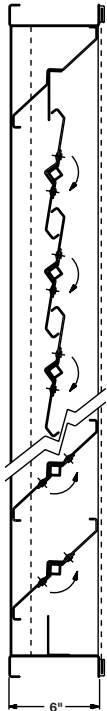
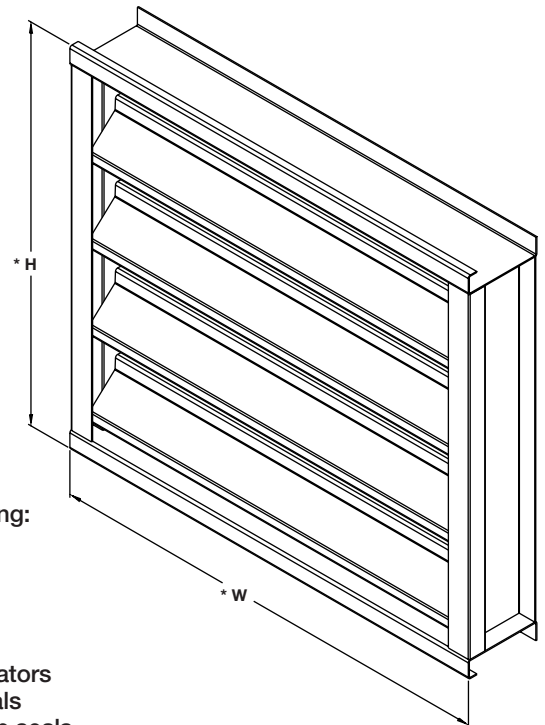


Application and Design

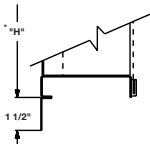
FAJ-602 is an adjustable weather louver designed to protect air intake and exhaust openings in building exterior walls. The adjustable blades may be motorized or manually operated, and when open allow airflow through the louver. When closed, they prevent the passage of air and weather. The FAJ-602 is an extremely efficient louver with **AMCA LICENSED PERFORMANCE DATA** enabling designers to select and apply with confidence.


Standard Construction

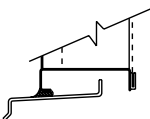
- Frame: 16 gauge galvanized steel
- Blades: 16 gauge galvanized steel, positioned at 45° angle on approximately 4" centers
- Linkage: Side linkage out of airstream (concealed in frame)
- Bearings: Synthetic sleeve type
- Axles: 1/2" diameter zinc plated steel
- Operator: Locking louver quadrant
- Birdscreen: 1/2" x 1/2" mesh, 19 gauge galvanized in removable frame. Screen is mounted on inside (rear)
- Finish: Mill
- Minimum Size: 12"W x 16.5"H
- Maximum Size: 60"W x 96"H (see page 4)


Options (at additional cost)

- Flanged frame
- Extended sill
- A variety of bird and insect screens
- A variety of architectural finishes including:
 - Baked enamel
 - Kynar
- Hinged frame
- Security bars
- Filter racks
- A variety of electric and pneumatic actuators
- Extruded dual durometer vinyl blade seals
- flexible stainless steel compression jamb seals
- Manual operator



OPTIONAL FLANGE



OPTIONAL EXTENDED SILL

* W & H Dimensions furnished approximately 1/4" under size.

