

Continuous Line
Acoustic Louvres

caice

caice.co.uk

Our **new & exclusive** ‘Continuous Line’ Acoustic Louvre system



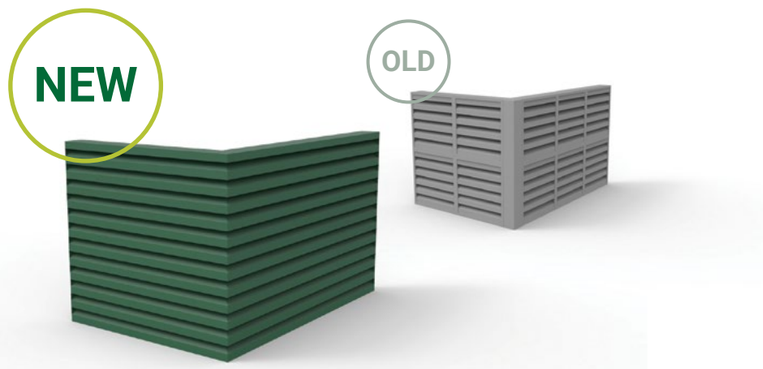
The unique and modular design maintains a **‘continuous line’** appeal that’s easy to assemble with our optional integrated steel work support system.

Visually attractive and versatile

With our Continuous Line Acoustic Louvres you can achieve a similar visual appearance to Continuous Line Weather Louvres. A range of sound reduction performance options are then available to suit your particular requirements including Attenuators mounted at the rear for even greater performance.

Being the largest company in the UK that manufactures Continuous Line Acoustic Louvres, Continuous Line Weather Louvres and Attenuators in-house we will recommend the best performing and most cost efficient solution for your project.

Contemporary looks, enhanced by improved performance. We are proud to be leading edge.



One multi-purpose system with many applications

Acoustic Louvre applications include: fresh air intakes and exhausts for ventilation systems, mechanical equipment screens or enclosures, natural ventilation and façade cladding, all providing a seamless look wherever they are used.

For a totally individual appearance, the Acoustic Louvres are fabricated from galvanised steel and can be finished in polyester powder paint to a wide range of RAL colours.

You can be confident in our performance testing

We like to do things properly and our Acoustic Louvre range has therefore been rigorously tested to offer performance data that you can trust. Applicable standards are -

Sound Reduction BS EN ISO 10140-2: 2010 (SRL)
Insertion Loss and Pressure Loss BS EN ISO 7235: 2009 (LCP)
Rainwater Penetration BS EN ISO 13030: 2001 (BSRIA)
Fire Safety Classification BS EN 13501-1:2018 (Warringtonfire)

More details on these test standards are available upon request.

Class A rainwater penetration

Rainwater will penetrate into a building through standard Acoustic Louvres. So we have developed a unique rainwater rejection system that can be fitted to the rear of the Acoustic Louvres to achieve Class A rainwater penetration when tested at BSRIA (99% effective at 1m/s face velocity).

100%

Be 100% confident in the quality and performance of our products



Fire safety testing and classification
for high-rise buildings

Caice Acoustic Louvres have been fire tested by Warringtonfire according to the requirements of BS EN 13501-1: 2018 to ensure they are suitable for high-rise buildings. Because the safety of our clients and the users of the buildings where our products are installed is our highest priority.

warringtonfire

Caice Acoustic Louvre achieve a classification of A2-s1, d0.

Why risk buildings under 11 metres height by specifying Acoustic Louvres that haven't been tested to allow classification to BS EN13501-1 when Caice products achieve a classification of A2-s1, d0?

Building Regulations apply to all "building work" and are not limited to residential or high-rise buildings.



Read about testing and classification and ensure your compliance with the Building Safety Act.

CAICE ACOUSTIC LOUVRES

FIRE CLASSIFICATION TO BS EN 13501-1



Building Type:	Residential	Non-residential
Height:	>11m high	>18m high
Classification Required:	A2-s1, d0	A2-s3, d2

Caice Acoustic Louvres achieve a classification of A2-s1, d0 and are therefore suitable for both building types

Built with designers and architects in mind

CASE STUDY

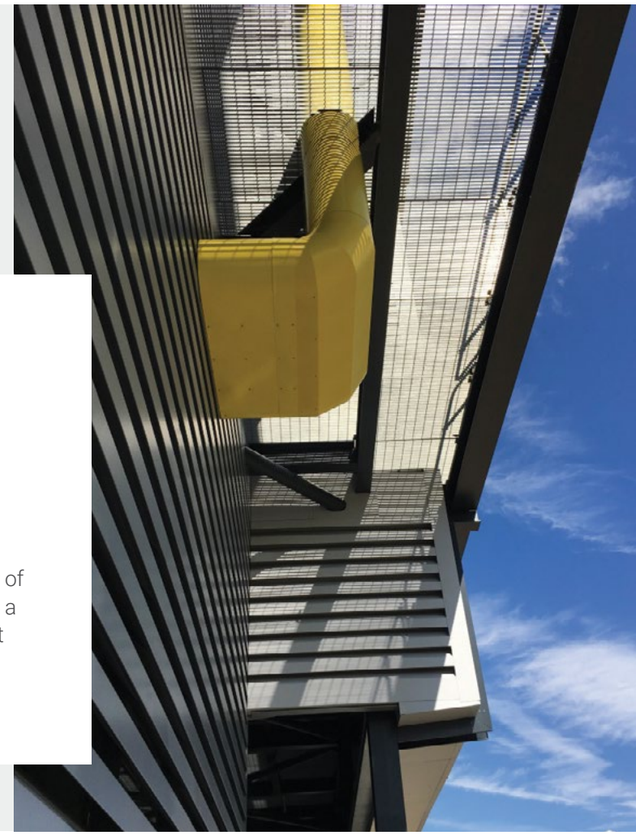
Infinity Here East Data Centre

(previously the Olympic Media Centre)

East London

We designed, supplied and installed £2.69m worth of SS150 Acoustic Louvres and support steelwork as a façade to protect residential neighbours from plant noise emissions from this new data centre.

Full article available.



Supporting you every step of the way

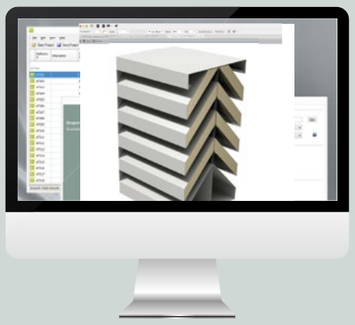
We are always delighted to answer your questions and provide you with detailed specifications, acoustic design and pricing. If you have a complex project then we can develop products or design solutions to meet your specialist needs with our bespoke service.

