Incorporating

Louvre systems

Series AL

Acoustic / Noise-attenuation louvres

- **Specialist louvre system designed to provide noise attenuation i areas like plant rooms**
- **Available in 150mm, 300mm and 600mm deep variants**
- **Requirement of building control in some inner city zones**



AL: December 2015

Series AL

Series AL acoustic louvres are specialist external louvres, designed primarily for areas like plant rooms or inner city car parks, where noise generated by machinery or vehicles cannot be allowed to leak into the surrounding area.

Using a twin part aluminium blade infilled with mineral wool, HVC acoustic louvres offer a high resistance to rain ingress, whilst also having the sufficient depth to provide useful levels of sound attenuation throughout a wide range of frequencies.

Acoustic louvres are available in the following variants:

- **AL150:** Slimline 150mm deep.
- **AL1:** Standard 300mm deep.
- **AL2:** Heavy duty 600mm deep.

All of the above units can be supplied without mineral wool infill should it be required

Supplied as standard in a recessed frame, various flanges are optional.



Design features

Material	Case and mineral wool infill holder: Galvanised steel Blades: Extruded aluminium Blade infill: Mineral wool
Blade	AL150: Single part aluminium extrusion AL1: Twin part aluminium extrusion AL2: Two banks of twin part aluminium blades set back to back (chevron)
Frame	Standard: Recessed Optional: Flanged
Fixings	Standard: None Optional: See page 5
Finish	Standard: Bare metal (galvanised steel and mill aluminium) Optional: See page 6
Mass/m² face area	AL150: 22 kg AL1: 44 kg AL2: 88kg

Quality assurance

HVC Supplies (Stourbridge) Ltd is an ISO 9001:2008 accredited company.

Assessed to ISO 9001:2008
Cert/Ref No. 1186

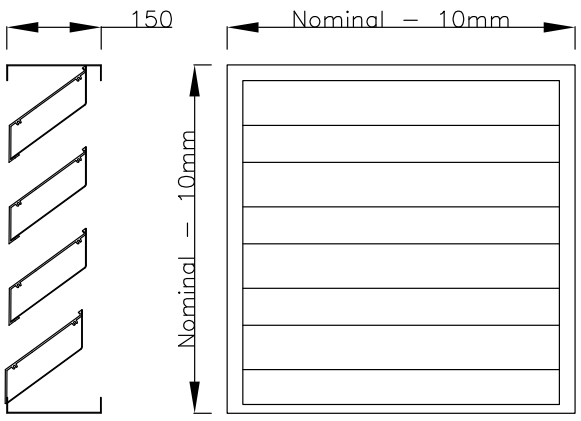
Performance

The table below gives the levels of sound reduction in dB at the shown frequencies for AL1 and AL2 acoustic louvres.

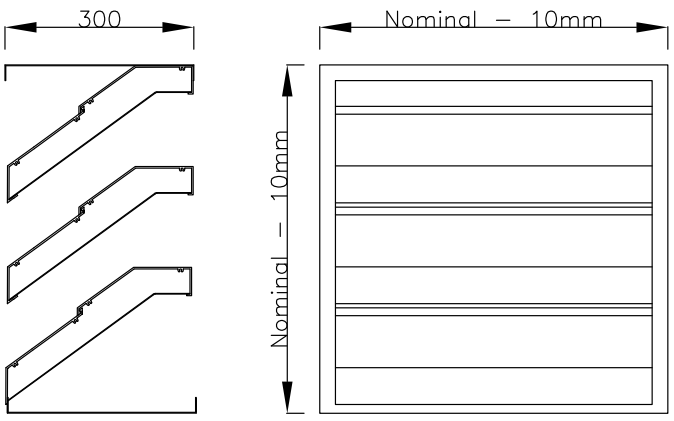
	63 Hz	125 Hz	250 Hz	500 Hz	1 KHz	2 KHz	4 KHz	8 KHz
AL1	5	6	8	13	17	20	15	14
AL2	7	10	13	23	30	32	30	28

