AIROLITE®
The look that works.™

LOUVER TYPE
SCV302MD

Florida Product Approval No.: 29695
Miami-Dade, FL NOA No.: 19-0708.13, EXP. 6/6/2024
AMCA 540 and 550 Listed
Maximum Wind-Load: 100 PSF

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

Visible Mullion Louver Type	SCV302MD
Material	Extruded Aluminum
Stationary Blade	0.050 in. (1.27 mm)
Jambs	0.081 in. (2.06 mm)
Head/Sill	0.062 in. (1.57 mm)
Louver Depth	3 in. (76.2 mm)
Free Area – 4 ft. x 4 ft. Unit	8.13 sq. ft. (0.76 m^2)
Percent Free Area	50.8%
Free Area Velocity at Beginning Point of Water Penetration – 0.01 oz H_2O/sq. ft. Free Area	above 1,250 fpm (6.350 m/s)
Air Volume Flow Rate at Beginning Point of Water Penetration – 4 ft. x 4 ft. Unit	10,163 cfm (4.80 m^3/s)
Pressure Drop at Beginning Point of Water Penetration	0.276 in. H_2O (0.069 kPa)

Wind-Driven Rain Water Penetration Data

Exterior Wind Velocity	29 mph (13 m/s)
Rainfall Rate	3 in. (75 mm)/hour
Effectiveness	99.8%
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	99.4%
Core Ventilation Rate	886 fpm (4.5 m/s)

amca INTERNATIONAL LISTED
HIGH VELOCITY RAIN RESISTANT WITH BLADES FULLY OPEN AND IMPACT RESISTANT LOUVER
Basic Protection Level D
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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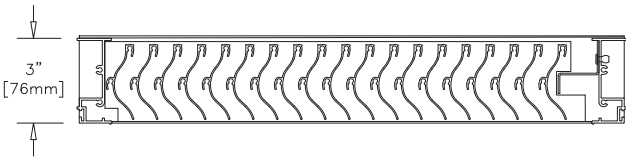


RECOMMENDED SPECIFICATION

GENERAL
Furnish and install where indicated on plans or described in schedules vertical blade Louver Type SCV302MD 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 areas, 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, 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 building code. Provide samples of manufacturer's finish and color charts showing the full range of colors available.

PRODUCTS
Louvers shall be Storm Class™ type and rated to resist water penetration under wind-driven rain conditions. Louvers shall be 3-inches (76.2 mm) deep and assembled entirely from extruded aluminum components. Blades shall be 0.050-inch (1.27 mm) thick aluminum, jambs shall be 0.081-inch (2.06 mm) and head/sill shall be 0.062-inch (1.57 mm) thick aluminum. Blades shall be vertical with a center hook and spaced 0.875-inches (22.22 mm) 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 60-inch W x 96-inch H. Louvers must be installed in accordance with the manufacturer's published installation instructions. Multi-wide assemblies shall be permitted without any additional reinforcing provided the rough opening height is 96-inch or less. 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

