

# Durasound

The Impact Resistant Sound Absorbing Panel

## **DURASOUND**

The impact resistant, sound absorbing panel.

Durasound™ is an acoustic wall and ceiling panel designed for use throughout the construction industry for both industrial and architectural applications. The panel is suitable for use as tough, functional wall and ceiling panelling in areas demanding a high level of impact resistance (our standard perforated panel achieves a class 2 impact resistance when tested) and to areas where panels need to be regularly cleaned. The panel is designed to absorb airborne noise therefore reducing noise transmission and to reduce reverberation within a room to create an improved acoustic environment.

#### The Panel

Panels are manufactured from galvanised perforated steel with a sound absorbing mineral wool infill as standard, however we can manufacture panels from mild steel, aluminium and stainless steel upon request. The outer face of the mineral wool can be covered with a variety of tissues and fabrics to improve the aesthetic appearance. Alternative facings such as moisture resistant films can be used to prevent the ingress of water, fuel oil, lubricants

and other substances. Perforated steel panels provide a much higher level of impact resistance compared to the mesh panels. The surface of the panel can be washed and cleaned as required and the panels are available with various perforation patterns (as shown right). Bespoke panels can be manufactured for individual requirements to compliment our standard range of panel dimensions.

#### Core

The core is a high performance, non-combustible bonded Mineral Fibre. Mineral Fibre gives impressive levels of sound proofing properties, excellent fire resistance as well as offering insulation. The Mineral Fibre core is water and moisture repellent, free of (H) CFCs, fully recyclable, completely vermin and rot proof and virtually eliminates the growth of fungi, mould or bacteria.

Durasound™ panels can withstand high levels of humidity and can be further protected from the ingress of water by encapsulation within a moisture resistant film. Where aesthetics are of greater importance the core can be covered in a tissue facing that also helps eliminate fibre loss through the panel. Tissue is available in White or Black.

## Facing / Finishes

Durasound™ can be finished with the following: mild steel, galvanised steel, stainless steel, architectural steel, aluminium, expanded flattened metal, expanded raised metal and woven wire mesh. To complement the internal space, Durasound™ can be powder coated or painted in any British Standard or RAL colour.

We also offer a large selection of coloured fabrics from the Camira range as

well as an opportunity for customers to specify fabrics (provided these are also a high quality acoustically transparent fabric).

For maximum architectural flexibility we offer the Camira Fingerprint range as it provides an unrivalled choice of fabric finish. Using the latest screen printing techniques, clients have the complete freedom to choose any image, pattern or logo for our Durasound™ panel.

### **Applications**

Durasound™ wall and ceiling panels can be used in many different environments such as Theatres, Cinemas, Recording Studios, Stadiums,

Arenas, Schools, Colleges, Universities, Plant Rooms, Control Rooms, Prisons, Police Stations, Leisure Centres and Factories.

#### Fire Protection

Mineral Fibre contained within the panels provides a non-combustible core when tested in accordance with BS476: Part 4: 1970 (1984).

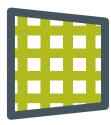
 Durasound™ is suitable for use at normal and high building temperatures The galvanised steel panels comply with the Class 'O' requirements of Building Regulations, when tested to BS476: Part 6 1981 and Part 7 1987.

Durasound™ is suitable for use within public buildings

#### **Perforation Patterns**



3mm Hole



5mm Square Hole

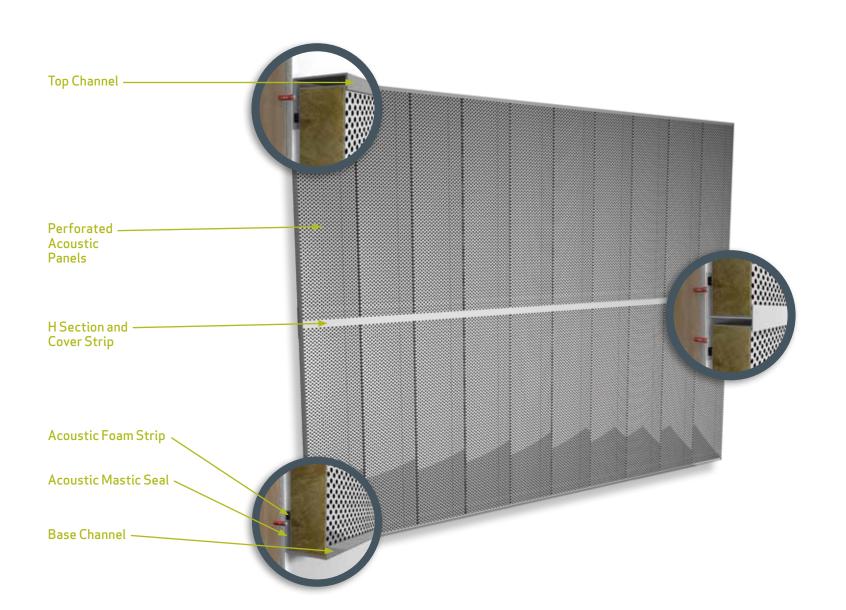


2 x 20mm Slots



Stainless Steel
Architectural Mesh

# Technical Drawings





Fingerprint Screen





## Acoustic Performance

Product	Thickness (mm)	Sound Absorption Coefficient Tested to BS EN ISO 354					
		125 Hz	250 Hz	500Hz	1000Hz	2000Hz	4000Hz
Durasound™ Mesh	50	0.30	0.73	1.00	1.00	1.00	1.00
	75	0.49	0.86	1.00	1.00	1.00	1.00
	100	0.58	0.94	1.00	1.00	1.00	1.00
Durasound™ Perforated	50	0.39	0.78	1.00	1.00	1.00	1.00
	75	0.55	0.91	1.00	1.00	1.00	1.00
	100	0.60	1.00	1.00	1.00	1.00	1.00

# Dimensions and Weight

Product	Nominal Thickness (mm)	Length (mm)	Width (mm)	Weight (kg/m²)
	50	2400	266 or 475	7
Durasound™ Mesh	75	2400	425	8
	100	2400	3 75	9
D ITM	50	2400	266 or 475	9
Durasound™ Perforated	75	2400	425	10
	100	2400	375	11

Note: Other thicknesses, widths and lengths available on request.

# **Building Regulation Classification**

Durasound™	Absorber Classification BS EN ISO 11654-1997	Spread of Flame
50mm	А	A1
75mm	А	Al
100mm	А	A1

# End of Life

The Durasound™ acoustic panel is designed and manufactured in a way that has as little impact on the environment as possible. At the end of the Durasound™ life cycle the panel can be split into its various component parts, all of which can be recycled and reused. For more information on the recyclability of our products and end of life please contact Puracoustic or visit our website.