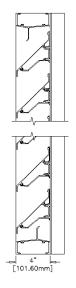


# K609



## STATIONARY EXTRUDED ALUMINUM ARCHITECTURAL BLADE LOUVER

| Visible Mullion Louve  | <b>r Type</b> K609                                    |
|--|---|
| Material   | Extruded Aluminum (Alloy 6063-T5)                     |
| Stationary Blade   | 0.081 in. (2.06 mm)                                   |
| Frame  | 0.081 in. (2.06 mm)                                   |
| Louver Depth   | 4 in. (101.6 mm)                                      |
| Blade Angle  | 45°   |
| Free Area – 4 ft. x 4 ft   | <b> Unit</b> 7.91 sq. ft. (0.74 sq m)                 |
| Percent Free Area  | 49.4%   |
| Free Area Velocity at I<br>Point of Water Peneti<br>0.01 oz H <sub>2</sub> O/sq. ft. Fre |   |
| Air Volume Flow Rate<br>Beginning Point of W<br>Penetration – 4 ft. x 4                  |   |
| Pressure Drop at Begi<br>Point of Water Peneti   | nning<br>ration 0.06 in. H <sub>2</sub> O (0.014 kPa) |





## RECOMMENDED SPECIFICATION

#### GENERA

Furnish and install where indicated on plans or described in schedules Louver Type K609 as designed and manufactured by The Airolite Company LLC, Schofield, Wisconsin. Louvers shall be furnished with bird screen, insect screen, supports, installation hardware and finishes as specified and as required for a complete installation.

### **PRODUCTS**

Louvers shall be architectural blade Louver Type K609 with visible vertical mullions (or Louver Type CB609 with invisible vertical mullions). Louvers shall be 4-inches (101.6 mm) deep and assembled entirely from extruded aluminum components. Blades and frames shall be 0.081-inch (2 mm) thick extruded aluminum, alloy 6063-TS. Blades shall be stationary, horizontal and spaced 5-inches (127 mm) on center.

## **OPTIONAL WELDED ASSEMBLY**

Join stationary blade, head, sill and jamb frames with fillet welds concealed from view, unless the size of the louver makes screwed connections between louver sections necessary. Louver blades shall be joined to each jamb frame with fillet welds produced with the Pulsed Gas Metal Arc Welding (GMAW/Mig) process.

#### STRUCTURAL DESIGN CRITERIA

Maximum single section size for model K609 is 72 in. W x 144 in. H or 144 in. W x 72 in. H. Larger openings require field assembly of multiple louver sections to make up the overall opening size. Individual louver sections are designed to withstand a 25 PSF wind load (please consult Airolite if the louvers must withstand higher wind-loads). Structural reinforcing members may be required to adequately support and install multiple louver sections within a large opening. Structural reinforcing members along with any associated installation hardware is not provided by Airolite unless indicated otherwise by Airolite. Options and accessories including, but not limited to, screens, filter racks, louver doors, and blank off panels are not subject to structural analysis unless indicated otherwise by Airolite. Additional information on louver installation may be found in AMCA Publication #501, Louver Application Manual.

## **PERFORMANCE RATINGS**

FREE AREA: 7.91 Square Feet (0.74 m²)
MINIMUM FREE AREA VELOCITY
at Beginning Point of Water Penetration: 562 fpm (2.86 m/s)
MINIMUM AIR VOLUME FLOW RATE

at Beginning Point of Water Penetration: 4,446 cfm (2.10 m³/s) MAXIMUM STATIC PRESSURE

at Beginning Point of Water Penetration: 0.06 in. H<sub>2</sub>O (0.014 kPa)

See page 4 for complete finish options

## **LOUVER TYPE K609 PRODUCT DESCRIPTION & DETAILS**

**AIROLITE LOUVER TYPE K609** is a versatile, horizontal blade, 4-inch (101.6 mm) deep architectural louver designed for applications that require intake and exhaust ventilation with moderate protection against water penetration. In addition to its frequent use as an exterior wall louver, Louver Type K609 is widely utilized as a louver screen wall. Louver Type K609 is available with both concealed and visible vertical mullions to complement and enhance exterior façade elements. Louver Type K609 is an efficient louver with AMCA Licensed air performance and water penetration ratings that enable designers to select and specify this product with confidence. Please contact your local Airolite representative or the factory for assistance with the layout and design of supports systems when required.

