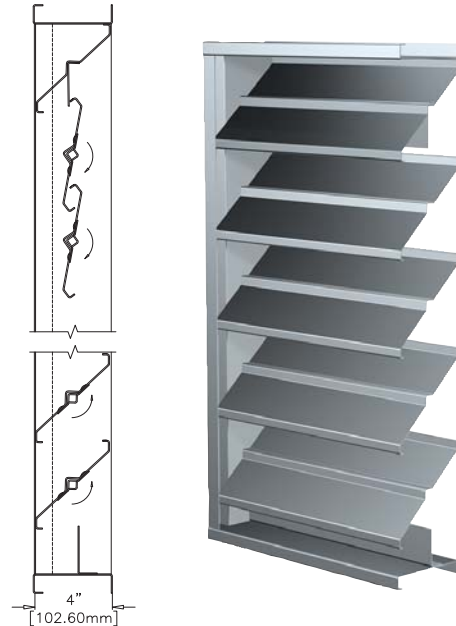




FABRICATED METAL ADJUSTABLE BLADE LOUVER

Visible Mullion Louver Type	645
Material	Galvanized Steel
Adjustable Blade	16 gauge
Frame	16 gauge
Louver Depth	4 in. (101.6 mm)
Blade Angle	45°
Free Area – 4 ft. x 4 ft. Unit	5.93 sq. ft. (0.55 m ²)
Percent Free Area	37.1%
Free Area Velocity at Beginning Point of Water Penetration – 0.01 oz H₂O/sq. ft. Free Area	691 fpm (3.51 m/s)
Air Volume Flow Rate at Beginning Point of Water Penetration – 4 ft. x 4 ft. Unit	4,098 cfm (1.93 m ³ /s)
Pressure Drop at Beginning Point of Water Penetration	0.063 in. H ₂ O (0.016 kPa)



RECOMMENDED SPECIFICATION

GENERAL

Furnish and install where indicated on plans or described in schedules adjustable blade Louver Type 645 as designed and manufactured by The Airlite Company LLC, Schofield, Wisconsin. Louvers shall be furnished with bird screen, insect screen, electric or pneumatic actuators, supports and finishes as specified and as required for a complete installation.

SUBMITTALS

Manufacturer shall submit shop drawings incorporating key plans, elevations, sections and details showing profiles, angles and spacing of louver blades and frames; unit dimensions related to wall openings and construction; and, anchorage details and locations. Provide samples of manufacturer's finish and color charts showing the full range of colors available. For each type of product specified, submit free area, air performance, and water penetration ratings determined in accordance with AMCA Standard 500-L 99 and licensed under the AMCA Certified Ratings Program.

PRODUCTS

Louvers shall incorporate adjustable blades in a single frame. Louvers shall be 4-inches (101.6 mm) deep and assembled entirely from galvanized steel components. Blades and frames shall be 16 gauge galvanized steel. Adjustable blades shall be positioned at 45-degrees and spaced 4 1/2-inches (114.3 mm) on center. The blade linkage assembly shall be fully-enclosed within the louver jamb frame and isolated from the active airstream.

STRUCTURAL DESIGN CRITERIA

Louvers and any supports required shall be designed and furnished by the manufacturer to withstand a wind force of not less than 25 pounds per square foot. Louvers larger than 60-inches (152 cm) wide x 96-inches (244 cm) high will be fabricated and installed in multiple sections. Louver blades, frames, mullions and anchorages shall be demonstrated to withstand the specified wind design load.

PERFORMANCE RATINGS

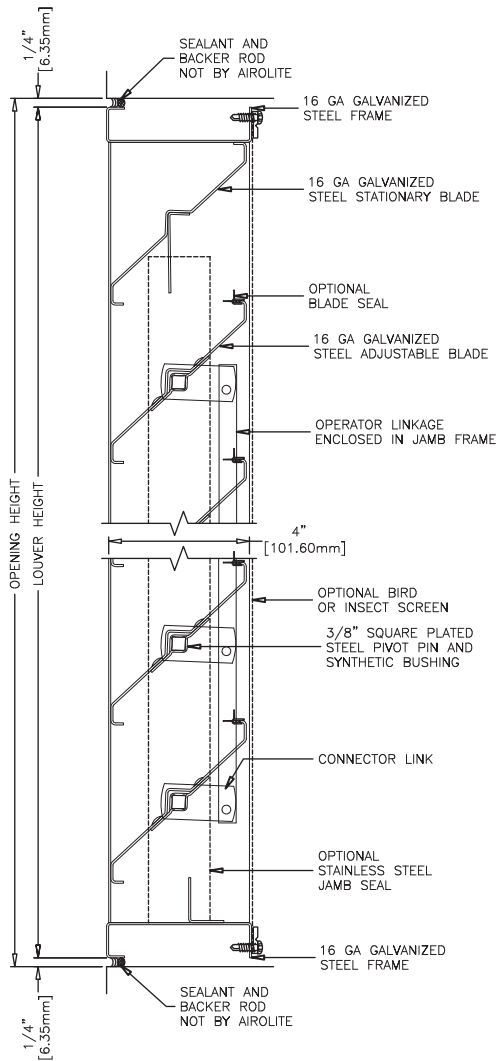
FREE AREA:	5.93 Square Feet (0.551 m ²)
MINIMUM FREE AREA VELOCITY at Beginning Point of Water Penetration:	691 fpm (3.51 m/s)
MINIMUM AIR VOLUME FLOW RATE at Beginning Point of Water Penetration:	4,098 cfm (1.93 m ³ /s)
MAXIMUM STATIC PRESSURE at Beginning Point of Water Penetration:	0.063 in. H ₂ O (0.016 kPa)

