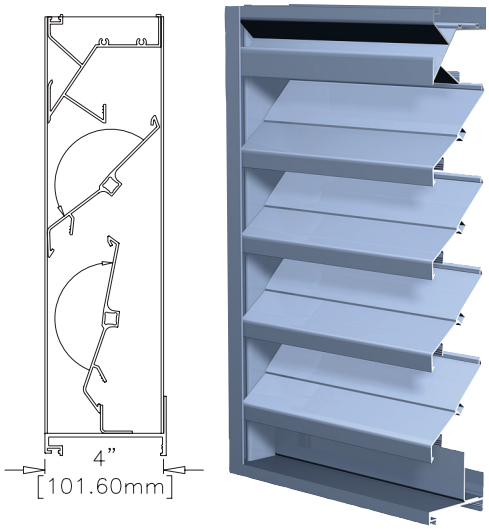
AIROLITE®
The look that works.™

LOUVER TYPE
T645

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 H_2O/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_2O (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
Maximum single section size for model T645 is 60-inches (152 cm) wide x 96-inches (244 cm) high. 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

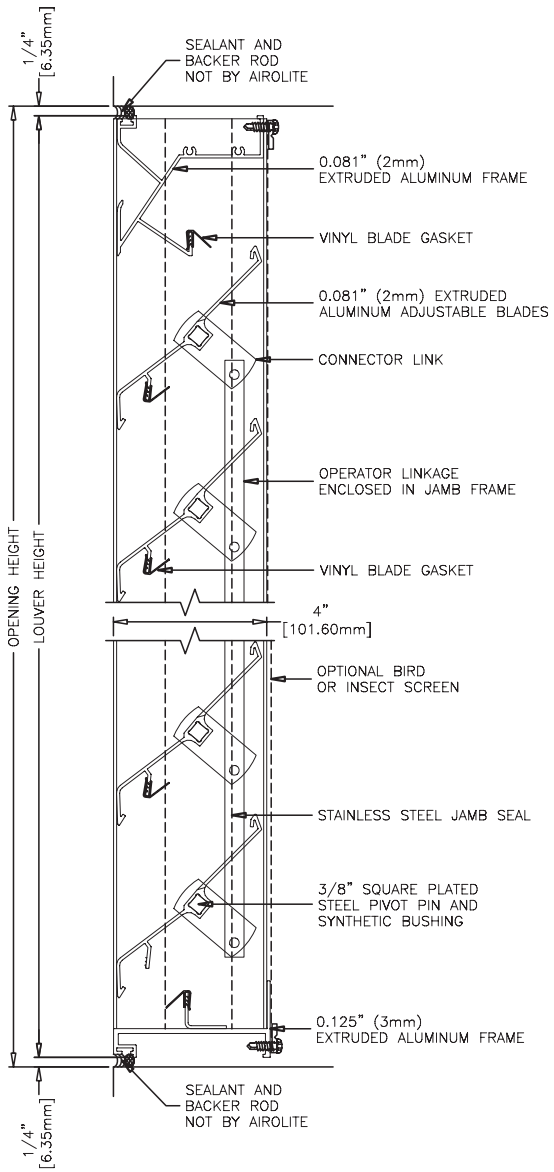
FREE AREA:	6.48 Square Feet (0.602 m^2)
MINIMUM FREE AREA VELOCITY at Beginning Point of Water Penetration:	1,023 fpm (5.197 m/s)
MINIMUM AIR VOLUME FLOW RATE at Beginning Point of Water Penetration:	6,629 cfm (3.129 m^3/s)
MAXIMUM STATIC PRESSURE at Beginning Point of Water Penetration:	0.17 in. H_2O (0.043 kPa)

