AIROLITE®
The look that works.™

FLORIDA BUILDING CODE & MIAMI-DADE APPROVED STORM CLASS™ LOUVER

LOUVER TYPE
SCV660MD

Florida Product Approval No.: 16746.1
Miami-Dade, FL NOA No.: 17-0807.21, EXP. 10/4/22
AMCA 540 and 550 Listed
TDI Approval No.: LVR-07

Visible Mullion Louver Type	SCV660MD
Material	Extruded Aluminum (Alloy 6063-T5)
Stationary Blade	0.063 in. (1.60 mm)
Frame	0.095 in. (2.41 mm)
Louver Depth	6 in. (152.4 mm)
Free Area – 4 ft. x 4 ft. Unit	7.29 sq. ft. (0.68 m^2)
Percent Free Area	45.6%
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	9,112 cfm (4.30 m^3/s)
Pressure Drop at Beginning Point of Water Penetration	0.18 in. H_2O (0.04 kPa)

Wind-Driven Rain Water Penetration Data

Exterior Wind Velocity	29 mph (13 m/s)
Rainfall Rate	3 in. (75 mm)/hour
Effectiveness	100%
Core Ventilation Rate	983 fpm (5.0 m/s)
Exterior Wind Velocity	50 mph (22 m/s)
Rainfall Rate	8 in. (200 mm)/hour
Effectiveness	100.0%
Core Ventilation Rate	985 fpm (5.0 m/s)

Maximum Qualified Wind Design Load	+/- 150 PSF (7.2 kPa)

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.®
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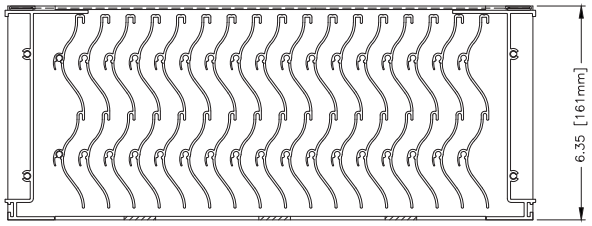


RECOMMENDED SPECIFICATION

GENERAL
Furnish and install where indicated on plans or described in schedules vertical blade Louver Type SCV660MD (with optional VCD-40 damper) as designed and manufactured by The Airolite Company LLC, Schofield, Wisconsin. Louvers shall be Florida Building Code and Miami-Dade approved for use where the room behind the louver is NOT designed to drain water penetrating into the room or the room will house non-water resistant or water proof equipment, components or supplies. 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. For each type of product specified, submit free area, air performance, water penetration and wind-driven rain water penetration ratings determined in accordance with AMCA Standard 500-L and licensed under the AMCA Certified Ratings Program , 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. Include Florida Product Approval or Miami-Dade Notice of Acceptance to demonstrate compliance with applicable code. Provide samples of manufacturer's finish and color charts showing the full range of colors available.

PRODUCTS
Louvers shall be vertical blade Louver Type SCV660MD with visible mullions. Louvers shall also be Florida Building Code and Miami-Dade Approved. Louvers shall be 6-inches (152.4 mm) deep and assembled entirely from extruded aluminum components. Blades shall be 0.063-inch (1.60 mm) and frames shall be 0.095-inch (2.41 mm) thick aluminum, alloy 6063-T5. Blades shall be vertical, V-type with center hook and spaced 0.75-inches on center.

STRUCTURAL DESIGN CRITERIA
Louvers shall be tested in accordance with Florida protocols TAS 201, TAS 202 and TAS 203. Maximum single section size shall be limited to 4-feet wide x 10-feet high. Louvers shall be tested for wind forces up to 150 psf (7.2 kPa). Louvers must be secured to a structural substrate in accordance with Dade County Product Approval Drawings. In addition, the structural substrate must be designed to accommodate the point loads transferred by the louvers when subject to the design wind loads. Structural reinforcing members along with any associated installation hardware is not provided by Airolite unless indicated otherwise by Airolite. Options and are not subject to structural analysis unless indicated otherwise by Airolite.

