# **Conabeare Acoustics**

#### **Quality Noise Control Solutions**

# INTRODUCTION

Type **ESD** Series Acoustic Panel System can be used to provide either acoustic screening or full acoustic enclosures.

The Type ESD Acoustic Panels can be supplied in 50mm, 75mm or 100mm thicknesses.

We can also supply higher performance panels as either septum panels (with a solid core and absorptive faces both sides) or solid faces (both sides to give a higher sound reduction level).

All panels are designed to suit your individual project, and our Team of Sales Engineers can assist with the design of the acoustic treatment for the optimum product selection.



# **DESIGN AND MANUFACTURE**

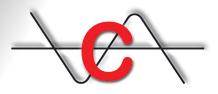
The **ESD** Series Acoustic Panel System is designed and fabricated to suit individual projects, to take into account the specific sound reduction index requirements for both Octave and Broad Band noise.

Where acoustic screening is required to achieve a particular specification, a screening calculation is carried out and the panels are sized accordingly.

With acoustic enclosures, we also calculate any temperature build up, and provide either forced or passive ventilation to minimise the temperature



Acoustic Panel System - ESD Panels



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# **PERFORMANCE DATA**

Type **ESD** Acoustic Panel System has the following Acoustic Performance.

	Sound Reduction Index in dB at Octave Band Centre							
Panel Type	63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz
ESD50	17	16	21	30	38	42	44	38
ESD75	17	18	22	32	39	44	44	40
ESD100	18	20	25	35	41	47	45	40

#### Random Incidence Absorption at Octave Band Centre

Panel Type	63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz
ESD50	0.15	0.20	0.35	0.65	0.80	0.90	0.85	0.70
ESD75	0.21	0.26	0.43	0.78	0.85	0.90	0.86	0.76
ESD100	0.28	0.35	0.53	0.94	0.95	0.90	0.88	0.82

### **PANEL DESCRIPTION**

Type **ESD** Acoustic Panel System nomenclature.

- **ESD50** 50mm Thick Acoustic Panel to give a nominal 20dB Reduction (Rw20)
- **ESD75** 75mm Thick Acoustic Panel to give a nominal 30dB Reduction (Rw30)
- **ESD100** 100mm Thick Acoustic Panel to give a nominal 40dB Reduction (Rw40).

### **WEIGHTS**

Type **ESD** Acoustic Panel System has the following weights per square metre.

Panel Type	Weight ( <u>m² in Kg)</u>
ESD50	26
ESD75	28
ESD100	30

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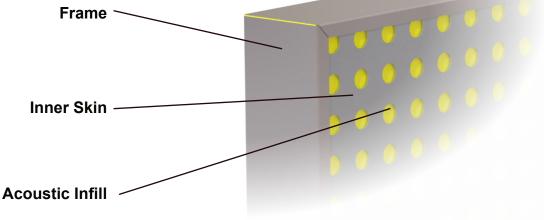
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# **TYPICAL SPECIFICATION**

#### Acoustic Panels.

Manufacturer: Conabeare Acoustics Limited - 0118 930 3650 Panel Type: ESD100/75/50 Acoustic Panel System. Outer Solid Skin: Pre-Galvanised Steel Sheet. 0.7mm expanded or perforated pre-galvanised steel skin having minimum 30% Inner Skin: free area. Acoustic Infill: 45kg/m<sup>3</sup> density mineral wool retained behind glass fibre tissue facing. Finish: Mill Finish as Standard. Fabricated Steel Acoustic Panel System comprising pre-galvanised steel Description: components throughout. Assembly using mechanical or spot welded concealed fixings. Frame



### **AVAILABLE OPTIONS**

- Polyester Powder Coat to a Non-standard RAL Colour.
- Polyester Powder Coat to a RAL Metallic Colour.
- Stainless Steel Fabrication (solid skin only).
- Aluminium Fabrication (solid skin only).
- Zinc Fabrication (solid skin only).
- Lead Clad Steel Fabrication (solid skin only).
- Single Leaf Door.
- Double Leaf Doors.
- Steelwork supports.

# **AVAILABLE SIZES**

Panels are supplied in Modular Format with sizes of up to 1200mm wide x 2400mm high.

The Panels can be supplied with joiner sections to make large screens or enclosures.

Multi section modules may require structural primary or secondary supports to ensure that the structural stability is maintained.

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# **ENVIRONMENTAL CONSIDERATIONS**

All items are produced in the UK from UK sourced suppliers and are constructed from recyclable materials throughout.

All items are supplied to ensure minimal handling, transportation and waste. As such all raw materials are ordered on a project by project basis to facilitate this.

The panels are supplied in stackable modules to enable any transportation to be fully utilised.

All packaging is kept to a minimum and mainly consists of recyclable cardboard or bubble wrap.



# Acoustic Panel System - ESD Panels

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