

### **Acoustic Louvres**



#### Description

Designed as an effective means of reducing sound transmittance whilst allowing weathered ventilation, McKenzie Martin Acoustic Louvres are suitable for vertical mounting into sidewall cladding or brickwork and may be installed singly, in horizontal runs or vertical tiers. The units are available in pitches of 100mm, 150mm and 300mm to suit.

Each model of louvre blade incorporates sound absorption material which is contained within a double layer of perforated mesh and provides sound reduction per the table below. The units are simple to install and maintain and may be used in conjunction with roof ventilators to provide an overall system of natural and/or fire ventilation. The louvres are made to measure and offered in a variety of materials and finishes to suit specific requirements

#### Design

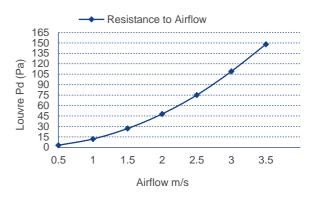
- Our Acoustic Louvres are manufactured from sheet Aluminium, 0.9mm Plastisol sheets or 0.9mm galvanized mild steel
- Available as single units or continuous runs to suit plant screening
- Units can be fabricated in depths of 100mm, 150mm and 300mm.
- Available in a variety of finishes to suit any requirements
- Acoustic doors can be fabricated if required
- Where a higher noise reduction level is required the systems can be provided in a double banked configuration

#### **Technical Information**

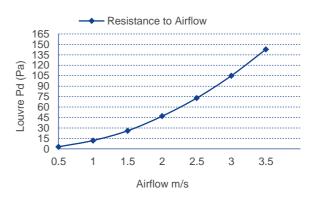
#### Aerodynamic Performance

Pressure drop with standard bird mesh fitted.

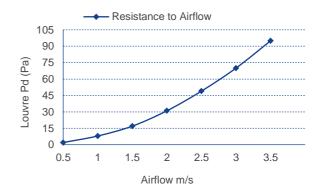
#### 100mm Acoustic Louvre



#### 150mm Acoustic Louvre



#### 300mm Acoustic Louvre





# **Acoustic Louvres**



#### **Acoustic Performance**

All units have been subjected to a series of controlled sound transmission tests at the prestigious Salford University Acoustic Laboratory to the specification shown in BS EN ISO 10140-2:2010

Octave Band Centre Frequency (Hz)	100mm Sound Reduction Index (dB)	150mm Sound Reduction Index (dB)	300mm Sound Reduction Index (dB)
63	-0.9	2.1	3.0
125	4.6	4.7	6.7
250	4.2	4.8	9.3
500	6.0	7.4	13.4
1000	9.4	13.2	17.7
2000	17.2	23.4	20.4
4000	15.9	20.8	17.0
8000	13.4	16.4	14.7

#### Sizes

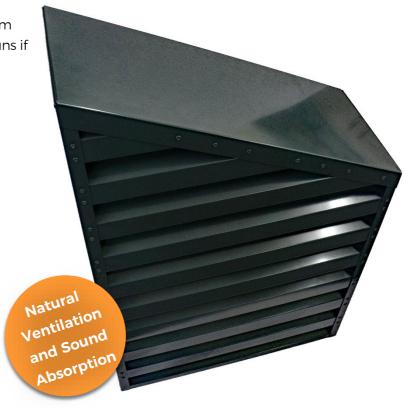
Acoustic Louvres can be manufactured in single units up to 1400mm wide x 2500mm high and built up into larger continuous runs if required.

#### Free Areas

- 100mm 33%
- 150mm 34%
- 300mm 30%

#### Weights

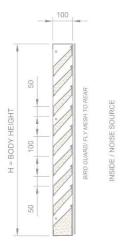
- 100mm 30kg/m²
- 150mm 35kg/m<sup>2</sup>
- 300mm 44kg/m<sup>2</sup>



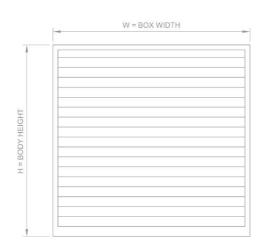


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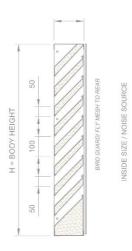
#### Standard Details