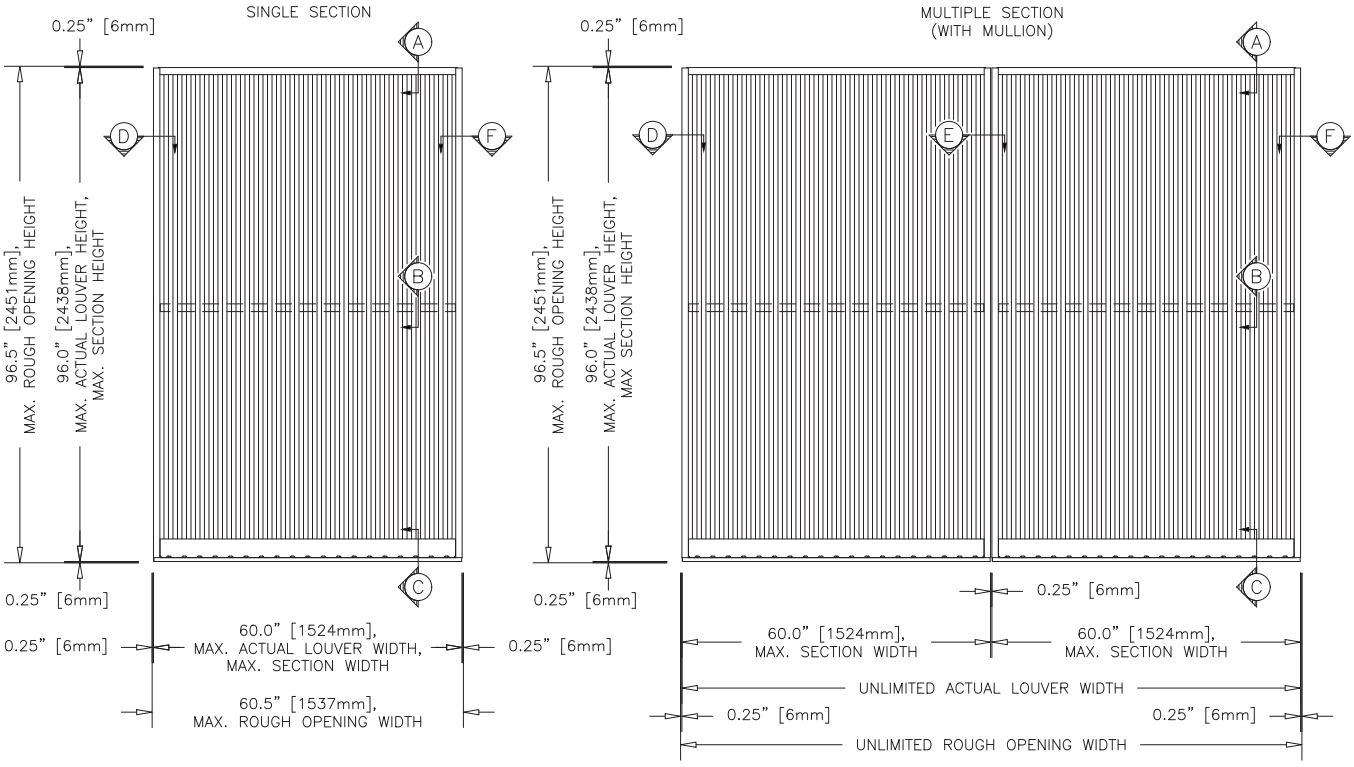
FREE AREA:	8.13 Square Feet (0.76 m^2)
MINIMUM FREE AREA VELOCITY at Beginning Point of Water Penetration:	1,250 fpm (6.35 m/s)
MINIMUM AIR VOLUME FLOW RATE at Beginning Point of Water Penetration:	10,163 cfm (4.80 m^3/s)
MAXIMUM STATIC PRESSURE at Beginning Point of Water Penetration:	0.28 in. H_2O (0.07 kPa)

See page 6 for complete Wind-driven Rain Performance
See page 7 for complete finish options

LOUVER TYPE SCV302MD PRODUCT DESCRIPTION & DETAILS

Airolite Louver Type SCV302MD is a 3-inch (76.2 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 201 (Large Missile Impact), TAS 202 (Uniform Static Air Pressure) and TAS 203 (Cyclic Wind Loading). In addition, Louver Type SCV302MD is rated 99.4% effective against water penetration at a core ventilation rate of 886 fpm (4.5 m/s) when tested under a 50 mph (22 m/s) wind velocity and 8-inch (200 mm) per hour rainfall rate. Louver Type SCV302MD 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.

