

Acoustic Weather Louvre

Model

AL1 / AL2 / NAL

Overview

Acoustic weather louvres are in many situations a necessity in modern buildings. In populated areas especially, noise from air movement machinery or other sources must be controlled to comply with local noise level laws.

HVC series AL Acoustic weather louvres utilise a large, hollow blade design with a mineral wool core, held inside a galvanised steel case. When fitted, dramatic reductions in noise levels are seen across the whole audible range.

Construction

- Variety of extruded outer frames available, case made with 1.2mm sheet steel.
- Two part extruded aluminium blade design, fully insulated with non-combustible mineral wool.
- Double bank set ups available for maximum noise reduction (Series AL2).
- Non acoustic version available for continuous appearance (Series NAL).

Options and accessories

HVC can supply you a standard Acoustic Weather Louvre, or a customised unit made to your exact specifications. Please see our list of options and accessories below for an overview of what we can do.

- **Volume control damper** – Combination units of an acoustic louvre and an adjustable volume control damper of traditional or UPVC construction can be manufactured. Please see the PDF entitled 'Combination Units' for more details.
- **Bird/Insect mesh** – Either type of mesh can be fitted to the rear of a unit to prevent birds, insects or other foreign objects being able to penetrate the louvre.
- **Finishes** - HVC can polyester powder coat or nylon coat your Series AL Louvre to any RAL or BS colour, non painted (STD) finish is mill.
- **Blanking plate** - Blanking plates enable a portion or all of the louvre to be disabled.
- **Fixings** – Countersunk fixing holes and screws, or concealed fixing lugs are available to aid fitting.
- **Double bank** – For even greater noise reduction HVC created double bank louvres. Consisting of two sets of acoustically lined blades set back to back, these represent an extremely effective method of cutting down noise transfer.



Fitting Options

Standard fitting

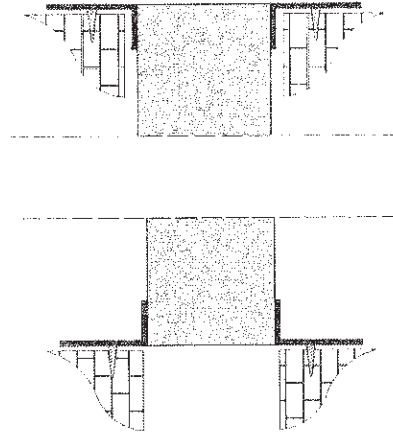
Acoustic weather louvres are normally supplied as a recessed unit with no outer frame. The louvre sits inside the cavity and is usually fixed to the wall by drilling through the interior frame and screwing into the surrounding timber or masonry.

In the event that ragged brickwork needs to be hidden, HVC can supply a non structural outer frame designed to slip over the interior frame and hide any ragged edges from view.

Special fitting

HVC Series AL acoustic weather louvres can be supplied with a variety of special frame options to suit most applications:

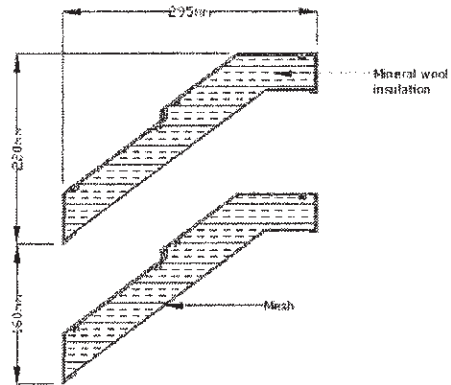
1. **Standard mounting** – Most useful when installation is not a retrofit, standard mounting means the body of the louvre sits entirely inside the wall. Fixing holes and screws are supplied as standard when this fitting option is chosen.
 2. **Surface mounted** – Best suited to retrofit installations where creating a cavity in the wall is not possible, the louvre will sit entirely proud of the surrounding masonry or timber. Fixing holes and screws are supplied as standard when this fitting option is chosen.
 3. **Custom mounted** – If a specific placement for the outer frame is needed, HVC can accommodate this. Simply provide a detailed sketch or description and we will make the unit to suit your needs. Fixing holes and screws are supplied as standard when this fitting option is chosen.
- **Fixing lugs** – Fixing lugs can be factory fitted to the rear of the unit to allow concealed fitting of the louvre.