PERFORMANCE RATINGS

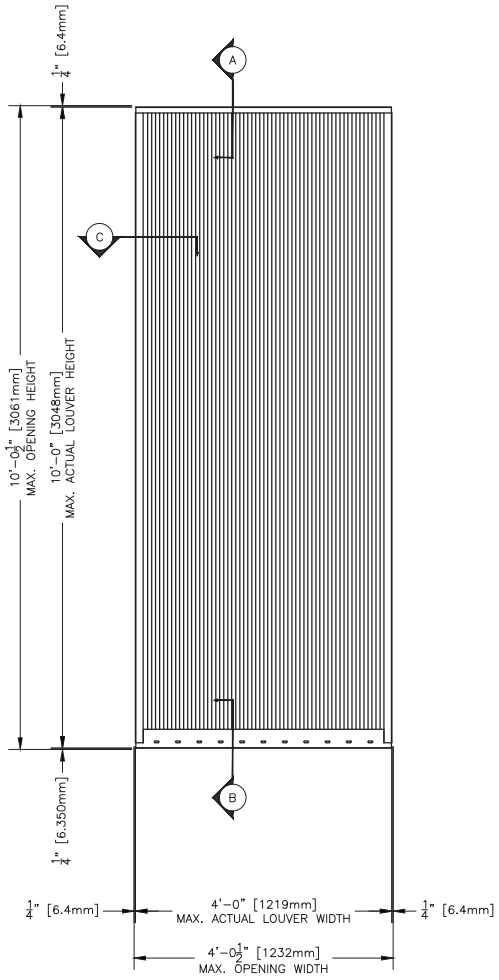
FREE AREA:	7.29 Square Feet (0.68 m^2)
MINIMUM FREE AREA VELOCITY at Beginning Point of Water Penetration:	1,250 fpm (6.35 m/s)
MINIMUM AIR VOLUME FLOW RATE at Beginning Point of Water Penetration:	9,112 cfm (4.30 m^3/s)
MAXIMUM STATIC PRESSURE at Beginning Point of Water Penetration:	0.18 in. H_2O (0.4 kPa)

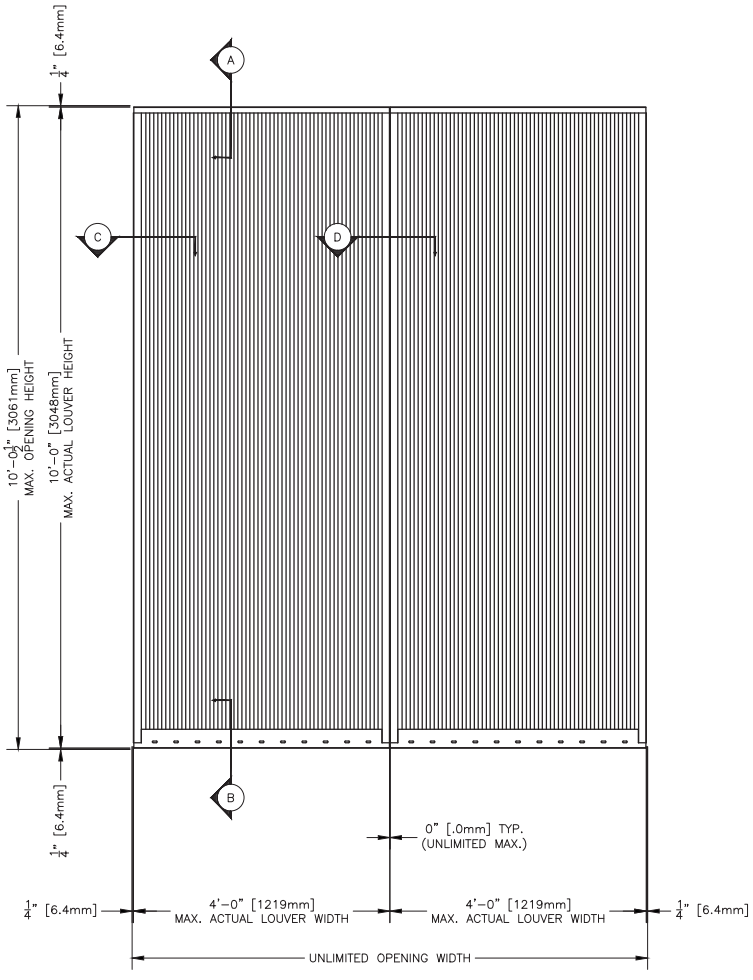
See page 5 for complete Wind-driven Rain Performance
See page 6 for complete finish options