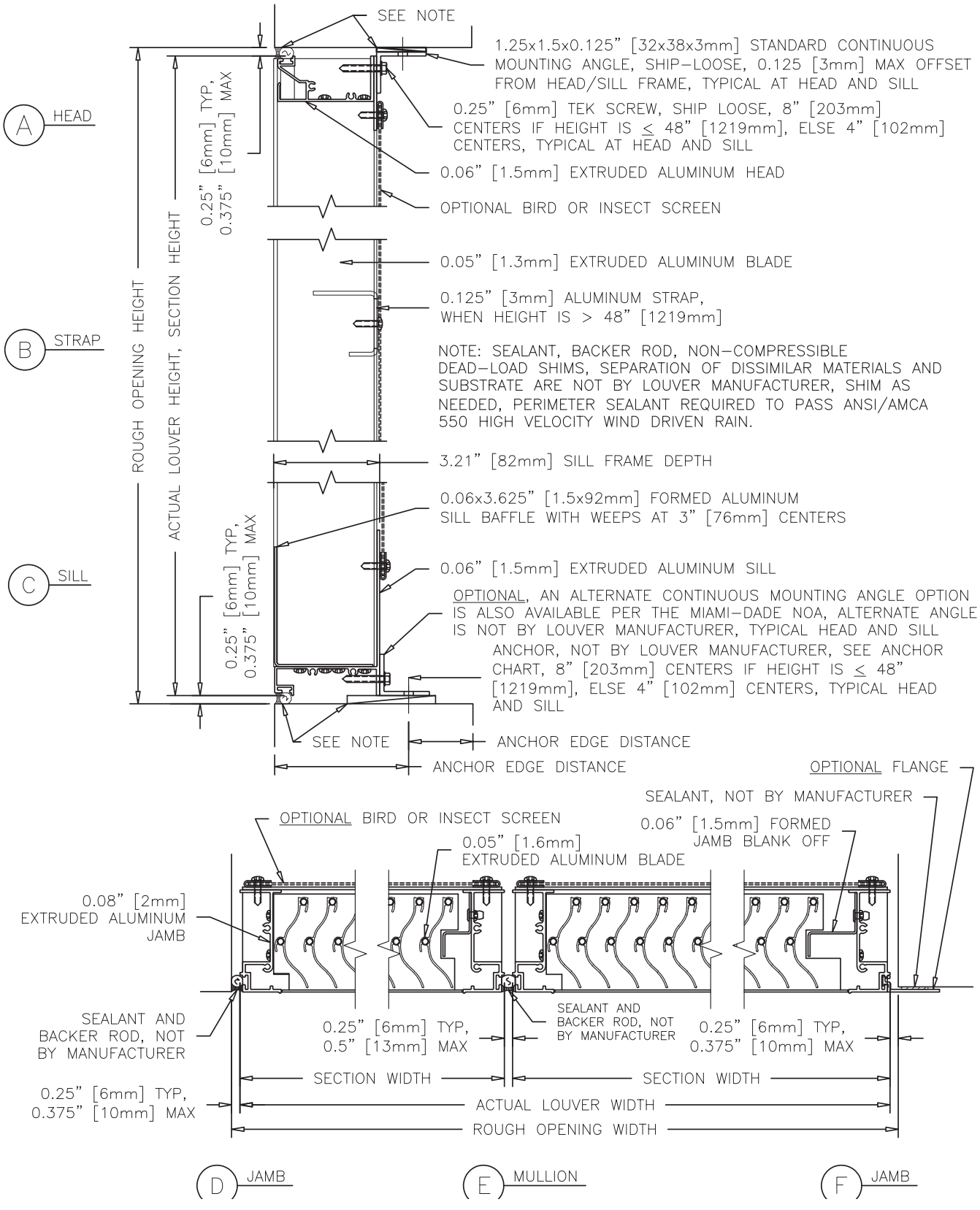
INSTALLATION DETAILS



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

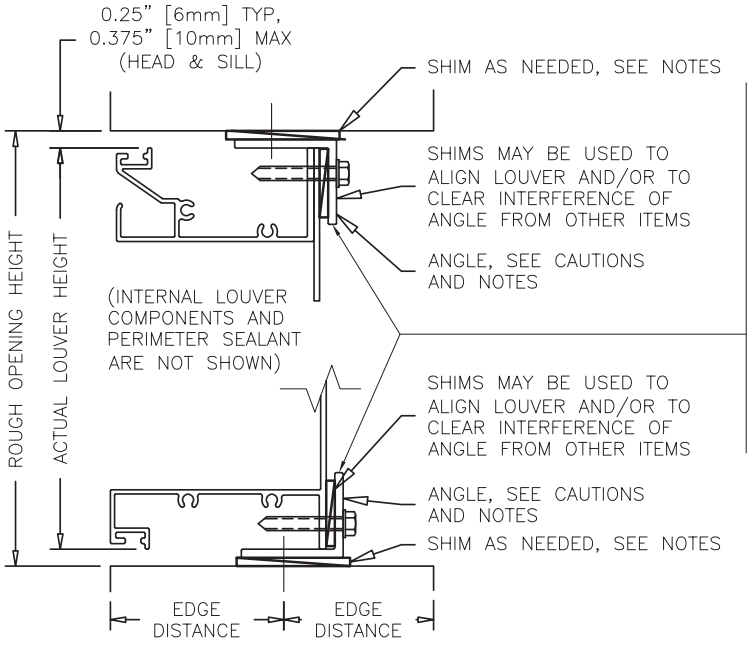
Maximum Rough Opening Section Size:
60 in. (185 cm) W x 96 in. (307 cm) H

LOUVER TYPE SCV302MD PRODUCT DETAILS



LOUVER TYPE SCV302MD PRODUCT DETAILS

OPTIONAL INVERTED CONTINUOUS MOUNTING ANGLE: SETUPS, CAUTIONS, & NOTES



NOTES: INVERTED ANGLE OPTION SHOWN UTILIZING THE THE MANUFACTURER PROVIDED STANDARD CONTINUOUS MOUNTING ANGEL AT THE HEAD/SILL. THE STANDARD ANGEL SHALL NOT EXTEND MORE THAN 0.125" [3mm] PAST THE TOP OF THE HEAD/SILL.

