AIROLITE®
The look that works.™

LOUVER TYPE
SCC550
AMCA 540 and 550 Listed

STORM CLASS™ LOUVER

Louver Type	SCC550
Material	Extruded Aluminum (Alloy 6005-T5)
Front Blade	0.081 in. (2.06 mm)
Back Blade	0.050 in. (1.27 mm)
Frame	0.081 in. (2.06 mm)
Louver Depth	5.50 in. (139.7 mm)
Free Area – 4 ft. x 4 ft. Unit	8.02 sq. ft. (0.75 m^2)
Percent Free Area	50%
Free Area Velocity at Beginning Point of Water Penetration – 0.01 oz H_2O/sq. ft. Free Area	1,083 fpm (5.50 m/s)
Air Volume Flow Rate at Beginning Point of Water Penetration – 4 ft. x 4 ft. Unit	8,686 cfm (4.10 m^3/s)
Pressure Drop at Beginning Point of Water Penetration	0.44 in. H_2O (0.109 kPa)

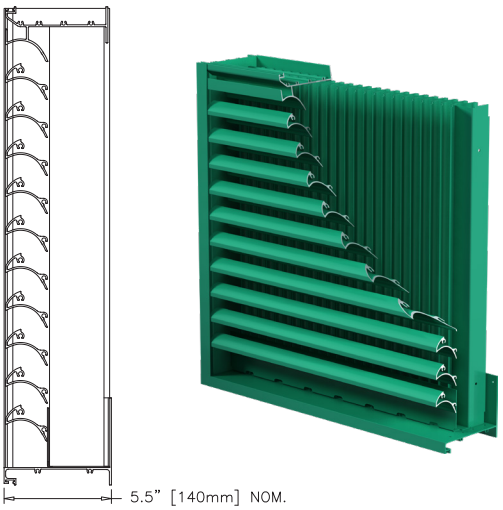
Wind-Driven Rain Water Penetration Data

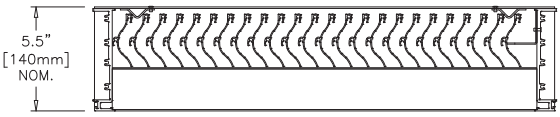
Exterior Wind Velocity	29 mph (13 m/s)
Rainfall Rate	3 in. (75 mm)/hour
Effectiveness	100.0%
Core Ventilation Rate	980 fpm (5.0 m/s)
Exterior Wind Velocity	50 mph (22 m/s)
Rainfall Rate	8 in. (200 mm)/hour
Effectiveness	99.5%
Core Ventilation Rate	980 fpm (5.0 m/s)

Note: AMCA performance above is for visible jambs only. See pages 5, 6 & 7 for complete performance data.

amca INTERNATIONAL LISTED — 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.

amca WORLDWIDE CERTIFIED RATINGS — WATER PENETRATION, AIR PERFORMANCE, WIND DRIVEN RAIN — AIR MOVEMENT AND CONTROL ASSOCIATION INTERNATIONAL, INC. — www.amca.org





RECOMMENDED SPECIFICATION

GENERAL
Furnish and install where indicated on plans or described in schedules Storm Class™ Louver Type SCC550 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. 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 5.5-inches (139.7 mm) deep and assembled entirely from extruded aluminum components. Exterior blades and frames shall be 0.081-inch (2 mm) thick extruded aluminum, alloy 6005-T5. Interior blades shall be 0.050-inch (1.27 mm) extruded aluminum, alloy 6005-T5. Exterior blades shall be horizontal and spaced 1.9-inches (48 mm) on center.

STRUCTURAL DESIGN CRITERIA
Maximum single section size for model SCC550 is 60-inches (152 cm) W x 96-inches (244 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 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.

