

STORM CLASS™ LOUVER

Louver Type	SCC901
Material	Extruded Aluminum (Alloy 6063-T5)
Front Blade	0.081 in. (2.06 mm)
Back Blade	0.060 in. (1.52 mm)
Frame	0.081 in. (2.06 mm)
Louver Depth	9.25 in. (235.3 mm)
Free Area – 4 ft. x 4 ft. Unit	8.66 sq. ft. (0.80 m ²)
Percent Free Area	54.1%
Free Area Velocity at Beginning Point of Water Penetration – 0.01 oz H₂O/sq. ft. Free Area	
974 fpm (4.95 m/s)	
Air Volume Flow Rate at Beginning Point of Water Penetration – 4 ft. x 4 ft. Unit	
8,435 cfm (3.98 m ³ /s)	
Pressure Drop at Beginning Point of Water Penetration	
0.32 in. H ₂ O (0.080 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	863 fpm (4.4 m/s)
Exterior Wind Velocity	50 mph (22 m/s)
Rainfall Rate8 in. (200 mm)/hour
Effectiveness	99.2%
Core Ventilation Rate	877 fpm (4.5 m/s)

Note: AMCA performance above is for visible jambs only. See pages 5 & 6 for complete performance data.

RECOMMENDED SPECIFICATION

GENERAL

Furnish and install where indicated on plans or described in schedules Storm Class™ Louver Type SCC901 as designed and manufactured by The Aiolite 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. 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 and licensed under the AMCA Certified Ratings Program.

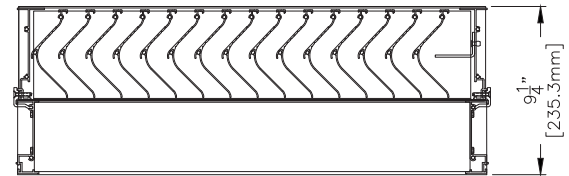
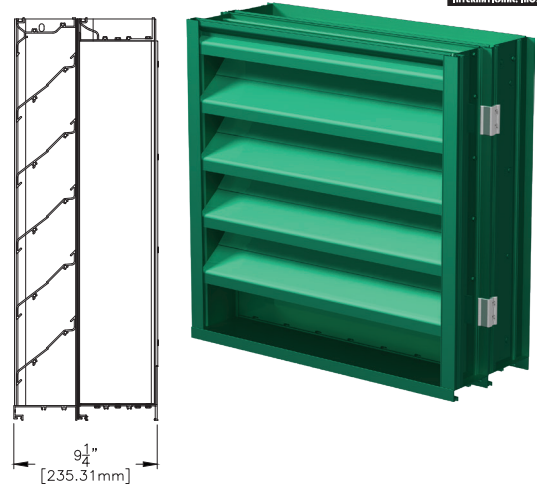
PRODUCTS

Louvers shall be Storm Class™ type and rated to resist water penetration under wind-driven rain conditions. Louvers shall be 9.25-inches (235.3 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 0.060-inch (1.5 mm) extruded aluminum, alloy 6063-T5. Exterior blades shall be horizontal and spaced 4.25-inches (108.0 mm) on center.



HIGH VELOCITY RAIN RESISTANT WITH BLADES FULLY OPEN AND IMPACT RESISTANT LOUVER
Enhanced Protection Level E
See www.AMCA.org for all certified or listed products

This label does not signify AMCA airflow performance certification.



STRUCTURAL DESIGN CRITERIA

Maximum single section size for model SCC901 is 60-inches (152 cm) W x 120-inches (305 cm) 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 Aiolite 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 Aiolite unless indicated otherwise by Aiolite. 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 Aiolite. Additional information on louver installation may be found in AMCA Publication #501, Louver Application Manual.

