

ACOUSTIC LOUVRES



Our details make the world of difference



CROSSFLOW ACOUSTIC LOUVRES

Product Range Data Sheet

GENERAL DESCRIPTION

The Crossflow ALS (CALs) range is a fabricated acoustic louvre designed for commercial projects where reduction in sound transmission is required whilst maintaining weathered ventilation. The CALs louvre is suitable for all applications and can be both vertically and horizontally mounted into pre-formed structural opens. The modular units can be manufactured to suit specific dimensions on site. Each louvre blade is filled with a sound absorption mineral wool to achieve the required acoustic performance. They are quick to install with all fixings being grade A4 stainless steel and are virtually maintenance free.

TECHNICAL DETAILS

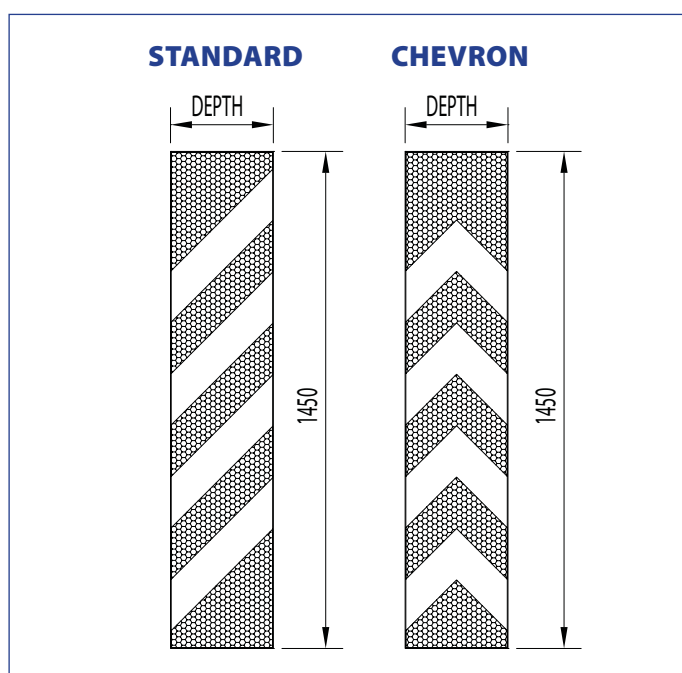
Materials

- Outer frame casing manufactured from 18 gauge galvanised steel
- Louvre blades manufactured from 22 gauge galvanised steel
- Acoustic medium-tissue faced 45kg/m³. Non toxic, vermin and moisture proof mineral wool (packed to +10% compression to eliminate voids)
- Perforated galvanised sheet to rear of blades
- Metal or aluminium bird mesh as standard

Louvre Options

- Perimeter flashings to suit application
- HDPE insect screen
- Blanking Plate as required
- Flanged or glazing outer frame
- Available in galvanised steel, 2mm aluminium, polyester powder coat finish to any RAL colour, and stainless steel.

Depth	Louvre Type	Approx kgm ²
100mm	Standard	20
150mm	Standard	30
275mm	Standard	45
300mm	Standard	50
C300mm	Chevron	50
C600mm	Chevron	100



Louvre designs have been tested at the Sound Research Laboratory, Suffolk, to determine the Airborne Sound Transmission in accordance with BS EN ISO 10140-2:2010

Crossflow Acoustic Louvres - Sound Transmission

Model	Louvre Depth (mm)	63	125	250	500	1K	2K	4K	8K
CALS 100	100	5	4	5	6	9	13	14	13
CALS 150	150	6	6	8	10	14	18	16	15
CALS 275	275	6	5	8	9	17	17	14	14
CALS 300	300	6	7	10	12	18	18	14	13
CALS 300 C	300	6	6	8	13	18	20	16	17
CALS 600 C	550	7	9	12	24	31	33	29	30