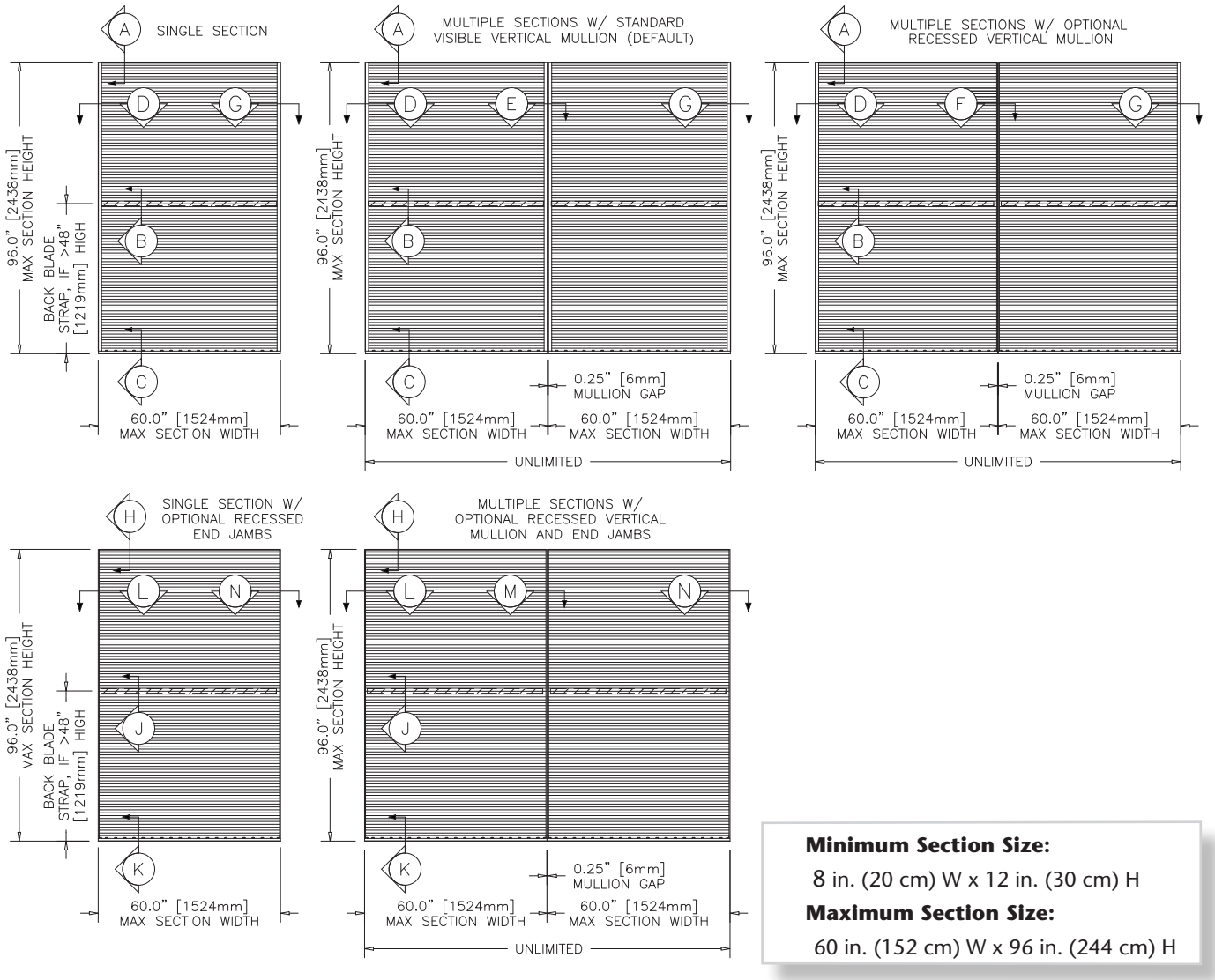
PERFORMANCE RATINGS

FREE AREA:	8.02 sq. ft. (0.75 m^2)
MINIMUM FREE AREA VELOCITY at Beginning Point of Water Penetration:	1,083 fpm (5.5 m/s)
MINIMUM AIR VOLUME FLOW RATE at Beginning Point of Water Penetration:	8,686 cfm (4.10 m^3/s)
MAXIMUM STATIC PRESSURE at Beginning Point of Water Penetration:	0.44 in. H_2O (0.109 kPa)