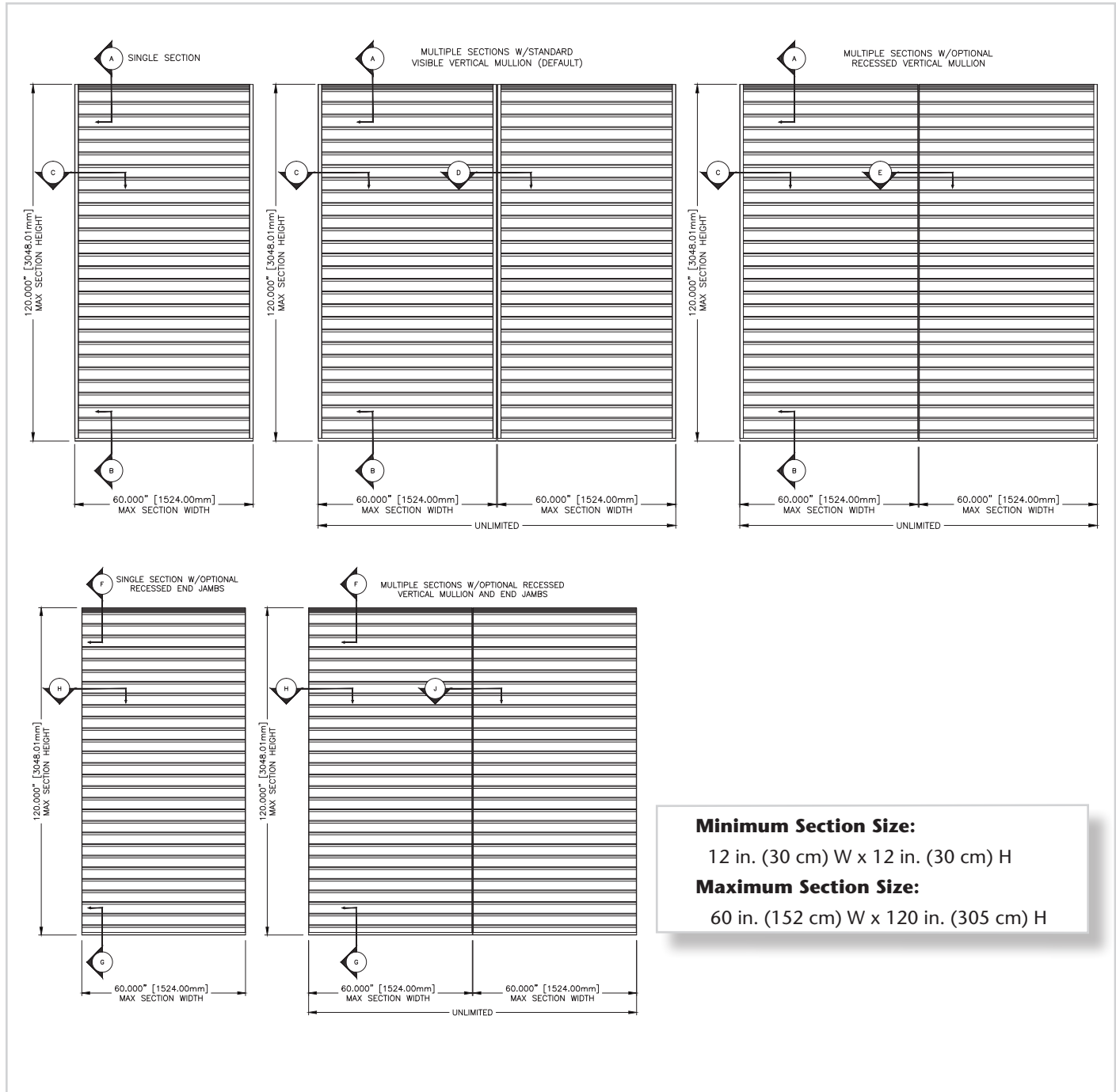
PERFORMANCE RATINGS

FREE AREA:	8.66 sq. ft. (0.80 m ²)
MINIMUM FREE AREA VELOCITY at Beginning Point of Water Penetration:	974 fpm (4.95 m/s)
MINIMUM AIR VOLUME FLOW RATE at Beginning Point of Water Penetration:	8,435 cfm (3.98 m ³ /s)
MAXIMUM STATIC PRESSURE at Beginning Point of Water Penetration:	0.32 in. H ₂ O (0.080 kPa)

See page 5 & 6 for complete Wind-driven Rain Performance
See page 8 for complete finish options

LOUVER TYPE SCC901 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 to non-traditional appearances. The interior module incorporates a highly efficient vertical 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 SCC901 is a 9.25-inch (235.3 mm) deep louver rated to be 99.2% effective at a core area velocity of 877 fpm (4.5 m/s) when tested at a wind velocity of 50 mph (22 m/s) and 8-inch per hour rainfall rate. Airolite Storm Class™ Louver Type SCC901 is a highly effective louver with AMCA Licensed Air Performance, Water Penetration and Wind Driven Rain performance ratings as well as tested in accordance with AMCA 540 Test Method for Louvers Impacted by Wind Borne Debris and AMCA 550 Test Method for High Velocity Wind Driven Rain that enables 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.



