Louver Series

Sand Trap Louvers | Fixed Louvers | Acoustical Louvers
Wind - Driven Rain Louvers | Combination Louver/Damper
Adjustable Louvers

CVS

LOUVER SERIES

Sand Trap Louvers

CVS

LOUVER SERIES

MODEL STL 4.2-XT
ULTRA LOW PRESSURE VERTICAL BLADE SAND TRAP LOUVER

STANDARD CONSTRUCTION:

Frame: 0.08" (2.00mm) Extruded Aluminum 6063 T6 or Galvanized Steel or Stainless Steel

Blade: 0.08" (2.00mm) Extruded Aluminum 6063 T6 or Galvanized Steel or Stainless Steel

Bird Screen: 0.75" x .051" Flattened Aluminum in removable frame. Screen is mounted as standard on inside (rear) as looking from exterior of building. Galvanized Steel or Stainless Steel screens are also available in various sizes.

Finish: Mill Aluminum (Std.)

Minimum Size: 12" x 12" (300mm x 300mm)

Maximum Section Size: 120" x 84" (3000 mm x 2100 mm) / 84" x 120" (2100 mm x 3000 mm)

OPTIONS:

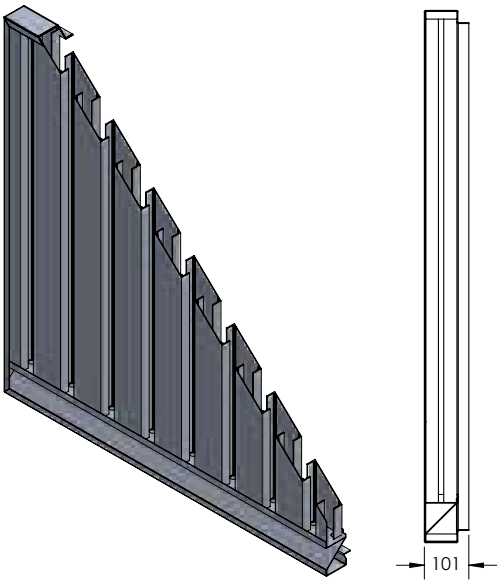
- □ Galvanized Steel Construction
- □ Stainless Steel Construction
- □ Welded Construction (Wind Load +/- 50 psft)
- □ Heavy Gauge (Please consult for availability)
- □ Security Bars
- □ Filter Racks
- □ Bird Screen
- □ Washable Filter (1/2", 3/5", 1")
- □ Extended Sill (with Chute)
- □ Optional Flange (with Chute)

AVAILABLE FINISHES:

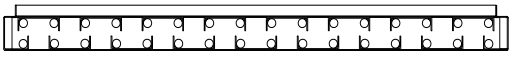
- □ **Powder Polyester TGIC** (2 coats) baked on at 410°F, 2.5 to 3.5 mils Meets AAMA-2603 Standards
- □ **Powder Super durable polyester** (2 coats) baked on at 410°F, 2.5 to 3.5 mils Meets AAMA-2604-05 Standards
- □ **Acrylic baked enamel** (ACRA-BOND® ULTRA) by AkzoNobel baked on at 350°F, 0.8 to 1.2 mils dry Meets AAMA-2603 Standards
- □ **Kynar®** (ALUM*A*STAR®) 2 coats by AkzoNobel baked on at 450°F, 1.2 to 1.6 mils dry Meets AAMA-2604-04 Standards
- □ **Kynar 500®** or HYLAR® 5000 70% TRINAR® (2 coats) by AkzoNobel baked on at 450°F, 1.2 to 1.6 mils dry, Meets AAMA-2605-05 Standards OPTIONAL
- □ **Kynar 500®** or HYLAR® 5000 (70% Tri-Escent II) (2 coats) by AkzoNobel, a superior finish to other metallic or anodized finishes. A blend of mica, ceramic, and inorganic pigments create subtle yet dazzling design that goes beyond metallic color without the requirement of a clear coat. 14 standard colors - custom colors available. Baked on at 415°F, 1.4 to 1.8 mils dry, meets AAMA 2605-05.
- □ **Clear Anodize** 204 R-1 Class II (AA-C22A31)(0.4 to 0.7 mil)
- □ **Clear Anodize** 215 R-1 Class I (AA-C22A41)(>0.7 mil)
- □ **Integral Color Anodize** (AA-C22A42)(>0.7 mil)

• Clear coat available for all above finishes.
• Hylar® 5000 is a registered trademark of Solvay Solexis, Inc.
• Kynar® 500 is a registered trademark of Arkema.
• ALUM*A*STAR® 50 and TRINAR® are registered trademarks of AkzoNobel
• ACRA-BOND® ULTRA is a registered trademark of AkzoNobel

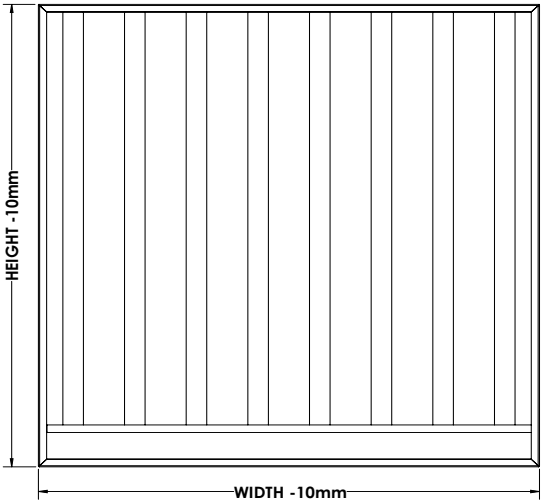
SIDE VIEW

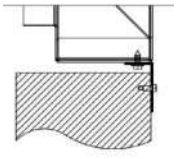


TOP VIEW

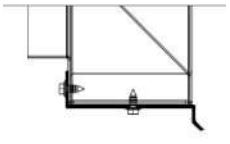


FRONT VIEW





OPTIONAL FLANGE



OPTIONAL EXTENDED SILL

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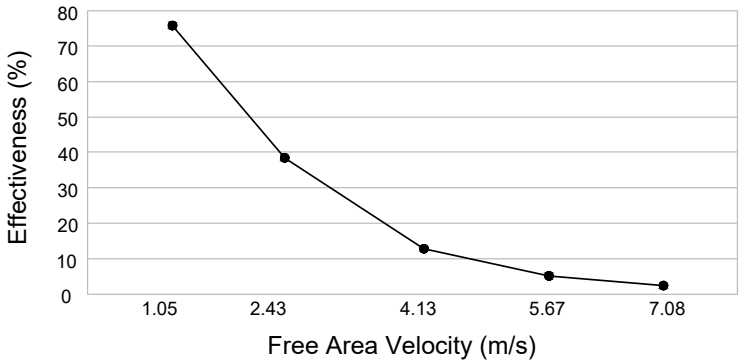
MODEL STL 4.2-XT ULTRA LOW PRESSURE VERTICAL BLADE SAND TRAP LOUVER					
Drawn By: DND	Approved BY: SB	REV. No.: 01	Date: March 2022	Cat ID: STL4.2-XT	Page: 1/4

WIND DRIVEN SAND PERFORMANCE GRAPH

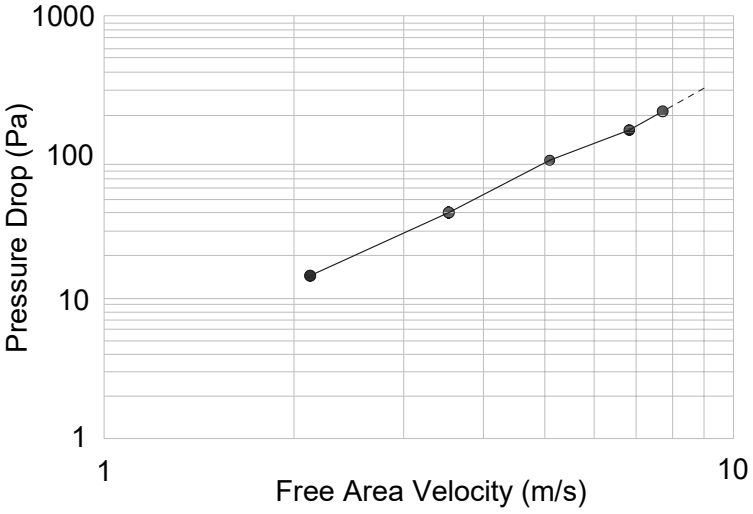


SAND REJECTION PERFORMANCE

Free Area Velocity(m/s) = Airflow rate(m^3/s) / Free Area (m^2)					
Test No	Airflow Rate m^3/s	Free Area Velocity (m/s)	Total Mass Injected g	Total mass Rejected g	Louver Effectiveness %
1	0.40	1.05	1000.3	761.2	76.10
2	0.94	2.43	1000.2	386.1	38.60
3	1.60	4.13	2000.7	257.8	12.89
4	2.19	5.67	2000.7	106.0	5.30
5	2.74	7.08	2000.9	47.2	2.36

Test Sample size is 48"x48" with a tolerance of +0, -0.25".
Wind driven sand performance data is based on intake performance.
Sand grade mass distribution per AMCA 511.

PRESSURE DROP GRAPH



PRESSURE DROP OF LOUVER

Pressure Drop (Pa)	Airflow Rate (m^3/s)	Free Area Velocity (m/s)
14.42	0.82	2.12
41.21	1.37	3.54
95.77	1.97	5.08
156.45	2.63	6.79
210.9	2.99	7.72

SUGGESTED SPECIFICATION

"Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary with fixed vertical blades formed or extruded and contained within a 3" frame. Where Duct Connection neck or filter rack is installed, frame shall be extended on the discharge side. Louver components (heads, jambs, sills, blades and mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall incorporate structural supports required to withstand a wind load of 30lbs. per sq.ft."

