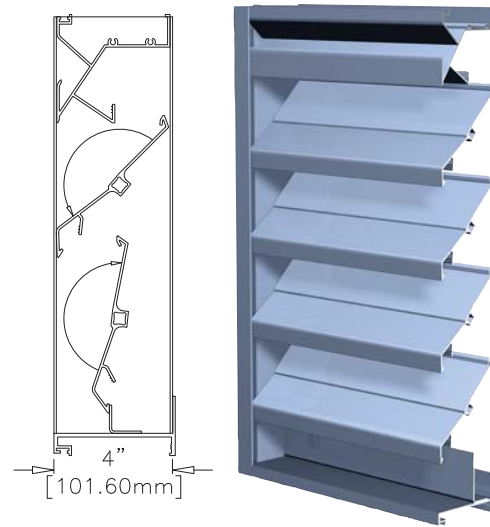




ADJUSTABLE BLADE LOUVER

Visible Mullion Louver Type	T645
Material	Extruded Aluminum (Alloy 6063-T5)
Adjustable Blade	0.081 in. (2.06 mm)
Frame	0.125 in. (3.175 mm)
Louver Depth	4 in. (101.6 mm)
Blade Angle	45°
Free Area – 4 ft. x 4 ft. Unit	6.48 sq. ft. (0.602 sq m)
Percent Free Area	40.5%
Free Area Velocity at Beginning Point of Water Penetration – 0.01 oz H₂O/sq. ft. Free Area	1,023 fpm (5.197 m/s)
Air Volume Flow Rate at Beginning Point of Water Penetration – 4 ft. x 4 ft. Unit	6,629 cfm (3.129 m ³ /s)
Pressure Drop at Beginning Point of Water Penetration	0.17 in. H ₂ O (0.043 kPa)



RECOMMENDED SPECIFICATION

GENERAL

Furnish and install where indicated on plans or described in schedules adjustable blade Louver Type T645 as designed and manufactured by The Airolite 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 extruded aluminum components. Adjustable blades shall be 0.081-inch (2 mm) extruded aluminum, alloy 6063-T5. Frames shall be 0.125-inch (3 mm) extruded aluminum, alloy 6063-T5. The louver head and each jamb frame shall incorporate integral gutters to minimize water penetration. Adjustable blades shall be positioned at 45-degrees and spaced 4.5-inches (114.3 mm) on center. Adjustable blades may be fitted with dual-durometer vinyl blade-edge gaskets and compressible jamb seals to resist air leakage and water penetration when the adjustable blades are closed. 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:	6.48 Square Feet (0.602 m ²)
MINIMUM FREE AREA VELOCITY at Beginning Point of Water Penetration:	1,023 fpm (5.197 m/s)
MINIMUM AIR VOLUME FLOW RATE at Beginning Point of Water Penetration:	6,629 cfm (3.129 m ³ /s)
MAXIMUM STATIC PRESSURE at Beginning Point of Water Penetration:	0.17 in. H ₂ O (0.043 kPa)