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

LOUVER TYPE SCC550 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 blades that afford the designer optimum flexibility in aesthetic, economic and performance considerations. The exterior horizontal blade and two jamb options allow the designer to present a wide range of conventional to non-traditional appearances. The interior vertical blades are a very efficient profile that yields high ventilation rates and presents a formidable barrier to water penetration. Louver Type SCC550 is a 5.5-inch (139.7 mm) deep louver rated to be 99.5% effective at a core area velocity of 782 fpm (5.0 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 SCC550 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:

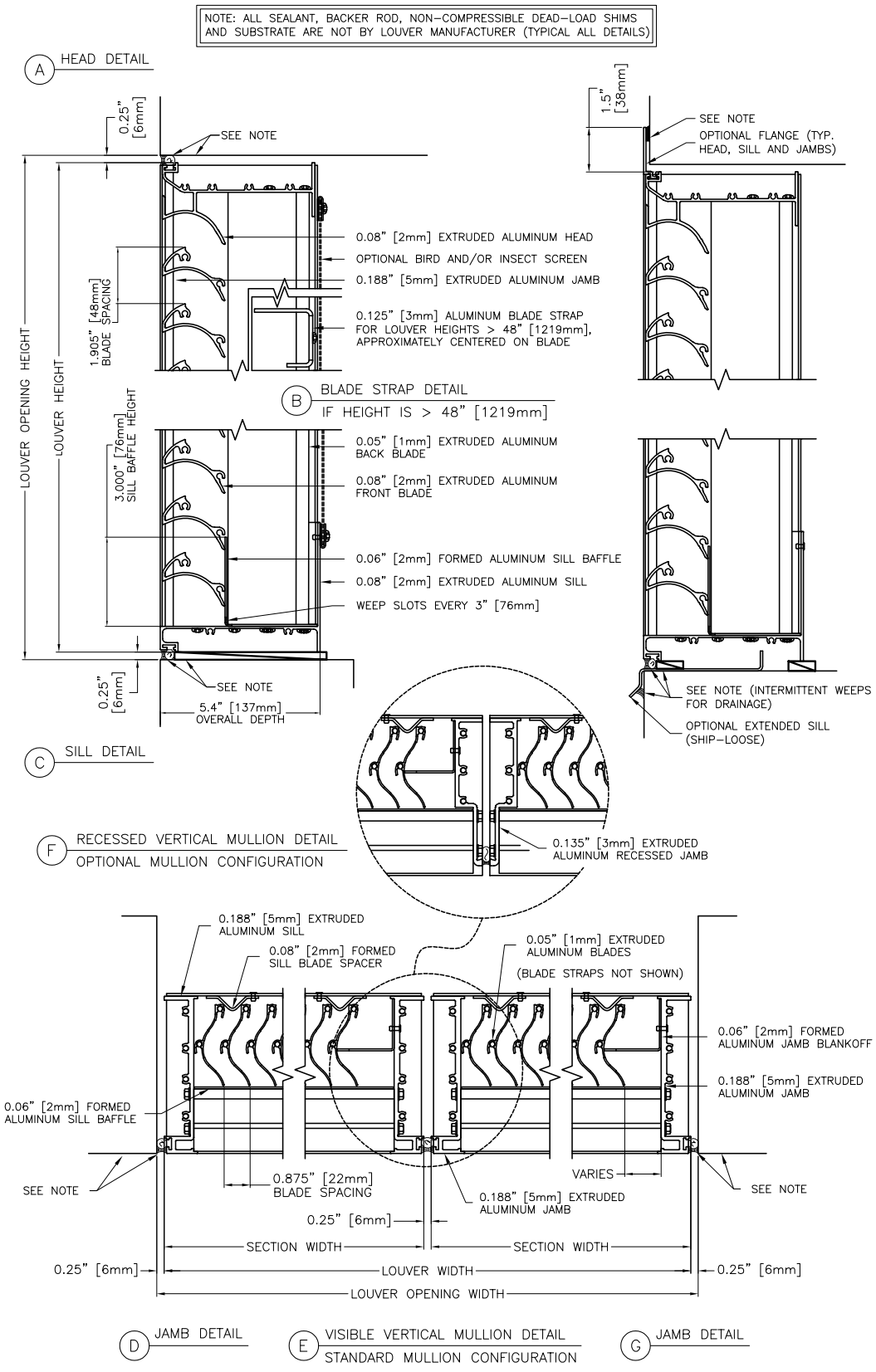
8 in. (20 cm) W x 12 in. (30 cm) H

Maximum Section Size:

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

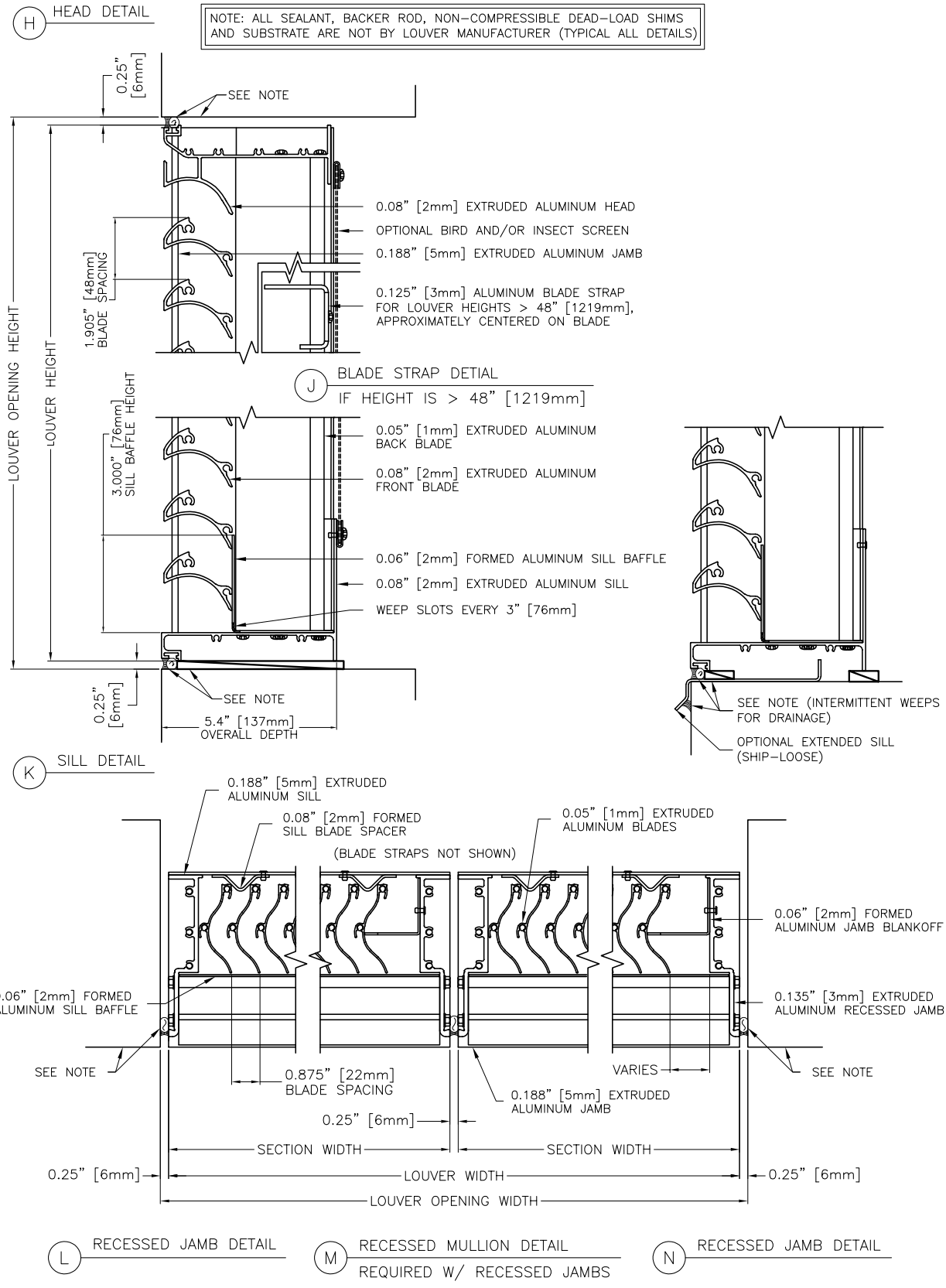
LOUVER TYPE SCC550 PRODUCT DETAILS

VISIBLE JAMB



LOUVER TYPE SCC550 PRODUCT DETAILS

RECESSED JAMB

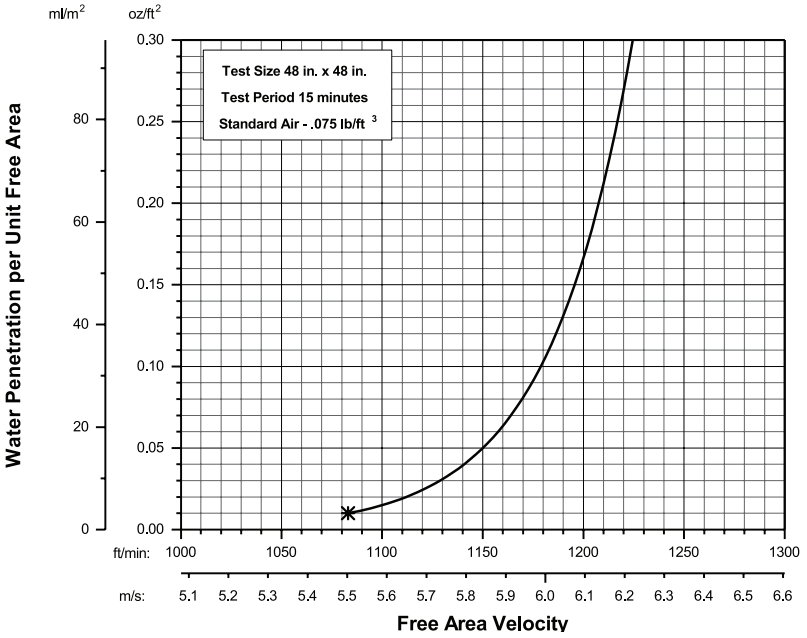


LOUVER TYPE *SCC550* PERFORMANCE RATINGS

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 SCC550 is 1083 fpm (5.50 m/s) free area velocity.***