THE STANDARD CONTINUOUS MOUNTING ANGLE CANNOT BE USED IN THE INVERTED POSITION AT BOTH THE HEAD AND SILL LOCATIONS. SEE CAUTION NOTES.

AN ALTERNATE CONTINUOUS MOUNTING ANGLE MAY BE USED FOR OTHER NEEDED SETUPS. AN ALTERNATE ANGLE CAN EXTEND MORE THAN 0.125" [3mm] PAST THE TOP OF THE HEAD/SILL. REFER TO THE LOUVER'S MIAMI–DADE NOA "ALTERNATE CONTINUOUS MOUNTING ANGLE ALLOWABLE SETUPS" TABLE FOR ALLOWABLE DESIGNS OF THE ALTERNATE ANGLE.

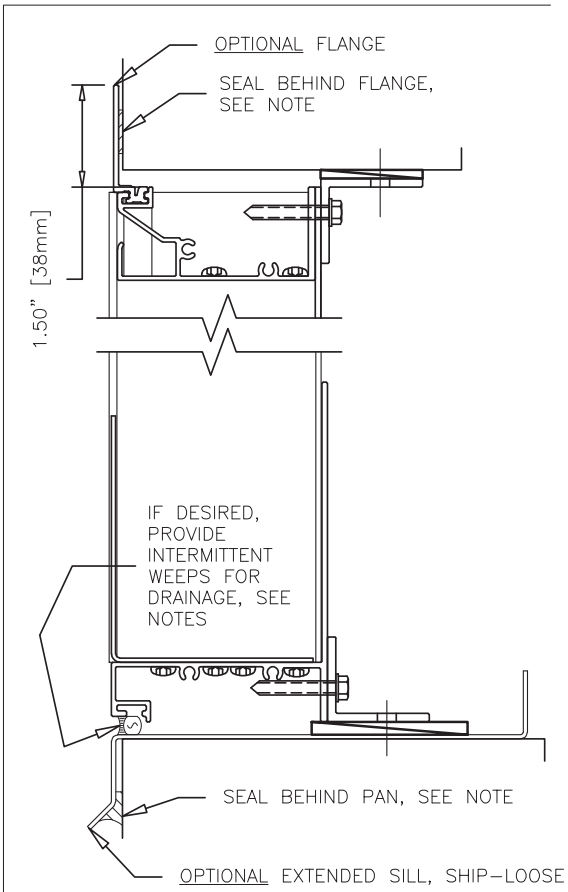
CAUTION! THE MANUFACTURER PROVIDED STANDARD CONTINUOUS MOUNTING ANGLES CAN ONLY BE USED IN THE INVERTED POSITION IF ONLY ONE OF THE STANDARD ANGLES IS INVERTED. EITHER AT THE HEAD OR AT THE SILL, NOT BOTH.