"Published louver performance bearing the AMCA Certified Ratings Seal for Air Performance & Wind Driven Sand must be submitted for approval prior to fabrication and must demonstrate pressure drop less than the CVS model specified. "

"Louver shall be model STL 4.2-XT, extruded Aluminum 6063-T6 construction as follows:
Frame: 3" Deep, 0.08" nominal wall thickness with sand discharge points at the bottom
Blades: 0.08" nominal wall thickness, blades are spaced at 2" apart"

FREE AREA CHART STL 4.2-XT

Height (H)	Width (W)																																			
	12 in.		18 in.		24 in.		30 in.		36 in.		42 in.		48 in.		54 in.		60 in.		66 in.		72 in.		78 in.		84 in.		90 in.		96 in.		102 in.		108 in.		114 in.		120 in.	
	300 mm		450 mm		600 mm		750 mm		900 mm		1050 mm		1200 mm		1350 mm		1500 mm		1650 mm		1800 mm		1950 mm		2100 mm		2250 mm		2400 mm		2550 mm		2700 mm		2850 mm		3000 mm	
12 in.	0.09	ft²	0.27	ft²	0.27	ft²	0.44	ft²	0.45	ft²	0.62	ft²	0.64	ft²	0.80	ft²	0.83	ft²	0.98	ft²	1.01	ft²	1.16	ft²	1.20	ft²	1.33	ft²	1.39	ft²	1.51	ft²	1.57	ft²	1.69	ft²	1.76	ft²
300 mm	0.01	m²	0.02	m²	0.02	m²	0.04	m²	0.04	m²	0.06	m²	0.06	m²	0.07	m²	0.07	m²	0.09	m²	0.09	m²	0.10	m²	0.10	m²	0.12	m²	0.12	m²	0.14	m²	0.14	m²	0.15	m²	0.15	m²
18 in.	0.17	ft²	0.51	ft²	0.51	ft²	0.86	ft²	0.87	ft²	1.20	ft²	1.23	ft²	1.54	ft²	1.59	ft²	1.88	ft²	1.95	ft²	2.22	ft²	2.30	ft²	2.57	ft²	2.66	ft²	2.91	ft²	3.02	ft²	3.25	ft²	3.38	ft²
450 mm	0.02	m²	0.05	m²	0.05	m²	0.08	m²	0.08	m²	0.11	m²	0.11	m²	0.14	m²	0.14	m²	0.17	m²	0.17	m²	0.20	m²	0.20	m²	0.23	m²	0.23	m²	0.26	m²	0.26	m²	0.30	m²	0.30	m²
24 in.	0.25	ft²	0.76	ft²	0.76	ft²	1.27	ft²	1.29	ft²	1.77	ft²	1.82	ft²	2.28	ft²	2.35	ft²	2.78	ft²	2.88	ft²	3.29	ft²	3.41	ft²	3.80	ft²	3.94	ft²	4.30	ft²	4.47	ft²	4.81	ft²	5.00	ft²
600 mm	0.02	m²	0.07	m²	0.07	m²	0.12	m²	0.12	m²	0.16	m²	0.16	m²	0.21	m²	0.21	m²	0.25	m²	0.25	m²	0.30	m²	0.30	m²	0.35	m²	0.35	m²	0.39	m²	0.39	m²	0.44	m²	0.44	m²
30 in.	0.34	ft²	1.01	ft²	1.01	ft²	1.68	ft²	1.71	ft²	2.35	ft²	2.41	ft²	3.02	ft²	3.11	ft²	3.69	ft²	3.81	ft²	4.36	ft²	4.51	ft²	5.03	ft²	5.22	ft²	5.70	ft²	5.92	ft²	6.37	ft²	6.62	ft²
750 mm	0.03	m²	0.09	m²	0.09	m²	0.15	m²	0.15	m²	0.21	m²	0.21	m²	0.27	m²	0.27	m²	0.34	m²	0.34	m²	0.40	m²	0.40	m²	0.46	m²	0.46	m²	0.52	m²	0.52	m²	0.58	m²	0.58	m²
36 in.	0.42	ft²	1.25	ft²	1.25	ft²	2.09	ft²	2.12	ft²	2.92	ft²	3.00	ft²	3.75	ft²	3.87	ft²	4.59	ft²	4.74	ft²	5.42	ft²	5.62	ft²	6.26	ft²	6.49	ft²	7.09	ft²	7.37	ft²	7.92	ft²	8.24	ft²
900 mm	0.04	m²	0.11	m²	0.11	m²	0.19	m²	0.19	m²	0.27	m²	0.27	m²	0.34	m²	0.34	m²	0.42	m²	0.42	m²	0.49	m²	0.49	m²	0.57	m²	0.57	m²	0.65	m²	0.65	m²	0.72	m²	0.72	m²
42 in.	0.50	ft²	1.50	ft²	1.50	ft²	2.50	ft²	2.54	ft²	3.49	ft²	3.58	ft²	4.49	ft²	4.63	ft²	5.49	ft²	5.68	ft²	6.49	ft²	6.72	ft²	7.49	ft²	7.77	ft²	8.48	ft²	8.81	ft²	9.48	ft²	9.86	ft²
1050 mm	0.05	m²	0.14	m²	0.14	m²	0.23	m²	0.23	m²	0.32	m²	0.32	m²	0.41	m²	0.41	m²	0.50	m²	0.50	m²	0.59	m²	0.59	m²	0.68	m²	0.68	m²	0.77	m²	0.77	m²	0.87	m²	0.87	m²
48 in.	0.58	ft²	1.74	ft²	1.74	ft²	2.91	ft²	2.96	ft²	4.07	ft²	4.17	ft²	5.23	ft²	5.40	ft²	6.39	ft²	6.61	ft²	7.55	ft²	7.83	ft²	8.72	ft²	9.05	ft²	9.88	ft²	10.26	ft²	11.04	ft²	11.48	ft²
1200 mm	0.05	m²	0.16	m²	0.16	m²	0.27	m²	0.27	m²	0.37	m²	0.37	m²	0.48	m²	0.48	m²	0.58	m²	0.58	m²	0.69	m²	0.69	m²	0.80	m²	0.80	m²	0.90	m²	0.90	m²	1.01	m²	1.01	m²
54 in.	0.66	ft²	1.99	ft²	1.99	ft²	3.32	ft²	3.38	ft²	4.64	ft²	4.76	ft²	5.97	ft²	6.16	ft²	7.29	ft²	7.54	ft²	8.62	ft²	8.93	ft²	9.95	ft²	10.32	ft²	11.27	ft²	11.71	ft²	12.60	ft²	13.10	ft²
1350 mm	0.06	m²	0.18	m²	0.18	m²	0.30	m²	0.30	m²	0.42	m²	0.42	m²	0.54	m²	0.54	m²	0.67	m²	0.67	m²	0.79	m²	0.79	m²	0.91	m²	0.91	m²	1.03	m²	1.03	m²	1.15	m²	1.15	m²
60 in.	0.75	ft²	2.24	ft²	2.24	ft²	3.73	ft²	3.79	ft²	5.22	ft²	5.35	ft²	6.71	ft²	6.92	ft²	8.20	ft²	8.48	ft²	9.69	ft²	10.04	ft²	11.18	ft²	11.60	ft²	12.67	ft²	13.16	ft²	14.16	ft²	14.73	ft²
1500 mm	0.07	m²	0.20	m²	0.20	m²	0.34	m²	0.34	m²	0.48	m²	0.48	m²	0.61	m²	0.61	m²	0.75	m²	0.75	m²	0.88	m²	0.88	m²	1.02	m²	1.02	m²	1.16	m²	1.16	m²	1.29	m²	1.29	m²
66 in.	0.83	ft²	2.48	ft²	2.48	ft²	4.14	ft²	4.21	ft²	5.79	ft²	5.94	ft²	7.44	ft²	7.68	ft²	9.10	ft²	9.41	ft²	10.75	ft²	11.14	ft²	12.41	ft²	12.88	ft²	14.06	ft²	14.61	ft²	15.72	ft²	16.35	ft²
1650 mm	0.08	m²	0.23	m²	0.23	m²	0.38	m²	0.38	m²	0.53	m²	0.53	m²	0.68	m²	0.68	m²	0.83	m²	0.83	m²	0.98	m²	0.98	m²	1.13	m²	1.13	m²	1.28	m²	1.28	m²	1.44	m²	1.44	m²
72 in.	0.91	ft²	2.73	ft²	2.73	ft²	4.55	ft²	4.63	ft²	6.36	ft²	6.53	ft²	8.18	ft²	8.44	ft²	10.00	ft²	10.34	ft²	11.82	ft²	12.24	ft²	13.64	ft²	14.16	ft²	15.46	ft²	16.06	ft²	17.27	ft²	17.97	ft²
1800 mm	0.08	m²	0.25	m²	0.25	m²	0.42	m²	0.42	m²	0.58	m²	0.58	m²	0.75	m²	0.75	m²	0.91	m²	0.91	m²	1.08	m²	1.08	m²	1.25	m²	1.25	m²	1.41	m²	1.41	m²	1.58	m²	1.58	m²
78 in.	0.99	ft²	2.97	ft²	2.97	ft²	4.96	ft²	5.05	ft²	6.94	ft²	7.12	ft²	8.92	ft²	9.20	ft²	10.90	ft²	11.28	ft²	12.89	ft²	13.35	ft²	14.87	ft²	15.43	ft²	16.85	ft²	17.51	ft²	18.83	ft²	19.59	ft²
1950 mm	0.09	m²	0.27	m²	0.27	m²	0.45	m²	0.45	m²	0.63	m²	0.63	m²	0.81	m²	0.81	m²	1.00	m²	1.00	m²	1.18	m²	1.18	m²	1.36	m²	1.36	m²	1.54	m²	1.54	m²	1.72	m²	1.72	m²
84 in.	1.07	ft²	3.22	ft²	3.22	ft²	5.37	ft²	5.46	ft²	7.51	ft²	7.71	ft²	9.66	ft²	9.96	ft²	11.81	ft²	12.21	ft²	13.95	ft²	14.45	ft²	16.10	ft²	16.71	ft²	18.25	ft²	18.95	ft²	20.39	ft²	21.21	ft²
2100 mm	0.10	m²	0.29	m²	0.29	m²	0.49	m²	0.49	m²	0.69	m²	0.69	m²	0.88	m²	0.88	m²	1.08	m²	1.08	m²	1.27	m²	1.27	m²	1.47	m²	1.47	m²	1.67	m²	1.67	m²	1.86	m²	1.86	m²
90 in.	1.16	ft²	3.47	ft²	3.47	ft²	5.78	ft²	5.88	ft²	8.09	ft²	8.30	ft²	10.40	ft²	10.73	ft²	12.71	ft²	13.14	ft²	15.02	ft²	15.56	ft²	---		---		---		---		---		---	
2250 mm	0.11	m²	0.32	m²	0.32	m²	0.53	m²	0.53	m²	0.74	m²	0.74	m²	0.95	m²	0.95	m²	1.16	m²	1.16	m²	1.37	m²	1.37	m²												
96 in.	1.24	ft²	3.71	ft²	3.71	ft²	6.19	ft²	6.30	ft²	8.66	ft²	8.89	ft²	11.14	ft²	11.49	ft²	13.61	ft²	14.08	ft²	16.08	ft²	16.66	ft²	---		---		---		---		---		---	
2400 mm	0.11	m²	0.34	m²	0.34	m²	0.57	m²	0.57	m²	0.79	m²	0.79	m²	1.02	m²	1.02	m²	1.24	m²	1.24	m²	1.47	m²	1.47	m²												
102 in.	1.32	ft²	3.96	ft²	3.96	ft²	6.60	ft²	6.72	ft²	9.24	ft²	9.48	ft²	11.87	ft²	12.25	ft²	14.51	ft²	15.01	ft²	17.15	ft²	17.77	ft²	---		---		---		---		---		---	
2550 mm	0.12	m²	0.36	m²	0.36	m²	0.60	m²	0.60	m²	0.84	m²	0.84	m²	1.08	m²	1.08	m²	1.33	m²	1.33	m²	1.57	m²	1.57	m²												
108 in.	1.40	ft²	4.20	ft²	4.20	ft²	7.01	ft²	7.13	ft²	9.81	ft²	10.07	ft²	12.61	ft²	13.01	ft²	15.41	ft²	15.94	ft²	18.22	ft²	18.87	ft²	---		---		---		---		---		---	
2700 mm	0.13	m²	0.38	m²	0.38	m²	0.64	m²	0.64	m²	0.90	m²	0.90	m²	1.15	m²	1.15	m²	1.41	m²	1.41	m²	1.66	m²	1.66	m²												
114 in.	1.48	ft²	4.45	ft²	4.45	ft²	7.42	ft²	7.55	ft²	10.38	ft²	10.65	ft²	13.35	ft²	13.77	ft²	16.32	ft²	16.87	ft²	19.28	ft²	19.98	ft²	---		---		---		---		---		---	
2850 mm	0.14	m²	0.41	m²	0.41	m²	0.68	m²	0.68	m²	0.95	m²	0.95	m²	1.22	m²	1.22	m²	1.49	m²	1.49	m²	1.76	m²	1.76	m²												
120 in.	1.57	ft²	4.70	ft²	4.70	ft²	7.83	ft²	7.97	ft²	10.96	ft²	11.24	ft²	14.09	ft²	14.53	ft²	17.22	ft²	17.81	ft²	20.35	ft²	21.08	ft²	---		---		---		---		---		---	
3000 mm	0.14	m²	0.43	m²	0.43	m²	0.72	m²	0.72	m²	1.00	m²	1.00	m²	1.29	m²	1.29	m²	1.57	m²	1.57	m²	1.86	m²	1.86	m²												