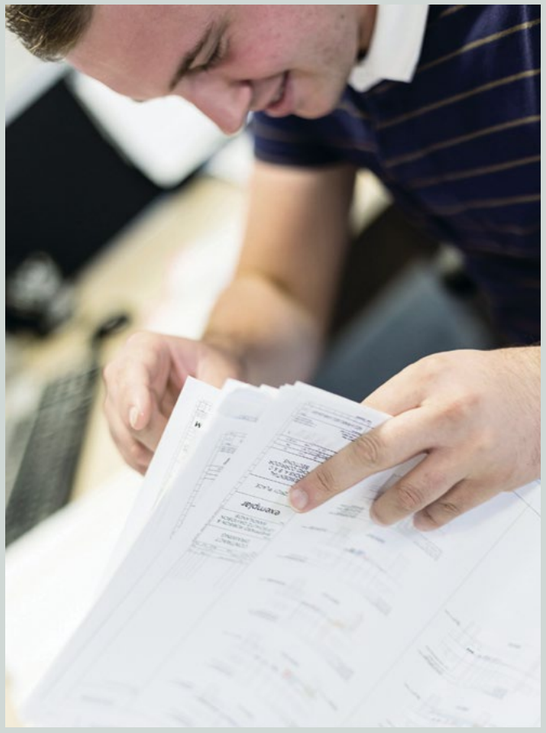
Continuous investment in automated manufacturing

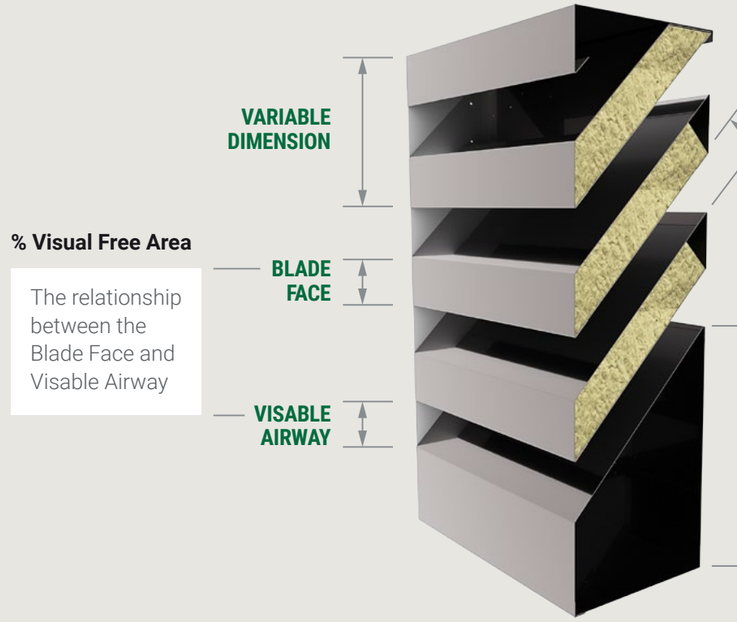
Advanced technology is central to our Production facilities in Dorset. From automated laser profiling and folding of sheet metal parts to high quality polyester powder painting for a durable and long lasting finish. We hate waste of all kinds and so continuously drive them out. Guaranteeing you the highest quality products, achieving your expectations and all delivered at the lowest possible cost.

Beautifully designed

All our contracts are drawn by skilled technicians, using AutoDesk Inventor, building accurate 3D models of the products, so all elements fit perfectly with each other and your building.







BSRIA has confirmed that our method of calculating the % Free Area is in accordance with BS EN 13141-1:2019.

Free Area of Acoustic Louvres explained

Make sure you know the % Free Area has been calculated accurately for your Acoustic Louvre application so it complies with legislation for airflow, or your plant isn't starved of air. Otherwise you might specify an Acoustic Louvre with a higher, inaccurate % Free Area than larger, correctly sized and more expensive Acoustic Louvres.

BSI Standard; BS EN 13141-1:2019 section 5.4 free area states that the "Free area shall be calculated from the measurements in one plane of the air transfer device. The measurement plane shall be such that the total cross section area of the air flow passage(s) crossing the minimum.

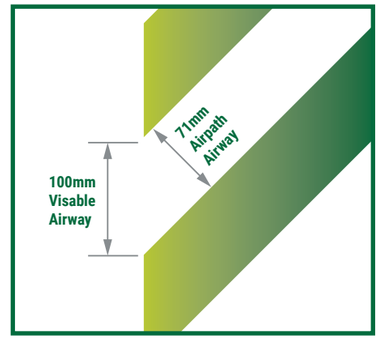
Accurate installation, on time and budget

Our highly trained project managers will work with you to ensure our products are installed on time and to budget, even for the most challenging of projects.

The unique modular design of our Acoustic Louvres makes installation faster, helping to save vital time on site.

We have even designed an innovative front fix bracket system for situations where the louvres can only be installed from the front.

Example of SS300



5%

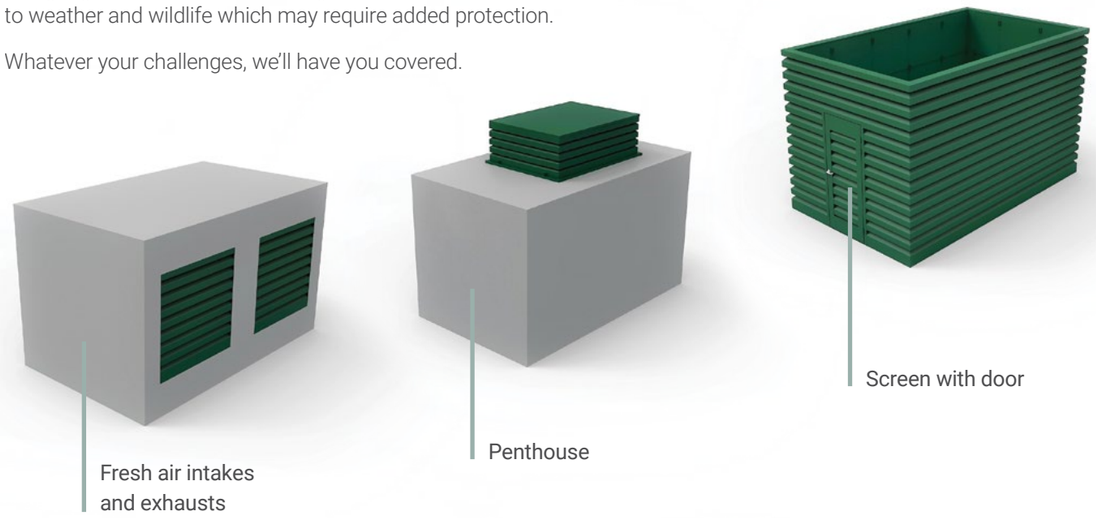
Material waste is down below 5% thanks to our unique software. All unused steel is recycled