Minimum Section Size:

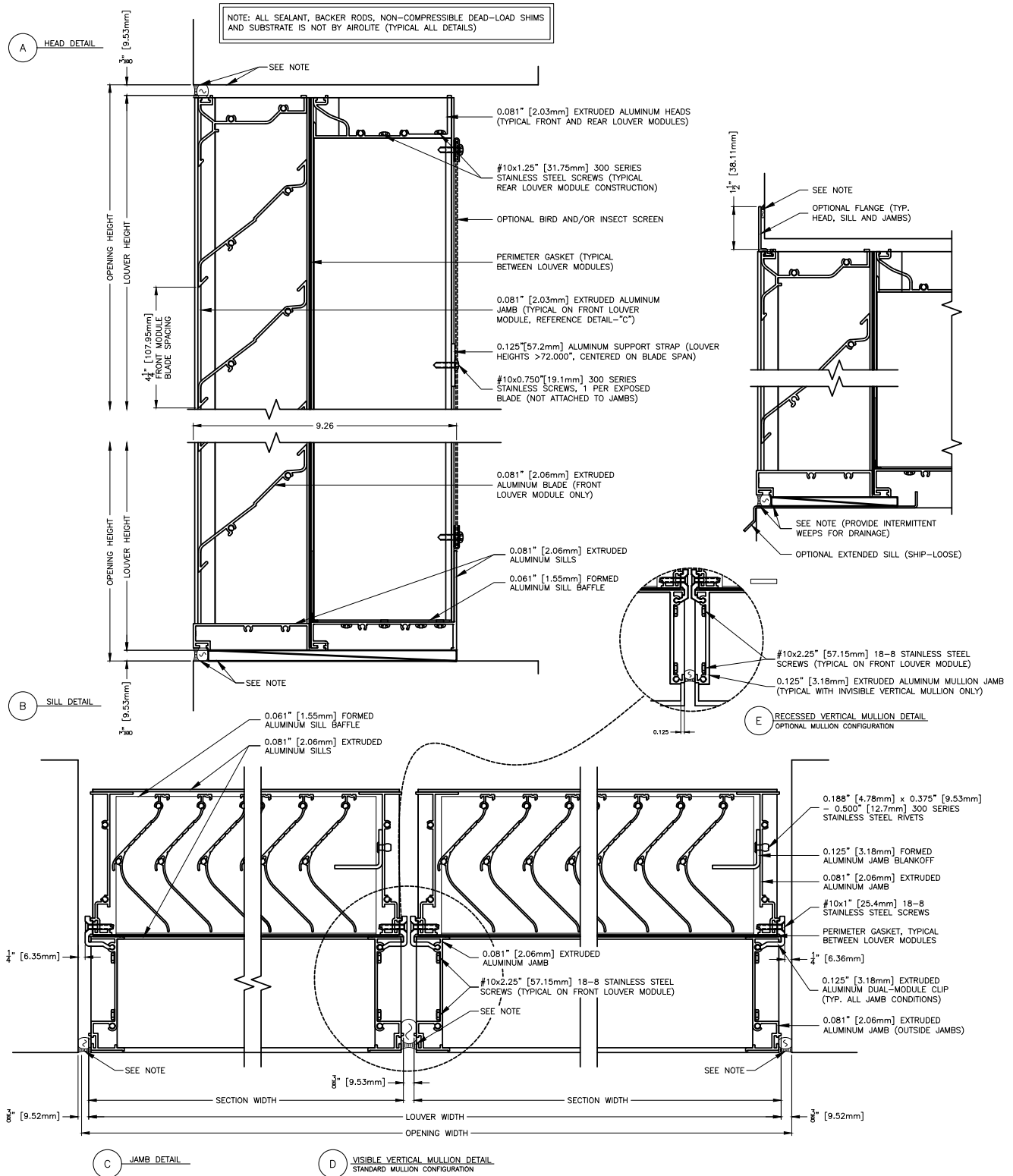
12 in. (30 cm) W x 12 in. (30 cm) H

Maximum Section Size:

60 in. (152 cm) W x 120 in. (305 cm) H

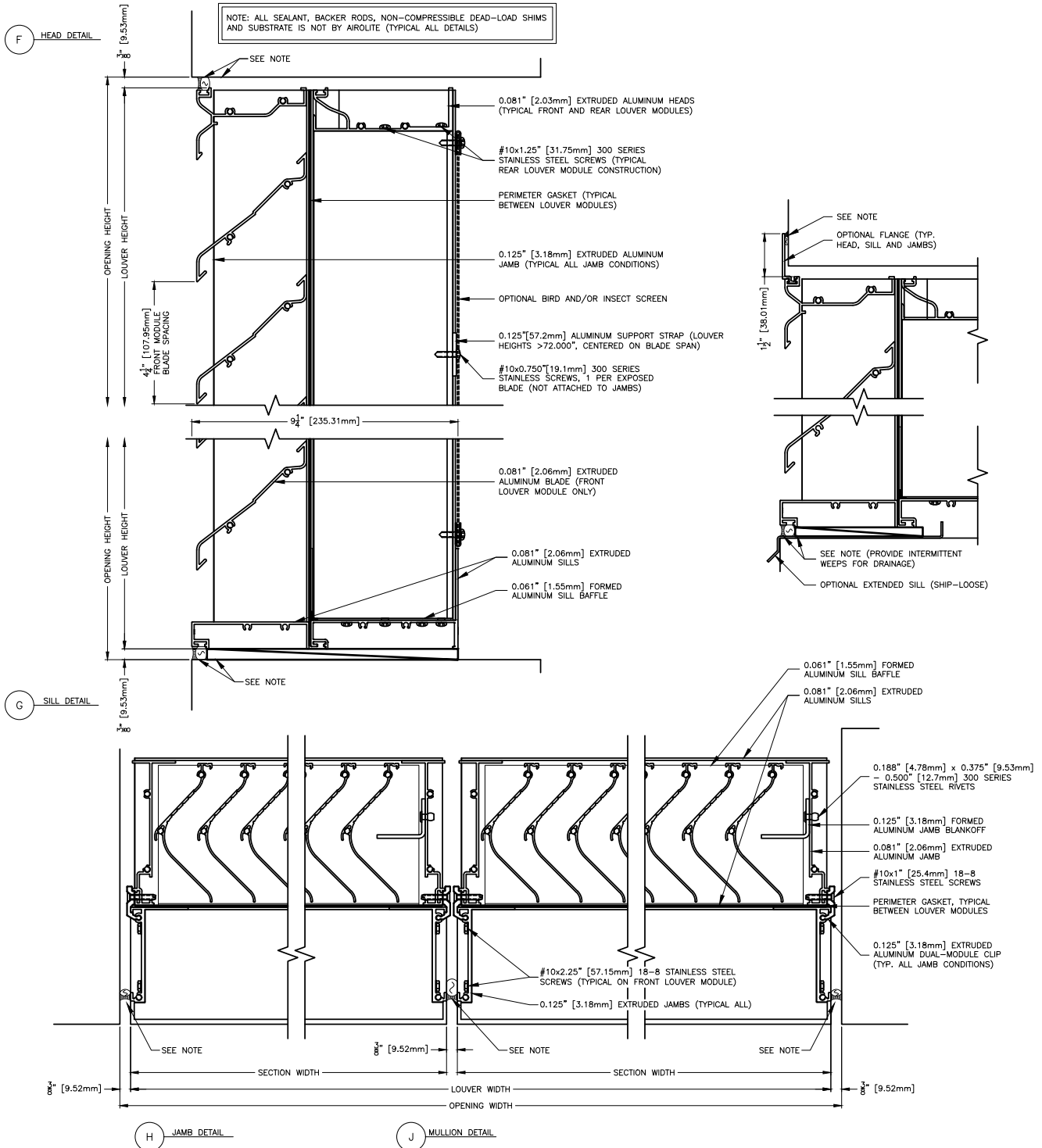
LOUVER TYPE SCC901 PRODUCT DETAILS

VISIBLE JAMB



LOUVER TYPE SCC901 PRODUCT DETAILS

RECESSED JAMB

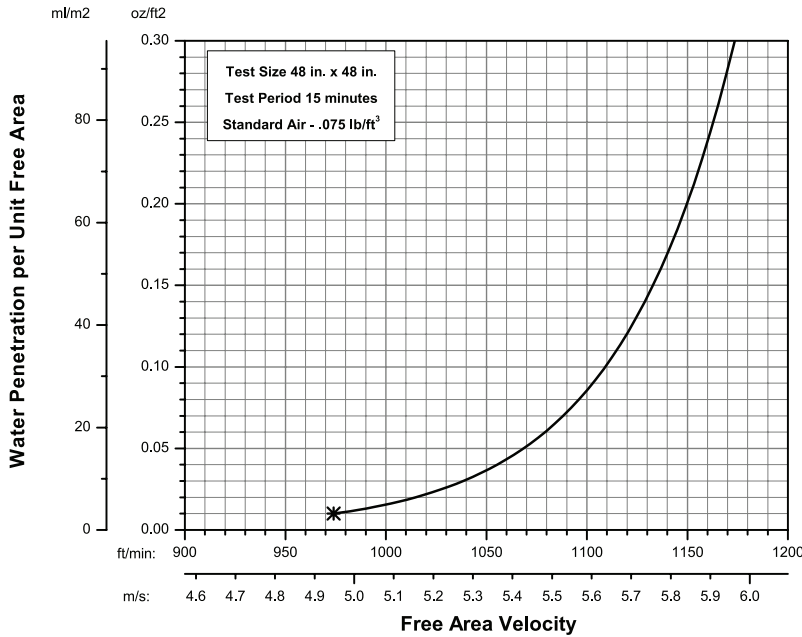


LOUVER TYPE SCC901 PERFORMANCE RATINGS

VISIBLE JAMB

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 weather-proof 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 SCC901 is 974 fpm (4.95 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			
Ventilation Air Core Velocity m/s (fpm)	Ventilation Air Free Area Velocity m/s (fpm)	Water Penetration Effectiveness %	Water Penetration Classification	Ventilation Air Core Velocity m/s (fpm)	Ventilation Air Free Area Velocity m/s (fpm)	Water Penetration Effectiveness %	Water Penetration Classification
0.0 (0)	0.0 (0)		A	0.0 (0)	0.0 (0)		A
0.5 (98)	0.8 (167)		A	0.5 (98)	0.8 (167)		A
1.0 (197)	1.7 (337)		A	1.0 (197)	1.7 (337)		A
1.5 (295)	2.6 (504)		A	1.5 (295)	2.6 (504)		A
2.0 (394)	3.4 (673)		A	2.0 (394)	3.4 (673)		A
2.5 (492)	4.3 (841)		A	2.5 (492)	4.3 (841)		A
3.0 (591)	5.1 (1010)		A	3.0 (591)	5.1 (1010)		A