--- Louvers will be manufactured in multi-section configuration for these highlighted sizes.

AMCA WORLDWIDE CERTIFIED RATINGS — AIR PERFORMANCE — WIND DRIVEN SAND — AIR MOVEMENT AND CONTROL ASSOCIATION INTERNATIONAL, INC. — www.amca.org

Central Ventilation Systems certifies that STL4.2-XT 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 certified ratings seal applies to wind driven sand and air performance ratings.

Tested for wind driven sand rejection in accordance with AMCA Standard 500-L, Figure 5.12.

CVS

LOUVER SERIES

MODEL STL 4.2
ULTRA LOW PRESSURE VERTICAL BLADE SAND TRAP LOUVER

STL 4.2 is designed to protect air intakes from wind-driven sand with best in class air performance. Vertical sight proof blades separate sand from the airstream and offer high clearance from sand tray to prevent ingress of sand. STL4.2 is designed for the most demanding applications such as Fresh Air intakes for buildings, Air Handling Units, Generator Rooms with a focus on high air flow performance to minimize fan loading.

STANDARD CONSTRUCTION:

Frame: 0.08" (2.00mm) Extruded 6063 Extruded Aluminum or Formed

Blade: 0.06" (1.50mm) Extruded 6063 Extruded Aluminum or Formed

Birdscreen: 0.75" x .051" Flattened Aluminum in removable frame. Screen is mounted as standard on inside (rear) as looking from exterior of building. Steel screens are also available in various sizes.

Finish: Mill Aluminum (Std.)

Minimum Size: 12" x 12" (300mm x 300mm)

Maximum Section Size: 120" x 120" (3000mm x 3000mm)

OPTIONS:

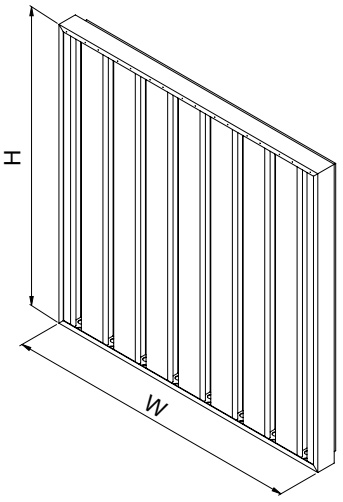
- □ Galvanized Steel Construction
- □ Stainless Steel Construction
- □ Welded Construction (Wind Load +/- 50 psf)
- □ Heavy Gauge (Please consult for availability)
- □ Security Bars
- □ Filter Racks
- □ Bird Screen
- □ Washable Filter (1/2", 3/5", 1")
- □ Extended Sil (with Chute)
- □ Optional Flange (with Chute)

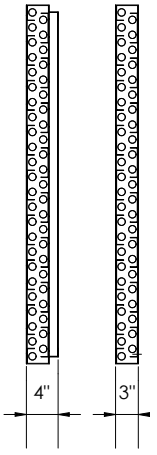
amca WORLDWIDE CERTIFIED RATINGS
AIR PERFORMANCE
WIND DRIVEN SAND
AIR MOVEMENT AND CONTROL ASSOCIATION INTERNATIONAL, INC.®
www.amca.org

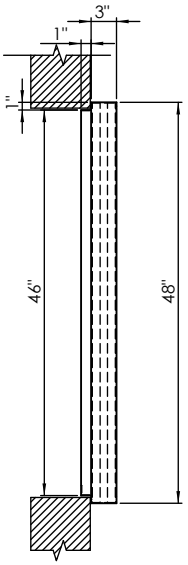
AVAILABLE FINISHES:

- □ **Powder Polyester TGIC** (2 coats) baked on at 410°F, 2.5 to 3.5 mils Meets AAMA-2603 Standards
- □ **Powder Super durable polyester** (2 coats) baked on at 410°F, 2.5 to 3.5 mils Meets AAMA-2604-05 Standards
- □ **Acrylic baked enamel** (ACRA-BOND® ULTRA) by AkzoNobel baked on at 350°F, 0.8 to 1.2 mils dry Meets AAMA-2603 Standards
- □ **Kynar®** (ALUM*A*STAR®) 2 coats by AkzoNobel baked on at 450°F, 1.2 to 1.6 mils dry Meets AAMA-2604-04 Standards
- □ **Kynar 500®** or HYLAR® 5000 70% TRINAR® (2 coats) by AkzoNobel baked on at 450°F, 1.2 to 1.6 mils dry, Meets AAMA-2605-05 Standards OPTIONAL OPTIONAL
- □ **Kynar 500®** or HYLAR® 5000 (70% Tri-Escent II) (2 coats) by AkzoNobel, a superior finish to other metallic or anodized finishes. A blend of mica, ceramic, and inorganic pigments creates subtie yet dazzling design that goes beyond metallic color without the requirement of a clear coat. 14 standard colors - custom colors available. Baked on at 415°F, 1.4 to 1.8 mils dry, meets AAMA 2605-05.
- □ **Clear Anodize** 204 R-1 Class II (AA-C22A31)(0.4 to 0.7 mil)
- □ **Clear Anodize** 215 R-1 Ciass I (AA-C22A41)(>0.7 mil)
- □ **Integrat Color Anodize** (AA-C22A42)(>0.7 mil)

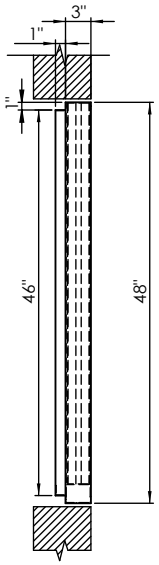
• Clear coat available for all above finishes.
• Hylar® 5000 is a registered trademark of Solvay Solexis, Inc.
• Kynar® 500 is a registered trademark of Arkema.
• ALUM*A*STAR® 50 and TRINAR® are registered trademarks of AkzoNobel
• ACRA-BOND® ULTRA is a registered trademark of AkzoNobel