WHY: DUE TO REQUIRED OFFSETS, USE OF THE FACTORY PUNCHED HOLES IN THE STANDARD CONTINUOUS MOUNTING ANGLE WILL POSITION THE HORIZONTAL LEG OF THE STANDARD ANGLE UP AGAINST THE HEAD/SILL FRAME MEMBER (AS SHOWN ON THIS PAGE). THEREFORE, IT IS IMPOSSIBLE TO PRE–MOUNT BOTH STANDARD ANGLES TO THE SUBSTRATE IN THE INVERTED POSITION AND STILL HAVE CLEARANCE FOR THE LOUVER HEAD AND/OR SILL FRAME TO SLIDE OVER AND PAST THE ANCHOR HEADS ON THE INVERTED ANGLES.

SOLUTION: TO OVERCOME THE ABOVE ISSUE, AN ALTERNATE CONTINUOUS MOUNTING ANGLE (NOT BY MANUFACTURER) MUST BE USED AT EITHER THE HEAD AND/OR SILL. THE ALTERNATE ANGLE CAN SPAN A LARGER GAP BETWEEN THE LOUVER FRAME AND THE SUBSTRATE, WHICH ALLOWS FOR MORE CLEARANCE BETWEEN THE LOUVER FRAME AND THE ANCHOR. REFER TO THE "ALTERNATE CONTINUOUS MOUNTING ANGLE ALLOWABLE SETUPS" TABLE FOR DESIGN INFORMATION. NOTE THAT THE STANDARD CONTINUOUS MOUNTING ANGLE CAN HAVE ITS FRAME FASTENER HOLES DRILLED IN A NEW LOCATION OF UP TO 0.75" [19mm] AWAY FROM THE OUTSIDE CORNER OF THE STANDARD ANGLE (SEE NOTES 1 & 2 ON THE LOUVER'S MIAMI–DADE NOA "ALTERNATE CONTINUOUS MOUNTING ANGLE ALLOWABLE SETUPS" TABLE).

CAUTION! NO MATTER WHAT TYPE OF CONTINUOUS MOUNTING ANGLE IS USED IN AN INVERTED SETUP, A LARGER THAN TYPICAL HEAD/SILL SUBSTRATE GAP CLEARANCE SHOULD BE CONSIDERED WHEN SIZING THE LOUVER IN ORDER TO MAKE SURE THE HEAD/SILL FRAME CAN SLIDE OVER AND PAST THE ANCHOR HEADS ON THE INVERTED MOUNTING ANGLE(S).

ANGLE PROVIDER: THE MANUFACTURER PROVIDES STANDARD CONTINUOUS MOUNTING ANGLES ONLY. ANY NEEDED ALTERNATE CONTINUOUS MOUNTING ANGLE IS BY OTHERS.



NOTE: SEALANT, BACKER ROD, NON–COMPRESSIBLE DEAD–LOAD SHIMS, SEPARATION OF DISSIMILAR MATERIALS AND SUBSTRATE ARE NOT BY LOUVER MANUFACTURER, SHIM AS NEEDED, PERIMETER SEALANT REQUIRED TO PASS ANSI/AMCA 550 HIGH VELOCITY WIND DRIVEN RAIN.

LOUVER TYPE SCV302MD FASTENER CHART

SUBSTRATE ANCHOR SPACING		
ACTUAL HEIGHT	≤ 48 IN.	> 48 IN.
ANCHOR SPACING	8 IN.	4 IN.