Technical drawings

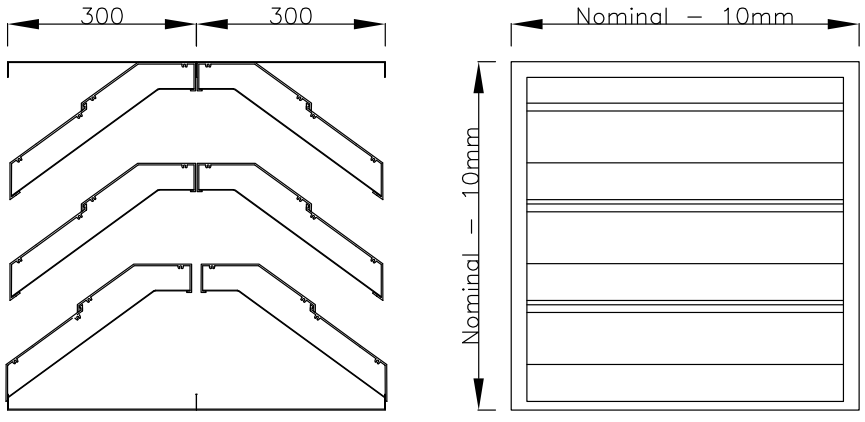
AL150



AL1



AL2



Technical notes

Blade spacings

Blade pitch will vary between 160mm and 195mm based on louvre height with AL1 and AL2 louvres.

If the requirement exists for louvres of different heights to be placed next to each other, please contact our design team who will design your louvres to your specification and provide drawings for approval.

Flange types

The below table shows the standard and optional flanges available for Series AL acoustic louvres, along with ordering codes and dimensions.

These are only standard sizes. If you have a special requirement not shown here, please contact us.

Frame code	Description	Nominal to overall size
25F	25mm flat	+ 37mm
30FW	30mm flat	+ 47mm
50FS	50mm flat (shallow)	+ 85mm
75FS	76mm flat (shallow)	+ 136mm
100FS	102mm flat (shallow)	+ 187mm

Fixings

None (Standard)

Most acoustic louvres are supplied with no fixings.

In this instance we recommend drilling through either the louvre flange (if fitted), or the case, and screwing directly into the supporting structure with an appropriate fixing.





Predrilled face fixing holes - FH

5.7mm countersunk fixing holes will be punched into the louvre frame before powder coating, allowing quick and easy fitting on site.

Number and layout of fixing holes will be appropriate to louvre size. Arrangements can be specified.

Supplied with pozidrive self tapping screws in the same finish as the louvre.

Only available if the louvre is specified with an optional flange.



Important note:

Acoustic louvres can be very heavy.

A flange is only intended for aesthetic purposes and must not be relied upon to support the entire weight of the louvre.

Finish

Galvanised steel and mill aluminium (standard)

Polyester powder coating to any RAL or BS colour



Ordering codes

Example

1 - 1000 x 1000 - AL1 - BS - 50FS - FH - Standard finish - 1S

Codes

1)	**Quantity**		
2)	**Size (mm)**	(Width x height)	
3)	**Series**	AL150	150mm deep single bank acoustic louvre
		AL1	300mm deep single bank acoustic louvre
		AL2	600mm deep double bank (chevron) acoustic louvre
		N...	Add the prefix N to any series code to specifiy no mineral wool infill. Example: NAL1
4)	**Debris screens**	BS	Bird screen (12mm x 12mm mesh)
		IS	Insect screen
5)	**Flanges**	25F	25mm flat flange
		30FW	30mm flat flange
		50FS	50mm flat flange - shallow
		75FS	76mm flat flange - shallow
		100FS	102mm flat flange - shallow
6)	**Fixings**	FH	Predrilled face fixing holes (only available when a flange is specified)
7)	**Finish**	Standard finish	Galvanised steel and mill aluminium (standard)
		RAL...	Polyester powder coated to RAL...
		BS...	Polyester powder coated to BS...
8)	**Sections**	_S	Number of sections required. If left blank this will be confirmed on order acknowledgement.