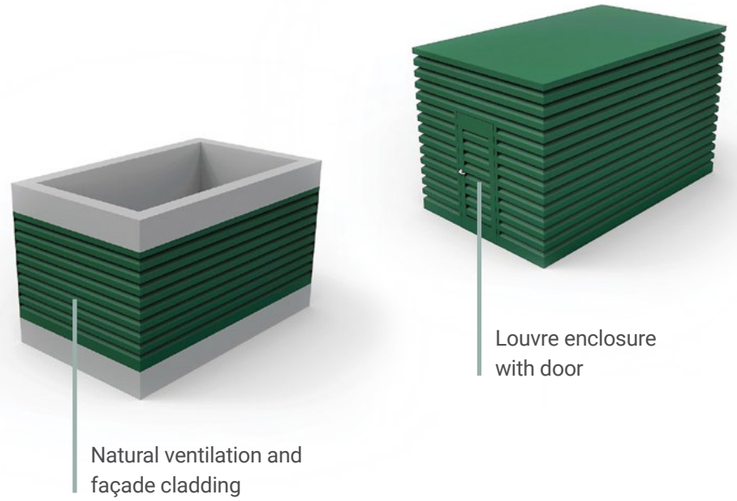
Acoustic Louvre applications

Our acousticians will recommend the best solution for your project based on your specific application and requirements. Whether natural or mechanical ventilation is required, what demand there is for sound reduction and if unsightly buildings or plant need 'hiding' from view.

The geographical location and height above sea level will also determine exposure to weather and wildlife which may require added protection.

Whatever your challenges, we'll have you covered.





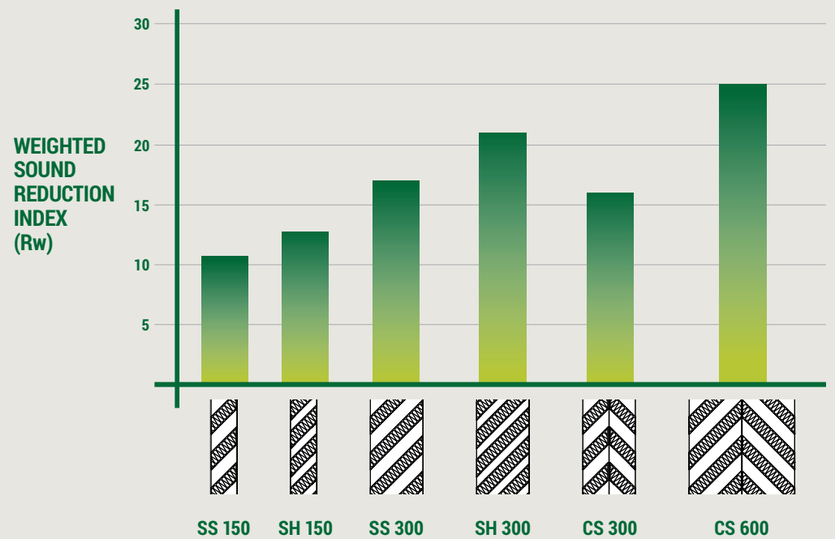
Acoustic Louvre doors

Doors are available as both single and double leaf. There's an extensive range of furniture options to meet both your safety and security requirements. They are offered for active airflow or provided as dummy profiles with blanking.

We're pioneers. Partnering with you to lead our industry, by creating the best products and structuring our business around you. Sharing our knowledge, embracing new ways of working using the latest technologies and being careful of our environment.



Sound reduction comparison chart



Acoustic Louvre options

1 A wide range of performance options available

Six different models are available with varying degrees of sound reduction performance using Acoustic Louvre depths of 150mm, 300mm and 600mm. Two models of matching 150mm deep Dummy Acoustic Louvres can also be provided with acoustic blanking at the rear where air movement is not required.

2 Optional panels fitted behind the Acoustic Louvres

These options will make your building work better and help to match your specific requirements.

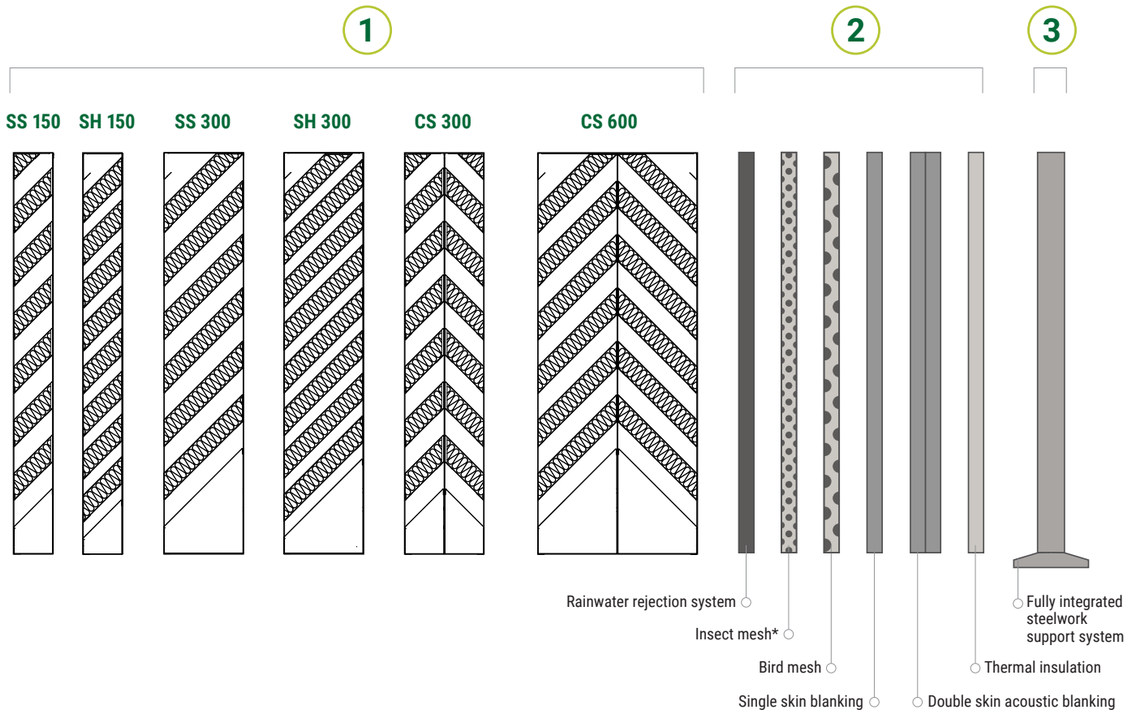
- Rainwater rejection system
- Bird mesh
- Insect mesh*
- Single skin blanking
- Double skin acoustic blanking
- Thermal insulation

* Please contact Caice to ensure the correct application of Insect mesh

3 Fully integrated steelwork support system

We have developed a fully integrated steelwork support system to enable easy installation of our Acoustic Louvres for screening applications, enclosures or within large building apertures. Calculations can be provided to ensure structural and wind loading requirements are achieved.