See page 4 for complete finish options

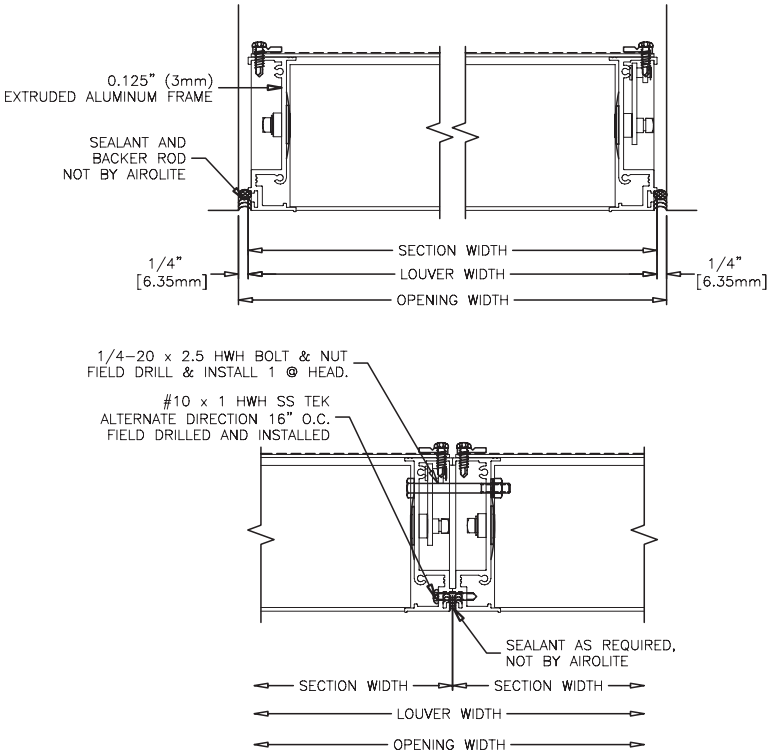
LOUVER TYPE T645 PRODUCT DESCRIPTION & DETAILS

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-cranks, 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 Airolite representative or the factory for assistance with the layout and design of operator and support systems when required.

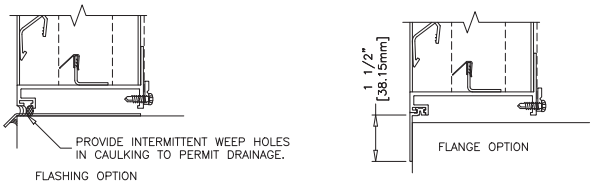
VERTICAL SECTION DETAIL



PLAN SECTION DETAIL



ACCESSORY ITEMS



Minimum Section Size:
12 in. (30 cm) W x 12 in. (30 cm) H

Maximum Section Size:
60 in. (152 cm) W x 96 in. (244 cm) H

LOUVER TYPE T645 PERFORMANCE RATINGS

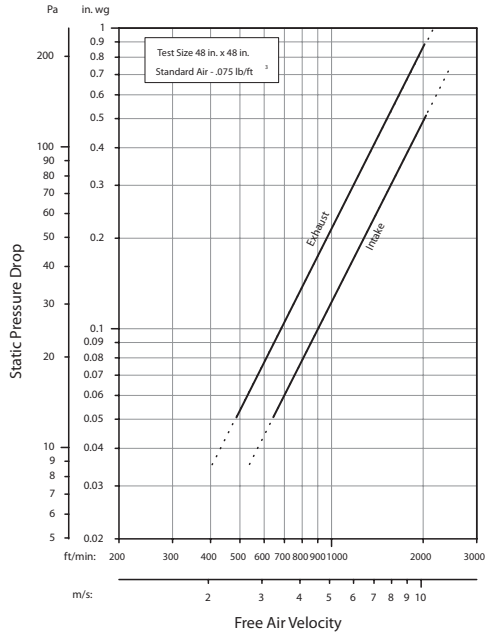
FREE AREA CHART - in square feet

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	2.53	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 Airolite 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