Leave code section blank if no option is required.

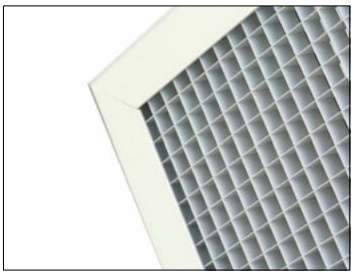
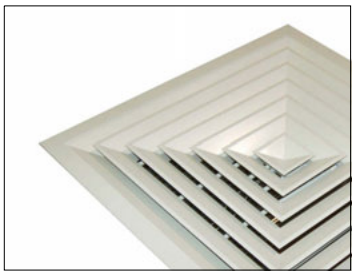
Unless stated, sizes are taken to be nominal, and will have a tolerance removed to aid fitting.

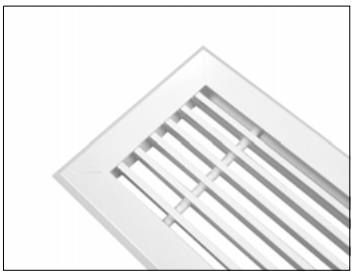
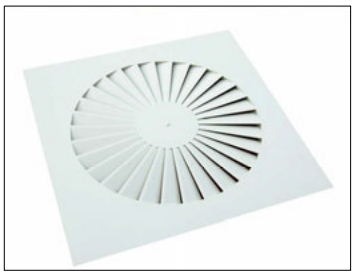
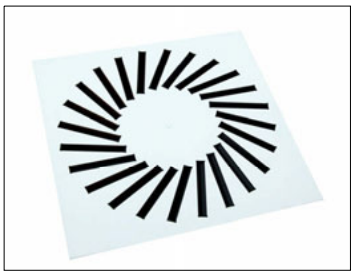
HVC & NCA products

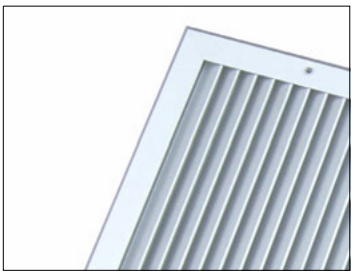
HVC offer the significant advantage of manufacturing both in duct and duct terminal equipment, making us a one stop shop for all your HVAC needs.

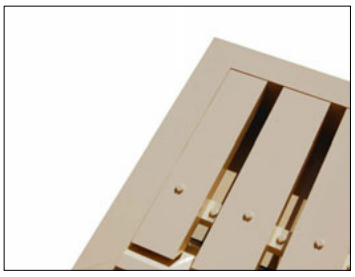
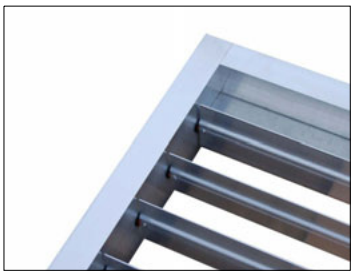
The products shown below are a selection, not an exhaustive list. Go to **www.h-v-c.com** for details on all HVC and NCA products.

HVC: Grilles, Diffusers, Louvres and Volume Control Dampers

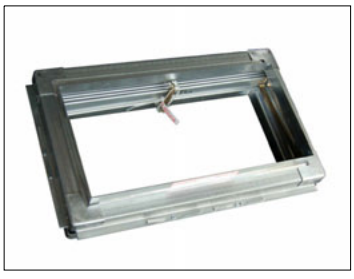





NCA: Fire and Volume Control Dampers





Assessed to ISO 9001:2008
Cert/Ref No. 1186

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