CASE STUDY

Cornwall Energy Recovery Centre (CERC)

St Austell, Cornwall.

We designed a completely new Acoustic Louvre to meet the Class A rainwater penetration requirements for this exposed project near the coast.

High winds and working through the winter also made installation challenging at 50 metres above the ground. Yet it was completed safely and on time with special scissor lifts externally and abseilers inside.

Full article available.



Acoustic Louvre Product Code Definitions

Product

AL — **Acoustic Louvre**

Type

SS150	Single bank standard profile 150 deep
SH150	Single bank high performance profile (reduced airway) 150 deep
SS300	Single bank standard profile 300 deep
SH300	Single bank high performance profile (reduced airway) 300 deep
CS300	Chevron standard profile 300 Deep
CS600	Chevron standard profile 600 Deep
DS150	Dummy single bank standard profile 150 deep
DH150	Dummy single bank high performance profile 150 deep

Material

G	Galvanised Steel

Format

M	Modular
I	Internal mitred corner
E	External mitred corner
C	Plain corner
S	Single door (on its own)
D	Double door (on its own)
P	Penthouse with roof
Suffix NT	Blades In normal orientation, set out from top

Options

Integral Doors (where n= number off)

Sn	Integral single leaf door
Dn	Integral double leaf door

Flashing

I	Internal picture frame
E	External picture frame
C	Extended drip cill

Notching (where n= number off)

Nn	Notch

Penetration (where n= number off)

Pn	Rectangular penetration

Removable (where n= number off)

Rn	Removable modules

Fixings

F	Front fix brackets
B	Back joining brackets
A	Aperture fixing brackets

Other

H1	Standard door hardware
H2	Emergency exit door hardware
X	Special

Delivery

001-999	Number of items delivered to site
P	Protective packaging

Finish

U	Unfinished base material
A	Standard polyester powder paint
B	Premium polyester powder paint
C	Premium plus polyester powder paint
Suffix E	External louvre only finished (CS300 and CS600 only)
Suffix W	Whole product

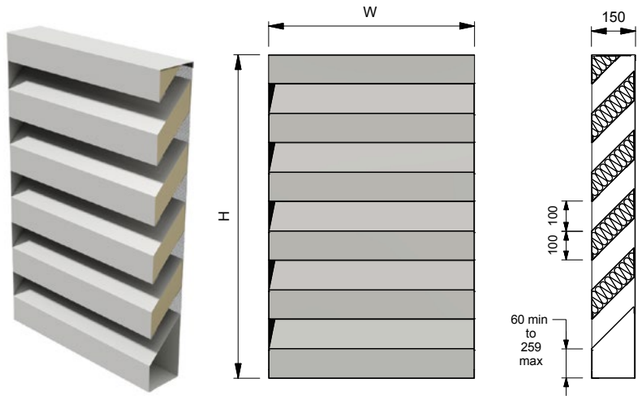
Features

A	**Class A rainwater rejection**
N	No backing
B	Bird mesh
I	Insect mesh
S	Single skin blanking
D	Double skin acoustic blanking
T	Thermal insulation

AL / SS 300 / M NT / G A W / 012 P / B / R 2

SS150 Acoustic Louvre Technical Data

Single Bank Acoustic Louvre, Standard Performance Profile, 150mm Deep



Typical weight 29kg/m²

Generally louvres above 50kg will be supplied in modules for assembly on site. Joining brackets and fixings will be provided for assembly.

Installation services, support steelwork, flashings, fixings to the structure and mastic will not be provided unless stated.

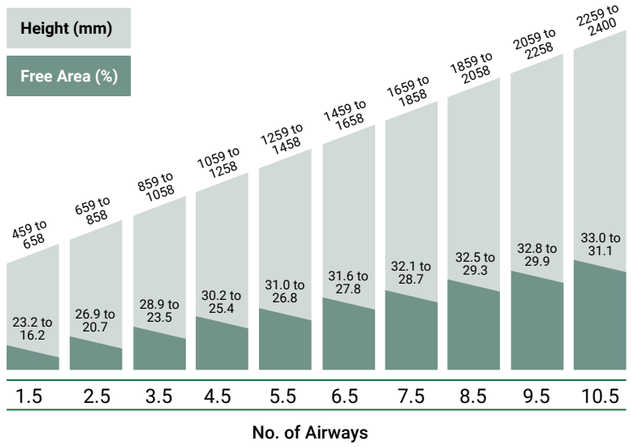
Refer to the Acoustic Louvre Schedule and Product Code Definitions for the size and specification of each Acoustic Louvre.

A minimum of 10mm clearance should be allowed between the structure and the Acoustic Louvre sizes shown.

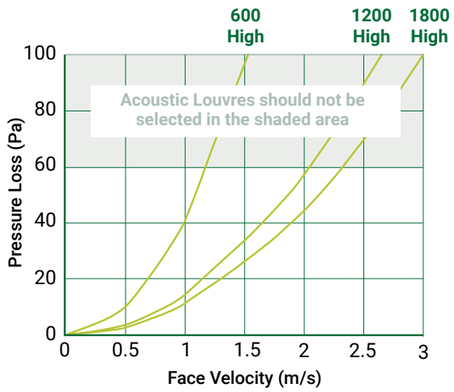
Performance

Acoustic Data	dB in each Octave Band Centre Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
Sound reduction index	4	4	6	8	11	11	11	10
Weighted sound reduction index (Rw)	11							
Static insertion loss	3	4	6	10	12	13	13	14
Regenerated sound power level at 1m/s face velocity	48	41	34	35	30	22	13	12
Regenerated sound power level at 2m/s face velocity	66	58	51	51	50	47	41	28