Quantity	Size	
	W Width	H Height
Project	Location	
Contractor	Architect/Engineer	

FAJ-602 Louver Performance Data

**AMCA
CERTIFIED
RATINGS**

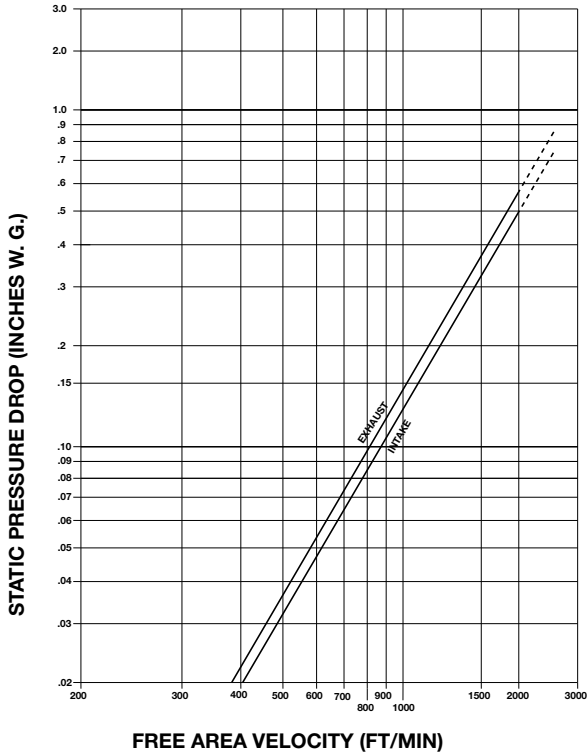
**WATER
PENETRATION
AIR
PERFORMANCE**

**AIR
MOVEMENT
AND CONTROL
ASSOCIATION, INC.**

MEMBER ASSOCIATION OF AMCA

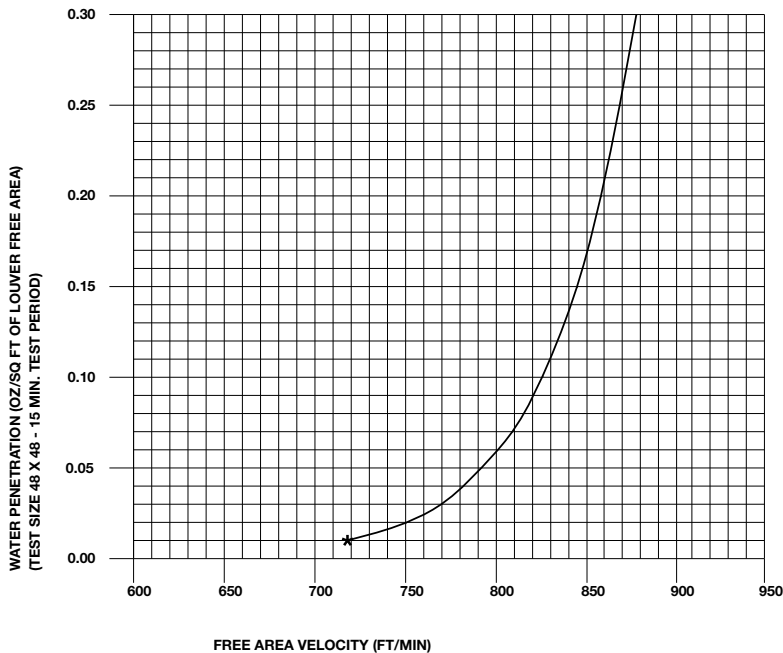
Greenheck certifies that the FAJ-602 louvers shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance and water penetration ratings.

Airflow Resistance (Standard Air - .075 lb/ft³)



Model FAJ-602 resistance to airflow varies depending on louver application (air intake or air exhaust). Free area velocities (shown) are higher than average velocity through the overall louver size. See louver selection information.

Water Penetration (Standard Air - .075 lb/ft³)



The AMCA Water Penetration Test provides a method for comparing various louver models and designs as to their efficiency in resisting the penetration of rainfall under specific laboratory test conditions. The beginning point of water penetration is defined as that velocity where the water penetration curve projects through .01 oz. of water (penetration) per sq. ft. of louver free area. ***The beginning point of water penetration for Model FAJ-602 is 717 fpm free area velocity.** These performance ratings do not guarantee a louver to be weatherproof or stormproof and should be used in combination with other factors including good engineering judgement in selecting louvers.

The AMCA Certified Ratings Seal applies to air performance and water penetration only.

Louver Selection and Application

Application of any louver involves selecting an airflow velocity through the louver free area (free area velocity in fpm) that produces an acceptable pressure drop and for intake applications minimizes carry through of normally encountered rain water. No louver manufacturer warrants their louver to prevent water penetration under all possible combinations of wind and rain. Water penetration through Model FAJ-602 begins at 717 fpm free area velocity. Intake air louver selection using free area velocity below 717 fpm is recommended. Louver selection involves the following two steps, and depending on given conditions, either step may come first.

Select Free Area Velocity:

Using the **Airflow Resistance Chart**, select a free area velocity that produces an acceptable pressure drop with minimal water penetration. (Water penetration need not be considered when selecting exhaust louvers.)

Determine Louver Free Area:

Using the free area velocity from previous step and total cfm, determine Louver Free Area required. Using **Louver Free Area Chart**, select a louver with the required free area. If louver size is given, determine free area from chart and work backwards to determine maximum airflow. See examples below.