3.5 (689)	6.0 (1178)		A	3.4 (664)	5.8 (1135)	99.8	A
4.0 (787)	6.8 (1345)		A	3.9 (771)	6.7 (1318)	99.6	A
4.4 (863)	7.5 (1475)	100.0	A	4.5 (877)	7.6 (1499)	99.2	A
5.0 (980)	8.5 (1675)	98.5	B	4.9 (964)	8.4 (1648)	98.5	B

Discharge Loss Coefficient Class (Intake) = 3

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

The Airolite Company, LLC certifies that Louver Type SCC901 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.

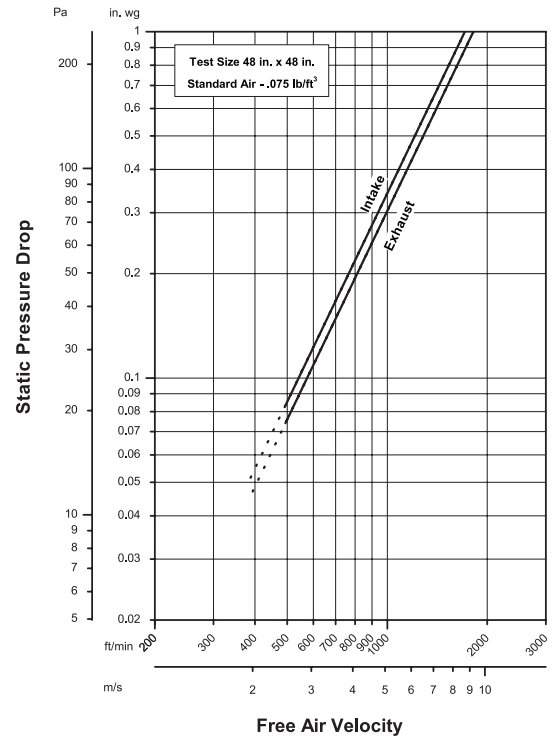
HIGH VELOCITY RAIN RESISTANT WITH BLADES FULLY OPEN AND IMPACT RESISTANT LOUVER
Enhanced Protection Level E
See www.AMCA.org for all certified or listed products

The Airolite Company, LLC certifies that Louver Type SCC901 (recessed jamb) shown herein is approved to bear the AMCA Listing Label. The ratings shown are based on tests and procedures performed in accordance with AMCA Publications and comply with the requirements of the AMCA Listing Label Program. The AMCA Listing Label applies to Wind Borne Debris Impact Resistant Louvers and High Velocity Rain Resistant Louvers.

