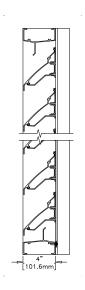


K638



STATIONARY EXTRUDED ALUMINUM ARCHITECTURAL BLADE LOUVER

Visible Mullion Louver Type	K638
Material Extruded Aluminum (Alloy of	6063-T5)
Stationary Blade 0.081 in. (2	.06 mm)
Frame	.06 mm)
Louver Depth	1.6 mm)
Free Area – 4 ft. x 4 ft. Unit 7.86 sq. ft. (0.	73 sq m)
Percent Free Area	. 49.1%
Free Area Velocity at Beginning Point of Water Penetration – 0.01 oz H ₂ O/sq. ft. Free Area 548 fpm (2	2.78 m/s
Air Volume Flow Rate at Beginning Point of Water Penetration – 4 ft. x 4 ft. Unit 4,307 cfm (2.	.03 m³/s
Pressure Drop at Beginning Point of Water Penetration 0.03 in. H ₂ O (0.	008 kPa





RECOMMENDED SPECIFICATION

GENERAL

Furnish and install where indicated on plans or described in schedules Louver Type K638 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 K638 with visible vertical mullions (or Louver Type CB638 with concealed 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-T5. 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 K638 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:	7.86 Square Feet (0.73 m ²)
MINIMUM FREE AREA VELOCITY at Beginning Point of Water Penetratio	on: 548 fpm (2.78 m/s)
MINIMUM AIR VOLUME FLOW RATE at Beginning Point of Water Penetration	
MAXIMUM STATIC PRESSURE at Beginning Point of Water Penetratio	on: 0.03 in. H.O (0.008 kPa

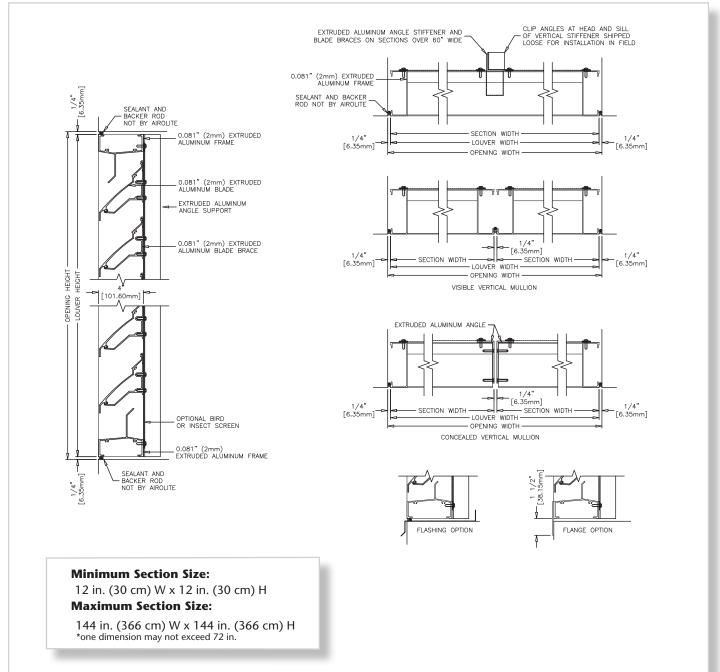
See page 4 for complete finish options

LOUVER TYPE K638 PRODUCT DESCRIPTION & DETAILS

AIROLITE LOUVER TYPE K638 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. Louver Type K638 is available with both concealed and visible vertical mullions to complement and enhance exterior façade elements. Specify Louver Type K638 with visible vertical mullions; and, Louver Type CB638 with concealed vertical mullions. Louver Type K638 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





LOUVER TYPE K638 PERFORMANCE RATINGS

FREE AREA CHART - in square feet

Louver Height Inches	Louver Width in Inches											
	12	24	36	48	60	72	84	96	108	120	132	144
12	0.23	0.53	0.84	1.14	1.44	1.71	2.01	2.32	2.62	2.92	3.19	3.49
24	0.61	1.42	2.23	3.05	3.86	4.57	5.38	6.19	7.01	7.82	8.53	9.34
36	1.11	2.60	4.08	5.57	7.05	8.35	9.84	11.32	12.80	14.29	15.59	17.07
48	1.57	3.67	5.76	7.86	9.96	11.79	13.89	15.98	18.08	20.17	22.01	24.10
60	1.98	4.63	7.27	9.92	12.56	14.88	17.52	20.17	22.81	25.46	27.77	30.42
72	2.47	5.77	9.07	12.36	15.66	18.55	21.84	25.14	28.44	31.74	34.62	37.92
84	2.85	6.66	10.47	14.27	18.08	21.41						
96	3.36	7.84	12.31	16.79	21.27	25.19						
108	3.82	8.91	14.00	19.09	24.17	28.63						
120	4.23	9.87	15.51	21.14	26.78	31.72						
132	4.72	11.01	17.30	23.59	29.88	35.38						
144	5.10	11.90	18.70	25.50	32.30	38.24						

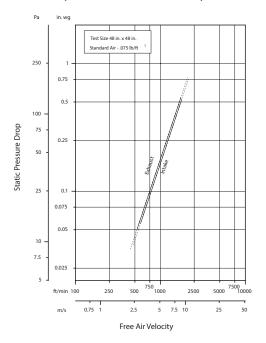


The Airolite Company, LLC certifies that Louver Type K638 shown herein is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the

requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies only to Air Performance and Water Penetration ratings.

AIRFLOW RESISTANCE

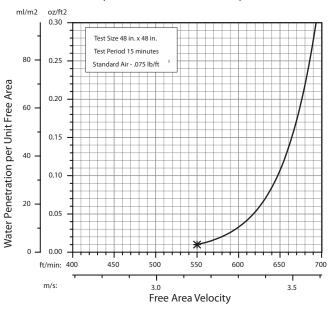
(Standard Air - .075 lb./ft.3)



Louver Type K638 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

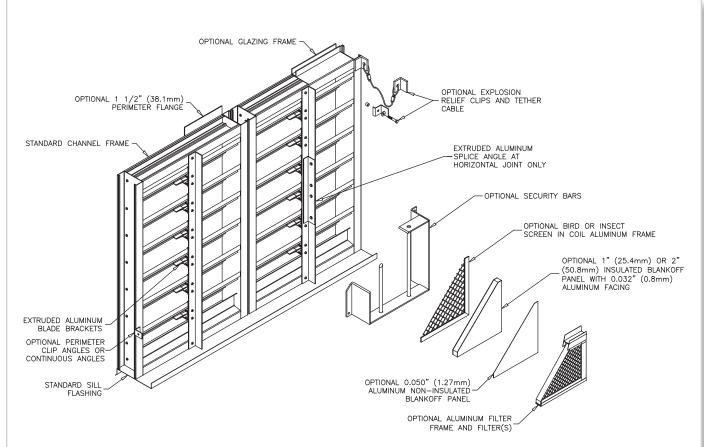
(Standard Air - .075 lb./ft.3)



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 K638 is 548 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 K638 METHOD OF INSTALLATION & ACCESSORY OPTIONS



FINISHES

Finish Type	Description/Application	Color Selection	Standard Warranty (Aluminum)			
AAMA 2605 100% Fluoropolymer (FEVE) 2-Coat 70% Kynar® (PVDF) 3-Coat 70% Kynar® (PVDF) 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 (20 Years Optional)			
AAMA 2603 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 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; Black	5 years			
AA-M10C22A41 Clear Anodize 215 R-1	Clear, colorless and hard oxide aluminum coating that resists weathering and chemical attack.	Clear	5 years			
AA-M10C22A31 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.