The Airolite Company, LLC certifies that Louver Type SCC550 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.

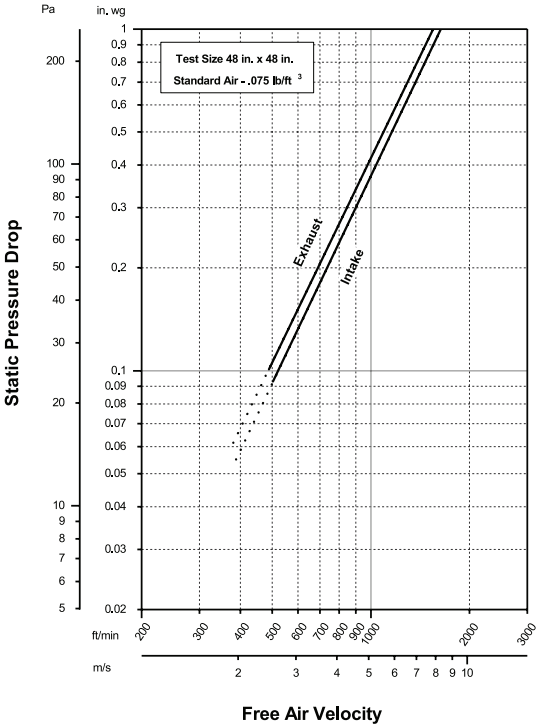
HIGH VELOCITY RAIN RESISTANT WITH BLADES FULLY OPEN AND IMPACT RESISTANT LOUVER
Enhanced Protection Level E
See www.AMCA.org for all certified or listed products

This label does not signify AMCA airflow performance certification.

The Airolite Company, LLC certifies that Louver Type SCC550 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.

