

AHL Series

ACOUSTIC LOUVER

MODEL AHL-150

FEATURES

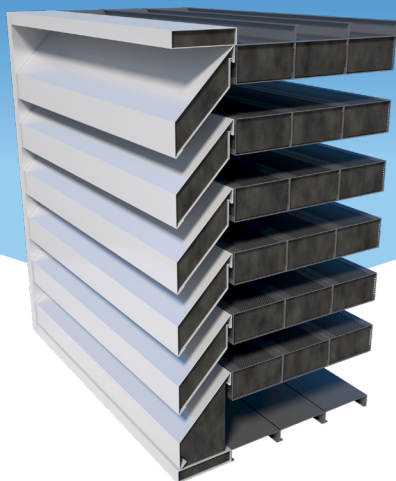
- High Attenuation Performance
- Add-on Acoustic Traps for Increased Performance
- Flat Blade Profile
- Obstructed Line of Sight
- Flangeless Channel Surround

CONSTRUCTION

The AHL-150 louver system is constructed entirely of 6063 T5 extruded aluminium. The acoustic insulation is a medium density, non-combustible Rockwool. Rear acoustic traps are supplied in black anodised as standard. All louvers are manufactured to the highest fabrication and performance standards.

OPTIONS

- Powder Coat finishes (Duratec warranty coatings available on request)
- Natural Anodised finish
- Aluminium or Stainless Steel bird mesh
- Add-on Acoustic Traps
- 25mm Flange Cover available



*AHL shown with optional rear acoustic traps



The Holyoake AHL-150 louver offers an attractive louver system that provides ventilation and sound attenuation. Based on proven Holyoake louver technology, the louver has been designed to efficiently allow air to pass through the facade of a building while reducing radiated noise.

The acoustic insulation is a rockwool product with thermal and fire resistant properties. The insulation has been engineered to meet the following requirements:

- Non-combustible requirements of NCC 2022 Volume 1 C2D10(1) when tested or assessed in accordance with AS 1530.1.
- NCC 2022 Volume 1, S7C7 for insulation materials. When assessed to AS/NZS 1530.3 the insulation does not exceed the 'Spread of Flame' or 'Smoke Developed' indices of Table S7C7.

The AHL-150 is able to be ordered with acoustic traps that are fixed to the rear of the louver for additional, improved attenuation performance.

Maximum, recommended velocity of 2.5m/s through the louver.

TYPICAL APPLICATIONS

High performance acoustic louvers have proven to be a very effective sound barrier in high density locations. They are suitable for applications where noise can be disruptive or irritating to patrons, businesses, and families. Utilising the AHL-150 can assist in creating spaces, such as dining and recreational areas, which would typically be unusable due to the high noise level.



PERFORMANCE DATA – MODEL AHL150

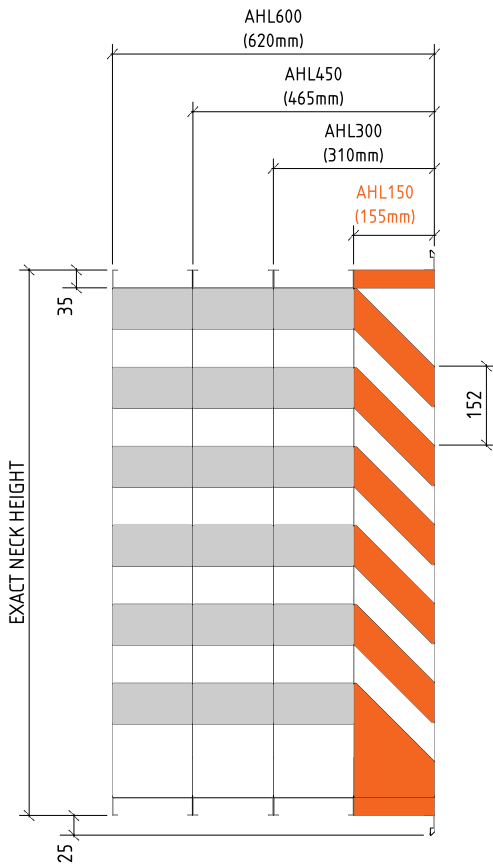
ACOUSTIC PERFORMANCE RATINGS

	Measured at Octave Band Center Frequencies					
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
Free-Field Noise Reduction (dB)	20	19	22	28	30	29
Transmission Loss (dB)	14	13	16	22	24	23