	SUBSTRATE MINIMUMS			ANCHOR MINIMUMS				
SUBSTRATE TYPE	THICKNESS (IN.)	PROPERTY	ANCHOR TYPE	OVERALL LENGTH (IN.)	THREADED LENGTH (IN.)	EMBEDMENT (IN.)	TO EDGE (IN.)	Fy, Fu (KSI)
WOOD	3	SG 0.42	1/4 IN. LAG SCREW, COATED STEEL	3	2 1/2	2 1/2	1 1/2	70, 105
			1/4 IN. LAG SCREW, 300 SERIES STAINLESS (1)					65, 100
			1/4 IN. SPAX POWERLAG, HEX OR T-STAR WASHER HEAD, COATED STEEL		1 3/4			-
			6 MM SPAX TIMBER SCREW, WASHER HEAD, 300 SERIES STAINLESS	80 mm	61 mm	2 11/16		
STEEL	16 GA	Fy 33 KSI	1/4-14 ELCO DRIL-FLEX SCREW, COATED STEEL	VARIES (2)	VARIES (2)	FULL	1/2	65, -
			1/4-14 SCREW, 300 SERIES STAINLESS (1)					
			1/4-20 BOLT, 300 SERIES STAINLESS (1)			BOLTED		
ALUMINUM	1/8	Fy 25 KSI	1/4-20 ELCO DRIL-FLEX SCREW, COATED STEEL	VARIES (2)	VARIES (2)	FULL	1/2	65, -
			1/4-20 SCREW OR THRU BOLT, 300 SERIES STAINLESS (1)			FULL/BOLTED		
CONCRETE (3)	3	Fc 2.5 KSI	1/4 IN. DEWALT SCREW-BOLT+, COATED STEEL	VARIES (2)	VARIES (2)	2 1/2 NOM.	2	-
	4		3/8 IN. HILTI KWIK BOLT TZ EXPANSION, 304 OR 316 STAINLESS (5)			2 5/16 NOM.	3	
CRACKED CONCRETE (3)	4	Fc 2.5 KSI	3/8 IN. HILTI KWIK BOLT TZ EXPANSION, 304 OR 316 STAINLESS (5)	VARIES (2)	VARIES (2)	2 5/16 NOM.	3	-
GROUT FILLED CMU (4)	4x4x16	Fm 1.5 KSI	3/8 IN. DEWALT SCREW-BOLT+, COATED STEEL (5)	VARIES (2)	VARIES (2)	3 1/4 NOM.	1 1/2	-
			1/2 IN. THREADED ROD W/ HIT-HY 270 ADHESIVE, 300 SERIES STAINLESS (5)			4 1/2 EFF.	1 3/4	65, -

1) ANCHOR MANUFACTURING PROCESS IS COLD-WORKED.

2) AS NEEDED TO COMPLY WITH THE EMBEDMENT WHILE ACCOUNTING FOR THE THICKNESS OF THE CONTINUOUS MOUNTING ANGLE, SHIM(S), ETC.

3) NORMAL WEIGHT CONCRETE, INCLUDING PRE-CAST.

4) LIGHT/MEDIUM/NORMAL-WEIGHT CMU CONFORMING TO ASTM C90, TYPE II, GROUT FILLED CONFORMING TO C476.

5) THE 1/4 IN. DIA. ANCHOR CLEARANCE HOLES IN THE MANUFACTURER PROVIDED STANDARD CONTINUOUS MOUNTING ANGLE (ITEM 5) WILL NEED TO BE FIELD ENLARGED TO ACCEPT THE ANCHOR.

