

## ACOUSTIC LOUVERS

### Commercial Products

#### Product Description

VAW Systems' **AL** (standard blade), **AL-S** (sight-proof) and **AL-F** (airfoil shaped) Acoustic Louvers are designed to provide optimal acoustic performance (Transmission Loss; dB) with minimal airflow restrictions (Pressure Drop; in.w.g.) for a variety of space restricted applications. Acoustic louvers are manufactured with a choice of finishes and material options. If required by the system or in-field conditions, the acoustic louver may be assembled in a modular fashion. VAW Systems offers a range of blade geometries that will meet your acoustic, aerodynamic and security requirements.

#### Applications

- Plant and mechanical room ventilation
- Replace standard rain louvers for improved acoustic performance
- Relief air from factories and workshops
- Ventilation for acoustic enclosures
- Air conditioning and cooling tower barriers (with airflow)
- Power generation equipment
- Noise barrier ventilation systems

#### Standard Features

- Casing materials: 18 ga. Galvanized
- Depth range: 4 – 12 in. (other sizes available)
- Cross-section (max. piece size): 48 in. wide by 120 in. tall
- Acoustic grade fiberglass media fill

#### Accessories

- 1x1 wire mesh protection
- Access doors



Standard Blade  
Acoustic Louver (AL)



Sight-Proof, V-Blade  
Acoustic Louver (AL-S)



Airfoil Blade  
Acoustic Louver (AL-F)

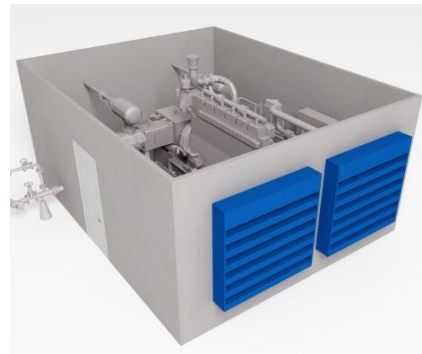
## Certified Performance Data

Louver Type	Depth (in.)	Octave Band Transmission Loss (dB)								Pressure Drop (in.w.g.) at Various Face Velocities			
		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	250 fpm	300 fpm	400 fpm	500 fpm
AL	4	4	6	8	11	15	20	16	12	0.09	0.13	0.24	0.37
	6	5	6	9	12	17	22	18	16	0.11	0.16	0.28	0.44
	8	6	7	10	14	20	23	21	18	0.10	0.14	0.24	0.38
	12	7	8	11	16	22	25	23	20	0.09	0.13	0.23	0.36
AL-S	8	6	7	11	16	23	25	24	19	0.10	0.14	0.24	0.38
	12	7	9	12	18	24	26	25	21	0.11	0.14	0.26	0.39
	18	7	10	13	20	26	27	25	22	0.10	0.15	0.26	0.40
	24	8	11	14	21	28	28	26	22	0.11	0.15	0.27	0.42
AL-F	8	5	5	6	9	12	13	10	12	0.03	0.04	0.07	0.11
	12	7	7	9	12	15	14	11	12	0.04	0.05	0.09	0.14
	18	7	9	11	14	20	18	12	13	0.03	0.05	0.08	0.13
	24	8	11	12	19	24	22	13	13	0.04	0.05	0.09	0.14

- Transmission Loss (TL) data based on the ASTM E90 standard
- Pressure Drop data based on the AMCA 500-L standard
- Noise Reduction (NR) may be estimated as:  $NR = TL + 6$  (across all frequencies) for a receiver in a free-field

## Construction Options

- Heavy casings: 10 and 14 ga.
- Casing materials: stainless steel, satin coat, and aluminum constructions
- Mounting flange
- Wire mesh protection
- Fiberglass cloth media protection
- Custom configurations for space and weight restrictions
- Paint finish and corrosion protection
- Hinged or door mountings



Air Intake Acoustic Louvers for a Mechanical Equipment Room



### VAW Model Number Definition

The following model name system applies to Acoustic Louvers (e.g. 24X36-AL-10)

\_\_\_\_\_ X \_\_\_\_\_ -AL- \_\_\_\_\_  
 Opening Width      Opening Height      Louver Depth

## Application Engineering Support

Contact VAW directly for free application engineering support, including an acoustic analysis of your noise control requirements and a quick silencer selection.