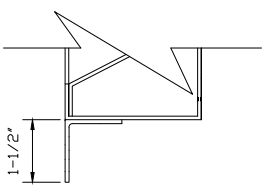




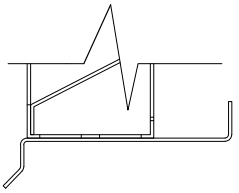
SAND TRAP LOUVER WITHOUT SAND CHUTE



SAND TRAP LOUVER WITH SAND CHUTE



OPTIONAL FLANGE WITH SAND CHUTE



EXTENDED SIL OPTION WITH SAND CHUTE

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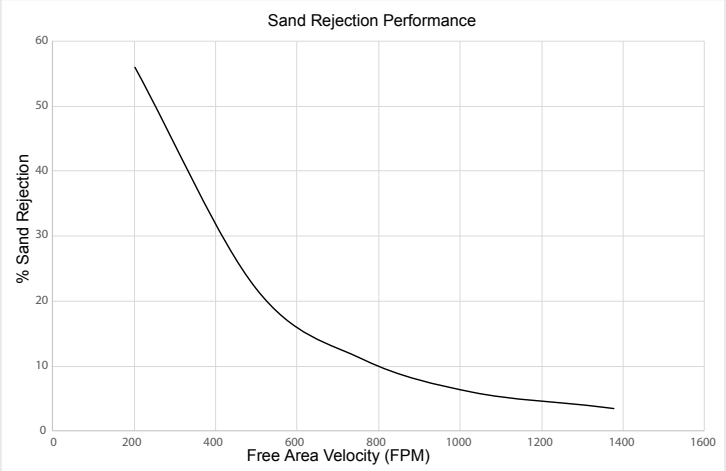
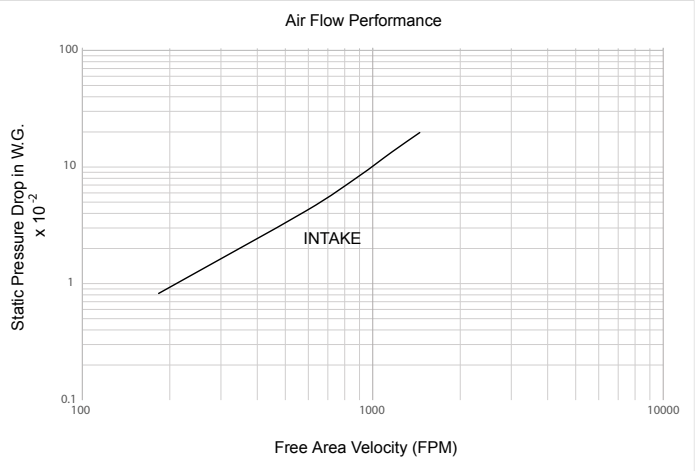
E cvsuae@eim.ae | www.cvshvac.com

PERFORMANCE DATA





SAND REJECTION PERFORMANCE

Free Area Velocity (fpm)	197	492	787	1083	1378
Effectiveness (%)	56	21.5	10.5	5	3
Penetration Class	D	D	D	D	D

Test Sample size is 48"x48" with a tolerance of +0, -0.25".
Wind driven sand performance data is based on intake performance.
Sand grade mass distribution per AMCA 511.

Central Ventilation Systems certifies that STL4.2 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 certified ratings seal applies to wind driven sand and air performance ratings.

Tested for wind driven sand rejection in accordance with AMCA Standard 500-L, Figure 5.12.

FREE AREA CHART (SQF)

Louver	Louver Width (in)																			Louver
Height (in)	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	Height (in)
12	0.19	0.31	0.42	0.53	0.65	0.76	0.88	0.99	1.11	1.22	1.34	1.45	1.57	1.68	1.80	1.91	2.02	2.14	2.25	12
18	0.33	0.53	0.73	0.92	1.12	1.32	1.52	1.72	1.91	2.11	2.31	2.51	2.70	2.90	3.10	3.30	3.50	3.69	3.89	18
24	0.47	0.75	1.03	1.31	1.59	1.88	2.16	2.44	2.72	3.00	3.28	3.56	3.84	4.13	4.41	4.69	4.97	5.25	5.53	24
30	0.61	0.97	1.34	1.70	2.07	2.43	2.80	3.16	3.52	3.89	4.25	4.62	4.98	5.35	5.71	6.08	6.44	6.81	7.17	30
36	0.75	1.19	1.64	2.09	2.54	2.99	3.43	3.88	4.33	4.78	5.23	5.67	6.12	6.57	7.02	7.47	7.91	8.36	8.81	36
42	0.89	1.42	1.95	2.48	3.01	3.54	4.07	4.60	5.14	5.67	6.20	6.73	7.26	7.79	8.32	8.85	9.39	9.92	10.45	42
48	1.02	1.64	2.25	2.87	3.48	4.10	4.71	5.33	5.94	6.56	7.17	7.78	8.40	9.01	9.63	10.24	10.86	11.47	12.09	48
54	1.16	1.86	2.56	3.26	3.95	4.65	5.35	6.05	6.75	7.44	8.14	8.84	9.54	10.24	10.93	11.63	12.33	13.03	13.73	54
60	1.30	2.08	2.86	3.65	4.43	5.21	5.99	6.77	7.55	8.33	9.11	9.90	10.68	11.46	12.24	13.02	13.80	14.58	15.36	60
66	1.44	2.31	3.17	4.03	4.90	5.76	6.63	7.49	8.36	9.22	10.09	10.95	11.82	12.68	13.55	14.41	15.27	16.14	17.00	66
72	1.58	2.53	3.48	4.42	5.37	6.32	7.27	8.22	9.16	10.11	11.06	12.01	12.95	13.90	14.85	15.80	16.75	17.69	18.64	72
78	1.72	2.75	3.78	4.81	5.84	6.88	7.91	8.94	9.97	11.00	12.03	13.06	14.09	15.13	16.16	17.19	18.22	19.25	20.28	78
84	1.86	2.97	4.09	5.20	6.32	7.43	8.55	9.66	10.77	11.89	13.00	14.12	15.23	16.35	17.46	18.58	19.69	20.81	21.92	84
90	2.00	3.19	4.39	5.59	6.79	7.99	9.18	10.38	11.58	12.78	13.98	15.17	16.37	17.57	18.77	19.97	21.16	22.36	23.56	90
96	2.14	3.42	4.70	5.98	7.26	8.54	9.82	11.10	12.39	13.67	14.95	16.23	17.51	18.79	20.07	21.35	22.64	23.92	25.20	96
102	2.27	3.64	5.00	6.37	7.73	9.10	10.46	11.83	13.19	14.56	15.92	17.28	18.65	20.01	21.38	22.74	24.11	25.47	26.84	102
108	2.41	3.86	5.31	6.76	8.20	9.65	11.10	12.55	14.00	15.44	16.89	18.34	19.79	21.24	22.68	24.13	25.58	27.03	28.48	108
114	2.55	4.08	5.61	7.15	8.68	10.21	11.74	13.27	14.80	16.33	17.86	19.40	20.93	22.46	23.99	25.52	27.05	28.58	30.11	114
120	2.69	4.31	5.92	7.53	9.15	10.76	12.38	13.99	15.61	17.22	18.84	20.45	22.07	23.68	25.30	26.91	28.52	30.14	31.75	120

SUGGESTED SPECIFICATION

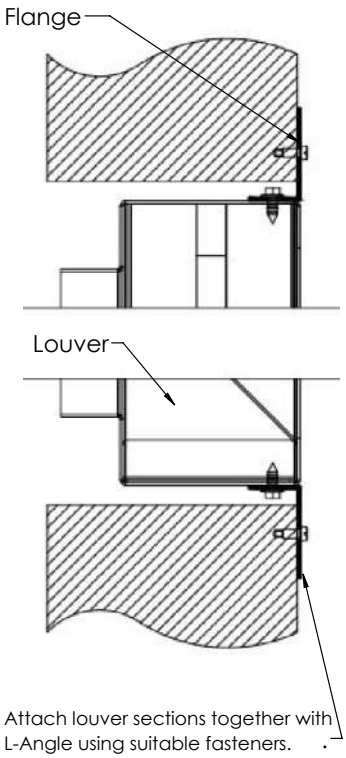
"Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary with fixed vertical blades formed or extruded and contained within a 3" frame. Where Duct Connection neck or filter rack is installed, frame shall be extended on the discharge side. Louver components (heads, jambs, sills, blades and mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall incorporate structural supports required to withstand a wind load of 30lbs. per sqf."