Free Area Chart

Louver Height Inches	Louver Width in Inches									Louver Height Inches
	12	18	24	30	36	42	48	54	60	
16.5	0.3	0.49	0.68	0.87	1.07	1.26	1.45	1.64	1.84	16.5
18	0.34	0.56	0.79	1.01	1.23	1.45	1.68	1.9	2.12	18
24	0.58	0.95	1.32	1.7	2.07	2.44	2.82	3.19	3.56	24
30	0.79	1.31	1.82	2.34	2.85	3.37	3.89	4.4	4.92	30
36	0.99	1.64	2.29	2.93	3.58	4.22	4.87	5.51	6.16	36
42	1.04	1.72	2.39	3.07	3.74	4.42	5.09	5.77	6.44	42
48	1.27	2.1	2.93	3.75	4.58	5.41	6.23	7.06	7.88	48
54	1.51	2.48	3.46	4.44	5.42	6.39	7.37	8.35	9.32	54
60	1.74	2.87	4	5.12	6.25	7.38	8.51	9.64	10.77	60
66	1.97	3.25	4.53	5.81	7.09	8.37	9.65	10.93	12.21	66
72	2.21	3.64	5.07	6.5	7.93	9.36	10.79	12.22	13.65	72
78	2.44	4.02	5.6	7.18	8.76	10.34	11.93	13.51	15.09	78
84	2.67	4.4	6.14	7.87	9.6	11.33	13.06	14.8	16.53	84
90	2.9	4.79	6.67	8.55	10.44	12.32	14.2	16.09	17.97	90
96	3.14	5.17	7.2	9.24	11.27	13.31	15.34	17.38	19.41	96
Louver Free Area in Square Feet										

FAJ-602 Selection and Examples

Example 1:

Airflow given as 8,000 cfm – select louver size.

- A. Determine louver free area by dividing airflow by free area velocity (do not exceed 691 fpm on intake louver application).

$$\frac{8,000 \text{ cfm}}{\text{Airflow}} \div \frac{717 \text{ fpm}}{\text{Free Area Velocity}} = \frac{11.2 \text{ ft.}^2}{\text{Required Louver Free Area}}$$

- B. Select a louver with at least the required louver free area from **Free Area Chart** above.

$$\frac{48'' \text{ W} \times 78'' \text{ H}}{11.93 \text{ ft.}^2 \text{ free area}}$$

$$\frac{671 \text{ fpm free area velocity (8,000 cfm} \div 11.93 \text{ ft.}^2 \text{ F.A.)}}{\text{(Other selections available - See Free Area Chart above)}}$$

- C. Check the pressure drop of the selected louver at the given airflow (**Airflow Resistance Chart** on Page 2).

$$\Delta P \text{ at } \frac{671 \text{ fpm}}{\text{Free Area Velocity}} = \frac{0.178 \text{ in. w.g.}}{\text{Pressure Drop}}$$

Example 2:

Louver size given as 48 x 48 – determine maximum airflow.

- A. Use **Free Area Chart** to determine
Free Area = 6.23 ft.²

- B. Multiply Free Area x Free Area Velocity (Do not exceed 717 fpm on intake louver applications).

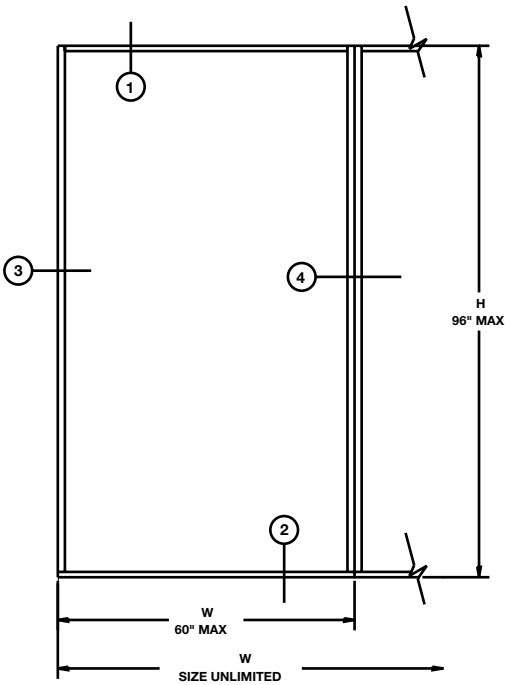
$$\frac{6.23 \text{ ft.}^2 \times 717 \text{ fpm}}{\text{Free Area} \quad \text{Free Area Velocity} \quad \text{Maximum Airflow}} = \frac{4,467 \text{ cfm}}{\text{Maximum Airflow}}$$

- C. Check the pressure drop of the selected louver at the given airflow (**Airflow Resistance Chart** on Page 2).

$$\Delta P \text{ at } \frac{717 \text{ fpm}}{\text{Free Area Velocity}} = \frac{0.07 \text{ in. w.g.}}{\text{Pressure Drop}}$$