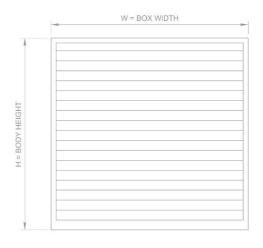
100mm Acoustic Louvres Vertical Section



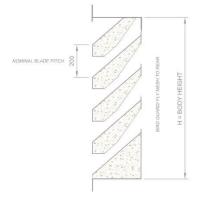
100mm Acoustic Louvres Face View



150mm Acoustic Louvres Vertical Section



150mm Acoustic Louvres Face View



300mm Acoustic Louvres Vertical Section



300mm Acoustic Louvres Face View



### **Acoustic Louvres**



# **Specifications**

#### 100mm Acoustic Louvre - L10 NBS Spec

Manufacturer: McKenzie Martin Ltd,

Product Reference: 100mm Acoustic Louvre

**Description:** Acoustic Louvre system providing an effective means of reducing sound transmittance (17.4db at 2kHz) whilst allowing weathered ventilation.

Louvre Blade Pitch: 100mm

Overall Depth: 100mm

Measured Free Area: 33%

Coefficient of Discharge: 0.223

Material (Blades and Frame): 1.2mm Aluminium 1050A H14 / 0.7mm hot dip galv, plastic coated one side / 0.7mm hot dip galv, plastic coated both sides / 0.9mm galvanised mild steel

Material (Acoustic Infill): Sound absorbing, fire retardant, inert mineral wool. Vermin and bacteria proof

Finish: Mill Finish Aluminium / Polyester Powder Coated / Marine Grade Polyester Powder Coated / Leathergrain,

Standard stock colour / Galvanised

Mesh: Aluminium bird diamond mesh 35 x 12 /

Aluminium fly diamond mesh 3.5 x 2

**Blanking Plates:** None / Single skin 1.5mm aluminium /

Double skin insulated or acoustic 1.5mm aluminium

Fixing: Louvres to be installed in line with manufacturer's

instructions by a competent installer

#### 150mm Acoustic Louvre - L10 NBS Spec

Manufacturer: McKenzie Martin Ltd,

Product Reference: 150mm Acoustic Louvre

**Description:** Acoustic Louvre system providing an effective means of reducing sound transmittance (23.4db at 2kHz)

whilst allowing weathered ventilation.

Louvre Blade Pitch: 100mm

Overall Depth: 150mm

Measured Free Area: 34%

Coefficient of Discharge: 0.227

Material (Blades and Frame): 1.2mm Aluminium 1050A H14 / 0.7mm hot dip galv, plastic coated one side / 0.7mm hot dip galv, plastic coated both sides / 0.9mm galvanised mild steel

Material (Acoustic Infill): Sound absorbing, fire retardant,

inert mineral wool. Vermin and bacteria proof

Finish: Mill Finish Aluminium / Polyester Powder Coated /

Marine Grade Polyester Powder Coated / Leathergrain,

Standard stock colour / Galvanised

Mesh: Aluminium bird diamond mesh 35 x 12 /

Aluminium fly diamond mesh 3.5 x 2

Blanking Plates: None / Single skin 1.5mm aluminium /

Double skin insulated or acoustic 1.5mm aluminium

Fixing: Louvres to be installed in line with manufacturer's

instructions by a competent installer



# Acoustic Louvres





# **Specifications**

300mm Acoustic Louvre - L10 NBS Spec

Manufacturer: McKenzie Martin Ltd,

Product Reference: 300mm Acoustic Louvre

**Description**: Acoustic Louvre system providing an effective means of reducing sound transmittance (20.4db at 2kHz) whilst allowing weathered ventilation.

Louvre Blade Pitch: 200mm

Overall Depth: 300mm

Coefficient of Discharge: 0.278

Material (Blades and Frame): 1.2mm Aluminium 1050A H14 / 0.7mm hot dip galv, plastic coated one side / 0.7mm hot dip galv, plastic coated both sides / 0.9mm galvanised mild steel

Material (Acoustic Infill): Sound absorbing, fire retardant, inert mineral wool. Vermin and bacteria proof

Finish: Mill Finish Aluminium / Polyester Powder Coated / Marine Grade
Polyester Powder Coated / Leathergrain, Standard stock colour /
Galvanised

**Mesh:** Aluminium bird diamond mesh  $35 \times 12$  / Aluminium fly diamond mesh  $3.5 \times 2$ 

**Blanking Plates:** None / Single skin 1.5mm aluminium / Double skin insulated or acoustic 1.5mm aluminium

**Fixing**: Louvres to be installed in line with manufacturer's instructions by a competent installer



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For more information or to speak to one of our sales advisors call <u>0161 723 2234</u> or email sales@mckenziemartin.co.uk



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