This label does not signify AMCA airflow performance certification.

AIRFLOW RESISTANCE

(Standard Air - .075 lb./ft.³)



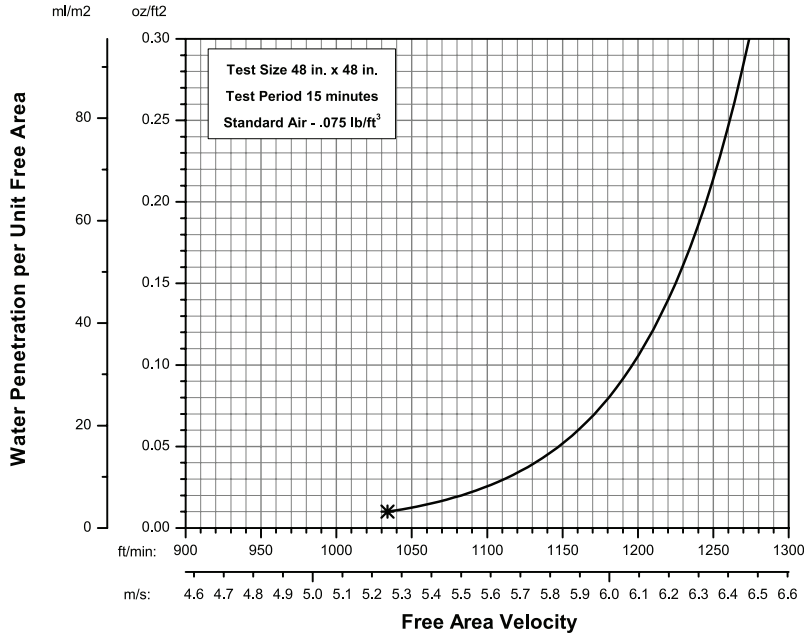
Louver Type SCC901 resistance to airflow varies depending on louver application (air intake or air exhaust). Free area velocities (shown) are higher than the average velocity through the overall louver size. (Test Figure 5.5-6.5)

LOUVER TYPE SCC901 PERFORMANCE RATINGS

RECESSED JAMB

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 weather-proof 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 SCC901 (recessed jamb) is 1,034 fpm (5.25 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			
Ventilation Air Core Velocity m/s (fpm)	Ventilation Air Free Area Velocity m/s (fpm)	Water Penetration Effectiveness %	Water Penetration Classification	Ventilation Air Core Velocity m/s (fpm)	Ventilation Air Free Area Velocity m/s (fpm)	Water Penetration Effectiveness %	Water Penetration Classification
0.0 (0)	0.0 (0)		A	0.0 (0)	0.0 (0)		A
0.5 (98)	0.9 (174)		A	0.5 (98)	0.9 (174)		A
1.0 (197)	1.8 (350)		A	1.0 (197)	1.8 (350)		A
1.5 (295)	2.7 (525)		A	1.5 (295)	2.7 (525)		A
2.0 (394)	3.6 (701)		A	2.0 (394)	3.6 (701)		A
2.5 (492)	4.4 (875)		A	2.5 (492)	4.4 (875)		A
3.0 (591)	5.3 (1051)		A	3.0 (591)	5.3 (1051)		A
3.5 (689)	6.2 (1226)		A	3.5 (685)	6.2 (1219)	99.8	A
3.7 (773)	7.0 (1375)	100.0	A	4.0 (782)	7.1 (1391)	99.6	A
4.4 (869)	7.9 (1546)	99.7	A	4.5 (876)	7.9 (1559)	99.2	A
5.0 (981)	8.9 (1745)	97.8	B	5.0 (976)	8.8 (1736)	95.0	B

Discharge Loss Coefficient Class (Intake) = 3

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.