"Published louver performance bearing the AMCA Certified Ratings Seal for Air Performance & Wind Driven Sand must be submitted for approval prior to fabrication and must demonstrate pressure drop less then the CVS model specified. "

"Louver shall be model STL 4.2, 6063-T6 extruded Aluminum construction as follows:
Frame: 3" Deep, 0.08" nominal wall thickness with sand discharge points at the bottom
Blades: 0.06" nominal wall thickness, blades are spaced at 2" apart"

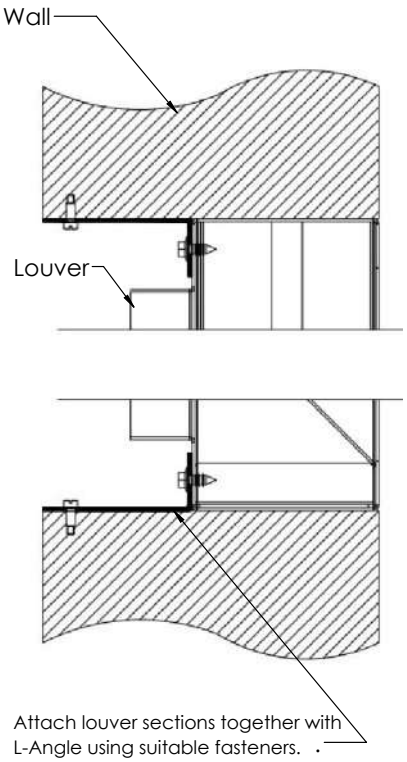
SAND TRAP LOUVER INSTALLATION INSTRUCTIONS

Flange Mount



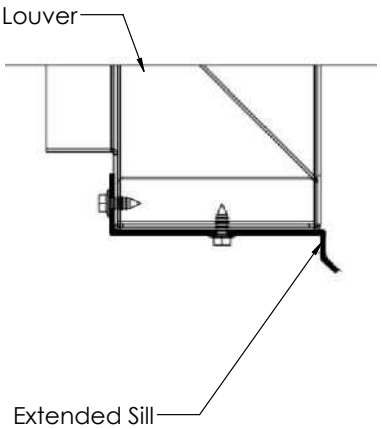
Attach louver sections together with L-Angle using suitable fasteners.
Fasteners are not supplied by CVS

Masonry Wall

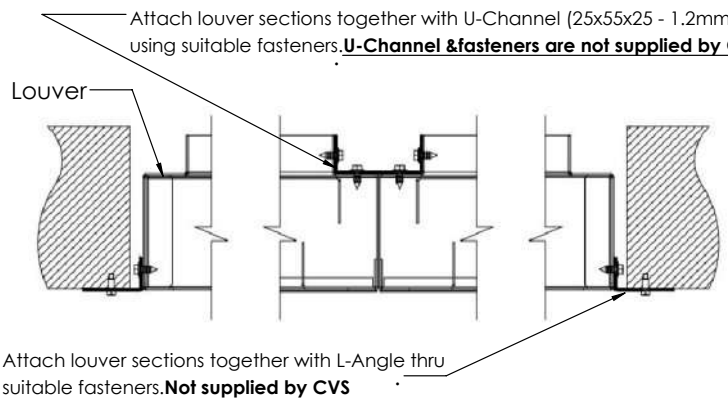


Attach louver sections together with L-Angle using suitable fasteners.
Fasteners are not supplied by CVS

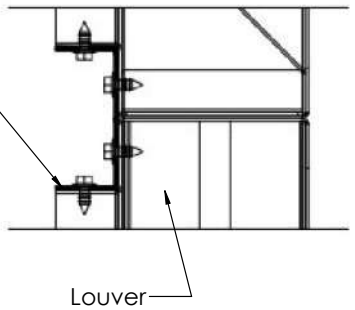
Extended Sill



Multi-Section Assembly Plan View



Multi-Section Assembly Elevation View



Notes:

* **All the installation accessories and fasteners are not provided by CVS.**
* Prior to installation, if the unit is to be stored on site, ensure it is stored in a clean & dry environment.
* Don't stack excessive numbers of units as the weight of the stack may damage them.
* Prior to installation, remove all packaging from the units.
* **Central Ventilation Systems (CVS)** reserves the right to change specifications without notice.

Fixed Louvers

CVS

LOUVER SERIES

Fixed Louvers

EL-4
4" deep, fixed blade, extruded aluminum

EL-6
6" deep, fixed blade, extruded aluminum

FL-D-2
2" deep, fixed blade, drainable, extruded aluminum

FL-D-4
4" deep, fixed blade, drainable, extruded aluminum

FL-D-6.1
6" deep, high performance fixed louver, extruded aluminum

SFL-2
2" deep, fixed "J" blade, formed steel

SFL-4
4" deep, fixed "J" blade, formed steel

SFL-6
6" deep, fixed "J" blade, formed steel

SFL-D-4
4" deep, fixed blade, formed steel, drainable

SFL-D-6
6" deep, fixed blade, formed steel, drainable

Model	Blade Angle	Blade Style	Blade	Material	FA*	fpm	CFM	W.G*	Sq. Ft.
EL-4	4.63	40˚	J/K	.081 EA	53%	994	8369	.19	7.49
EL-6	6.2	45˚	J	.125 EA	52%	834	6889	.12	8.26
FL-D-2	2.16	37°	Drainable	.060 EA	54%	805	6971	.09	8.66
FL-D - 4	4.19	37°	Drainable	.081 EA	50%	1250	10,025	.15	8.02
FL-D-6.1	6.2	37°	Drainable	.081 EA	54%	1250	10,888	.16	8.71
SFL-2	2.13	45˚	J	18 ga. galv.					
SFL-4	4.13	45˚	J	18 ga. galv.	47%	840	6342	.08	8.42
SFL-6	6	45˚	J	18 ga. galv.	47%	896	6782	.14	7.57
SFL-D-4	4.13	45˚	Drainable	18 ga. galv.	47%	1056	7888	.15	7.47
SFL-D-6	6.13 4	5˚	Drainable	18 ga. galv.					

* Free area based on 48" x 48", pressure drop at 1,000 fpm.

MODEL FL-D-4
HIGH PERFORMANCE 4" FIXED LOUVER

STANDARD CONSTRUCTION:

Frame: 0.081” (2.00 mm) Extruded Aluminum, 4.19" (106 mm) Deep

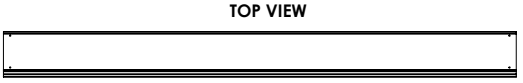
Blade: 0.081” (2.00 mm) Extruded Aluminum positioned on a 37° angle on approximately 2.88" (73.15 mm) centers.

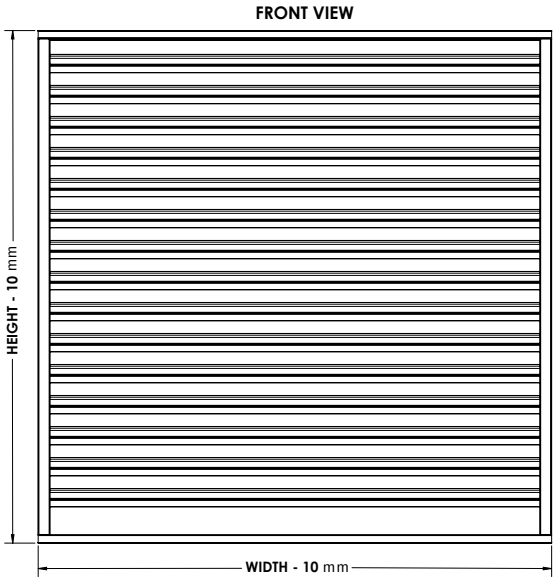
Birdscreen: 0.5" x .039" (12 mm x 1 mm) wire mesh or flattened aluminum. Screen is mounted as standard on inside (rear) as looking from exterior of building.

Finish: RAL 9010 (Std.). For other finishes, please contact the manufacturer.

Minimum Section Size: 12” x 12” (300 mm x 300 mm)

Maximum Single Section Size: 120” x 84” (3000 mm x 2100 mm) / 84” x 120” (2100 mm x 3000 mm)



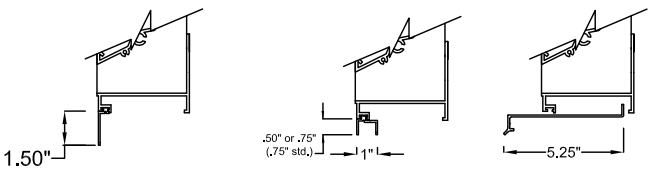


OPTIONS:

□ FBC Approved for +/- 50 PSF (FL 12335.1)
□ Flanged Frame (1.50" std.)
□ Custom Frame (1", 2", or 3"), (1.5", 2" , 3" for shapes R)
□ Extended Sill
□ Security Bars
□ Filter Racks (No screen)
□ Insect Screen (Other screens available)
□ Glazing Adapter (0.50" or 0.75")
□ Hinged Sub Frame
□ Split Deflection 45°/ 0° blades
□ Welded Construction (Wind load +/- 50 psf□ 0.125" (6 mm) construction
□ Blank-off, Alum., non-insulated, no screen, non-removable
□ Blank-off, Alum., non-insulated, with bird screen or insect screen
□ Blank-off, Alum., insulated double wall, with bird screen, removable
□ Blank-off, Alum., insulated double wall, no screen, non-removable

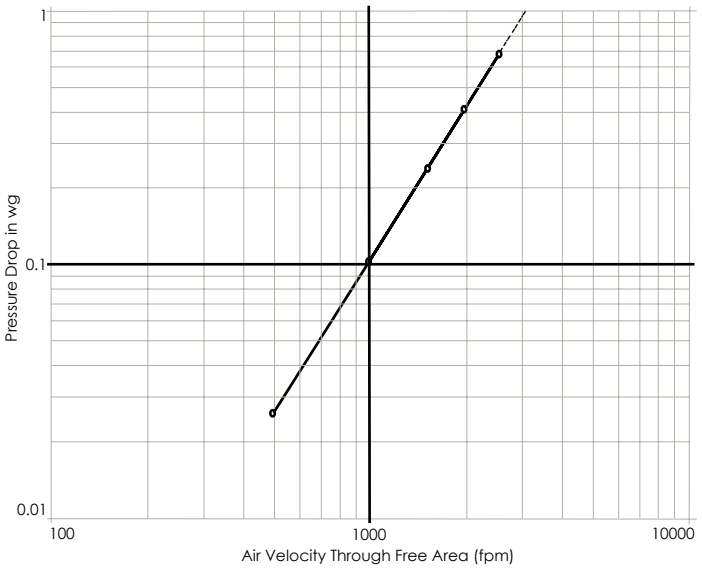
AVAILABLE FINISHES:

□ **Powder Polyester TGIC** (2 coats) baked on at 410°F, 2.5 to 3.5 mils Meets AAMA-2603 Standards
□ **Powder Super durable polyester** (2 coats) baked on at 410°F, 2.5 to 3.5 mils Meets AAMA-2604-05 Standards
□ **Acrylic baked enamel** (ACRA-BOND® ULTRA) by AkzoNobel baked on at 350°F, 0.8 to 1.2 mils dry Meets AAMA-2603 Standards
□ **Kynar®** (ALUM*A*STAR®) 2 coats by AkzoNobel baked on at 450°F, 1.2 to 1.6 mils dry Meets AAMA-2604-05 Standards
□ **Kynar 500®** or HYLAR® 5000 70% TRINAR® (2 coats) by AkzoNobel baked on at 450°F, 1.2 to 1.6 mils dry, Meets AAMA-2605-05 Standards
□ **Kynar 500®** or HYLAR® 5000 (70% Tri-Escent II) (2 coats) by AkzoNobel, a superior finish to other metallic or anodized finishes. A blend of mica, ceramic, and inorganic pigments creates subtle yet dazzling design that goes beyond metallic color without the requirement of a clear coat. 14 standard colors - custom colors available. Baked on at 415°F, 1.4 to 1.8 mils dry, meets AAMA 2605-05.
□ **Clear Anodize** 204 R-1 Class II (AA-C22A31)(0.4 to 0.7 mil)
□ **Clear Anodize** 215 R-1 Class I (AA-C22A41)(>0.7 mil)
□ **Integral Color Anodize** (AA-C22A42)(>0.7 mil)
• Clear coat available for all above finishes.
• Hylar® 5000 is a registered trademark of Solvay Solexis, Inc.
• Kynar® 500 is a registered trademark of Arkema.
• ALUM*A*STAR® 50 and TRINAR® are registered trademarks of AkzoNobel
• ACRA-BOND® ULTRA is a registered trademark of AkzoNobel



OPTIONAL FLANGE (except R_ Shapes, 1" optional std)
OPTIONAL GLAZING ADAPTER
OPTIONAL EXTENDED SILL

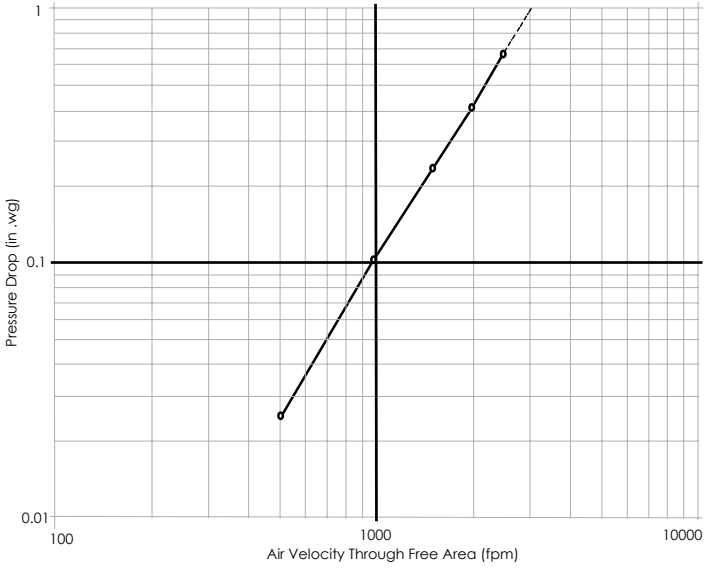
PRESSURE DROP - INTAKE



Tested in accordance with ANSI/AMCA 500-L, Figure 5.5
Test sample size is 1220 mm x 1220 mm (48 in. x 48 in.)
Air performance data are based on Intake performance with standard air - 0.075 lb/ft^3

Detail No.	$V_{Free\ Area}$ (fpm)	ΔP_{DS} (in. wg)
1	2497	0.68
2	1989	0.43
3	1493	0.24
4	1001	0.11
5	499	0.03

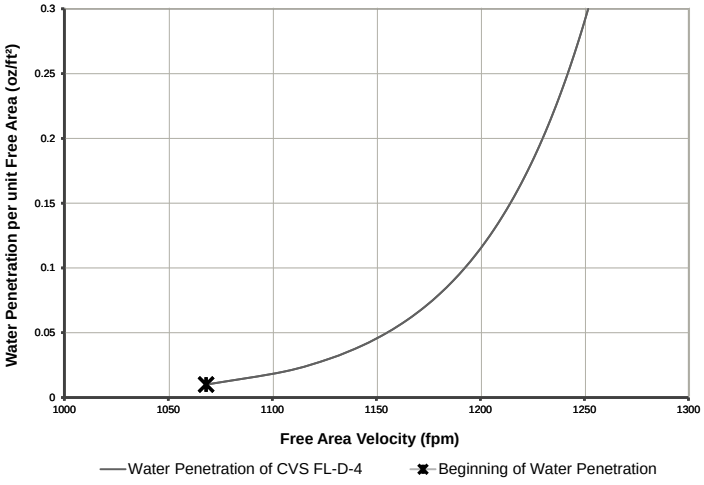
PRESSURE DROP - EXHAUST



Tested in accordance with ANSI/AMCA 500-L, Figure 5.5
Test sample size is 1220 mm x 1220 mm (48 in. x 48 in.)
Air performance data are based on Exhaust performance with standard air - 0.075 lb/ft^3

Detail No.	$V_{Free\ Area}$ (fpm)	ΔP_{DS} (in. wg)
1	2500	0.68
2	1992	0.41
3	1493	0.24
4	998	0.10
5	499	0.02

WATER PENETRATION



Test sample size is 1220 mm x 1220 mm 48 in. x 48 in.
Beginning of water penetration per AMCA Publication 511 Section 8.3.2 based on AMCA measured free area: **1068.3 fpm**

Detail No.	$V_{Free\ Area}$ (fpm)	Net Weight (oz./ft. ^{2})
1	927	0.001
2	1031	0.003
3	1083	0.016
4	1135	0.035

SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary drainable type with drain gutters in each blade and downspouts in jambs and mullions. Stationary drainable blades shall be contained within a 4.19" (106 mm) frame. Louver components (heads, jambs, sills, blades and mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built by the contractor from factory assembled louver sections to provide overall sizes required.

Louvers shall be model CVS FL-D-4, 6063-T6 Aluminum construction as follows:

FRAME: 4.19" (106 mm) deep, 0.081" (2 mm) nominal wall thickness.
BLADES: 0.081" (2 mm) nominal wall thickness. Blades are positioned at 39°angle and spaced approx. 2.88" (73.15 mm) center to center.
SCREEN: 0.5" x 0.039" (12 mm x 1 mm) wire mesh or flattened aluminium on the inside (rear).
FINISH: Select finish specification from CVS Finishes brochure.

Published louver performance bearing the AMCA Certified Ratings Seal for Air Performance & Water Penetration must be submitted for approval prior to fabrication and must demonstrate pressure drop and water penetration equal to or less then the CVS model specified.

AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500-L is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate. The louver system should be designed with a reasonable safety factor for louver performance to ensure protection from water carryover, design with a performance level somewhat below maximum desired pressure drop and 0.01 oz./sq/ ft. of water penetration.