### **VERTICAL SECTION DETAIL** PLAN SECTION DETAIL CLIP ANGLES AT HEAD AND SILL OF VERTICAL STIFFENER SHIPPED EXTRUDED ALUMINUM ANGLE STIFFENER AND BLADE BRACES LOOSE FOR INSTALLATION IN FIELD ON SECTIONS OVER 60" WIDE 0.081" (2.05mm) EXTRUDED ALUMÍNUM FRAME SEALANT AND BACKER SFALANT AND ROD NOT BY AIROLITE BACKER ROD NOT BY AIROLITE 0.081" (2.05mm) EXTRUDED ALUMINUM FRAME SECTION WIDTH 1/4" LOUVER WIDTH [6.35mm][6.35mm] OPENING WIDTH 0.081" (2.05mm) EXTRUDED ALUMINUM BLADE EXTRUDED ALUMINUM TEE SUPPORT 0.081" (2.05mm) EXTRUDED ALUMINUM BLADE BRACE 1/4" [6.35mm] 1/4" 1/4" SECTION WIDTH SECTION WIDTH [6.35mm] [6.35mm] LOUVER WIDTH HEIGHT HEIGHT OPFNING WIDTH VISIBLE VERTICAL MULLION 4" [101.60mm] OPENING LOUVER EXTRUDED ALUMINUM ANGLE 1/4' [6.35mm] 1/4" SECTION WIDTH SECTION WIDTH [6.35mm] [6.35mm] LOUVER WIDTH OPENING WIDTH OPTIONAL BIRD CONCEALED VERTICAL MULLION OR INSECT SCREEN SEALANT AND BACKER ROD **Minimum Section Size:** 12 in. (30 cm) W x 12 in. (30 cm) H **Maximum Section Size:** 144 in. (366 cm) W x 144 in. (366 cm) H \*one dimension may not exceed 72 in.



## **LOUVER TYPE K609 PERFORMANCE RATINGS**

## FREE AREA CHART - in square feet

| Louver           | Louver Width in Inches |      |       |       |       |       |       |       |       |       |       |       |
|------------------|------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Height<br>Inches | 12                     | 24   | 36    | 48    | 60    | 72    | 84    | 96    | 108   | 120   | 132   | 144   |
| 12               | 0.23                   | 0.55 | 0.86  | 1.17  | 1.49  | 1.76  | 2.07  | 2.39  | 2.70  | 3.01  | 3.29  | 3.60  |
| 24               | 0.61                   | 1.43 | 2.24  | 3.06  | 3.88  | 4.59  | 5.41  | 6.22  | 7.04  | 7.85  | 8.57  | 9.38  |
| 36               | 1.11                   | 2.60 | 4.09  | 5.57  | 7.06  | 8.36  | 9.85  | 11.33 | 12.82 | 14.31 | 15.61 | 17.10 |
| 48               | 1.58                   | 3.69 | 5.80  | 7.91  | 10.02 | 11.87 | 13.97 | 16.08 | 18.19 | 20.30 | 22.15 | 24.26 |
| 60               | 1.99                   | 4.64 | 7.29  | 9.94  | 12.59 | 14.91 | 17.57 | 20.22 | 22.87 | 25.52 | 27.84 | 30.49 |
| 72               | 2.48                   | 5.80 | 9.11  | 12.42 | 15.74 | 18.64 | 21.95 | 25.26 | 28.58 | 31.89 | 34.79 | 38.10 |
| 84               | 2.86                   | 6.68 | 10.49 | 14.31 | 18.13 | 21.47 |       |       |       |       |       |       |
| 96               | 3.37                   | 7.85 | 12.34 | 16.83 | 21.31 | 25.24 |       |       |       |       |       |       |
| 108              | 3.83                   | 8.94 | 14.05 | 19.16 | 24.27 | 28.74 |       |       |       |       |       |       |



The Airolite Company, LLC certifies that Louver Type K609 shown herein is 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 only to Air Performance and Water Penetration ratings.