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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

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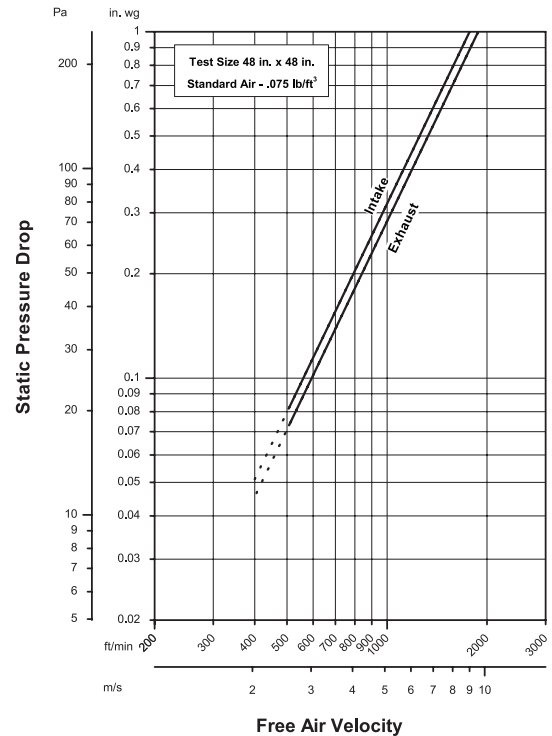
HIGH VELOCITY RAIN RESISTANT WITH BLADES FULLY OPEN AND IMPACT RESISTANT LOUVER
Enhanced Protection Level E
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This label does not signify AMCA airflow performance certification.

AIRFLOW RESISTANCE

(Standard Air - .075 lb./ft.³)



Louver Type SCC901 (recessed jamb) 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. (Test Figure 5.5-6.5)

LOUVER TYPE SCC901 PERFORMANCE RATINGS

FREE AREA CHART - Visible Jamb *(In Square Feet)*

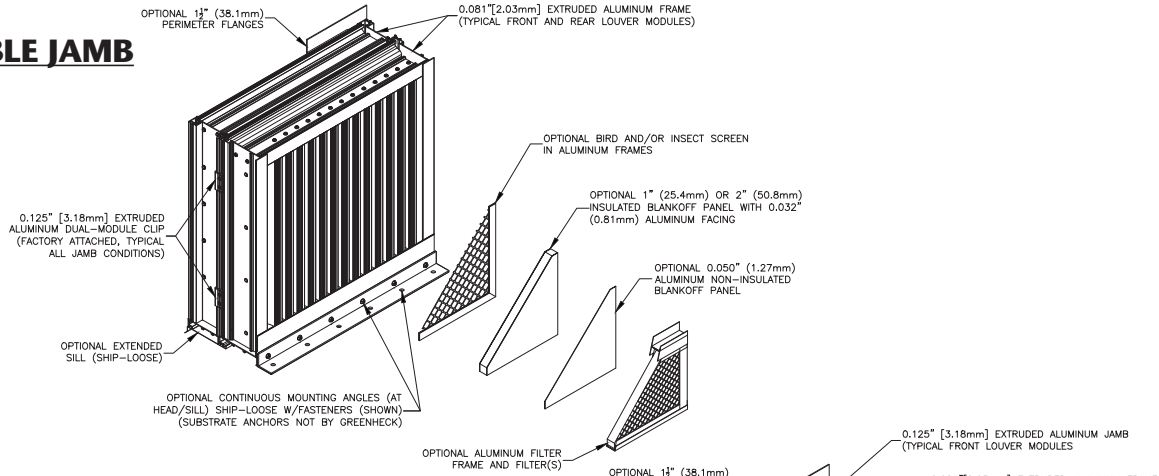
Louver Height Inches	Louver Width in Inches								
	12	18	24	30	36	42	48	54	60
12	0.24	0.44	0.63	0.83	1.02	1.22	1.41	1.60	1.80
18	0.45	0.81	1.17	1.53	1.89	2.26	2.62	2.98	3.34
24	0.66	1.18	1.71	2.24	2.77	3.30	3.83	4.35	4.88
30	0.86	1.56	2.25	2.95	3.64	4.34	5.03	5.73	6.43
36	1.07	1.93	2.79	3.66	4.52	5.38	6.24	7.11	7.97
42	1.28	2.31	3.33	4.36	5.39	6.42	7.45	8.48	9.51
48	1.48	2.68	3.88	5.07	6.27	7.46	8.66	9.86	11.05
54	1.69	3.05	4.42	5.78	7.14	8.51	9.87	11.23	12.59
60	1.90	3.43	4.96	6.49	8.02	9.55	11.08	12.61	14.14
66	2.10	3.80	5.50	7.19	8.89	10.59	12.29	13.98	15.68
72	2.31	4.18	6.04	7.90	9.77	11.63	13.49	15.36	17.22
78	2.47	4.46	6.44	8.43	10.42	12.41	14.40	16.39	18.38
84	2.67	4.83	6.99	9.14	11.30	13.45	15.61	17.76	19.92
90	2.88	5.20	7.53	9.85	12.17	14.49	16.82	19.14	21.46
96	3.09	5.58	8.07	10.56	13.05	15.54	18.02	20.51	23.00
102	3.30	5.95	8.61	11.26	13.92	16.58	19.23	21.89	24.55
108	3.50	6.33	9.15	11.97	14.80	17.62	20.44	23.26	26.09
114	3.71	6.70	9.69	12.68	15.67	18.66	21.65	24.64	27.63
120	3.92	7.07	10.23	13.39	16.54	19.70	22.86	26.02	29.17