Airpath Free Area and Height range

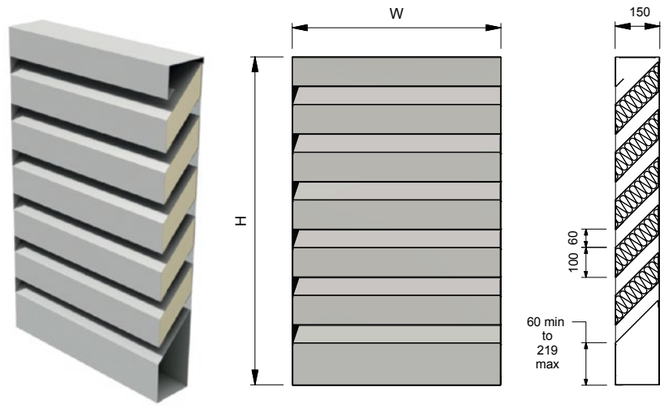


Free area and pressure drop shown is based on a 1150mm wide single piece louvre fitted with bird mesh and will vary slightly for different widths and larger heights. Pressure losses for Class A rated louvres and/or Insect mesh are available upon request.



SH150 Acoustic Louvre Technical Data

Single Bank Acoustic Louvre, Higher Performance Profile, 150mm Deep



Typical weight 35kg/m²

Generally louvres above 50kg will be supplied in modules for assembly on site. Joining brackets and fixings will be provided for assembly.

Installation services, support steelwork, flashings, fixings to the structure and mastic will not be provided unless stated.

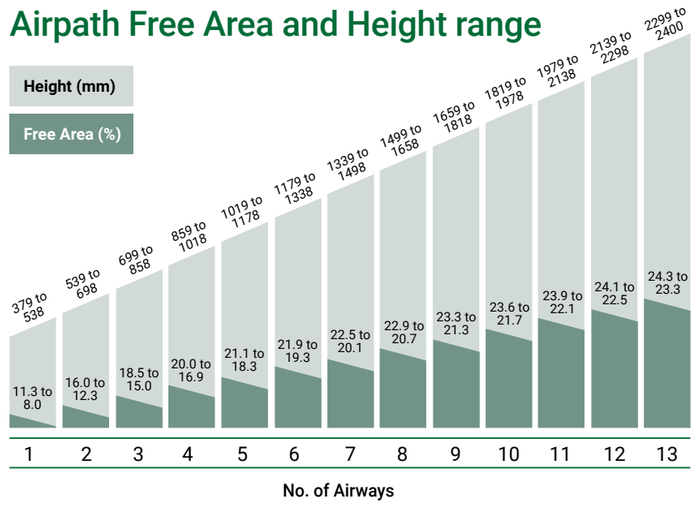
Refer to the Acoustic Louvre Schedule and Product Code Definitions for the size and specification of each Acoustic Louvre.

A minimum of 10mm clearance should be allowed between the structure and the Acoustic Louvre sizes shown.

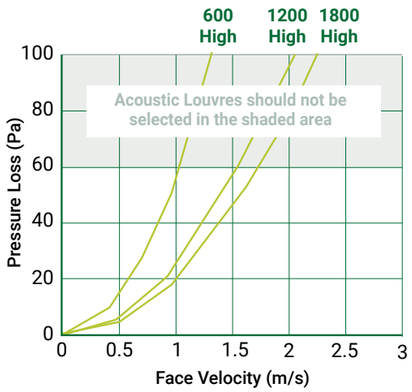
Performance

Acoustic Data	dB in each Octave Band Centre Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
Sound reduction index	5	5	7	9	13	13	13	12
Weighted sound reduction index (Rw)	13							
Static insertion loss	4	5	7	12	16	16	16	18
Regenerated sound power level at 1m/s face velocity	53	47	38	36	33	29	18	12
Regenerated sound power level at 2m/s face velocity	70	65	58	53	51	51	45	35

Airpath Free Area and Height range

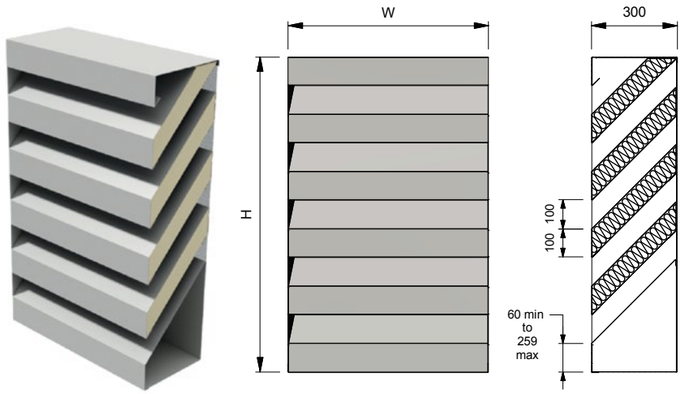


Free area and pressure drop shown is based on a 1150mm wide single piece louvre fitted with bird mesh and will vary slightly for different widths and larger heights. Pressure losses for Class A rated louvres and/or Insect mesh are available upon request.



SS300 Acoustic Louvre Technical Data

Single Bank Acoustic Louvre, Standard Performance Profile, 300mm Deep



Typical weight 43kg/m²

Generally louvres above 50kg will be supplied in modules for assembly on site. Joining brackets and fixings will be provided for assembly.

Installation services, support steelwork, flashings, fixings to the structure and mastic will not be provided unless stated.

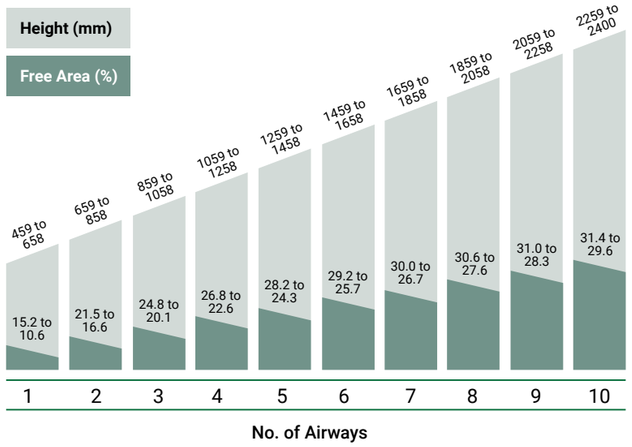
Refer to the Acoustic Louvre Schedule and Product Code Definitions for the size and specification of each Acoustic Louvre.

A minimum of 10mm clearance should be allowed between the structure and the Acoustic Louvre sizes shown.