LOUVER TYPE SCV302MD PERFORMANCE RATINGS

FREE AREA CHART - in square feet

Louver Height Inches	Louver Width in Inches								
	12	18	24	30	36	42	48	54	60
12	0.21	0.36	0.51	0.66	0.82	0.95	1.10	1.25	1.40
18	0.43	0.75	1.06	1.37	1.69	1.96	2.27	2.58	2.90
24	0.66	1.13	1.61	2.08	2.56	2.97	3.44	3.92	4.39
30	0.88	1.52	2.15	2.79	3.43	3.98	4.61	5.25	5.89
36	1.10	1.90	2.70	3.50	4.30	4.99	5.79	6.59	7.39
42	1.33	2.29	3.25	4.21	5.17	6.00	6.96	7.92	8.88
48	1.55	2.67	3.80	4.92	6.04	7.01	**8.13**	9.25	10.38
54	1.70	2.93	4.16	5.40	6.63	7.68	8.92	10.15	11.38
60	1.92	3.32	4.71	6.10	7.50	8.69	10.09	11.48	12.88
66	2.15	3.70	5.26	6.81	8.37	9.70	11.26	12.82	14.37
72	2.37	4.09	5.80	7.52	9.24	10.71	12.43	14.15	15.87
78	2.59	4.47	6.35	8.23	10.11	11.72	13.60	15.48	17.36
84	2.82	4.86	6.90	8.94	10.98	12.73	14.78	16.82	18.86
90	3.04	5.24	7.45	9.65	11.85	13.74	15.95	18.15	20.36
96	3.26	5.63	7.99	10.36	12.73	14.75	17.12	19.49	21.85

The Airolite Company, LLC certifies that the SCV302MD louvers shown herein are 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 air performance, water penetration, and wind-driven rain ratings.

HIGH VELOCITY RAIN RESISTANT WITH BLADES FULLY OPEN AND IMPACT RESISTANT LOUVER
Basic Protection Level D
* 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 the SCV302MD louvers shown herein are approved to bear the AMCA Listing Label. The Ratings shown are based on tests and procedures performaned 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 and High Velocity Wind-Driven 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 SCV302MD 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			
Ventilation Air Core Velocity m/s (fpm)	Free Area Ventilation Rate (fpm)	Water Pen. Effectivness %	Water Pen. Classification	Ventilation Air Core Velocity m/s (fpm)	Free Area Ventilation Rate (fpm)	Water Pen. Effectivness %	Water Pen. Classification
0.0 (0)	0.0 (0)			0.0 (0)	0.0 (0)		
0.5 (98)	0.8 (161)			0.5 (98)	0.8 (161)		
1.0 (197)	1.6 (324)			1.0 (197)	1.6 (324)		
1.5 (295)	2.5 (486)			1.5 (295)	2.5 (486)		
2.0 (394)	3.3 (649)			2.0 (394)	3.3 (649)		
2.5 (492)	4.1 (810)			2.5 (492)	4.1 (810)		
3.0 (591)	4.9 (973)			3.0 (591)	4.9 (973)		
3.5 (689)	5.8 (1134)			3.5 (695)	5.8 (1144)	99.6	A
4.0 (788)	6.6 (1297)	100.0	A	3.9 (776)	6.5 (1277)	99.4	A
4.5 (882)	7.4 (1452)	99.9	A	4.5 (886)	7.4 (1458)	99.4	A
5.0 (983)	8.2 (1618)	99.8	A	5.0 (978)	8.2 (1610)	97.3	B

Discharge Loss Coefficient Class (Intake) = 2

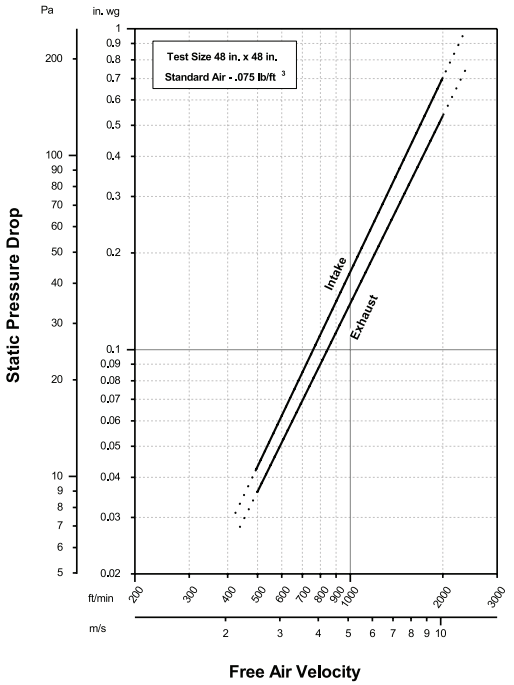
Weather louvers shall be classified by their ability to reject simulated rain. The table to the right shows different classifications based on the maximum simulated rain penetration per square meter (square feet) of louver. Water penetration rating at a given louver face velocity is determined by the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