FREE AREA CHART FL-D-4

Height (H)	Width (W)																																											
	12	in.	18	in.	24	in.	30	in.	36	in.	42	in.	48	in.	54	in.	60	in.	66	in.	72	in.	78	in.	84	in.	90	in.	96	in.	102	in.	108	in.	114	in.	120	in.
	300	mm	450	mm	600	mm	750	mm	900	mm	1050	mm	1200	mm	1350	mm	1500	mm	1650	mm	1800	mm	1950	mm	2100	mm	2250	mm	2400	mm	2550	mm	2700	mm	2850	mm	3000	mm
12 in.	0.33	ft^2	0.54	ft^2	0.74	ft^2	0.94	ft^2	1.15	ft^2	1.35	ft^2	1.55	ft^2	1.76	ft^2	1.96	ft^2	2.16	ft^2	2.36	ft^2	2.57	ft^2	2.77	ft^2	2.97	ft^2	3.18	ft^2	3.38	ft^2	3.58	ft^2	3.79	ft^2	3.99	ft^2
300 mm	0.03	m^2	0.05	m^2	0.06	m^2	0.08	m^2	0.10	m^2	0.12	m^2	0.14	m^2	0.15	m^2	0.17	m^2	0.19	m^2	0.21	m^2	0.23	m^2	0.24	m^2	0.26	m^2	0.28	m^2	0.30	m^2	0.31	m^2	0.33	m^2	0.35	m^2
18 in.	0.58	ft2	0.93	ft2	1.28	ft2	1.64	ft2	1.99	ft2	2.34	ft2	2.69	ft2	3.04	ft2	3.40	ft2	3.75	ft2	4.10	ft2	4.45	ft2	4.80	ft2	5.16	ft2	5.51	ft2	5.86	ft2	6.21	ft2	6.56	ft2	6.92	ft2
450 mm	0.05	m^2	0.08	m^2	0.11	m^2	0.14	m^2	0.18	m^2	0.21	m^2	0.24	m^2	0.27	m^2	0.30	m^2	0.33	m^2	0.36	m^2	0.39	m^2	0.42	m^2	0.46	m^2	0.49	m^2	0.52	m^2	0.55	m^2	0.58	m^2	0.61	m^2
24 in.	0.82	ft2	1.33	ft2	1.83	ft2	2.33	ft2	2.83	ft2	3.33	ft2	3.83	ft2	4.33	ft2	4.83	ft2	5.33	ft2	5.83	ft2	6.33	ft2	6.84	ft2	7.34	ft2	7.84	ft2	8.34	ft2	8.84	ft2	9.34	ft2	9.84	ft2
600 mm	0.07	m^2	0.12	m^2	0.16	m^2	0.21	m^2	0.25	m^2	0.29	m^2	0.34	m^2	0.38	m^2	0.43	m^2	0.47	m^2	0.52	m^2	0.56	m^2	0.61	m^2	0.65	m^2	0.69	m^2	0.74	m^2	0.78	m^2	0.83	m^2	0.87	m^2
30 in.	1.07	ft2	1.72	ft2	2.37	ft2	3.02	ft2	3.67	ft2	4.32	ft2	4.97	ft2	5.62	ft2	6.27	ft2	6.92	ft2	7.57	ft2	8.22	ft2	8.87	ft2	9.52	ft2	10.17	ft2	10.82	ft2	11.47	ft2	12.12	ft2	12.77	ft2
750 mm	0.09	m^2	0.15	m^2	0.21	m^2	0.27	m^2	0.33	m^2	0.38	m^2	0.44	m^2	0.50	m^2	0.56	m^2	0.61	m^2	0.67	m^2	0.73	m^2	0.79	m^2	0.84	m^2	0.90	m^2	0.96	m^2	1.02	m^2	1.07	m^2	1.13	m^2
36 in.	1.32	ft2	2.11	ft2	2.91	ft2	3.71	ft2	4.51	ft2	5.31	ft2	6.11	ft2	6.91	ft2	7.71	ft2	8.51	ft2	9.31	ft2	10.11	ft2	10.91	ft2	11.71	ft2	12.51	ft2	13.30	ft2	14.10	ft2	14.90	ft2	15.70	ft2
900 mm	0.12	m^2	0.19	m^2	0.26	m^2	0.33	m^2	0.40	m^2	0.47	m^2	0.54	m^2	0.61	m^2	0.68	m^2	0.75	m^2	0.83	m^2	0.90	m^2	0.97	m^2	1.04	m^2	1.11	m^2	1.18	m^2	1.25	m^2	1.32	m^2	1.39	m^2
42 in.	1.56	ft2	2.51	ft2	3.46	ft2	4.41	ft2	5.35	ft2	6.30	ft2	7.25	ft2	8.20	ft2	9.15	ft2	10.10	ft2	11.04	ft2	11.99	ft2	12.94	ft2	13.89	ft2	14.84	ft2	15.79	ft2	16.73	ft2	17.68	ft2	18.63	ft2
1050 mm	0.14	m^2	0.22	m^2	0.31	m^2	0.39	m^2	0.47	m^2	0.56	m^2	0.64	m^2	0.73	m^2	0.81	m^2	0.90	m^2	0.98	m^2	1.06	m^2	1.15	m^2	1.23	m^2	1.32	m^2	1.40	m^2	1.49	m^2	1.57	m^2	1.65	m^2
48 in.	1.73	ft2	2.78	ft2	3.83	ft2	4.88	ft2	5.93	ft2	6.98	ft2	8.03	ft2	9.08	ft2	10.14	ft2	11.19	ft2	12.24	ft2	13.29	ft2	14.34	ft2	15.39	ft2	16.44	ft2	17.49	ft2	18.54	ft2	19.59	ft2	20.64	ft2
1200 mm	0.16	m^2	0.26	m^2	0.36	m^2	0.45	m^2	0.55	m^2	0.65	m^2	0.75	m^2	0.84	m^2	0.94	m^2	1.04	m^2	1.14	m^2	1.24	m^2	1.33	m^2	1.43	m^2	1.53	m^2	1.63	m^2	1.72	m^2	1.82	m^2	1.92	m^2
54 in.	1.97	ft2	3.16	ft2	4.36	ft2	5.56	ft2	6.75	ft2	7.95	ft2	9.14	ft2	10.34	ft2	11.54	ft2	12.73	ft2	13.93	ft2	15.12	ft2	16.32	ft2	17.52	ft2	18.71	ft2	19.91	ft2	21.10	ft2	22.30	ft2	23.50	ft2
1350 mm	0.18	m^2	0.29	m^2	0.40	m^2	0.51	m^2	0.62	m^2	0.74	m^2	0.85	m^2	0.96	m^2	1.07	m^2	1.18	m^2	1.29	m^2	1.40	m^2	1.51	m^2	1.62	m^2	1.73	m^2	1.84	m^2	1.95	m^2	2.06	m^2	2.17	m^2
60 in.	2.21	ft2	3.56	ft2	4.90	ft2	6.25	ft2	7.59	ft2	8.94	ft2	10.28	ft2	11.63	ft2	12.97	ft2	14.32	ft2	15.66	ft2	17.01	ft2	18.35	ft2	19.70	ft2	21.04	ft2	22.39	ft2	23.73	ft2	25.08	ft2	26.42	ft2
1500 mm	0.20	m^2	0.33	m^2	0.45	m^2	0.58	m^2	0.70	m^2	0.82	m^2	0.95	m^2	1.07	m^2	1.20	m^2	1.32	m^2	1.44	m^2	1.57	m^2	1.69	m^2	1.82	m^2	1.94	m^2	2.06	m^2	2.19	m^2	2.31	m^2	2.44	m^2
66 in.	2.46	ft2	3.95	ft2	5.45	ft2	6.94	ft2	8.44	ft2	9.93	ft2	11.42	ft2	12.92	ft2	14.41	ft2	15.91	ft2	17.40	ft2	18.89	ft2	20.39	ft2	21.88	ft2	23.38	ft2	24.87	ft2	26.36	ft2	27.86	ft2	29.35	ft2
1650 mm	0.23	m^2	0.36	m^2	0.50	m^2	0.64	m^2	0.77	m^2	0.91	m^2	1.05	m^2	1.19	m^2	1.32	m^2	1.46	m^2	1.60	m^2	1.74	m^2	1.87	m^2	2.01	m^2	2.15	m^2	2.28	m^2	2.42	m^2	2.56	m^2	2.70	m^2
72 in.	2.70	ft2	4.35	ft2	5.99	ft2	7.63	ft2	9.28	ft2	10.92	ft2	12.56	ft2	14.21	ft2	15.85	ft2	17.49	ft2	19.14	ft2	20.78	ft2	22.42	ft2	24.07	ft2	25.71	ft2	27.35	ft2	28.99	ft2	30.64	ft2	32.28	ft2
1800 mm	0.25	m^2	0.40	m^2	0.55	m^2	0.70	m^2	0.85	m^2	1.00	m^2	1.15	m^2	1.30	m^2	1.45	m^2	1.60	m^2	1.75	m^2	1.90	m^2	2.05	m^2	2.20	m^2	2.35	m^2	2.51	m^2	2.66	m^2	2.81	m^2	2.96	m^2
78 in.	2.95	ft2	4.74	ft2	6.53	ft2	8.33	ft2	10.12	ft2	11.91	ft2	13.70	ft2	15.49	ft2	17.29	ft2	19.08	ft2	20.87	ft2	22.66	ft2	24.45	ft2	26.25	ft2	28.04	ft2	29.83	ft2	31.62	ft2	33.41	ft2	35.21	ft2
1950 mm	0.26	m^2	0.42	m^2	0.58	m^2	0.74	m^2	0.90	m^2	1.06	m^2	1.22	m^2	1.38	m^2	1.53	m^2	1.69	m^2	1.85	m^2	2.01	m^2	2.17	m^2	2.33	m^2	2.49	m^2	2.65	m^2	2.81	m^2	2.97	m^2	3.13	m^2
84 in.	3.20	ft2	5.14	ft2	7.08	ft2	9.02	ft2	10.96	ft2	12.90	ft2	14.84	ft2	16.78	ft2	18.73	ft2	20.67	ft2	22.61	ft2	24.55	ft2	26.49	ft2	28.43	ft2	30.37	ft2	32.31	ft2	34.26	ft2	36.20	ft2	38.14	ft2
2100 mm	0.28	m^2	0.46	m^2	0.63	m^2	0.80	m^2	0.97	m^2	1.15	m^2	1.32	m^2	1.49	m^2	1.66	m^2	1.84	m^2	2.01	m^2	2.18	m^2	2.35	m^2	2.53	m^2	2.70	m^2	2.87	m^2	3.04	m^2	3.22	m^2	3.39	m^2
90 in.	3.44	ft2	5.53	ft2	7.62	ft2	9.71	ft2	11.80	ft2	13.89	ft2	15.98	ft2	18.07	ft2	20.16	ft2	22.25	ft2	24.34	ft2	26.43	ft2	28.52	ft2	---		---		---		---		---		---	
2250 mm	0.30	m^2	0.49	m^2	0.68	m^2	0.86	m^2	1.05	m^2	1.23	m^2	1.42	m^2	1.60	m^2	1.79	m^2	1.98	m^2	2.16	m^2	2.35	m^2	2.53	m^2												
96 in.	3.69	ft2	5.93	ft2	8.16	ft2	10.40	ft2	12.64	ft2	14.88	ft2	17.12	ft2	19.36	ft2	21.60	ft2	23.84	ft2	26.08	ft2	28.32	ft2	30.56	ft2	---		---		---		---		---		---	
2400 mm	0.33	m^2	0.53	m^2	0.72	m^2	0.92	m^2	1.12	m^2	1.32	m^2	1.52	m^2	1.72	m^2	1.92	m^2	2.12	m^2	2.32	m^2	2.52	m^2	2.71	m^2												
102 in.	3.93	ft2	6.32	ft2	8.71	ft2	11.10	ft2	13.48	ft2	15.87	ft2	18.26	ft2	20.65	ft2	23.04	ft2	25.43	ft2	27.82	ft2	30.20	ft2	32.59	ft2	---		---		---		---		---		---	
2550 mm	0.35	m^2	0.56	m^2	0.77	m^2	0.99	m^2	1.20	m^2	1.41	m^2	1.62	m^2	1.83	m^2	2.05	m^2	2.26	m^2	2.47	m^2	2.68	m^2	2.90	m^2												
108 in.	4.18	ft2	6.71	ft2	9.25	ft2	11.79	ft2	14.33	ft2	16.86	ft2	19.40	ft2	21.94	ft2	24.48	ft2	27.01	ft2	29.55	ft2	32.09	ft2	34.63	ft2	---		---		---		---		---		---	
2700 mm	0.37	m^2	0.60	m^2	0.82	m^2	1.05	m^2	1.27	m^2	1.50	m^2	1.72	m^2	1.95	m^2	2.17	m^2	2.40	m^2	2.63	m^2	2.85	m^2	3.08	m^2												
114 in.	4.42	ft2	7.11	ft2	9.79	ft2	12.48	ft2	15.17	ft2	17.85	ft2	20.54	ft2	23.23	ft2	25.91	ft2	28.60	ft2	31.29	ft2	33.97	ft2	36.66	ft2	---		---		---		---		---		---	
2850 mm	0.39	m^2	0.63	m^2	0.87	m^2	1.11	m^2	1.35	m^2	1.59	m^2	1.82	m^2	2.06	m^2	2.30	m^2	2.54	m^2	2.78	m^2	3.02	m^2	3.26	m^2												
120 in.	4.58	ft2	7.37	ft2	10.15	ft2	12.94	ft2	15.72	ft2	18.51	ft2	21.30	ft2	24.08	ft2	26.87	ft2	29.65	ft2	32.44	ft2	35.22	ft2	38.01	ft2	---		---		---		---		---		---	
3000 mm	0.41	m^2	0.67	m^2	0.92	m^2	1.17	m^2	1.42	m^2	1.67	m^2	1.93	m^2	2.18	m^2	2.43	m^2	2.68	m^2	2.93	m^2	3.19	m^2	3.44	m^2												