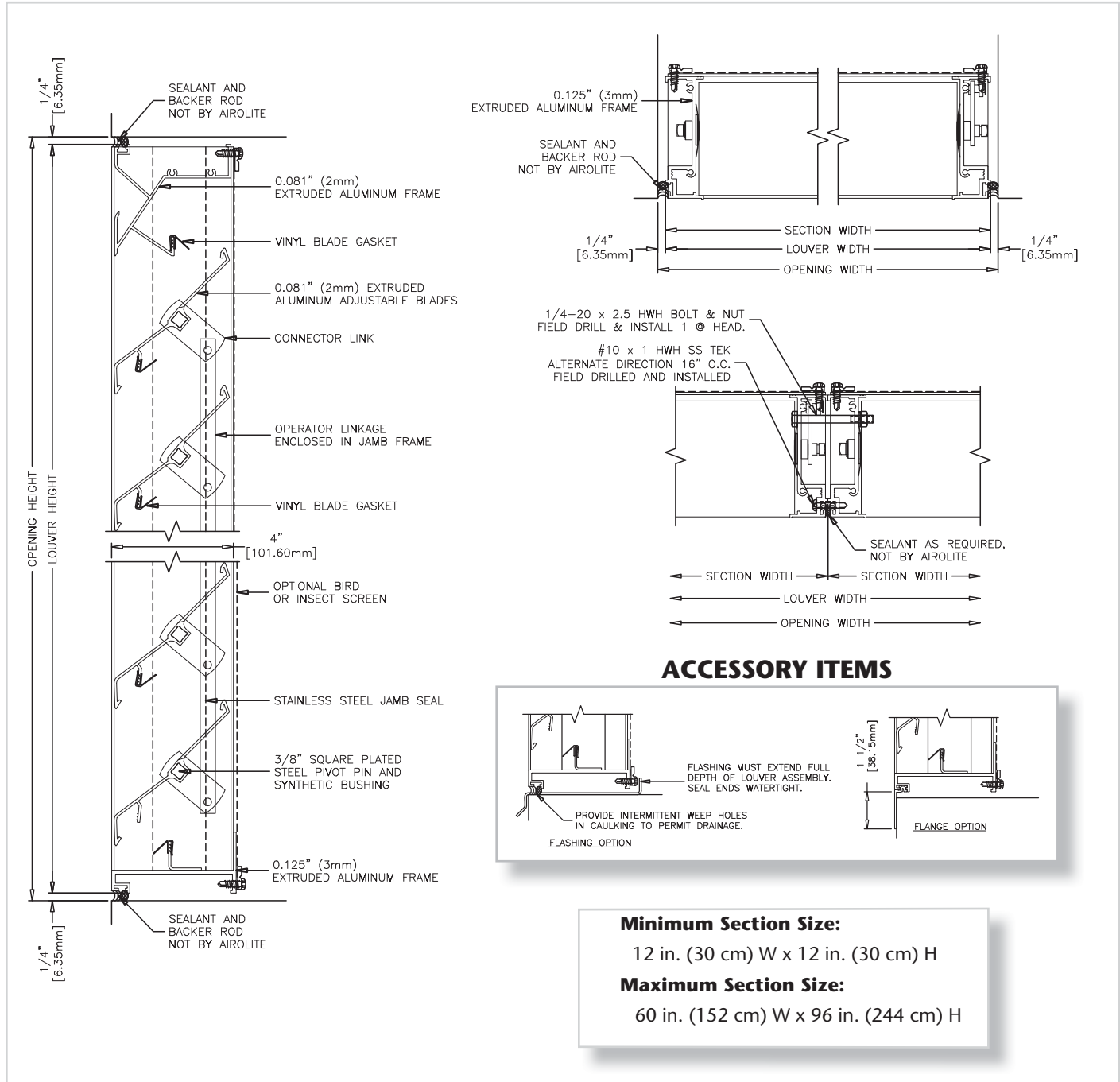
See page 4 for complete finish options

LOUVER TYPE T645 PRODUCT DESCRIPTION & DETAILS

AIROLITE LOUVER TYPE T645 is an 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 rotated to a 45-degree angle to permit intake and exhaust ventilation yet provide resistance to water penetration. If required, the adjustable blades may be fitted with dual-durometer vinyl blade-edge gaskets and compressible stainless steel jamb seals to resist air leakage and water penetration when the adjustable blades are closed. Adjustable blades may be controlled with manually operated hand-crank, pull-chains, fusible-link mechanisms, electric motor or pneumatic actuators. Louver Type T645 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 Airlite representative or the factory for assistance with the layout and design of operator and support systems when required.