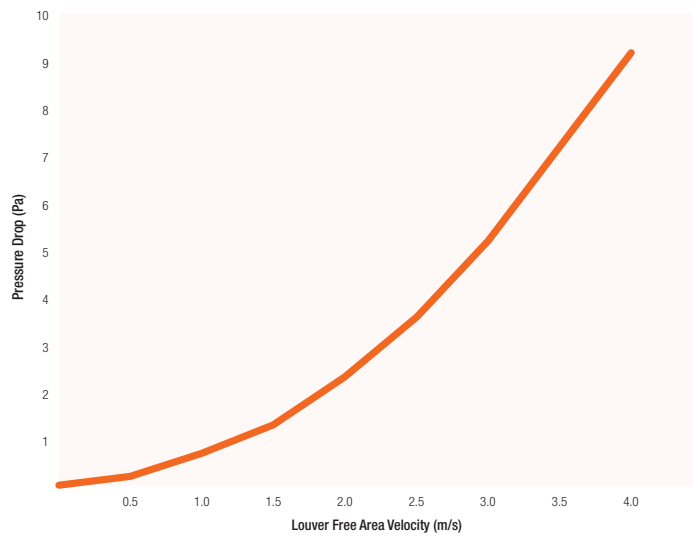
Performance Notes:

1. Test data obtained in accordance with AS1191-2002 & ISO 15186-1: 2000 test standards for Transmission Loss
2. Free Field Noise Reduction = Transmission Loss + 6 dB
3. Weighted Sound Reduction Index Value (Rw) = 21, obtained in accordance with AS-NZS-ISO 717.1: 2004

DIMENSIONAL DATA



AERODYNAMIC PERFORMANCE



FIRE HAZARD PROPERTIES & NON-COMBUSTIBILITY

The insulation has been tested and is compliant with AS 1530.1 and AS/NZS 1530.3:

Fire Hazard Properties	When assessed in accordance with AS/NZS 1530.3	Ignitability: 0, Spread of flame: 0 Heat evolved: 0, Smoke developed: 1
Non-Combustibility	When assessed in accordance with AS 1530.1	Non-Combustible

PERFORMANCE DATA – MODEL AHL300

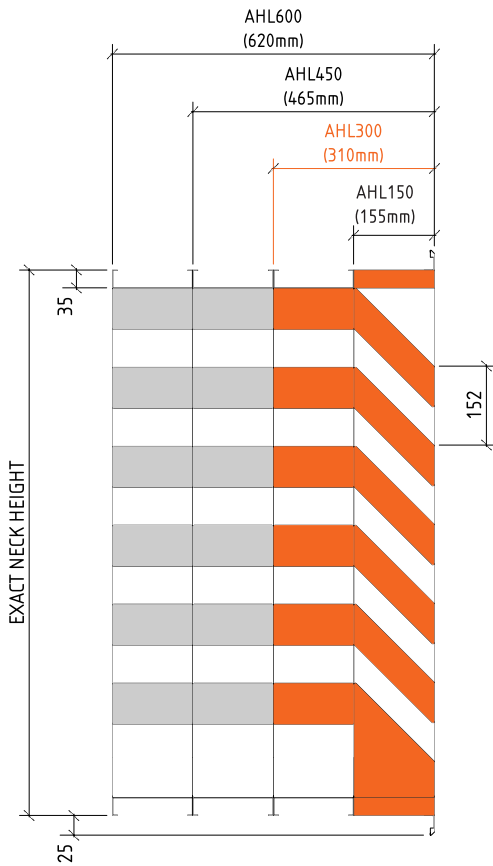
ACOUSTIC PERFORMANCE RATINGS

	Measured at Octave Band Center Frequencies					
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
Free-Field Noise Reduction (dB)	20	21	26	34	38	37
Transmission Loss (dB)	14	15	20	28	32	31

Performance Notes:

1. Test data obtained in accordance with AS1191-2002 & ISO 15186-1: 2000 test standards for Transmission Loss
2. Free Field Noise Reduction = Transmission Loss + 6 dB
3. Weighted Sound Reduction Index Value (Rw) = 26, obtained in accordance with AS-NZS-ISO 717.1: 2004

