

Resilient Bars

Resilient Bar is a thin metal channel designed to substantially improve the sound insulation of plasterboard walls and ceilings. The channel effectively isolates the plasterboard from the studwork, eliminating 'direct contact' to dissipate sound which would normally be transferred through the frame. This system is easy to install and will add around 5dB+ to the acoustic performance of an otherwise identical wall structure. When used for ceilings airborne improvements of 12dB and impact improvements of 13dB can be achieved.

When installed beneath an existing ceiling with 100mm acoustic mineral wool and 30mm of plasterboard applied, improvements in both airborne noise and impact sound would normally be well in excess of 300%. Fire resistance with a minimum of 30mm of plasterboard applied would be 1 hour.

Bar Cutting:

Resilient Bar can easily be cut with tinsnips or hacksaw.

Ceilings:

If fitted directly to the underside of an existing ceiling, 50mm battens should be screwed to the ceiling at approx. 600mm centers (depending on if your using acoustic quilt or mineral wool). Care must be taken to ensure that the fixings used are secured to the joists and not just to the plasterboard. If our acoustic quilt is being used then the battens can be used to hold the quilt in place against the ceiling so the quilt covers the entire ceiling area. The quilt will also isolate the battens from ceiling contact. If using acoustic mineral wool slabs between the battens then the battens should be fixed to the ceiling joists via our 5mm thick neoprene isolation strips.



Bars should be fixed at a maximum of 450mm centers. Ends of boards must be supported on resilient bar noggins at ceiling perimeters as well as at corners, openings and abutments to provide additional support for the lining boards. If using 2400mm boards then the bars should be fixed at 400mm centers.

Maximum Loading: With bars spaced at 400mm centres the maximum recommended Uniform distributed load is 35kg/m²

Walls:

On walls the bars should be mounted at right angles to the frame with the narrow mounting flange at the bottom and the wider flange at the top at 600mm centres.

The bars should be screwed to all of the battens with 36mm drywall screws. Bars should be joined by overlapping them directly over a batten with the corrugated webs nested together and both base flanges screwed through to the batten beneath.

Plasterboard:

A layer of 12.5mm and 19mm plasterboard plank, (or similar composite), should be used and fitted to within 5mm of the surrounding walls/ceiling. Joints should be staggered in all direction. All joints should be secured to the resilient bar with the appropriate length screws at 230mm centers for ceilings and 300mm centers for walls and at 150mm centers for board ends.

Fixing:

Secure the first, or thickest layer, of plasterboard to the resilient strip with the appropriate length drywall screws. It is essential that the screws only penetrate the corrugated web and do not come into contact with the supporting battens behind. Screw the second layer of plasterboard using the correct length longer screws taking care to overlap the joints of the first layer making sure that the screws only penetrate the corrugated web part of the resilient bar.

Edge Sealant:

Flexible Mastic Sealant should be applied to all the edge perimeters after the installation of each layer to achieve optimum results.

Finishing:

All plasterboard joints should be finished with traditional jointing methods and plaster skimmed before decorating.

Dimensions:

Steel Gauge: 0.5mm
Weight: approx. 0.37Kg/m
Length: 3 metres
Width: 70mm
Depth: 15mm

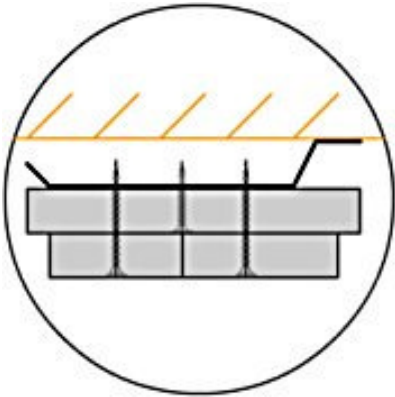
Screw Lengths:

25mm screws for 12.5mm and 15mm wall board.

32mm screws for 19mm plank.

36mm screws for 12.5mm wall board fixed over 12.5mm wall board.

42mm screws for 12.5mm wall board fixed over 19mm plank and 15mm wall board fixed over 15mm wallboard.



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