Blade details

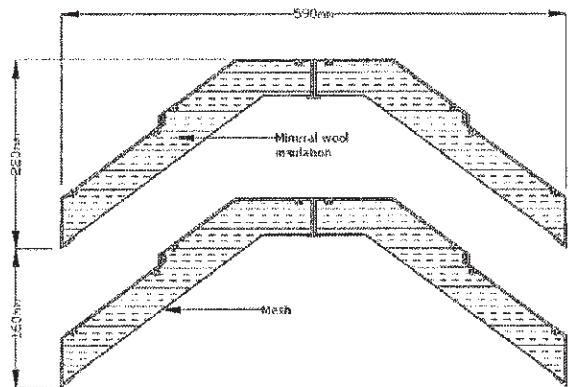
• Single bank acoustic louvre (Series AL1)

Consisting of one set of fully insulated blades, series AL1 acoustic louvres offer a good level of noise reduction.



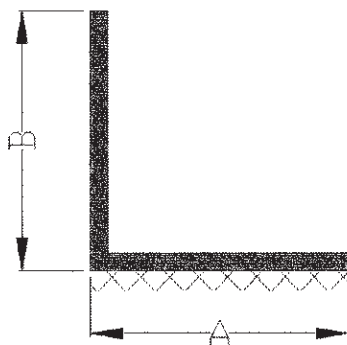
• Double bank acoustic louvre (Series AL2)

With twice the amount of lined blades than its AL1 counterpart, HVC Series AL2 Acoustic louvres give an excellent level of noise reduction right across the audible range.



Please note that blade spacing will be between 160mm and 190mm, based on size of louvre selected. See selection date for detailed acoustic properties of Series AL1 & AL2 louvres.

Outer frame types



A (inches/ mm)	B (inches/ mm)
1/25.4	3/76.2
1.5/38.1	3/76.2
2/50.4	2/50.4
3/76.2	3/76.2
4/101.6	3/76.2
6/152.4	3/76.2

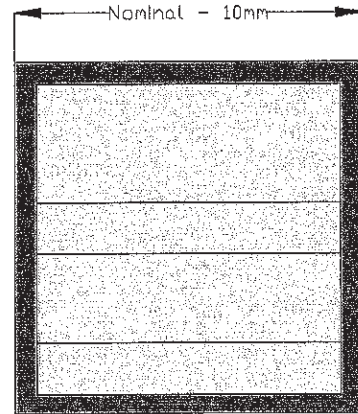
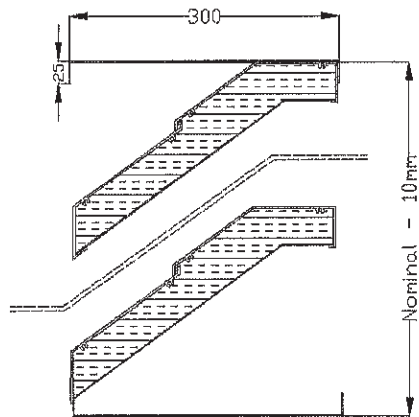
N.B - Hatching denotes visible area



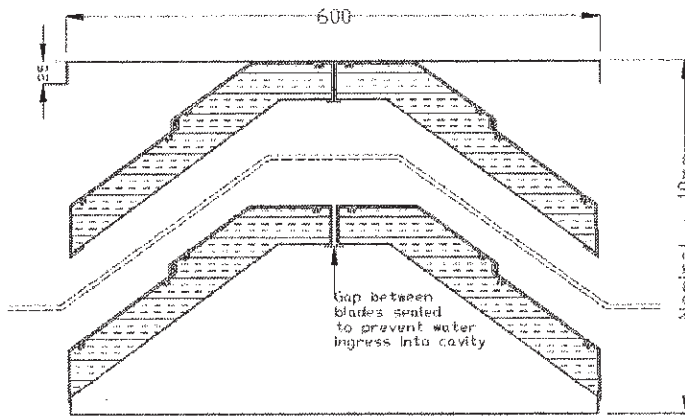
Technical information

- Free area – Approx 50%.
- AL1 Mass/M² face area = 44KG
- AL2 Mass/M² face area = 88KG

