

Case Study showing PhoneStar Soundproofing Board being Installed on an Existing Ceiling in a Refurbishment Situation



The existing plasterboard can be left in place. The ceiling is then battened to reduce the vibrations coming from the floor above. Flexible thermal insulation can optionally be placed between the battens. The resilient bars are then attached perpendicularly to the battens at 400mm centres. They must not quite touch the surrounding walls as this may cause flanking sound.



The PhoneStar boards are screwed to the resilient bars only using 25mm drywall screws. These screws must NOT penetrate into the ceiling. If possible fix the boards in a brickwork formation. Butt the boards tightly up to each other and to the perimeter walls. Ensure the PhoneStar board edges are sealed with PhoneStar Eco-tape after cutting to minimise sand spillage.



The PhoneStar boards can optionally be sealed with flexible sealant at the joints and perimeter, to ensure there are no gaps to allow sound to escape through. The screw heads are also sealed in this case.



Acoustic plasterboard is then secured by screwing into the resilient bars only, using 38-42mm drywall screws. It is best to use a brickwork pattern. If you are only treating the ceiling and not the walls then leave a 5mm gap all around the perimeter edges and seal this gap with permanently flexible sealant. The joints and screw heads are then sealed as normal. In this case the ceilings and walls have both been upgraded to create an acoustic seal, so the plasterboard can go into the corners.

This system should substantially reduce both airborne and impact noise coming through the ceiling so that unwanted noise will no longer be a problem.