## AIRFLOW RESISTANCE

120

132

4.24

4.74

9.89

11.05

11.93

21.19

23.68

25.56

15.54

17.36

18.75

26.84

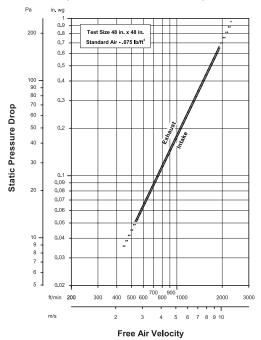
29.99

31.79

35.51

38.34

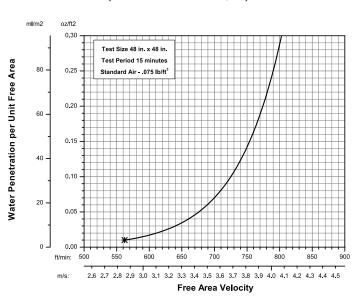
(Standard Air - .075 lb./ft.3)



Louver Type K609 resistance to airflow (pressure drop) varies depending on louver application (air intake or air exhaust). Free area velocities (shown) are higher than average velocity through the overall louver size. (Tested to Figure 5.5-6.5)

## WATER PENETRATION

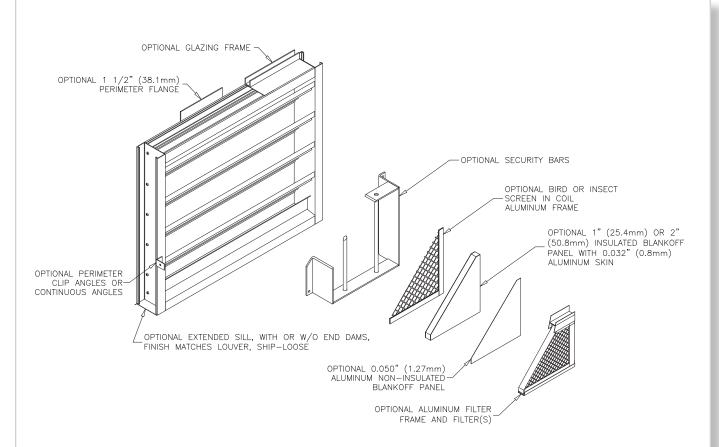
(Standard Air - .075 lb./ft.3)



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 point of zero 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 Louver Type K609 is 562 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.



## LOUVER TYPE K609 METHOD OF INSTALLATION & ACCESSORY OPTIONS



## **FINISHES**

| Finish Type  | Description/Application  | Color Selection  | Standard<br>Warranty<br>(Aluminum) |  |  |
|--|--|--|------------------------------------|--|--|
| AAMA 2605<br>100% Fluoropolymer (FEVE)<br>2-Coat 70% Kynar® (PVDF)<br>3-Coat 70% Kynar® (PVDF)<br>4-Coat 70% Kynar® (PVDF) | "Best." The premier finish for extruded aluminum. Tough, long-lasting coating has superior color retention and abrasive properties. Resists chalking, fading, chemical abrasion and weathering.      | Standard Colors: Any of the 27 standard colors shown can be furnished in 70% or 50% Kynar®, 100% Fluoropolymer or Baked Enamel.  Mica Colors: Airolite offers 6 standard Mica colors for 70% Kynar® or 100% Fluoropolymer.  Custom Colors: Custom color matching is available. Consult your Airolite | 10 Years<br>(20 Years Optional)    |  |  |
| AAMA 2603<br>Baked Enamel  | "Good." Provides good adhesion and resistance to weathering, corrosion and chemical stain.   | representative for cost and/or lead-time implications if a custom color is required.   | 1 Year                             |  |  |
| AA-M10C22A42<br>Integral Color Anodize   | "Two-step" anodizing is produced by following the normal anodizing step with a second, colorfast process.  | Light, Medium, Dark or Extra Dark Bronze; Champagne;<br>Black  | 5 years                            |  |  |
| AA-M10C22A41<br>Clear Anodize 215 R-1  | Clear, colorless and hard oxide aluminum coating that resists weathering and chemical attack.  | Clear  | 5 years                            |  |  |
| AA-M10C22A31<br>Clear Anodize 204  | Clear, colorless and hard oxide aluminum coating that resists weathering and chemical attack.  | Clear  | 1 Year                             |  |  |
| Prime Coat   | Louvers or architectural products shall be cleaned, pre-treated and receive a prime coat finish suitable for field painting.  Airolite does not recommend prime coat or field painting of materials. |  |                                    |  |  |
| Mill   | Materials may be supplied in natural aluminum or galvanized steel finish when normal weathering is acceptable and there is no concern for color or color change.                                     |  |                                    |  |  |

Finishes meet or exceed AAMA 2605, AAMA 2604, and AAMA 2603 requirements. Please consult www.airolite.com for complete information on standard and extended paint warranties. Paint finish warranties are not applicable to steel products.



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