AIRFLOW RESISTANCE

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



Louver Type SCC550 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)

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 (177)		A	0.5 (98)	0.9 (177)		A
1.0 (197)	1.8 (356)		A	1.0 (197)	1.8 (356)		A
1.5 (295)	2.7 (533)		A	1.5 (295)	2.7 (533)		A
2.0 (394)	3.6 (712)		A	2.0 (394)	3.6 (712)		A
2.5 (492)	4.5 (889)		A	2.5 (492)	4.5 (889)		A
3.0 (591)	5.4 (1068)		A	3.0 (591)	5.4 (1068)		A
3.5 (689)	6.3 (1245)		A	3.5 (689)	6.3 (1245)		A
4.0 (787)	7.2 (1422)		A	4.0 (782)	7.2 (1413)	99.7	A
4.5 (886)	8.1 (1600)		A	4.5 (883)	8.1 (1595)	99.6	A
5.0 (980)	9.0 (1770)	100.0	A	5.0 (980)	9.0 (1770)	99.5	A

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

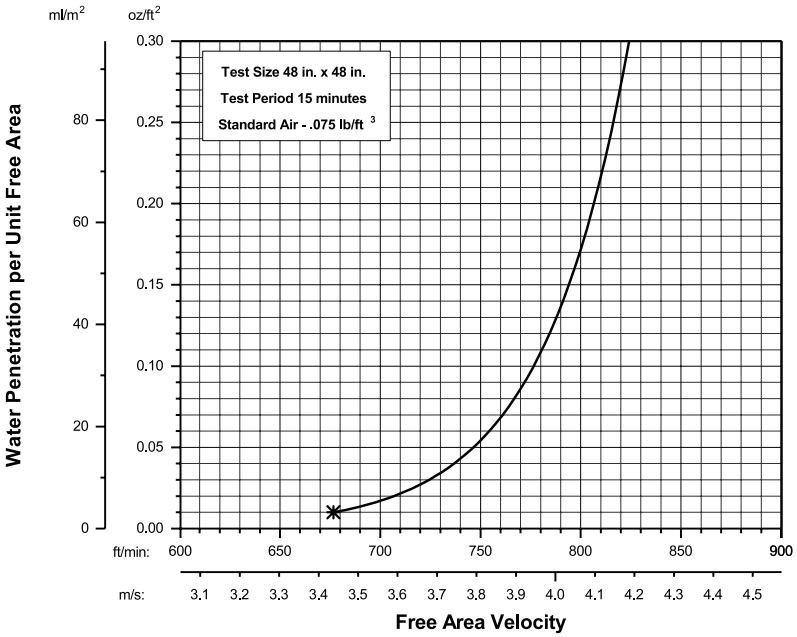
Wind-driven Rain Penetration Classes	
Class	Effectiveness
A	1 to 0.99
B	0.989 to 0.95
C	0.949 to 0.80
D	Below 0.80

LOUVER TYPE SCC550 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 SCC550 (recessed jamb) is 677 fpm (3.44 m/s) free area velocity.**

The Airolite Company, LLC certifies that Louver Type SCC550 (recessed jamb) 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.

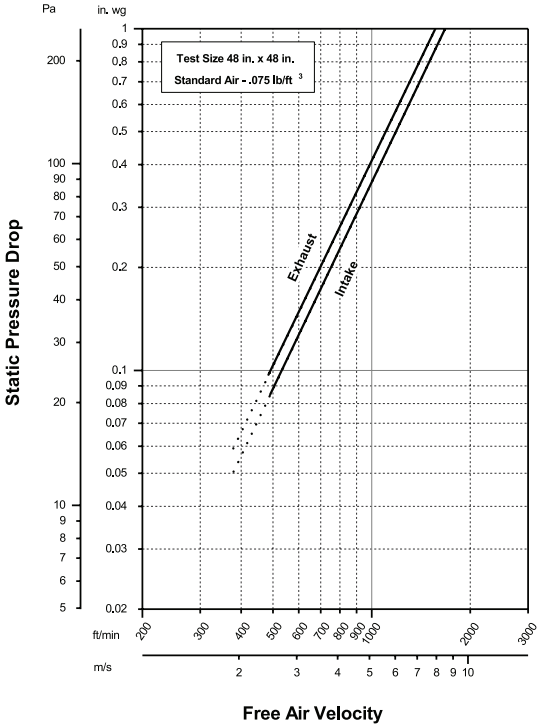
HIGH VELOCITY RAIN RESISTANT WITH BLADES FULLY OPEN AND IMPACT RESISTANT LOUVER
Enhanced Protection Level E
See www.AMCA.org for all certified or listed products

This label does not signify AMCA airflow performance certification.