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

AIRFLOW RESISTANCE

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



Louver Type SCV302MD 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. (Tested to AMCA Figure 5.5)

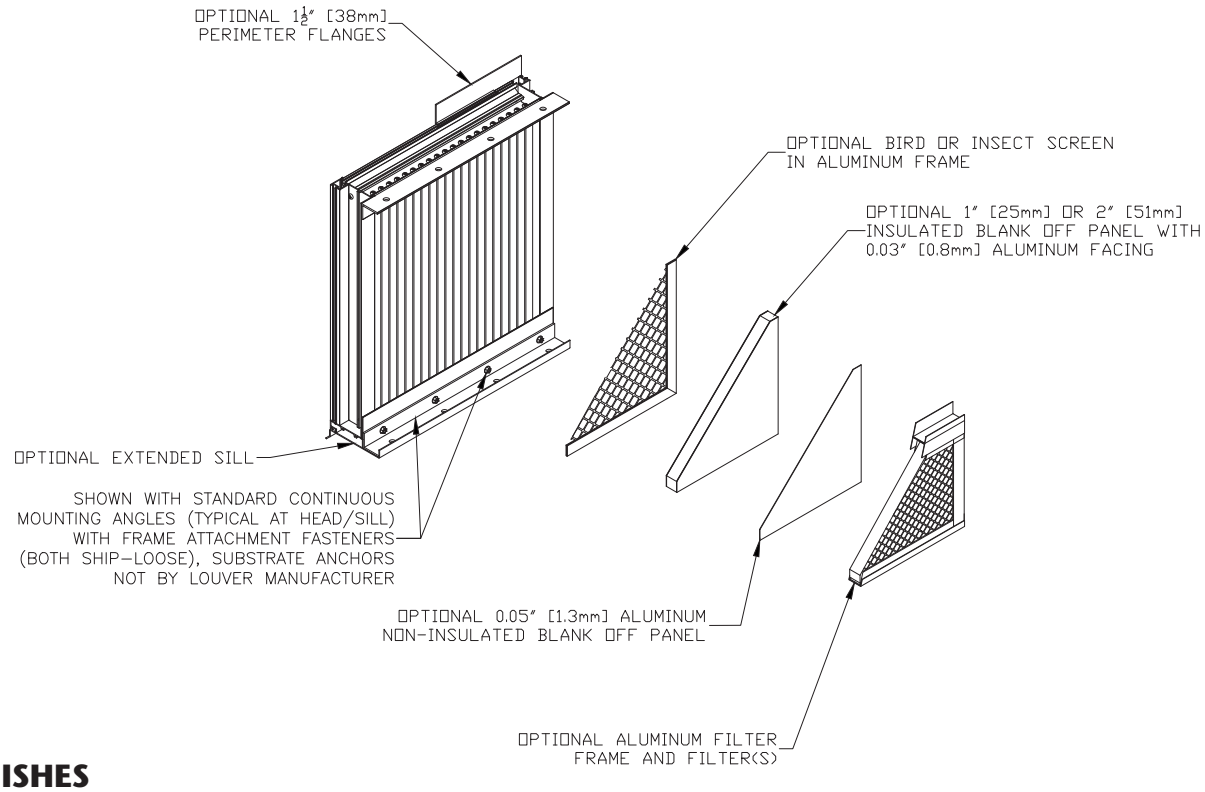
Pressure Drop Calculations *(in English units)*

Intake: $\blacktriangle P = 10^{(2 \log_{10}(V)-6.753)}$

Exhaust: $\blacktriangle P = 10^{(2 \log_{10}(V)-6.873)}$

AIROLITE® The look that works.™

LOUVER TYPE SCV302MD
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®
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