 in between 2 layers of plasterboard (you can also use MDF or similar if you prefer, depending on the finished look you require).

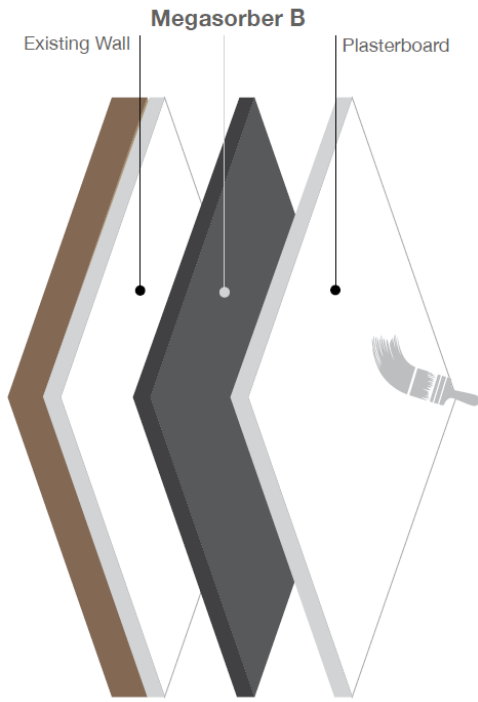
If treating an existing wall, this means simply installing the B8 over the existing plasterboard (this can be stapled or nailed on initially), taking care to overlap sheets to ensure there are no gaps. If overlapping is not possible, butt join the sheets together and use Megasorber A200 adhesive as a bead at each join to seal any gaps. Once you apply the 2nd layer of plasterboard, the screws will provide the final fixing for both the plaster and the noise barrier.

If treating a new wall, you may opt to install the B8 directly on the stud frame, and then install a single layer of plasterboard – this is a budget option and will not have the same performance as a wall with a second layer of plasterboard. The following schematics provide more insight:

New wall construction



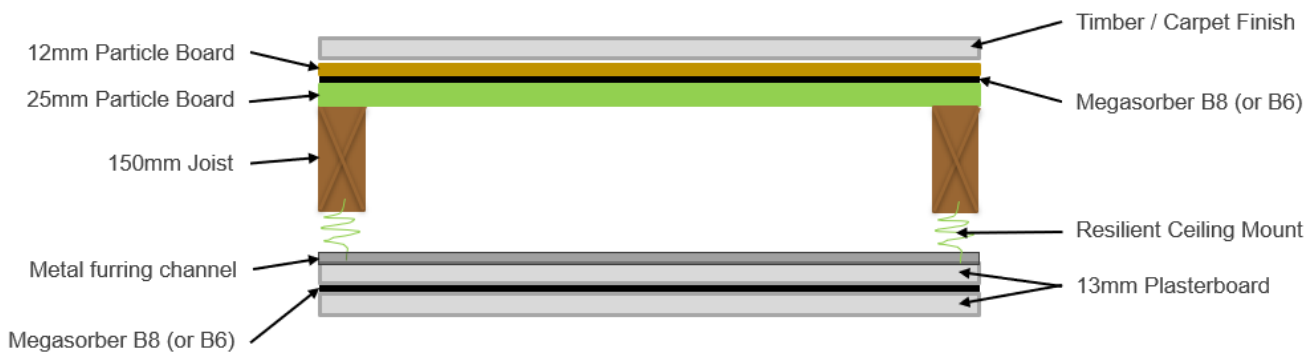
Existing wall construction



For a super quiet option, treat both sides of the stud wall.

We recommend a minimum 13mm plasterboard – the thicker and heavier, the better the overall acoustic performance of the wall.

Noise Barrier – Ceiling and Floor Above



As with the wall treatment outlined above, the ceiling should be treated with Megasorber B8 between two layers of plasterboard. For best results, this should be fixed using resilient mounts and furring channels, however if your space or budget is limited, this can be directly fixed to the joists if required.

In multi-storey buildings, for an extra quiet option, we also recommend using Megasorber B8 on the floor above, between two layers of structural grade particle board or similar, prior to laying the underlay and floor finish of your choice.

Recommended Products

B8

8kg/m² Thermal mouldable flexible noise barrier

Standard sheet size: 2.3m x 1.2m

B6

6kg/m² Thermal mouldable flexible noise barrier

Standard sheet size: 2.3m x 1.2m



Further Information

As each project has different requirements, this information should be used as a guide only.

Please contact the Megasorber team with any specific enquiries for additional information and recommendations.

