AIROLITE®
The look that works.™

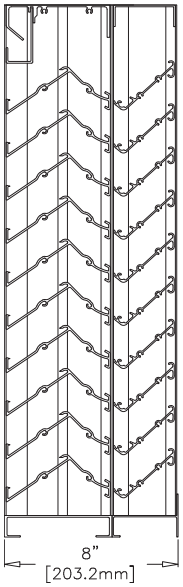
LOUVER TYPE
SCH8

STORM CLASS™ LOUVER

Visible Mullion Louver Type	SCH8
Material	Extruded Aluminum (Alloy 6063-T5)
Front Blade	0.081 in. (2.06 mm)
Back Blade	0.063 in. (1.60 mm)
Frame	0.081 in. (2.06 mm)
Louver Depth	8 in. (203.2 mm)
Free Area – 4 ft. x 4 ft. Unit	7.53 sq. ft. (0.700 m^2)
Percent Free Area	47.1%
Free Area Velocity at Beginning Point of Water Penetration – 0.01 oz H_2O/sq. ft. Free Area	above 1,250 fpm (6.35 m/s)
Air Volume Flow Rate at Beginning Point of Water Penetration – 4 ft. x 4 ft. Unit	9,412 cfm (4.45 m^3/s)
Pressure Drop at Beginning Point of Water Penetration	0.50 in. H_2O (0.102 kPa)

Wind-Driven Rain Water Penetration Data

Exterior Wind Velocity	29 mph (13 m/s)
Rainfall Rate	3 in. (75 mm)/hour
Effectiveness	100.0%
Core Ventilation Rate	590 fpm (2.9 m/s)
Exterior Wind Velocity	50 mph (22 m/s)
Rainfall Rate	8 in. (200 mm)/hour
Effectiveness	99.0%
Core Ventilation Rate	564 fpm (2.8 m/s)



RECOMMENDED SPECIFICATION

GENERAL
Furnish and install where indicated on plans or described in schedules Storm Class™ Louver Type SCH8 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.

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. Submit theoretical calculations prepared by a professional engineer specializing in the application of welding technology demonstrating that each fillet weld joining blade and frame members will withstand a minimum of 526 pounds of force in shear. 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, water penetration and wind-driven rain ratings determined in accordance with AMCA Standard 500-L 99 and licensed under the AMCA Certified Ratings Program.

PRODUCTS
Louvers shall be Storm Class™ type and rated to resist water penetration under wind-driven rain conditions. Louvers shall be 8-inches (203.2 mm) deep and assembled entirely from extruded aluminum components. Exterior blades and frames shall be 0.081-inch (2 mm) thick extruded aluminum, alloy 6063-T5. Interior blades shall be 0.063-inch (1.6 mm) extruded aluminum, alloy 6063-T5. Exterior blades shall be horizontal and spaced 2-inches (50.8 mm) on center.

ALL-WELDED ASSEMBLY
Join stationary blade and frames and frame members with fillet welds concealed from view, unless the size of the louver makes bolted connections between louver sections necessary. Louver blades shall be joined to each jamb frame with a minimum of two fillet welds produced with the Pulsed Gas Metal Arc Welding (GMAW/Mig) process. Each weld shall be a minimum of 1-inch (25.4 mm) in length with a minimum 1/8-inch (3.175 mm) leg. Frames shall be joined at each corner with a full-length GMAW fillet weld with a minimum 1/8-inch (3.175 mm) throat.

STRUCTURAL DESIGN CRITERIA
Manufacturer shall design and furnish all supports required to withstand a wind force of not less than 25 pounds per square foot. Louvers larger than 144-inches wide x 72-inches high or 72-inches wide x 144-inches 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