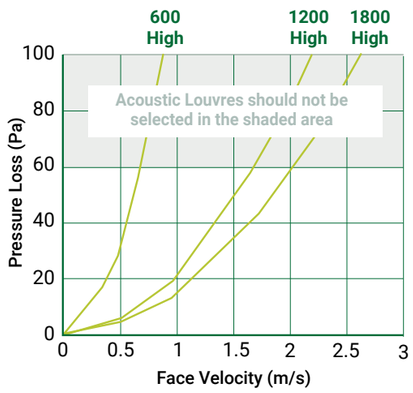
Performance

Acoustic Data	dB in each Octave Band Centre Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
Sound reduction index	6	6	9	13	21	20	16	13
Weighted sound reduction index (Rw)	17							
Static insertion loss	5	6	9	14	20	20	20	20
Regenerated sound power level at 1m/s face velocity	48	41	34	30	25	20	13	12
Regenerated sound power level at 2m/s face velocity	66	58	51	47	45	43	39	28

Airpath Free Area and Height range

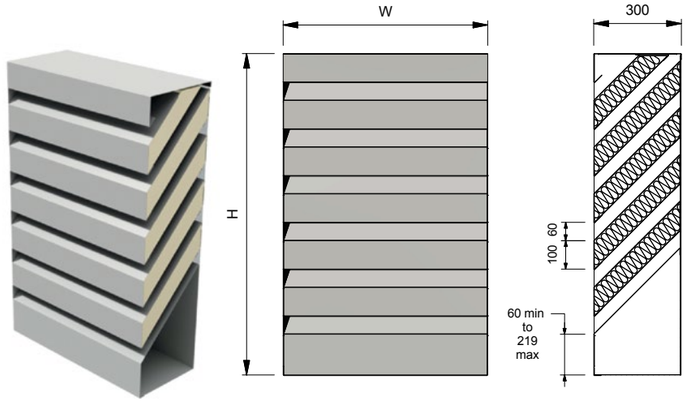


Free area and pressure drop shown is based on a 1150mm wide single piece louvre fitted with bird mesh and will vary slightly for different widths and larger heights. Pressure losses for Class A rated louvres and/or Insect mesh are available upon request.



SH300 Acoustic Louvre Technical Data

Single Bank Acoustic Louvre, Higher Performance Profile, 300mm Deep



Typical weight 53kg/m²

Generally louvres above 50kg will be supplied in modules for assembly on site. Joining brackets and fixings will be provided for assembly.

Installation services, support steelwork, flashings, fixings to the structure and mastic will not be provided unless stated.

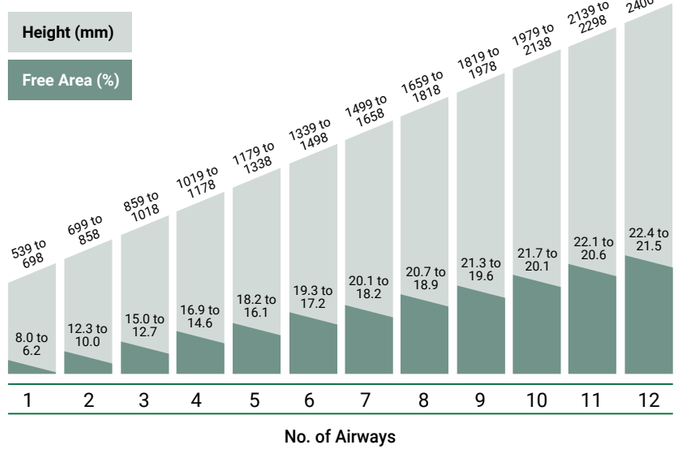
Refer to the Acoustic Louvre Schedule and Product Code Definitions for the size and specification of each Acoustic Louvre.

A minimum of 10mm clearance should be allowed between the structure and the Acoustic Louvre sizes shown.

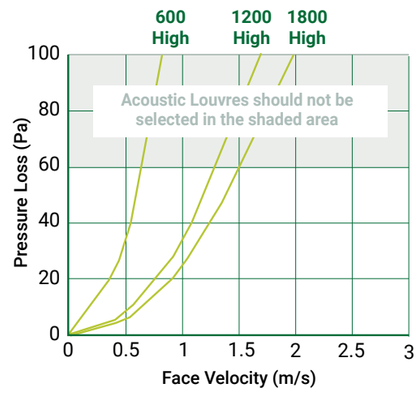
Performance

Acoustic Data	dB in each Octave Band Centre Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
Sound reduction index	7	7	10	17	29	30	27	21
Weighted sound reduction index (Rw)	21							
Static insertion loss	6	7	10	18	31	28	26	25
Regenerated sound power level at 1m/s face velocity	50	44	39	34	30	26	17	12
Regenerated sound power level at 2m/s face velocity	70	60	55	52	49	49	43	35

Airpath Free Area and Height range

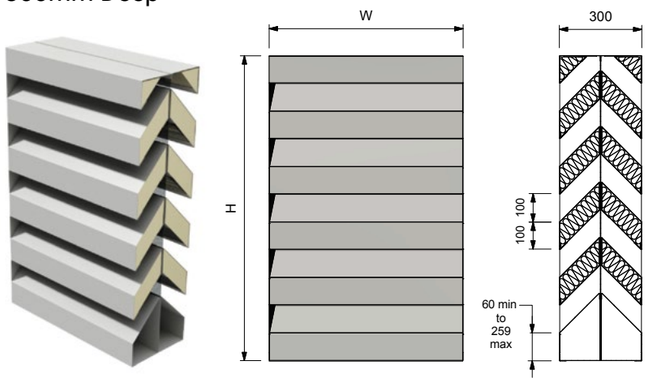


Free area and pressure drop shown is based on a 1150mm wide single piece louvre fitted with bird mesh and will vary slightly for different widths and larger heights. Pressure losses for Class A rated louvres and/or Insect mesh are available upon request.



CS300 Acoustic Louvre Technical Data

Chevron Acoustic Louvre, Standard Performance Profile, 300mm Deep



Typical weight 57kg/m^2

Generally louvres above 50kg will be supplied in modules for assembly on site. Joining brackets and fixings will be provided for assembly.

Installation services, support steelwork, flashings, fixings to the structure and mastic will not be provided unless stated.

Refer to the Acoustic Louvre Schedule and Product Code Definitions for the size and specification of each Acoustic Louvre.