LOUVER TYPE SCV660MD PRODUCT DESCRIPTION & DETAILS

Airolite Louver Type SCV660MD is a 6-inch (152.4 mm) deep, vertical blade louver that is Florida Building Code Approved for use in the High Velocity Hurricane Zone and Miami-Dade Approved for use where the room behind the louver is NOT designed to drain water penetrating into the room or the room will house non-water resistant or water proof equipment, components or supplies. This product complies with Florida protocols TAS-100(A), Test Procedure for Wind and Wind Driven Rain Penetration; TAS-201, Large and Small Missile Impact; TAS-202, Criteria for Testing Impact and Not Impact Resistant Building Envelope Components Using Static Uniform Air Pressure; and, TAS-203, Criteria for Testing Product Subject to Cyclic Wind Pressure. In addition, Louver Type SCV660MD is rated 100% effective against water penetration at a core ventilation rate of 985 fpm (5.0 m/s) when tested under a 50 mph (22 m/s) wind velocity and 8-inch (200 mm) per hour rainfall rate. Louver Type SCV660MD is a highly effective louver with AMCA Licensed air performance, water penetration, and wind-driven rain water penetration 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 enable designers to select and specify this product with confidence. Please contact your local Airolite representative or the factory for assistance with the layout an design of support systems when required.