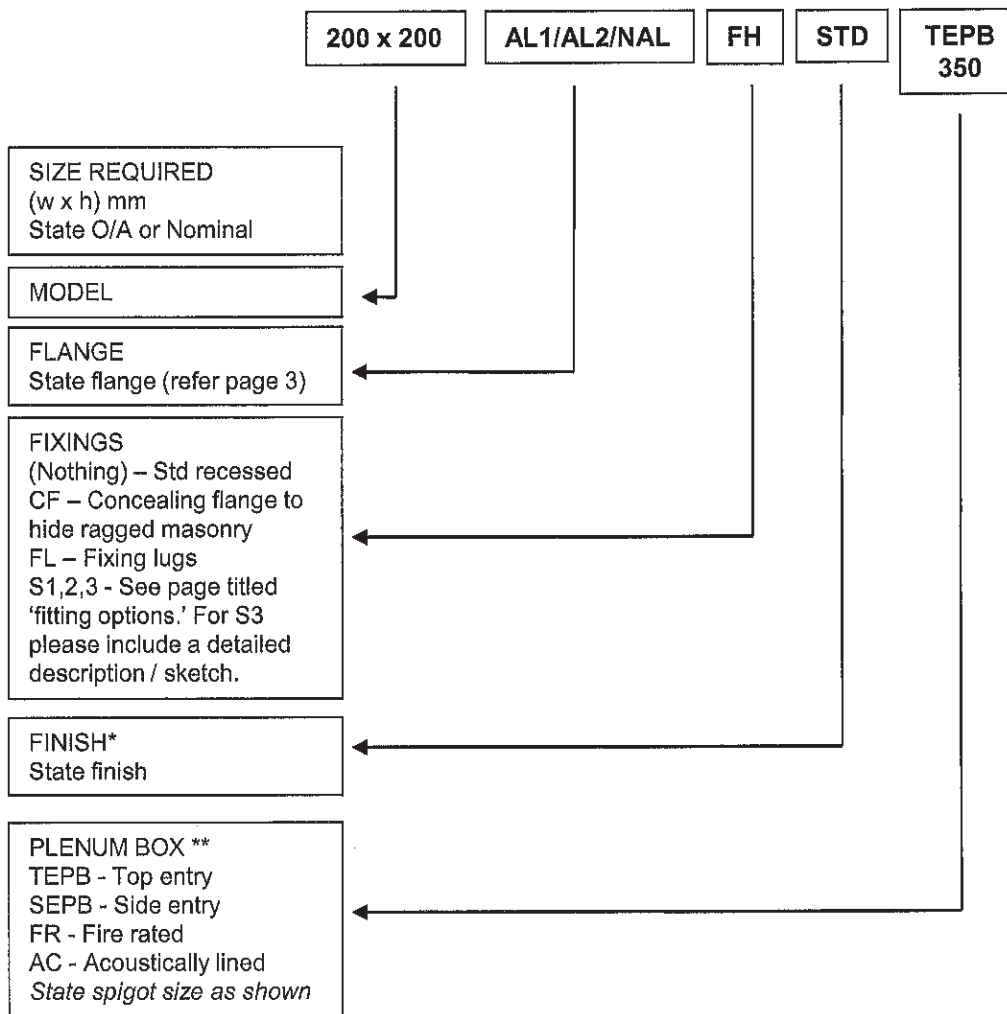
• (___ x ___) – AL1



• (___ x ___) – AL2



Ordering codes



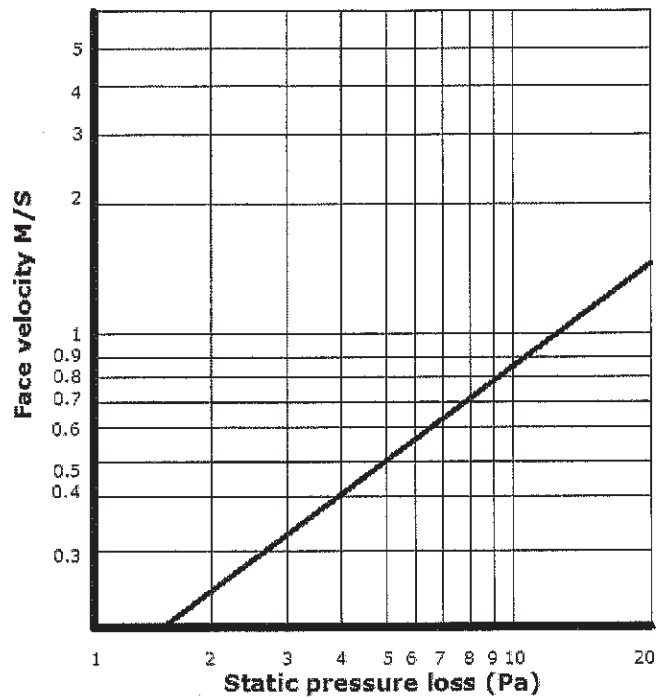
* Standard (STD) finish on weather louvres is mill.

** Plenum boxes are as standard 100mm deep, please state should other depth be required.

HVC Supplies (Stourbridge) Ltd reserves the right to alter, without notice, any specifications issued. Any alterations made will appear on www.h-v-c.com as soon as possible.



Selection data



Louvre type	Sound reduction index in dB at shown frequencies							
	63Hz	125Hz	250Hz	500Hz	1KHz	2KHz	4KHz	8KHz
Single bank 300mm deep	5	6	8	13	17	20	15	14
Double bank 600mm deep	7	10	13	23	30	32	30	28