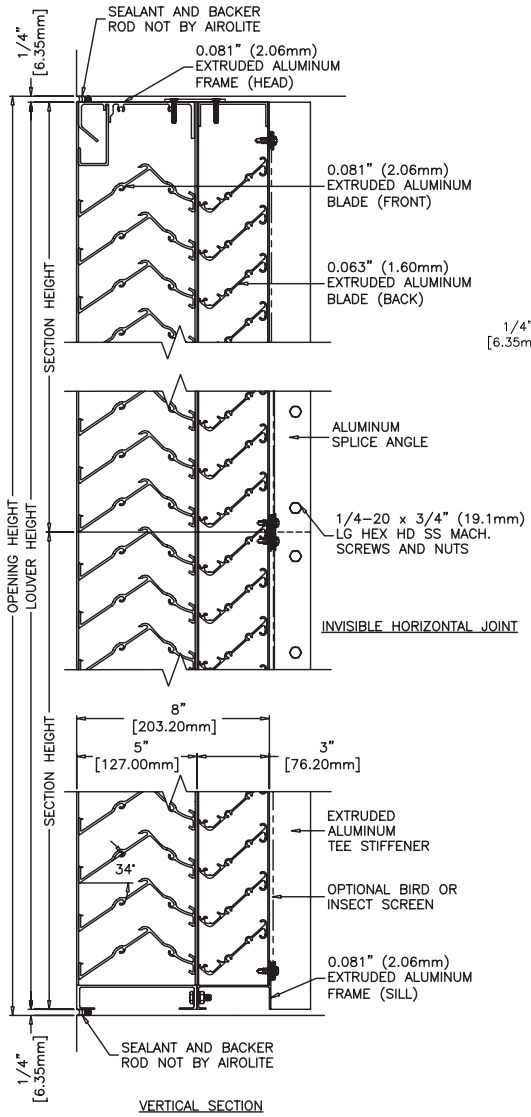
FREE AREA:	7.53 Square Feet (0.700 m^2)
MINIMUM FREE AREA VELOCITY at Beginning Point of Water Penetration:	1,250 fpm (6.35 m/s)
MINIMUM AIR VOLUME FLOW RATE at Beginning Point of Water Penetration:	9,412 cfm (4.45 m^3/s)
MAXIMUM STATIC PRESSURE at Beginning Point of Water Penetration:	0.50 in. H_2O (0.102 kPa)

See page 3 for complete Wind-driven Rain Performace
See page 4 for complete finish options

LOUVER TYPE SCH8 PRODUCT DESCRIPTION & DETAILS

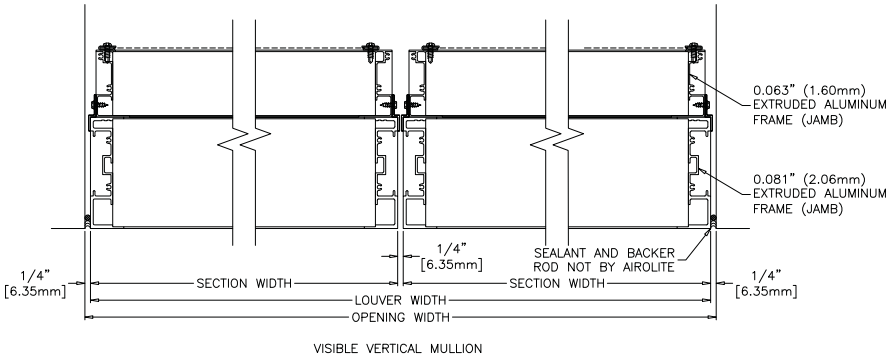
Airolite Storm Class™ combination louvers are designed and rated to provide high volume intake and exhaust ventilation and the greatest level of protection against water penetration available even under the most severe wind-driven rain conditions. Airolite Storm Class™ Combination louvers incorporate exterior and interior louver modules that afford the designer optimum flexibility in aesthetic, economic and performance considerations. The exterior module allows the designer to present a wide range of conventional features. The interior module incorporates a highly efficient horizontal blade profile that yields high ventilation rates and presents a formidable barrier to water penetration. Where there are large inactive louver areas, the interior module may be omitted to achieve economy. Louver Type SCH8 is an 8-inch (203.2 mm) deep louver rated to be 99.9% effective at a core area velocity of 689 fpm (3.5 m/s) when tested at a wind velocity of 50 mph (22.42 m/s) and 8-inch (203.2 ml) per hour rainfall rate. Airolite Storm Class™ Louver Type SCH8 is a highly efficient louver with AMCA Licensed Air Performance, Water Penetration and Wind-driven Rain performance 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 support systems when required.

VERTICAL SECTION DETAIL

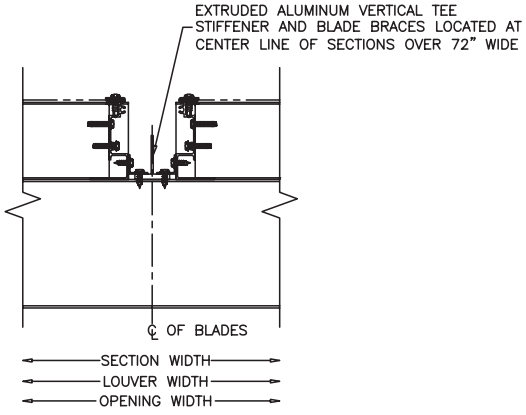


VERTICAL SECTION

PLAN SECTION DETAIL



VISIBLE VERTICAL MULLION



TEE STIFFENER

Minimum Section Size:

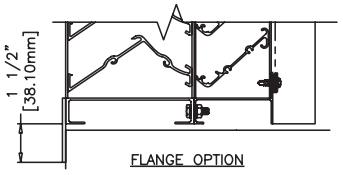
12 in. (30 cm) W x 12 in. (30 cm) H

Maximum Section Size:

144 in. (366 cm) W x 144 in. (366 cm) H

*one dimension cannot exceed 72 in.