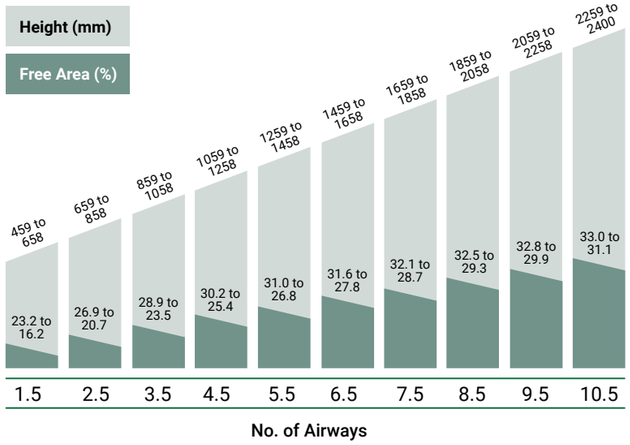
A minimum of 10mm clearance should be allowed between the structure and the Acoustic Louvre sizes shown.

Site constraints may make the installation of the Chevron style product impractical. Please contact Caice to discuss your requirements before selecting.

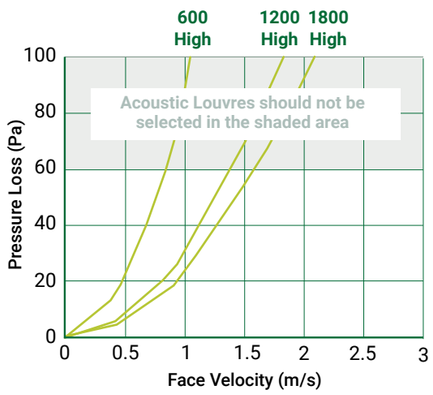
Performance

Acoustic Data	dB in each Octave Band Centre Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
Sound reduction index	5	6	8	12	19	19	18	17
Weighted sound reduction index (Rw)	16							
Static insertion loss	4	5	8	12	20	20	20	21
Regenerated sound power level at 1m/s face velocity	53	46	43	40	41	36	24	12
Regenerated sound power level at 2m/s face velocity	74	66	60	57	57	56	50	40

Airpath Free Area and Height range

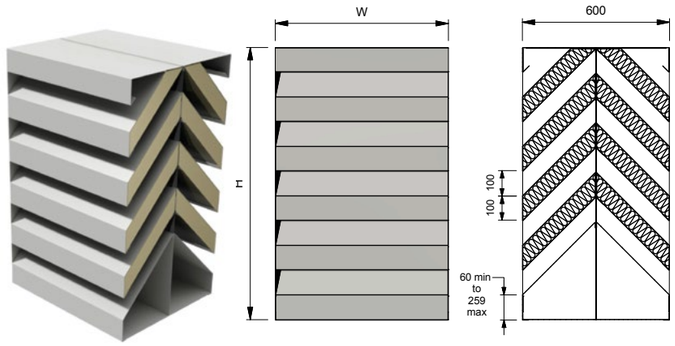


Free area and pressure drop shown is based on a 1150mm wide single piece louvre fitted with bird mesh and will vary slightly for different widths and larger heights. Pressure losses for Class A rated louvres and/or Insect mesh are available upon request.



CS600 Acoustic Louvre Technical Data

Chevron Acoustic Louvre, Standard Performance Profile, 600mm Deep



Typical weight 85kg/m^2

Generally louvres above 50kg will be supplied in modules for assembly on site. Joining brackets and fixings will be provided for assembly.

Installation services, support steelwork, flashings, fixings to the structure and mastic will not be provided unless stated.

Refer to the Acoustic Louvre Schedule and Product Code Definitions for the size and specification of each Acoustic Louvre.

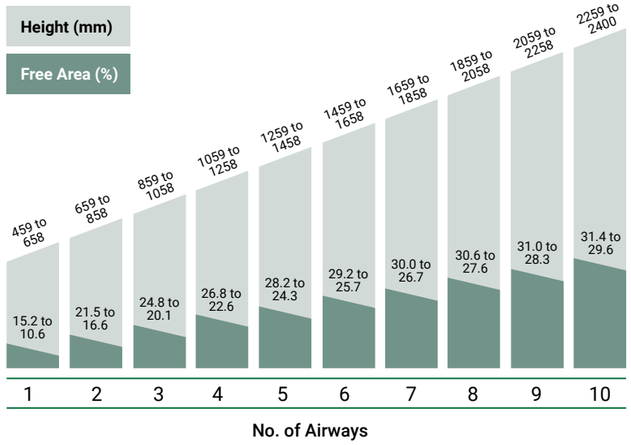
A minimum of 10mm clearance should be allowed between the structure and the Acoustic Louvre sizes shown.

Site constraints may make the installation of the Chevron style product impractical. Please contact Caice to discuss your requirements before selecting.

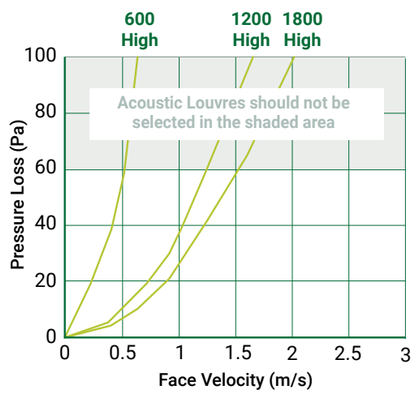
Performance

Acoustic Data	dB in each Octave Band Centre Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
Sound reduction index	7	8	13	23	37	33	29	29
Weighted sound reduction index (Rw)	25							
Static insertion loss	6	8	13	23	38	32	32	32
Regenerated sound power level at 1m/s face velocity	54	46	37	32	28	24	15	12
Regenerated sound power level at 2m/s face velocity	71	66	57	50	47	46	41	30

Airpath Free Area and Height range

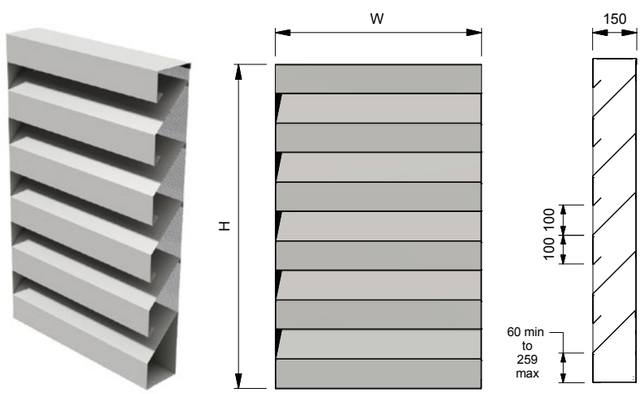


Free area and pressure drop shown is based on a 1150mm wide single piece louvre fitted with bird mesh and will vary slightly for different widths and larger heights. Pressure losses for Class A rated louvres and/or Insect mesh are available upon request.