INSTALLATION DETAILS





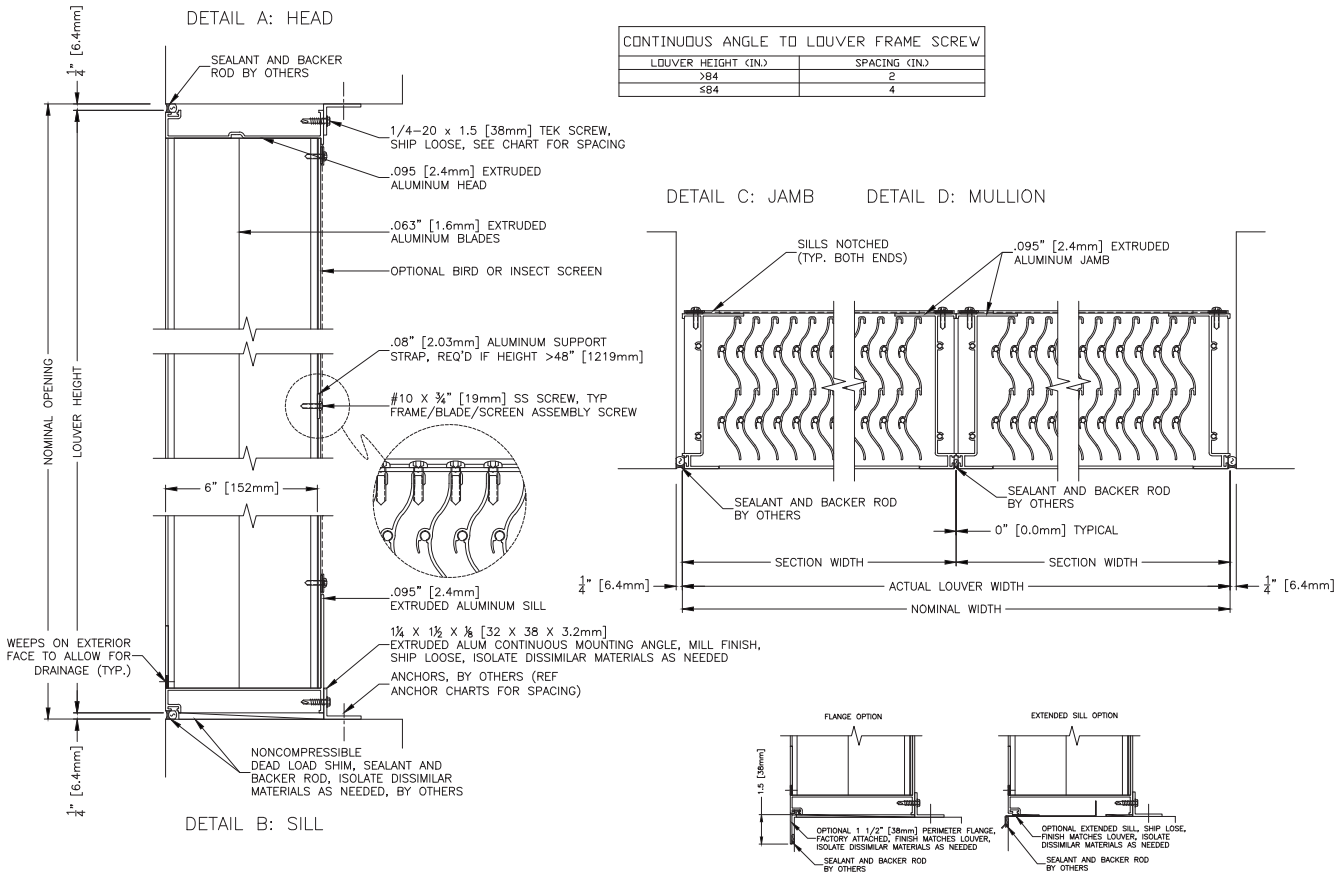
Minimum Rough Opening Section Size:

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

Maximum Rough Opening Section Size:

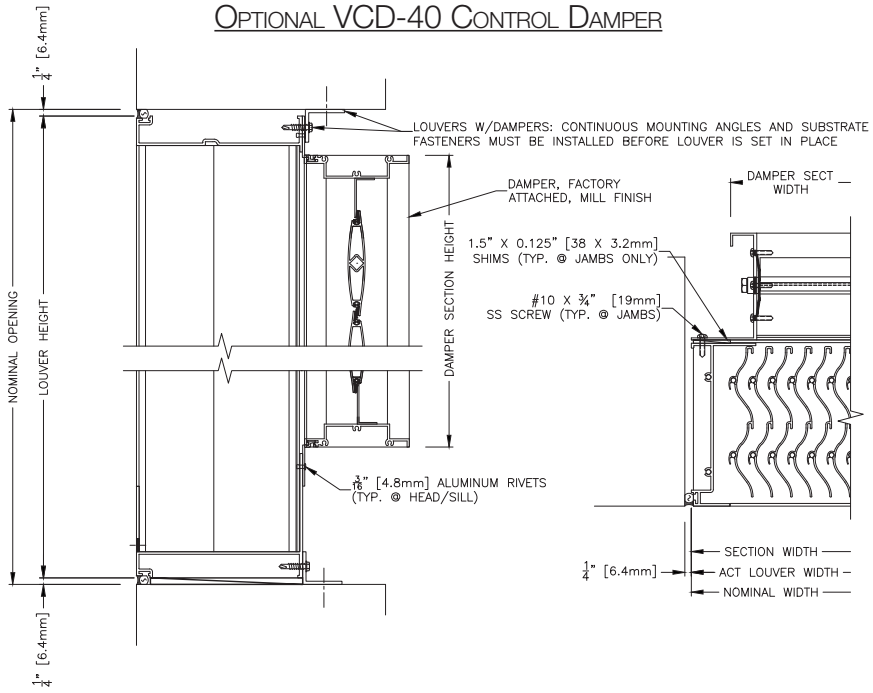
48.5 in. (123 cm) W x 120.5 in. (306 cm) H