ACCESSORY ITEM



FLANGE OPTION

LOUVER TYPE SCH8 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	0.22	0.50	0.79	1.08	1.36	1.65	1.94	2.22	2.51	2.80	3.08	3.37
24	0.65	1.51	2.37	3.23	4.09	4.95	5.81	6.67	7.53	8.39	9.25	10.11
36	1.08	2.51	3.94	5.38	6.81	8.24	9.68	11.11	12.54	13.98	15.41	16.84
48	1.51	3.51	5.52	7.53	9.53	11.54	13.55	15.55	17.56	19.57	21.57	23.58
60	1.94	4.52	7.10	9.68	12.26	14.84	17.42	20.00	22.58	25.16	27.74	30.32
72	2.37	5.52	8.67	11.83	14.98	18.13	21.29	24.44	27.59	30.75	33.90	37.05
84	2.80	6.52	10.25	13.98	17.70	21.43						
96	3.23	7.53	11.83	16.13	20.43	24.73						
108	3.66	8.53	13.40	18.28	23.15	28.02						
120	4.09	9.53	14.98	20.43	25.87	31.32						
132	4.52	10.54	16.56	22.58	28.60	34.62						
144	4.95	11.54	18.13	24.73	31.32	37.91						

The Airolite Company, LLC certifies that Louver Type SCH8 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 to Water Penetration, Air Performance and Wind-driven Rain.

WATER PENETRATION

(Standard Air - .075 lb./ft.^{3}; Test Size - 48 in. x 48 in.; Test Duration - 15 min.)

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 beginning point of water penetration is defined as that velocity where the water penetration curve projects through 0.01 oz. of water (penetration) per sq. ft. of louver free area. 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. ***The beginning point of water penetration for Model SCH8 is above 1,250 fpm (6.35 m/s) free area velocity.**

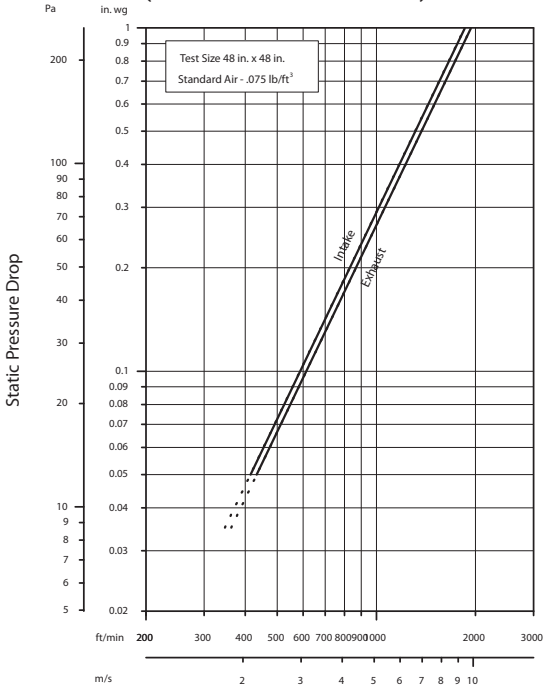
WIND-DRIVEN RAIN PERFORMANCE

	75mm/h (3 in/hr) Rainfall & 13 m/s (29 mph) Wind Velocity			200mm/h (8 in/hr) Rainfall & 22 m/s (50 mph) Wind Velocity		
Free Area Ventilation Rate (fpm)	Ventilation Air Core Velocity m/s (fpm)	Water Penetration Effectiveness %	Water Penetration Classification	Ventilation Air Core Velocity m/s (fpm)	Water Penetration Effectiveness %	Water Penetration Classification
0	0 (0)	100.0	A	0 (0)	100.0	A
175	.5 (98)	100.0	A	.5 (98)	100.0	A
351	1.0 (197)	100.0	A	1.0 (197)	100.0	A
526	1.5 (295)	100.0	A	1.5 (295)	100.0	A
703	2.0 (394)	100.0	A	2.0 (398)	99.8	A
878	2.5 (492)	100.0	A	2.5 (492)	99.5	A
1053	3.0 (590)	100.0	A	3.0 (564)	99.0	A
1210	3.5 (678)	99.0	A	3.5 (670)	96.6	B
1376	4.0 (771)	94.3	C	4.0 (785)	91.4	C
1556	4.5 (872)	90.3	C	4.5 (870)	88.1	C
1740	5.0 (975)	81.5	C	5.0 (963)	79.1	D