Maximum Size and Installation Information

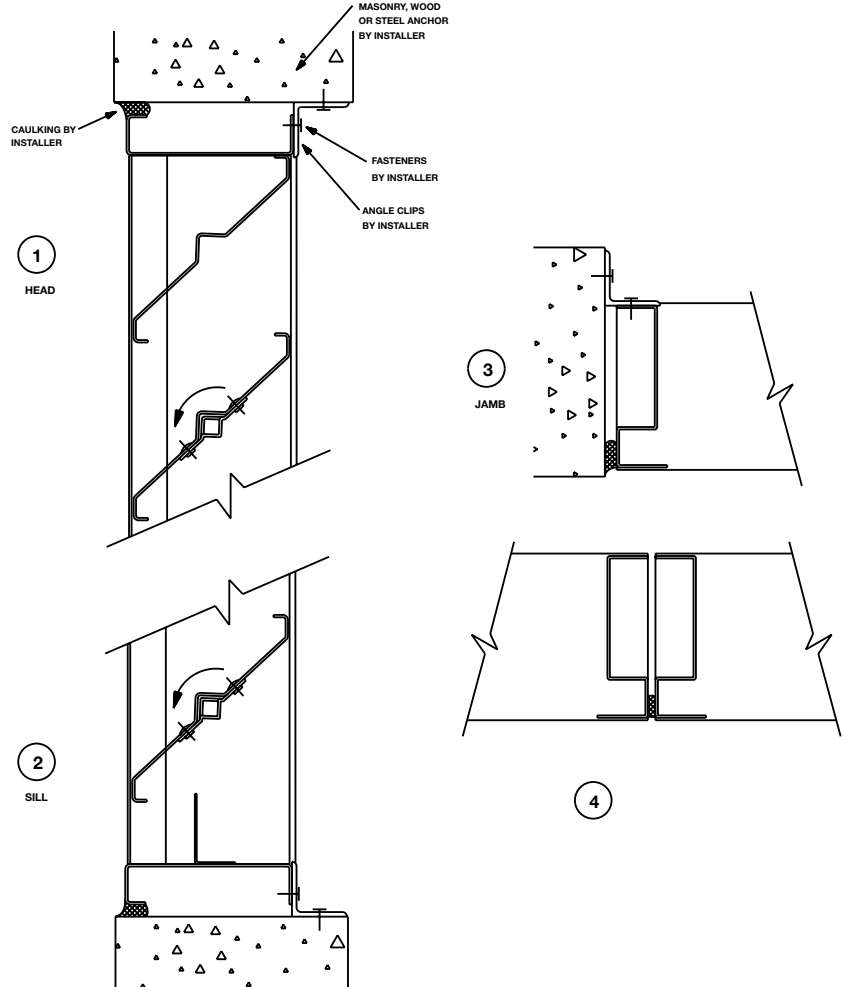
Because of Model FAJ-602's adjustable blade design, the width is limited to a maximum of 60" and height of 96". Factory-assembled louver sections are designed to withstand wind loadings of 25 pounds per square foot (100 mph wind equivalent), however, louver frames and hidden mullions require bracing or support from the building structure to provide overall structural integrity. If larger louver assemblies are to be field erected, section joints also require bracing or support from the building structure. Angles, clips, bolts, and other fasteners and installation hardware are not provided with the louvers and must be supplied by the installing contractor. Details shown are general in nature. Additional information on louver installation may be found in AMCA Publication #501, Louver Application Manual.



Maximum Louver Size Information

W = Overall width – 60" maximum

H = Overall height – 96" maximum



FAJ-602 Specifications

Louvers meeting the following specifications shall be furnished and installed where shown on the plans and/or as described in schedules. Louvers shall be adjustable type blades in a 6" louver frame.

Each factory-assembled louver section shall be designed to withstand wind loadings of 25 pounds per square foot (100 mph wind equivalent). Louver frames, mullions, and section joints shall be adequately supported from the building structure to withstand this same wind loading.

Louver performance data shall be licensed under the AMCA Certified Ratings Program and shall bear the AMCA Certified Ratings Seal. This certified performance data shall include airflow pressure loss and water penetration, and shall demonstrate performance equal to or better than the Greenheck model specified.

Louvers shall be Greenheck Model FAJ-602 adjustable type fabricated from 16 gauge galvanized steel. Blades shall be positioned approximately on 6" centers. Each louver shall be equipped with a framed, removable, rear-mounted screen of 1/2" x 1/2", 19 gauge galvanized steel.

Specifier select one of the following finish specifications:

Louvers shall be supplied with standard mill finish.

Louvers shall be supplied with a baked enamel finish applied after a thorough cleaning and preparation of the metal surface. A total dry film thickness of approximately 1.2 mils shall be provided. Color shall be (specify color from standard color chart).

Louvers shall be supplied with a Kynar finish applied following a thorough cleaning and pretreatment of the metal surface. Dry film thickness of the Kynar shall be approximately 1.2 mils after baking at 450°F. Color shall be (specify color from standard color chart).