FREE AREA CHART - Recessed Jamb *(In Square Feet)*

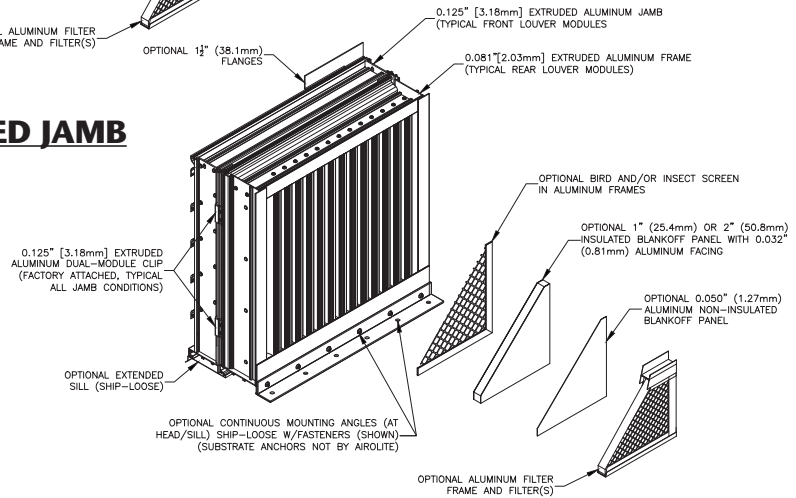
Louver Height Inches	Louver Width in Inches								
	12	18	24	30	36	42	48	54	60
12	0.33	0.58	0.83	1.08	1.32	1.57	1.82	2.07	2.32
18	0.49	0.85	1.22	1.58	1.95	2.31	2.67	3.04	3.40
24	0.73	1.28	1.83	2.38	2.92	3.47	4.02	4.57	5.12
30	0.89	1.55	2.22	2.88	3.55	4.21	4.87	5.54	6.20
36	1.13	1.98	2.83	3.68	4.52	5.37	6.22	7.07	7.92
42	1.38	2.41	3.44	4.47	5.50	6.53	7.56	8.60	9.63
48	1.53	2.68	3.83	4.98	6.12	7.27	8.42	9.57	10.72
54	1.78	3.11	4.44	5.77	7.10	8.43	9.76	11.10	12.43
60	1.93	3.38	4.83	6.28	7.72	9.17	10.62	12.07	13.52
66	2.18	3.81	5.44	7.07	8.70	10.33	11.97	13.60	15.23
72	2.33	4.08	5.83	7.58	9.32	11.07	12.82	14.57	16.32
78	2.58	4.51	6.44	8.37	10.30	12.23	14.17	16.10	18.03
84	2.82	4.94	7.05	9.17	11.28	13.40	15.51	17.63	19.74
90	2.98	5.21	7.44	9.67	11.90	14.13	16.37	18.60	20.83
96	3.22	5.64	8.05	10.47	12.88	15.30	17.71	20.13	22.54
102	3.38	5.91	8.44	10.97	13.50	16.03	18.57	21.10	23.63
108	3.62	6.34	9.05	11.77	14.48	17.20	19.91	22.63	25.34
114	3.86	6.76	9.66	12.56	15.46	18.36	21.26	24.15	27.05
120	4.02	7.04	10.05	13.07	16.08	19.10	22.11	25.13	28.14

LOUVER TYPE SCC901 METHOD OF INSTALLATION & ACCESSORY OPTIONS

VISIBLE JAMB



RECESSED JAMB



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: Airlite offers 6 standard Mica colors for 70% Kynar® or 100% Fluoropolymer. Custom Colors: Custom color matching is available. Consult your Airlite 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. Airlite 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.airlite.com for complete information on standard and extended paint warranties. Paint finish warranties are not applicable to steel products.



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