See page 4 for complete finish options

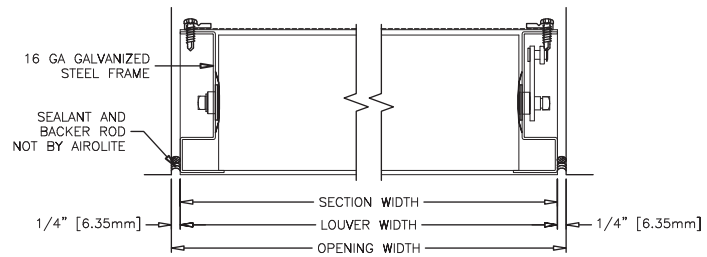
LOUVER TYPE 645 PRODUCT DESCRIPTION & DETAILS

Airolite Louver Type 645 is a fabricated metal adjustable blade louver intended for high volume intake and exhaust applications that require weather protection. The adjustable blades in this 4-inch (101.6 mm) deep louver may be opened to a 45-degree angle to permit intake and exhaust ventilation and provide resistance to water penetration. Adjustable blades may be controlled with manually operated hand-crank, pull-chains, fusible-link mechanisms, electric motor or pneumatic actuators. Fabricated metal louvers are typically produced from galvanized steel but are also available in stainless steel and other commercially available materials. Louver Type 645 is an efficient adjustable 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 operator and support systems when required.

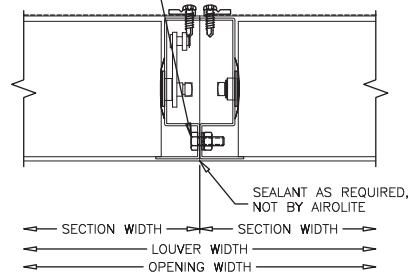
VERTICAL SECTION DETAIL



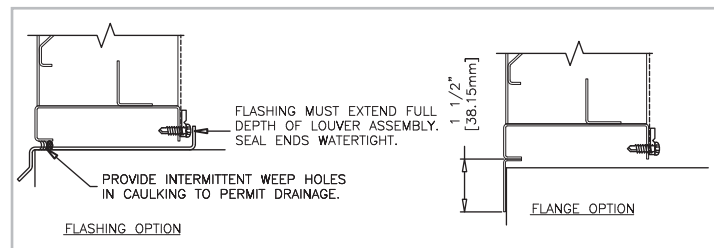
PLAN SECTION DETAIL



1/4-20 x 3/4" HWH BOLT, NUT & LOCKWASHER, FIELD DRILLED AND INSTALLED @ 16" O.C.



ACCESSORY ITEMS



Minimum Section Size:

12 in. (30 cm) W x 12.5 in. (32 cm) H

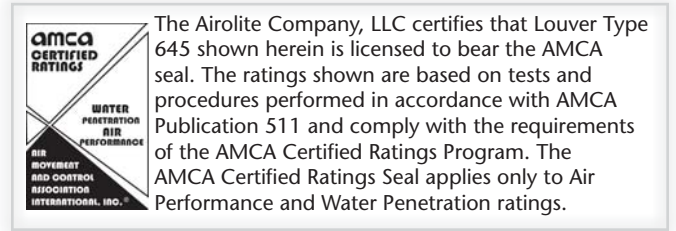
Maximum Section Size:

60 in. (152 cm) W x 96 in. (244 cm) H

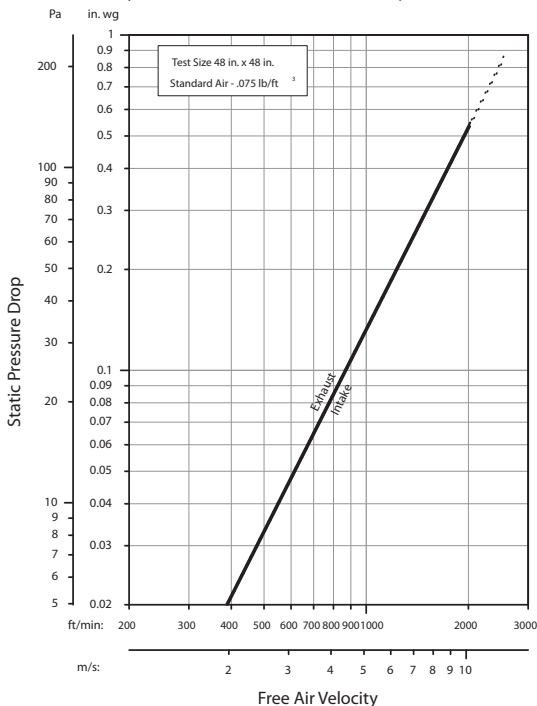
LOUVER TYPE 645 PERFORMANCE RATINGS

FREE AREA CHART - in square feet

Louver Height Inches	Louver Width in Inches								
	12	18	24	30	36	42	48	54	60
12.5	0.21	0.34	0.47	0.60	0.74	0.87	1.00	1.14	1.27
18	0.37	0.61	0.84	1.10	1.34	1.58	1.82	2.06	2.30
24	0.52	0.85	1.18	1.52	1.85	2.19	2.52	2.86	3.19
30	0.66	1.09	1.51	1.94	2.37	2.80	3.22	3.65	4.08
36	0.95	1.56	2.17	2.79	3.40	4.01	4.63	5.24	5.85
42	1.09	1.80	2.50	3.21	3.92	4.62	5.33	6.04	6.74
48	1.21	2.00	2.78	3.57	4.36	5.13	5.93	6.72	7.50
54	1.52	2.51	3.49	4.48	5.46	6.45	7.44	8.42	9.41
60	1.66	2.74	3.82	4.90	5.98	7.06	8.14	9.22	10.30
66	1.81	2.98	4.15	5.32	6.50	7.67	8.84	10.01	11.18
72	2.09	3.45	4.81	6.17	7.53	8.88	10.24	11.60	12.96
78	2.24	3.69	5.14	6.59	8.04	9.49	10.95	12.40	13.85
84	2.38	3.93	5.47	7.01	8.56	10.10	11.65	13.19	14.74
90	2.67	4.40	6.13	7.86	9.59	11.32	13.05	14.78	16.51
96	2.67	4.40	6.13	7.86	9.59	11.32	13.05	14.78	16.51

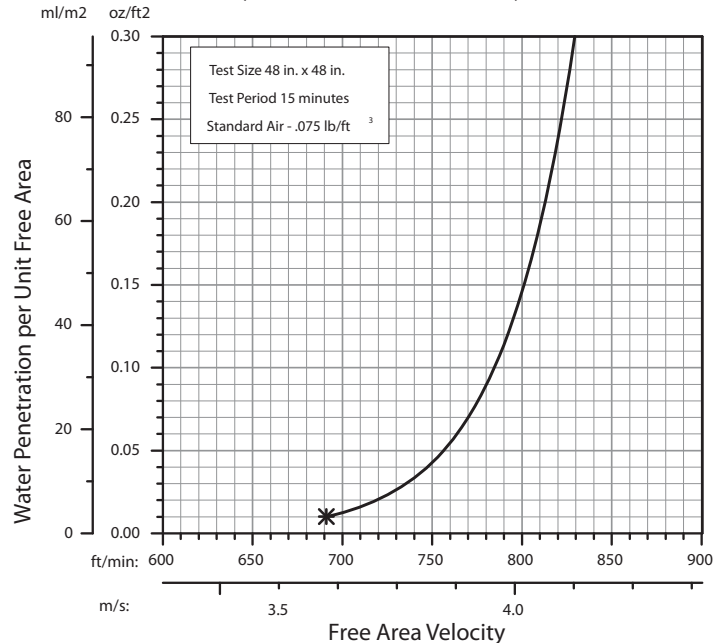


AIRFLOW RESISTANCE (Standard Air - .075 lb./ft.³)