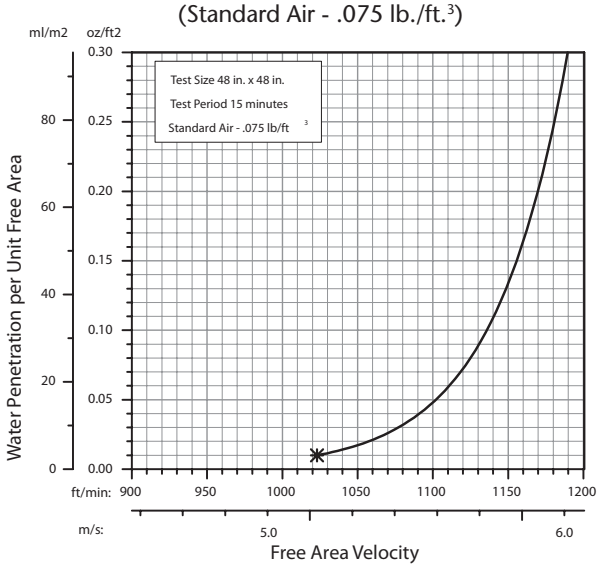
(Standard Air - .075 lb./ft.^{3})



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.

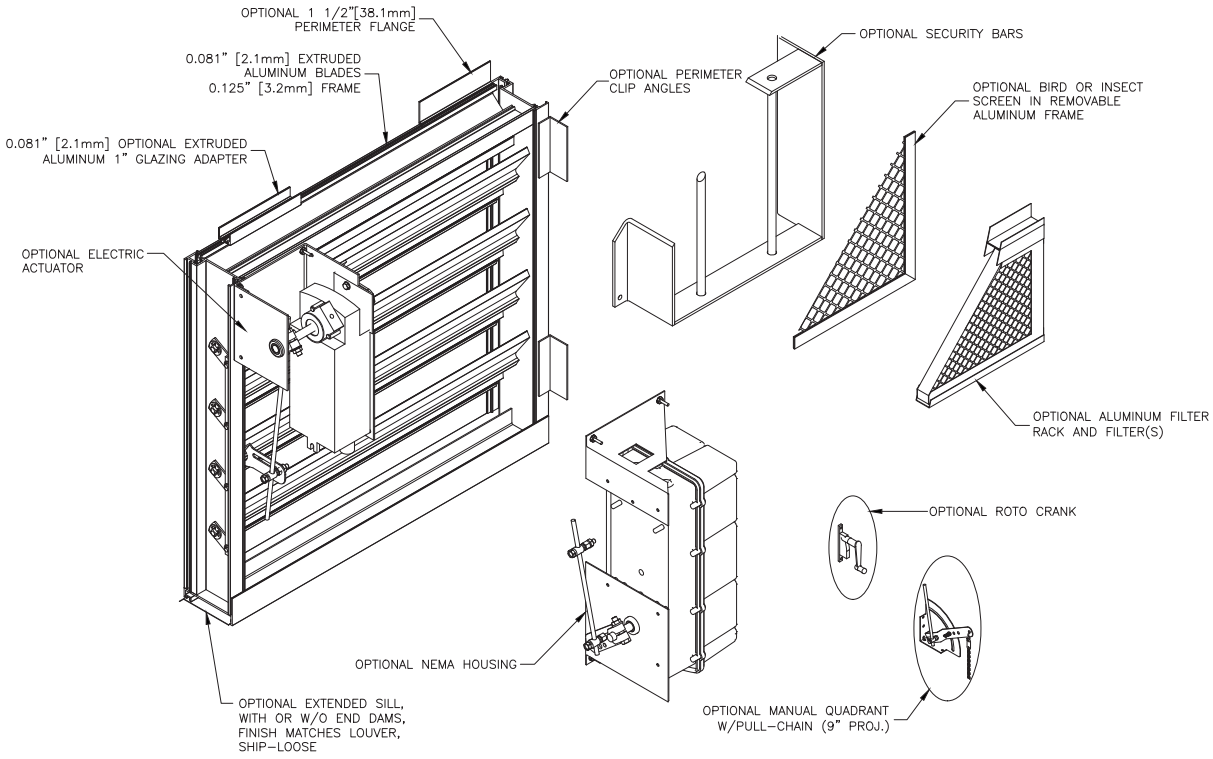
WATER PENETRATION

(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

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 representative for cost and/or lead-time implications if a custom color is required.	10 Years (20 Years Optional)
AAMA 2603 Baked Enamel	**"Good."** Provides good adhesion and resistance to weathering, corrosion and chemical stain.		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.		n/a
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.		n/a

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.

** 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.*

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