LOUVER TYPE SCV660MD PRODUCT DETAILS



CONTINUOUS ANGLE TO LOUVER FRAME SCREW	
LOUVER HEIGHT (IN.)	SPACING (IN.)
>84	2
≤84	4

OPTIONAL VCD-40 CONTROL DAMPER



LOUVER TYPE SCV660MD FASTENER CHART

CONCRETE OR CMU ANCHORING			
1/4" TAPCON SCREW FASTENER TABLE			
DESCRIPTION	1/4" TAPCON		
SUBSTRATE	CONCRETE OR CMU (GROUT FILLED)		
MINIMUM	3.192 KSI CONCRETE OR 3.192 KSI GROUT		
EDGE DISTANCE <MIN>	1 IN	1 1/2 IN	2 1/2 IN
PENETRATION <MIN>	1 3/4 IN		
LOUVER HEIGHT <IN>	SPACING <IN>		
>108 & ≤120	2	2	4
>96 & ≤108		4	
>72 & ≤96			6
>48 & ≤72	4	6	
>0 & ≤48	6		

CONCRETE OR CMU ANCHORING					
3/8" POWERS WEDGE BOLT FASTENER TABLE					
DESCRIPTION	3/8" POWERS WEDGE BOLT				
SUBSTRATE	NORMAL WEIGHT CONCRETE			CMU <1.5 KSI GROUT FILLED>	
MINIMUM	2.5 KSI			6" WIDE, GRADE N, TYPE II, LIGHT/MEDIUM/NORMAL WEIGHT CMU CONFORMING TO ASTM C90	
EDGE DISTANCE <MIN>	2 IN	3 IN	4 1/2 IN	1 1/2 IN	2 IN
PENETRATION <MIN>	2 1/8 IN			2 1/2 IN	
LOUVER HEIGHT <IN>	SPACING <IN>			SPACING <IN>	
>108 & ≤120	4	6	6	NOT ALLOWED	NOT ALLOWED
>72 & ≤108	6				6
>36 & ≤72					
>0 & ≤36				6	

WOOD OR STEEL ANCHORING				
LAG SCREW, SCREW, & BOLT W/NUT FASTENER TABLE				
DESCRIPTION	3/8" LAG SCREW	1/4" LAG SCREW	1/4"-20 SCREW OR BOLT W/NUT	
SUBSTRATE	WOOD		STEEL	
MINIMUM	G ≥ 0.42		A36 STEEL OR Fy≥36 KSI	
EDGE DISTANCE <MIN>	1 1/2 IN		1/2 IN	
PENETRATION <MIN>	2 3/4 IN		16 GA <0.06 IN>	3/16 IN
LOUVER HEIGHT <IN>	SPACING <IN>		SPACING <IN>	
>84 & ≤120	6	4	6	
>0 & ≤84		6		