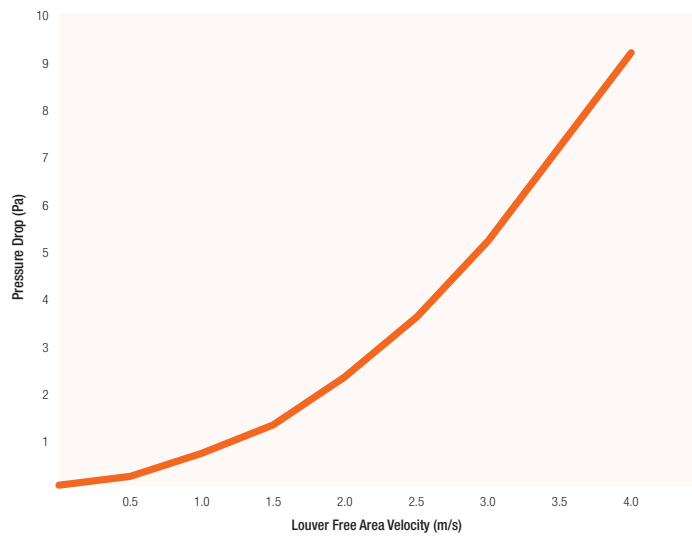
DIMENSIONAL DATA



Side Elevation

Note: 25mm Flange Cover option shown

AERODYNAMIC PERFORMANCE



FIRE HAZARD PROPERTIES & NON-COMBUSTIBILITY

The insulation has been tested and is compliant with AS 1530.1 and AS/NZS 1530.3:

Fire Hazard Properties	When assessed in accordance with AS/NZS 1530.3	Ignitability: 0, Spread of flame: 0 Heat evolved: 0, Smoke developed: 1
Non-Combustibility	When assessed in accordance with AS 1530.1	Non-Combustible

PERFORMANCE DATA – MODEL AHL450

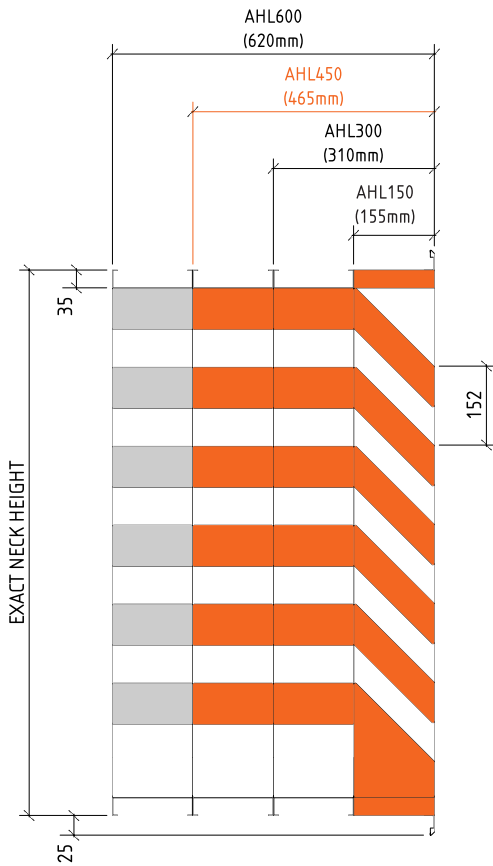
ACOUSTIC PERFORMANCE RATINGS

	Measured at Octave Band Center Frequencies					
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
Free-Field Noise Reduction (dB)	20	23	29	39	43	41
Transmission Loss (dB)	14	17	23	33	37	35

Performance Notes:

1. Test data obtained in accordance with AS1191-2002 & ISO 15186-1: 2000 test standards for Transmission Loss
2. Free Field Noise Reduction = Transmission Loss + 6 dB
3. Weighted Sound Reduction Index Value (Rw) = 29, obtained in accordance with AS-NZS-ISO 717.1: 2004

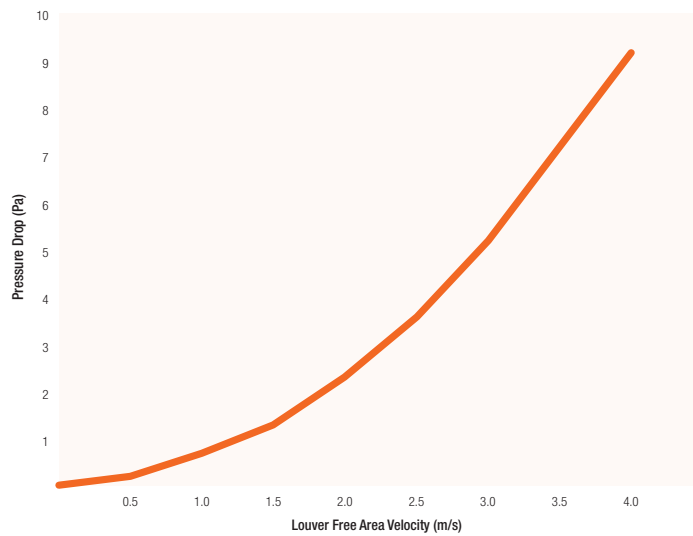
DIMENSIONAL DATA



Side Elevation

Note: 25mm Flange Cover option shown

AERODYNAMIC PERFORMANCE



FIRE HAZARD PROPERTIES & NON-COMBUSTIBILITY

The insulation has been tested and is compliant with AS 1530.1 and AS/NZS 1530.3:

Fire Hazard Properties	When assessed in accordance with AS/NZS 1530.3	Ignitability: 0, Spread of flame: 0 Heat evolved: 0, Smoke developed: 1
Non-Combustibility	When assessed in accordance with AS 1530.1	Non-Combustible

PERFORMANCE DATA – MODEL AHL600

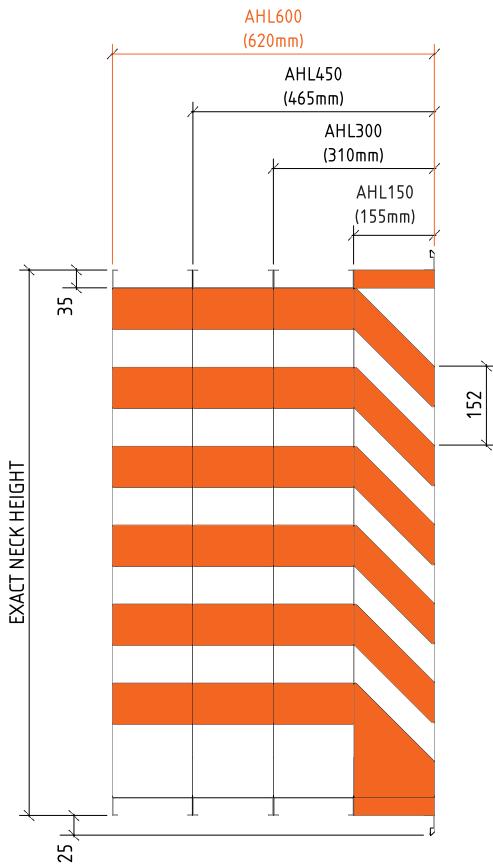
ACOUSTIC PERFORMANCE RATINGS

	Measured at Octave Band Center Frequencies					
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
Free-Field Noise Reduction (dB)	21	24	32	43	46	44
Transmission Loss (dB)	15	18	26	37	40	38

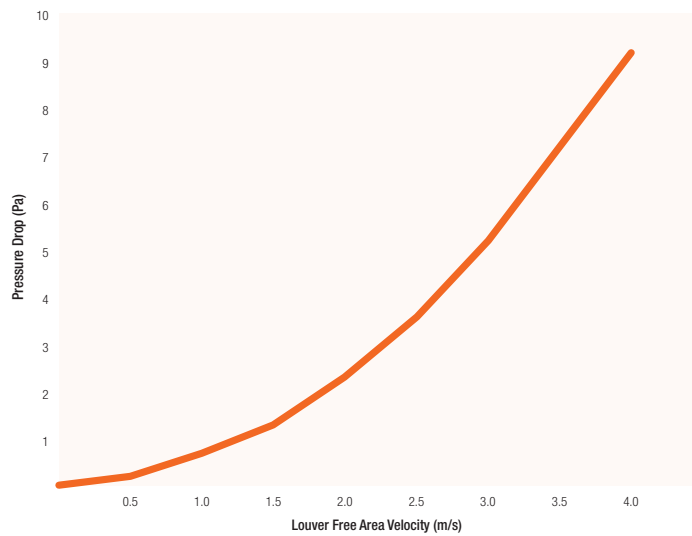
Performance Notes:

1. Test data obtained in accordance with AS1191-2002 & ISO 15186-1: 2000 test standards for Transmission Loss
2. Free Field Noise Reduction = Transmission Loss + 6 dB
3. Weighted Sound Reduction Index Value (Rw) = 31, obtained in accordance with AS-NZS-ISO 717.1: 2004

DIMENSIONAL DATA



AERODYNAMIC PERFORMANCE



FIRE HAZARD PROPERTIES & NON-COMBUSTIBILITY

The insulation has been tested and is compliant with AS 1530.1 and AS/NZS 1530.3:

Fire Hazard Properties	When assessed in accordance with AS/NZS 1530.3	Ignitability: 0, Spread of flame: 0 Heat evolved: 0, Smoke developed: 1
Non-Combustibility	When assessed in accordance with AS 1530.1	Non-Combustible