DS150 Dummy Acoustic Louvre Technical Data

Single Bank Dummy Acoustic Louvre, Standard Performance Profile, 150mm Deep



Typical weight 17kg/m²

Generally louvres above 50kg will be supplied in modules for assembly on site. Joining brackets and fixings will be provided for assembly.

Installation services, support steelwork, flashings, fixings to the structure and mastic will not be provided unless stated.

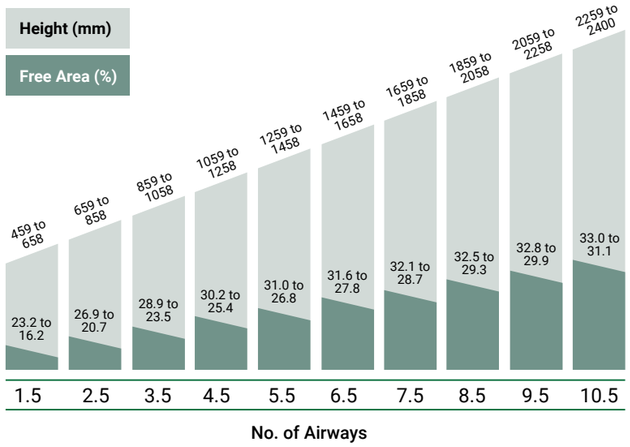
Refer to the Acoustic Louvre Schedule and Product Code Definitions for the size and specification of each Acoustic Louvre.

A minimum of 10mm clearance should be allowed between the structure and the Acoustic Louvre sizes shown.

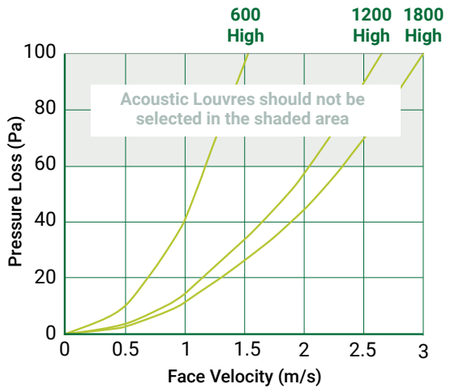
Performance

Acoustic Data	dB in each Octave Band Centre Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
Regenerated sound power level at 1m/s face velocity	48	41	34	35	30	22	13	12
Regenerated sound power level at 2m/s face velocity	66	58	51	51	50	47	41	28

Airpath Free Area and Height range

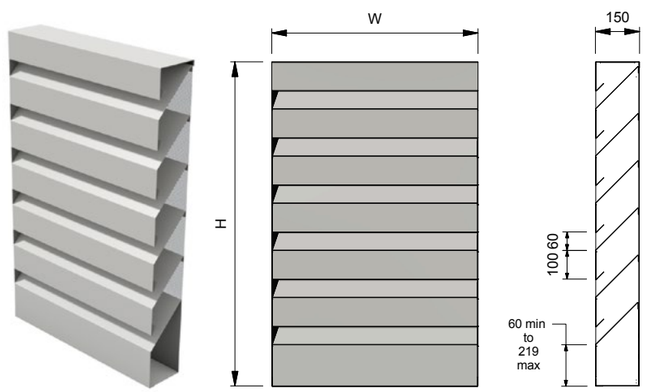


Free area and pressure drop shown is based on a 1150mm wide single piece louvre fitted with bird mesh and will vary slightly for different widths and larger heights. Pressure losses for Class A rated louvres and/or Insect mesh are available upon request.



DH150 Dummy Acoustic Louvre Technical Data

Single Bank Dummy Acoustic Louvre, Higher Performance Profile, 150mm Deep



Typical weight 25kg/m²

Generally louvres above 50kg will be supplied in modules for assembly on site. Joining brackets and fixings will be provided for assembly.

Installation services, support steelwork, flashings, fixings to the structure and mastic will not be provided unless stated.

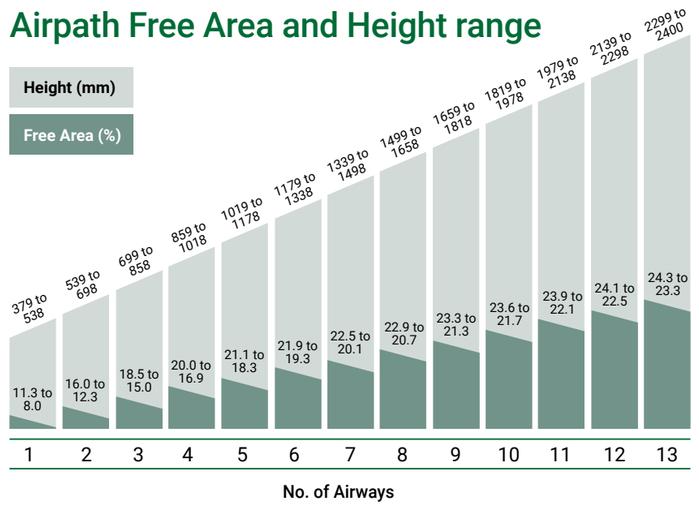
Refer to the Acoustic Louvre Schedule and Product Code Definitions for the size and specification of each Acoustic Louvre.

A minimum of 10mm clearance should be allowed between the structure and the Acoustic Louvre sizes shown.

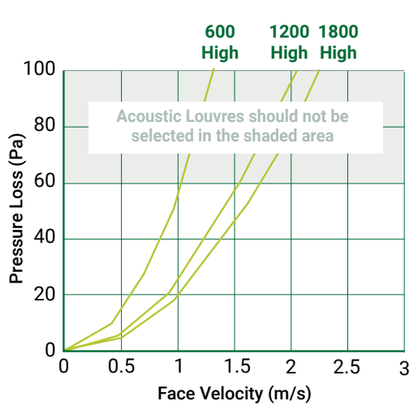
Performance

Acoustic Data	dB in each Octave Band Centre Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
Regenerated sound power level at 1m/s face velocity	53	47	38	36	33	29	18	12
Regenerated sound power level at 2m/s face velocity	70	65	58	53	51	51	45	35

Airpath Free Area and Height range



Free area and pressure drop shown is based on a 1150mm wide single piece louvre fitted with bird mesh and will vary slightly for different widths and larger heights. Pressure losses for Class A rated louvres and/or Insect mesh are available upon request.



Specifying the Acoustic Louvre system

Acoustic Louvre specification

We're here to help and can provide a detailed Acoustic Louvre specification for inclusion within the overall specification for your project. This is also available in a short form NBS Specification format if required.

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