LOUVER TYPE SCV660MD PERFORMANCE RATINGS

FREE AREA CHART - in square feet

Louver Height Inches	Louver Width in Inches						
	12	**18**	**24**	**30**	**36**	**42**	**48**
6	0.03	0.06	0.09	0.13	0.16	0.19	0.22
12	0.17	0.34	0.52	0.70	0.88	1.06	1.23
18	0.30	0.63	0.95	1.27	1.60	1.92	2.24
24	0.44	0.91	1.38	1.84	2.31	2.78	3.25
30	0.58	1.19	1.80	2.42	3.03	3.65	4.26
36	0.71	1.47	2.23	2.99	3.75	4.51	5.27
42	0.85	1.75	2.66	3.56	4.47	5.37	6.28
48	0.98	2.03	3.09	4.14	5.19	6.24	**7.29**
54	1.12	2.32	3.51	4.71	5.90	7.10	8.29
60	1.26	2.60	3.94	5.28	6.62	7.96	9.30
66	1.39	2.88	4.37	5.85	7.34	8.83	10.31
72	1.53	3.16	4.79	6.43	8.06	9.69	11.32
78	1.67	3.44	5.22	7.00	8.78	10.55	12.33
84	1.80	3.73	5.65	7.57	9.49	11.42	13.34
90	1.94	4.01	6.08	8.14	10.21	12.28	14.35
96	2.08	4.29	6.50	8.72	10.93	13.14	15.36
102	2.21	4.57	6.93	9.29	11.65	14.01	16.37
108	2.35	4.85	7.36	9.86	12.37	14.87	17.37
114	2.48	5.13	7.78	10.43	13.08	15.73	18.38
120	2.62	5.42	8.21	11.01	13.80	16.60	19.39

The Airolite Company, LLC certifies that Louver Type SCV660MD 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 SCV660MD 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.

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 SCV660MD is above 1,250 fpm (6.35 m/s) free area velocity.**

WIND-DRIVEN RAIN PERFORMANCE

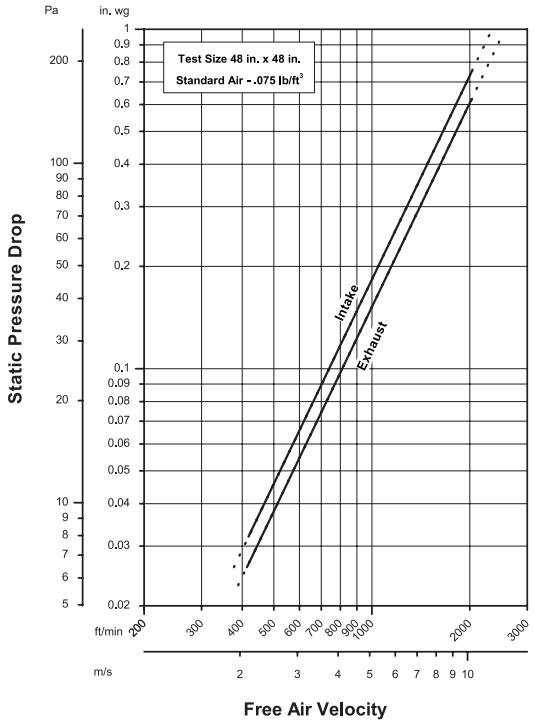
75 mm/h (3 in./hr) Rainfall & 13 m/s (29 mph) Wind Velocity						202 mm/h (8 in./hr) Rainfall & 22 m/s (50 mph) Wind Velocity					
Free Area Velocity		Ventilation Air Core Velocity		Water Penetration		Free Area Velocity		Ventilation Air Core Velocity		Water Penetration	
(fpm)	(m/s)	(fpm)	(m/s)	Effective	Class	(fpm)	(m/s)	(fpm)	(m/s)	Effective	Class
0.0 (0)		0.0 (0)			A	0.0 (0)		0.0 (0)			A
0.9 (185)		0.5 (98)			A	0.9 (185)		0.5 (98)			A
1.9 (371)		1.0 (197)			A	1.9 (371)		1.0 (197)			A
2.8 (556)		1.5 (295)			A	2.8 (556)		1.5 (295)			A
3.8 (742)		2.0 (394)			A	3.8 (742)		2.0 (394)			A
4.7 (927)		2.5 (492)			A	4.7 (927)		2.5 (492)			A
5.7 (1113)		3.0 (591)			A	5.7 (1113)		3.0 (591)			A
6.6 (1298)		3.5 (689)			A	6.6 (1298)		3.5 (689)			A
7.5 (1483)		4.0 (787)			A	7.5 (1483)		4.0 (787)			A
8.5 (1669)		4.5 (886)			A	8.5 (1669)		4.5 (886)			A
9.4 (1852)		5.0 (983)		100.0	A	9.4 (1856)		5.0 (985)		100.0	A

Discharge Loss Coefficient Class (Intake) = 2

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.