The Airolite Company, LLC certifies that Louver Type SCC550 (recessed jamb) shown herein is approved to bear the AMCA Listing Label. The ratings shown are based on tests and procedures performed in accordane 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 and High Velocity Rain Resistant Louvers.

AIRFLOW RESISTANCE

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



Louver Type SCC550 (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)

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 (183)		A	0.5 (98)	0.9 (183)		A
1.0 (197)	1.9 (367)		A	1.0 (197)	1.9 (367)		A
1.5 (295)	2.8 (550)		A	1.5 (295)	2.8 (550)		A
2.0 (394)	3.7 (734)		A	2.0 (394)	3.7 (734)		A
2.5 (492)	4.7 (917)		A	2.5 (492)	4.7 (917)		A
3.0 (591)	5.6 (1101)		A	3.0 (591)	5.6 (1101)		A
3.5 (689)	6.5 (1284)		A	3.5 (689)	6.5 (1284)		A
4.0 (787)	7.5 (1467)		A	4.0 (778)	7.4 (1450)	99.7	A
4.5 (886)	8.4 (1651)		A	4.5 (884)	8.4 (1647)	99.6	A
5.0 (979)	9.3 (1824)	100.0	A	5.0 (985)	9.3 (1836)	99.5	A

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

LOUVER TYPE *SCC550* PERFORMANCE RATINGS

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

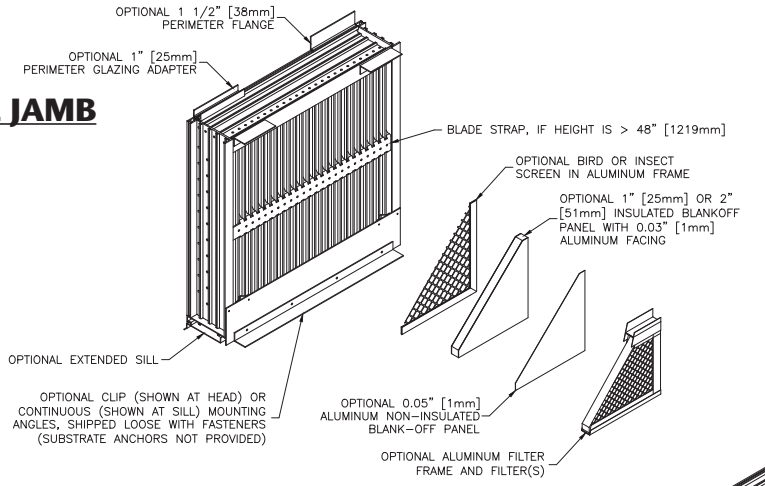
Louver Height Inches	Louver Width In Inches									
	8	12	18	24	30	36	42	**48**	54	60
12	0.14	0.23	0.38	0.52	0.66	0.81	0.95	1.09	1.24	1.38
18	0.27	0.47	0.75	1.04	1.33	1.61	1.90	2.19	2.47	2.76
24	0.42	0.72	1.16	1.60	2.04	2.48	2.92	3.36	3.80	4.24
30	0.57	0.97	1.56	2.16	2.75	3.35	3.94	4.54	5.13	5.73
36	0.72	1.22	1.97	2.72	3.47	4.22	4.97	5.72	6.47	7.22
42	0.87	1.47	2.38	3.28	4.19	5.10	6.00	6.91	7.81	8.72
48	1.01	1.71	2.76	3.81	4.86	5.92	6.97	**8.02**	9.07	10.12
54	1.15	1.94	3.14	4.33	5.53	6.72	7.92	9.11	10.31	11.50
60	1.28	2.18	3.52	4.86	6.20	7.54	8.88	10.22	11.56	12.90
66	1.43	2.43	3.93	5.42	6.92	8.41	9.91	11.40	12.90	14.39
72	1.58	2.68	4.33	5.98	7.63	9.29	10.94	12.59	14.24	15.89
78	1.73	2.93	4.74	6.55	8.35	10.16	11.97	13.77	15.58	17.38
84	1.88	3.19	5.15	7.11	9.07	11.03	12.99	14.95	16.91	18.87
90	2.02	3.42	5.52	7.63	9.73	11.83	13.94	16.04	18.14	20.25
96	2.15	3.65	5.90	8.14	10.39	12.64	14.89	17.13	19.38	21.63