VERTICAL SECTION DETAIL

PLAN SECTION DETAIL



LOUVER TYPE T645 PERFORMANCE RATINGS

FREE AREA CHART - in square feet

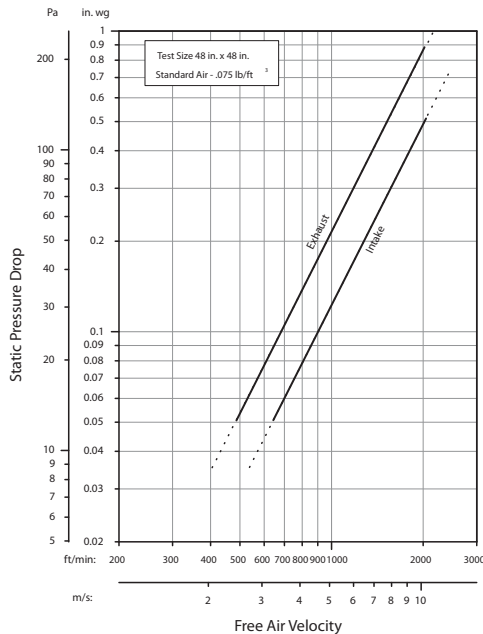
Louver Height Inches	Louver Width in Inches																
	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60
16	0.28	0.38	0.47	0.59	0.65	0.75	0.84	0.93	1.02	1.11	1.21	1.30	1.39	1.48	1.57	1.67	1.76
21	0.43	0.57	0.71	0.85	0.99	1.13	1.28	1.42	1.56	1.70	1.84	1.98	2.12	2.26	2.40	2.54	2.68
24	0.58	0.77	0.96	1.15	1.34	1.52	1.71	1.90	2.09	2.25	2.47	2.66	2.85	3.03	3.22	3.41	3.60
30	0.73	0.97	1.20	1.44	1.68	1.91	2.15	2.39	2.63	2.86	3.10	3.34	3.57	3.81	4.05	4.28	4.52
33	0.88	1.16	1.45	1.73	2.02	2.30	2.59	2.87	3.16	3.44	3.73	4.01	4.30	4.59	4.87	5.15	5.44
39	1.03	1.36	1.69	2.03	2.36	2.69	3.03	3.36	3.69	4.03	4.36	4.69	5.03	5.36	5.69	6.03	6.36
42	1.18	1.56	1.94	2.32	2.70	3.08	3.47	3.85	4.23	4.61	4.99	5.37	5.75	6.14	6.54	6.90	7.28
48	1.33	1.75	2.18	2.61	3.04	3.47	3.90	4.33	4.76	5.19	5.62	6.05	6.48	6.91	7.34	7.77	8.20
51	1.47	1.95	2.43	2.91	3.36	3.86	4.34	4.82	5.30	5.78	6.25	6.73	7.21	7.69	8.17	8.64	9.12
57	1.62	2.15	2.67	3.20	3.73	4.25	4.78	5.31	5.83	6.36	6.88	7.41	7.94	8.46	8.99	9.52	10.04
60	1.77	2.35	2.92	3.49	4.07	4.64	5.22	5.79	6.37	6.94	7.52	8.09	8.66	9.24	9.81	10.39	10.96
66	1.92	2.54	3.17	3.79	4.41	5.03	5.66	6.28	6.90	7.52	8.15	8.77	9.39	10.01	10.64	11.26	11.88
69	2.07	2.74	3.41	4.08	4.75	5.42	6.09	6.77	7.44	8.11	8.78	9.45	10.12	10.79	11.46	12.13	12.80
75	2.22	2.94	3.66	4.37	5.09	5.81	6.53	7.25	7.97	8.69	9.41	10.13	10.85	11.57	12.29	13.00	13.72
78	2.37	3.13	3.90	4.67	5.44	6.20	6.97	7.74	8.51	9.27	10.04	10.81	11.57	12.34	13.11	13.88	14.64
84	2.51	3.33	4.15	4.96	5.78	6.59	7.41	8.22	9.04	9.86	10.67	11.49	12.30	13.12	13.93	14.75	15.56
87	2.66	3.53	4.39	5.25	6.12	6.98	7.85	8.71	9.57	10.44	11.30	12.17	13.03	13.89	14.76	15.62	16.48
93	2.81	3.72	4.64	5.55	6.46	7.37	8.28	9.20	10.11	11.02	11.93	12.84	13.76	14.67	15.58	16.49	17.41
96	2.96	3.92	4.88	5.84	6.80	7.76	8.72	9.68	10.64	11.60	12.56	13.52	14.48	15.44	16.40	17.37	18.33



The Airlite Company, LLC certifies that Louver Type T645 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

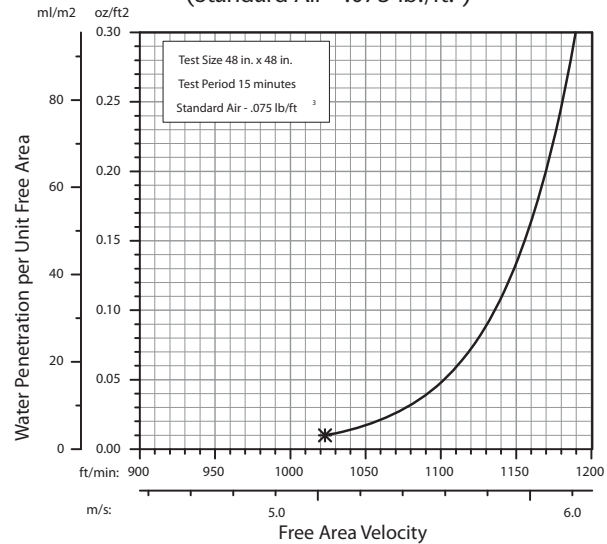
(Standard Air - .075 lb./ft.³)



Louver Type T645 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.