Discharge Loss Coefficient Class (Intake) = 3

AIRFLOW RESISTANCE

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



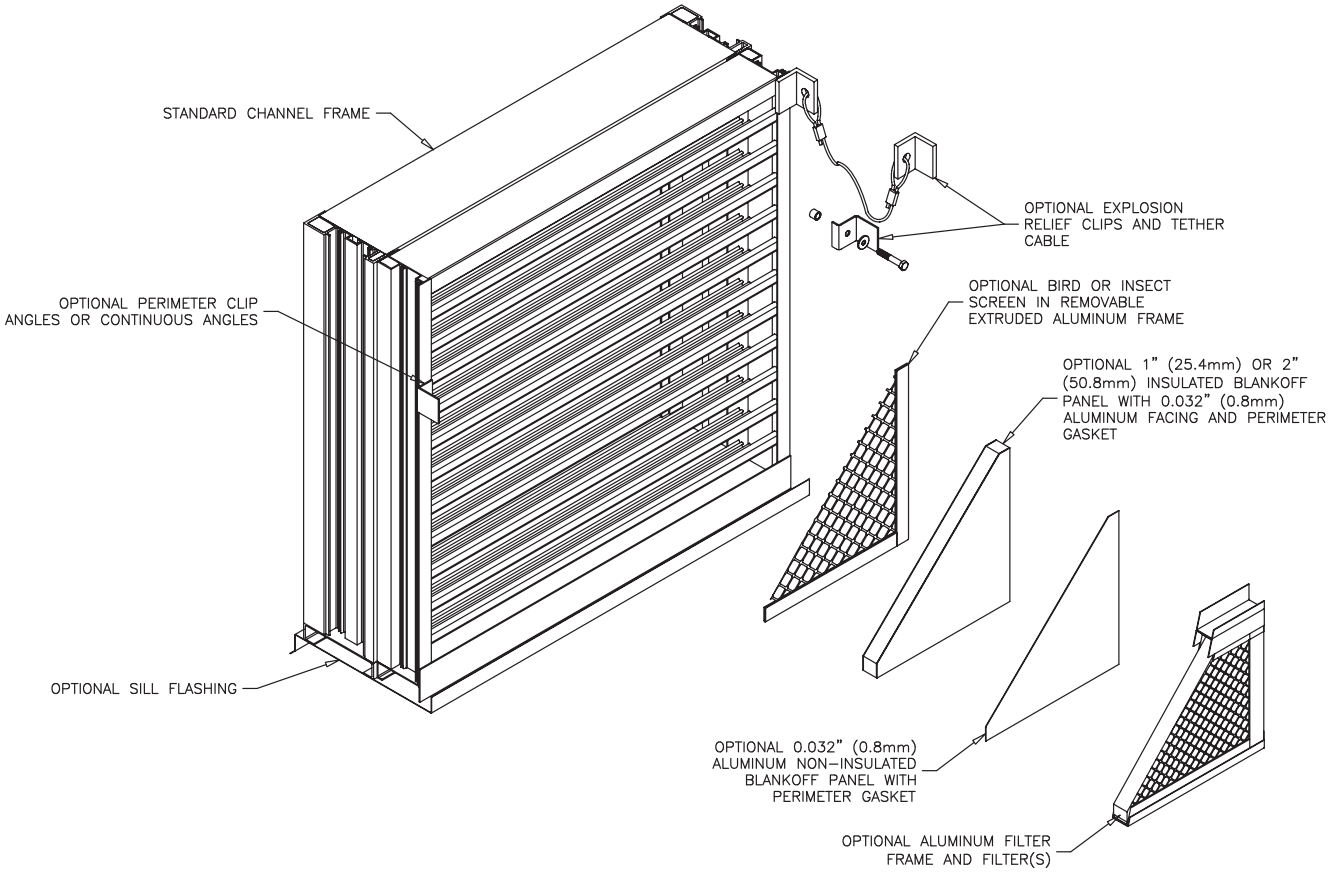
Louver Type SCH8 resistance to airflow varies depending on louver application (air intake or air exhaust). Free area velocities (shown) are higher than the average velocity through the overall louver size.

Weather louvers shall be classified by their ability to reject simulated rain. The table to the right shows different classifications based on the maximum simulated rain penetration per square meter (square feet) of louver. Water penetration rating at a given louver face velocity is determined by the water penetration while the louver is subjected to a selected simulated rainfall rate and wind velocity.

Discharge Loss Coefficient Classifications	
Class	Discharge Loss Coefficient
1	0.4 and Above
2	0.3 to 0.399
3	0.2 to 0.299
4	0.199 and Below

Wind-driven Rain Penetration Classes	
Class	Effectiveness
A	1 to 0.99
B	0.989 to 0.95
C	0.949 to 0.80
D	Below 0.80

LOUVER TYPE SCH8
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.

** Finish applied to exterior louver module only. Specify finish applied to interior louver module when required.*

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

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THE ALL-WELDED ADVANTAGE