AIRFLOW RESISTANCE

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



Louver Type SCV660MD 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)

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

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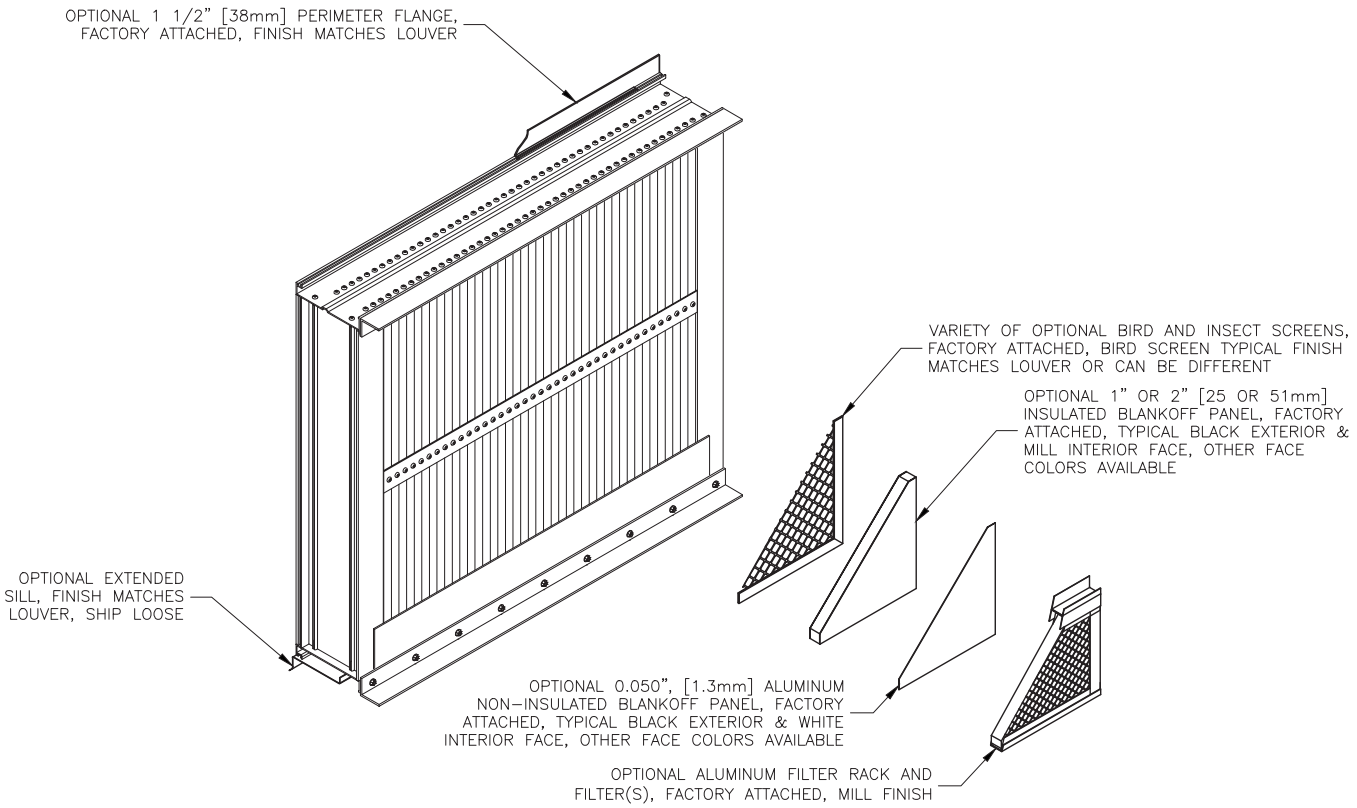
LOUVER TYPE SCV660MD
METHOD OF INSTALLATION & ACCESSORY OPTIONS



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.

AIROLITE®
The look that works.™
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