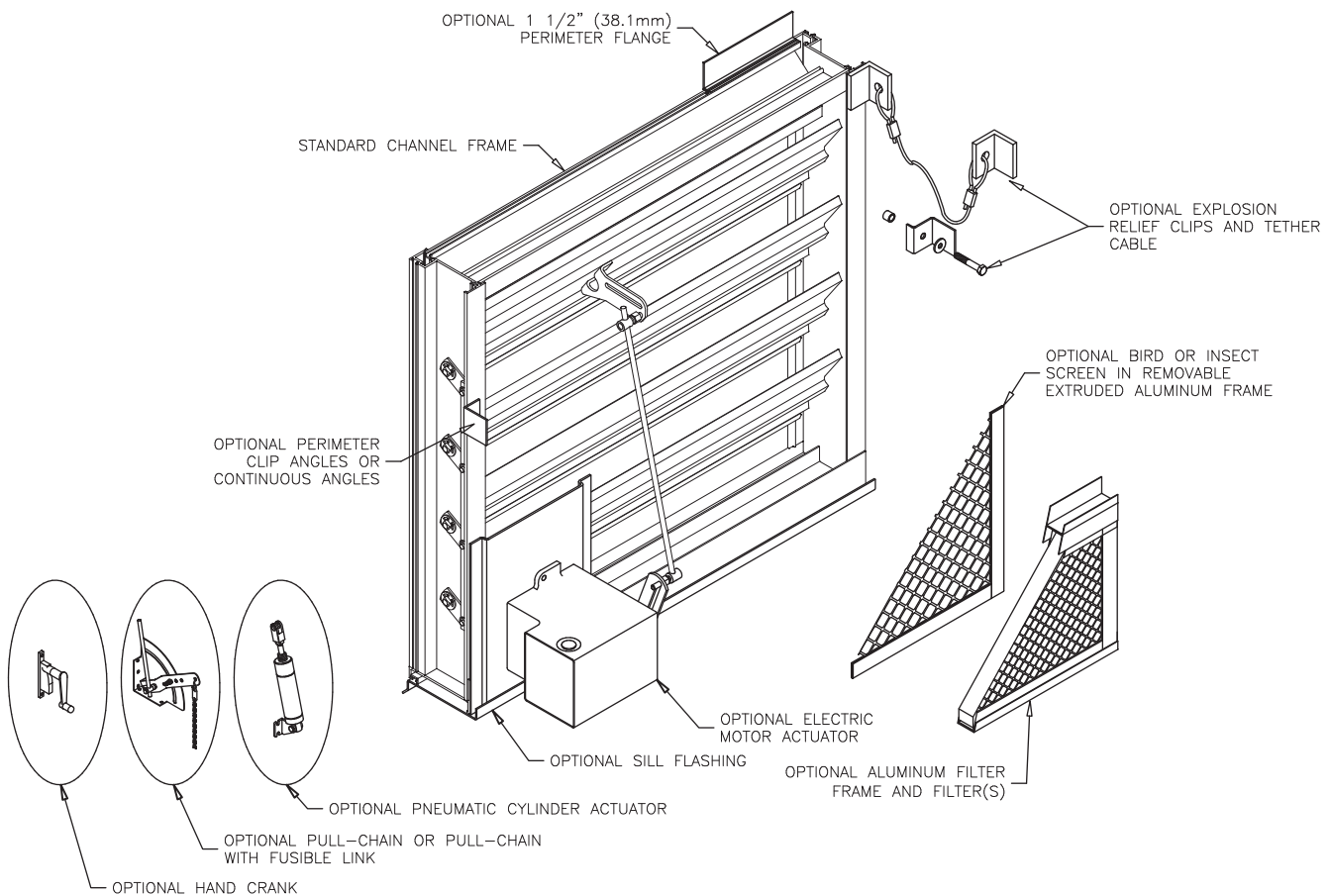
WATER PENETRATION

(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 T645 is 1023 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 T645 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."

CLEAR ANODIZE: Louvers shall be Finished with a Class I clear anodized coating (AA-M10C22A41) that complies with the performance requirements of AAMA Specification 611-98, "Voluntary Specification for Anodized Architectural Aluminum."

COLOR ANODIZE: Louvers shall be Finished with a Class I electrolytically color anodized coating (AA-M10C22A42/44) that complies with the performance requirements of AAMA Specification 611-98, "Voluntary Specification for Anodized Architectural Aluminum." Color shall be (select one): Champagne, Light Bronze, Medium Bronze, Dark Bronze, Extra Dark Bronze or Black Anodize.

* Note: Louver finish makes reference to the finish on the louver frames, blades, screens and/or blank-off panels as specified. As standard, all actuator mounting channels and additional corner supports are mill finish. If color to match louver is required, please consult the factory for additional costs.

AIROLITE®
The look that works.™

P.O. Box 410, 525 Western Road, Schofield, WI 54476-0410 USA
715.841.8757 • fax 715.841.8773 • www.airolite.com

Submittal T645 June 2005, Revision 1
Copyright ©2005 The Airlite Company, LLC

The Airlite Company, LLC reserves the right to make product changes.