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

Louver Height Inches	Louver Width in Inches									
	8	12	18	24	30	36	42	**48**	54	60
12	0.15	0.24	0.39	0.53	0.67	0.82	0.96	1.10	1.25	1.39
18	0.29	0.49	0.77	1.06	1.35	1.63	1.92	2.21	2.49	2.78
24	0.45	0.75	1.19	1.62	2.06	2.50	2.94	3.38	3.82	4.26
30	0.61	1.01	1.60	2.20	2.79	3.39	3.98	4.58	5.17	5.77
36	0.77	1.27	2.02	2.77	3.52	4.27	5.02	5.77	6.52	7.27
42	0.93	1.53	2.44	3.35	4.25	5.16	6.06	6.97	7.87	8.78
48	1.08	1.78	2.83	3.88	4.94	5.99	7.04	**8.09**	9.14	10.19
54	1.23	2.02	3.22	4.41	5.61	6.80	8.00	9.19	10.39	11.58
60	1.38	2.27	3.61	4.95	6.29	7.63	8.97	10.31	11.65	12.99
66	1.54	2.53	4.03	5.52	7.02	8.51	10.01	11.50	13.00	14.49
72	1.69	2.80	4.45	6.10	7.75	9.40	11.05	12.70	14.35	16.00
78	1.85	3.06	4.86	6.67	8.47	10.28	12.09	13.89	15.70	17.50
84	2.01	3.32	5.28	7.24	9.20	11.16	13.12	15.08	17.04	19.00
90	2.16	3.56	5.66	7.77	9.87	11.97	14.08	16.18	18.28	20.38
96	2.31	3.80	6.05	8.30	10.54	12.79	15.04	17.28	19.53	21.77

LOUVER TYPE SCC550
METHOD OF INSTALLATION & ACCESSORY OPTIONS

VISIBLE JAMB



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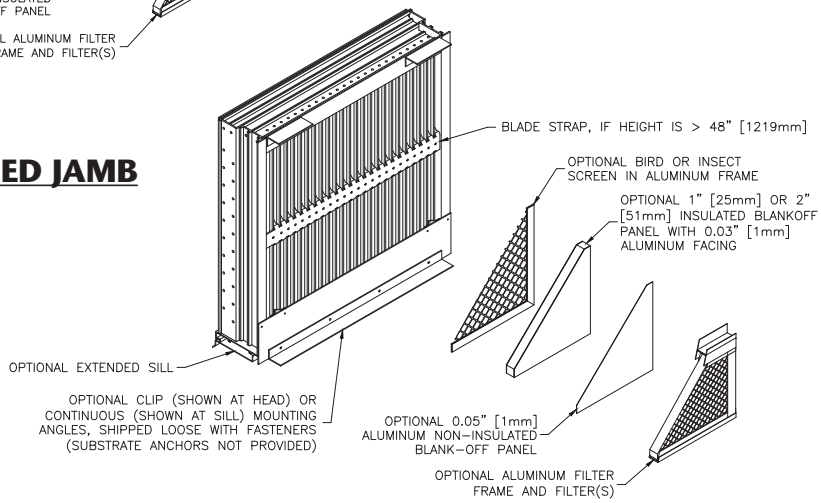

FINISHES

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.

AIROLITE®
The look that works.™
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715.841.8757 • fax 715.841.8773 • www.airolite.com

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