HOW TO SPECIFY CROSSFLOW CALS LOUVRES

- Supply and install CALS louvres as manufactured by Crossflow Ltd. Outer frame casing shall be made from 18 gauge (1.2mm) galvanised steel. Louvre blades shall be made from 22 gauge (0.7mm) galvanised steel. Louvre blades to be filled with acoustic medium-tissue faced, non-toxic, vermin and moisture proof mineral wool to achieve the required acoustic performance as indicated.
- Static pressure drop of the louvres not to exceed _____ Pa at a face velocity of _____ m/sec.
- Louvre to have galvanised bird mesh fitted to the rear as standard
- Louvre finish to be _____ in RAL colour _____

CALS 100 - Standard Acoustic Louvre

CALS - 100		ACOUSTIC PERFORMANCE							
Octave band Centre frequency (Hz)	63	125	250	500	1000	2000	4000	8000	
Transmission Loss (dB)	5	4	5	6	9	13	14	13	

CALS - 100		AERODYNAMIC PERFORMANCE									
Static Pressure Drop (N/m ²)	10	20	30	40	50	60	70	80	90	100	
Face Velocity (m/s)	0.92	1.30	1.59	1.84	2.05	2.25	2.43	2.61	2.76	2.90	
Nominal Free Area (%)	42%										

CALS 150 - Standard Acoustic Louvre

CALS - 150		ACOUSTIC PERFORMANCE							
Octave band Centre frequency (Hz)	63	125	250	500	1000	2000	4000	8000	
Transmission Loss (dB)	6	6	8	10	14	18	16	15	

CALS - 150		AERODYNAMIC PERFORMANCE									
Static Pressure Drop (N/m ²)	10	20	30	40	50	60	70	80	90	100	
Face Velocity (m/s)	0.53	0.73	0.90	1.04	1.16	1.28	1.37	1.47	1.56	1.64	
Nominal Free Area (%)	32%										

CALS 275 - Standard Acoustic Louvre

CALS - 275		ACOUSTIC PERFORMANCE							
Octave band Centre frequency (Hz)	63	125	250	500	1000	2000	4000	8000	
Transmission Loss (dB)	6	5	8	9	17	17	14	14	

CALS - 275		AERODYNAMIC PERFORMANCE									
Static Pressure Drop (N/m ²)	10	20	30	40	50	60	70	80	90	100	
Face Velocity (m/s)	0.90	1.15	1.48	1.79	2.05	2.15	2.40	2.60	2.77	2.84	
Nominal Free Area (%)	42%										

CALS 300 - Standard Acoustic Louvre

CALS - 300		ACOUSTIC PERFORMANCE						
Octave band Centre frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Transmission Loss (dB)	6	7	10	12	18	18	14	13

CALS - 300		AERODYNAMIC PERFORMANCE								
Static Pressure Drop (N/m ²)	10	20	30	40	50	60	70	80	90	100
Face Velocity (m/s)	0.94	1.31	1.61	1.83	2.13	2.27	2.46	2.63	2.84	2.99
Nominal Free Area (%)	45%									

CALS 300 - Chevron Acoustic Louvre

CALS - 300		ACOUSTIC PERFORMANCE						
Octave band Centre frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Transmission Loss (dB)	6	6	8	13	18	20	16	17

CALS - 300		AERODYNAMIC PERFORMANCE								
Static Pressure Drop (N/m ²)	10	20	30	40	50	60	70	80	90	100
Face Velocity (m/s)	0.91	1.26	1.49	1.70	2.01	2.08	2.25	2.31	2.60	2.70
Nominal Free Area (%)	45%									

CALS 600 - Chevron Acoustic Louvre

CALS - 600		ACOUSTIC PERFORMANCE						
Octave band Centre frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Transmission Loss (dB)	7	9	12	24	31	33	29	30

CALS - 600		AERODYNAMIC PERFORMANCE								
Static Pressure Drop (N/m ²)	10	20	30	40	50	60	70	80	90	100
Face Velocity (m/s)	0.68	0.94	1.15	1.30	1.47	1.61	1.77	1.89	2.02	2.13
Nominal Free Area (%)	45%									