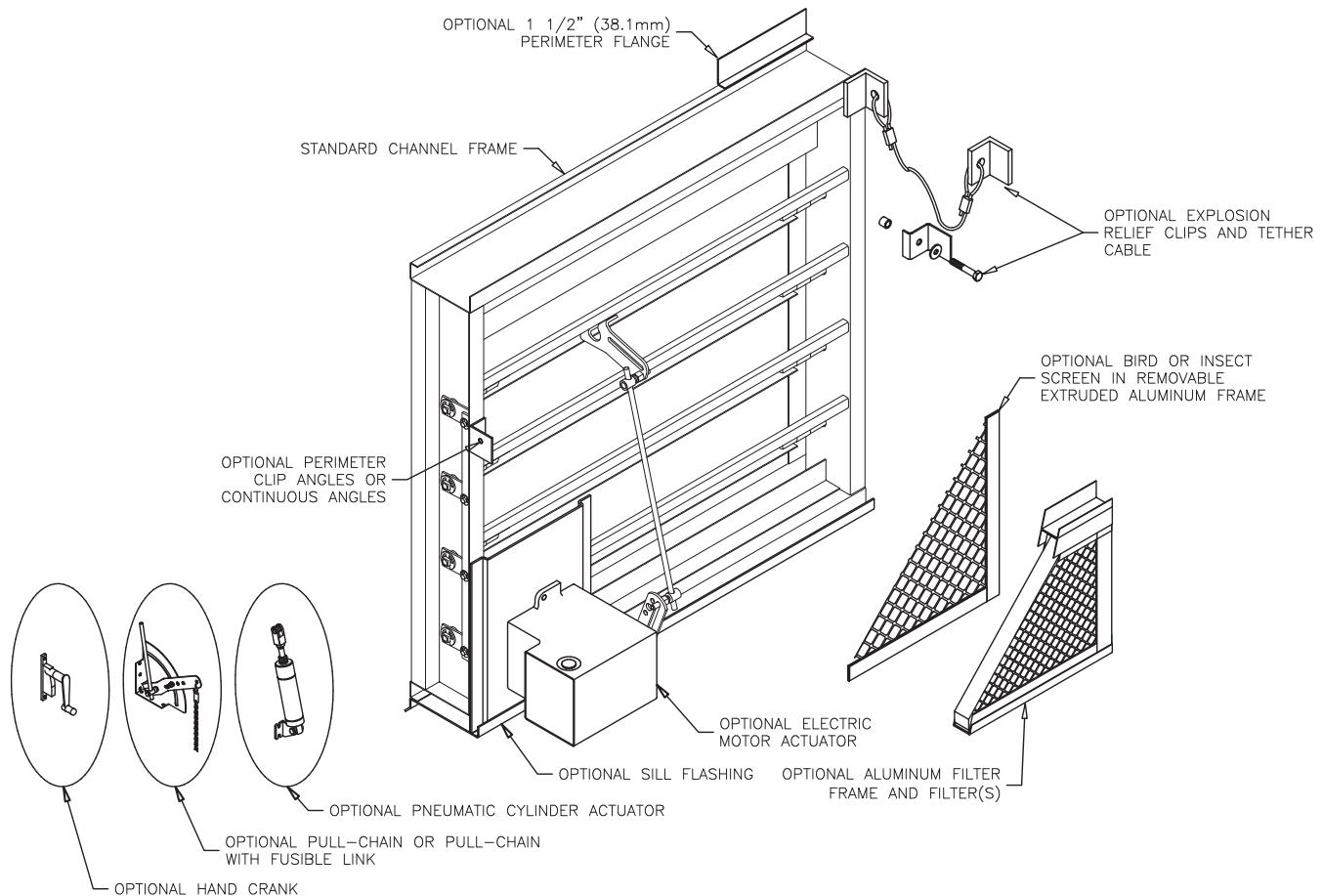
Louver Type 645 resistance to airflow is shown with louver blades fully open. Resistance (pressure drop) varies depending on louver application (air intake or air exhaust). Free area velocities (shown) are higher than average velocity through the overall louver size.

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 645 is 691 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 645 METHOD OF INSTALLATION & ACCESSORY OPTIONS



FINISHES (Select one of the following)

ACRYLIC ENAMEL: Louvers shall be cleaned, pretreated and Finished with an oven-cured thermosetting acrylic enamel finish that meets or exceeds the performance requirements of AAMA 2603, "Voluntary Specification Performance Requirements and Test Procedures for Pigmented Organic Coatings."

2-COAT FLUOROPOLYMER: Louvers shall be cleaned, pretreated and Finished with an inhibitive primer and oven-cured Kynar 500® / Hylar 5000® resin coating with minimum 1.2 mils dry-film coating thickness that meets or exceeds the performance requirements of AAMA 2605, "Voluntary Specification, Performance Requirements and Test Procedures for Superior Performance Organic Coatings on Aluminum Extrusions and Panels."

3-COAT FLUOROPOLYMER: Louvers shall be cleaned, pretreated and Finished with an inhibitive primer and oven-cured Kynar 500® / Hylar 5000® resin coating with minimum 2.0 mils dry-film coating thickness that meets or exceeds the performance requirements of AAMA 2605, "Voluntary Specification, Performance Requirements and Test Procedures for Superior Performance Organic Coatings on Aluminum Extrusions and Panels."



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