

# IMPACT RESISTANT ABSORBERS

## Perforated Steel Sound Absorbent Panels



A steel faced sound absorbing panel system, equally suitable for installation as individual units, or as continuous panel runs to cover larger surface areas. Designed primarily for use in sports or multi-purpose community halls, where the combination of excellent sound absorption and a robust standard of construction is desirable, in order to minimise the risk of damage through light impact.

### Description

The system consists of lengths of channel fixed to the wall surface to form a series of horizontal retaining elements. No vertical supports are required other than the possible use of similar sections to vertically finish panel runs, dependent on the project. Each panel comprises a tray, formed from a choice of either perforated pre-finished white 'Stelvetite' mild steel sheet, or perforated pre-galvanised mild steel sheet, which can be supplied in powder coat paint finish with colour to choice. A high density mineral fibre infill faced with a black non woven glass cloth is positioned within each panel tray. The panels are inserted into the top horizontal retaining channels and then pushed back to the wall or substrate, prior to lowering into the base channel. This method continues along the panel run with panels abutting one another at vertical joints.

### Technical Specification

Maximum overall panel dimensions are nominally 470 or 300mm wide x up to 2500/3000 high x 50mm or 100mm deep and would have a nominal weight of 6.1kg/m<sup>3</sup>.

The steel face would be manufactured from 0.7mm thick perforated white 'Stelvetite' sheet or pre-galvanised mild steel sheet with approximately 30% open area. The retaining channels would be fabricated from 1.2mm thick material in material to match the face finish. The panel infill would be 45kg/m<sup>3</sup> density mineral fibre, faced with a black non-woven glass cloth.

### Maintenance

Maximum overall panel dimensions are nominally 470 or 300mm wide x up to 2500/3000 high x 50mm or 100mm deep and would have a nominal weight of 6.1kg/m<sup>3</sup>

### Acoustic Performance

The following absorption coefficients were achieved when independently tested to BS 3638:1987 and ISO 354: 1985.

Frequency (Hz)	63	125	250	500	1k	2k	4k	8k
50mm thick panel	0.07	0.21	0.67	1.18	0.96	0.76	0.72	0.53
100mm thick panel	0.17	0.57	0.88	1.15	1.06	0.83	0.82	0.69