--- Louvers will be manufactured in multi-section configuration for these highlighted sizes.

Central Ventilation Systems certifies that FL-D-4 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.

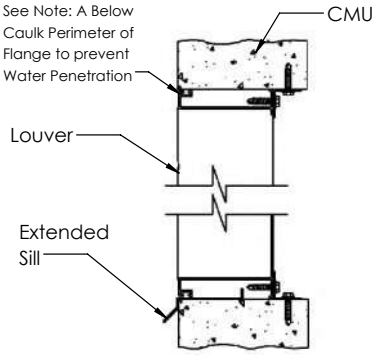
The AMCA Certified Ratings Seal applies to Air Performance and Water Penetration ratings.

CVS

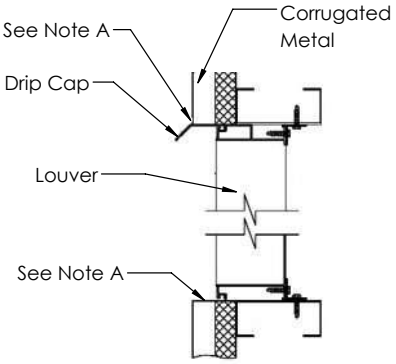
LOUVER SERIES

Louver Installation Instructions

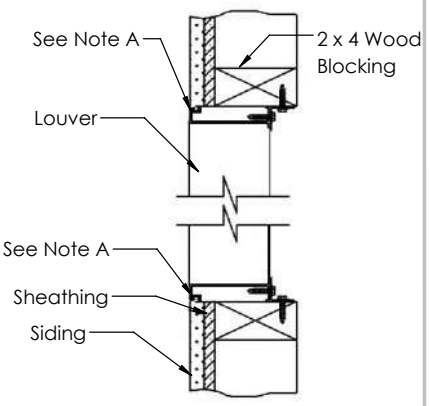
Masonry Wall



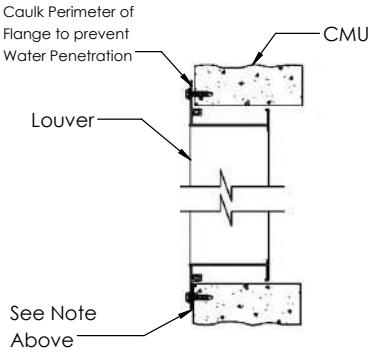
Metal Panel Wall



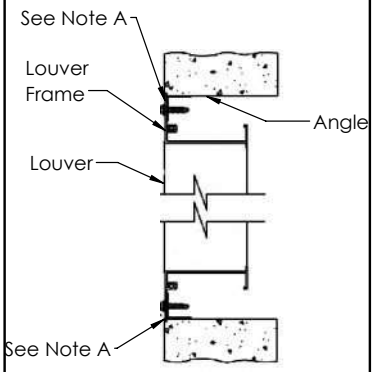
Wood Instalation

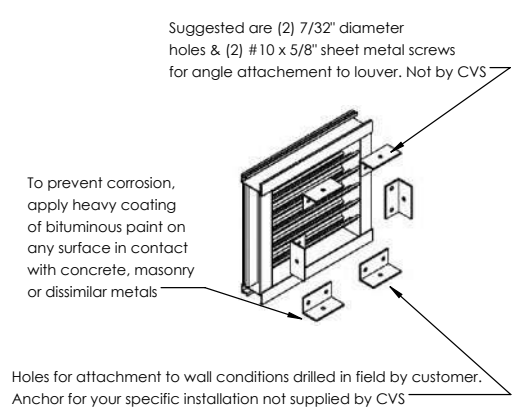


Flange Mount

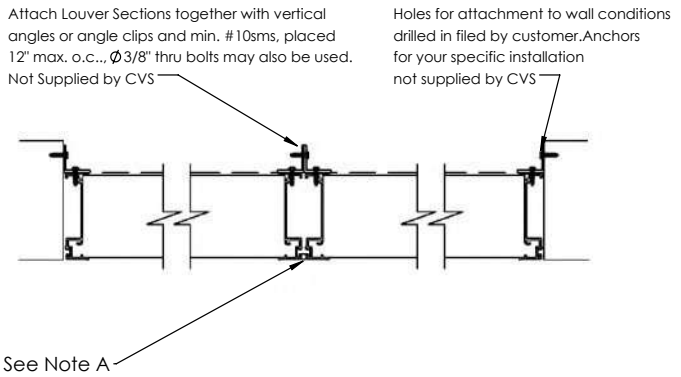


Angle Subframe

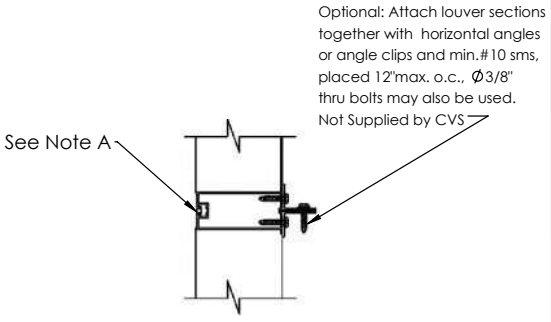




Multi-Section Assembly / Plan View



Multi-Section Assembly / Elevation View



Note A: After the louver is secured to the substrate, install backer rod andcaulking (not provided by CVS) around the perimeter of the louver to thesubstrate and at section joints where possible. If mullion strips are provided,place caulk behind mullion strip (if possible) before attaching. If mullion stripis already installed, apply a small bead where it touches the louver.Due to continuing research, **Central Ventilation Systems (CVS)** reserves theright to change specifications without notice.

Acoustical Louvers

CVS

LOUVER SERIES

Acoustical Louvers

XAC-4
8" deep acoustical louver, formed steel

XAC-6
12" deep acoustical louver, formed steel

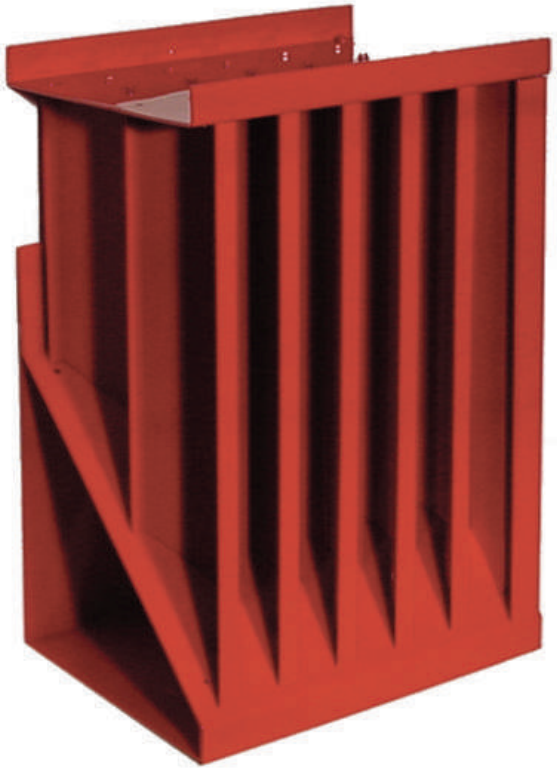
XAC-9
12" deep acoustical louver, formed steel (variation in construction to XAC 6)

AXF-12
12" deep acoustical louver, airfoil blade, formed steel

AXF-8
8" deep acoustical louver, airfoil blade, formed steel

Model	Depth	Blade Style	Noise Reduction						FA	fpm	CFM	W.G
			125	250	500	1K	2K	4K				
XAC-4	8	Straight	6	4	7	12	14	10	28% 4.46	868	3871	.08
XAC-6	12	Straight	7	6	9	12	14	10				
XAC-9	12	Straight	8	8	13	17	16	12				
AXF-12	12	Straight	6	5	8	11	10	8				
AXF-8	8	Straight	12	11	12	13	13	13				

Wind - driven Rain Louvers



CVS

LOUVER SERIES

Wind-driven Rain Louvers

SED-4
4" deep, fixed blade, drainable, wind/rain, extruded aluminum

RD-4
4" deep, fixed vertical blade, drainable, wind/rain, extruded aluminum

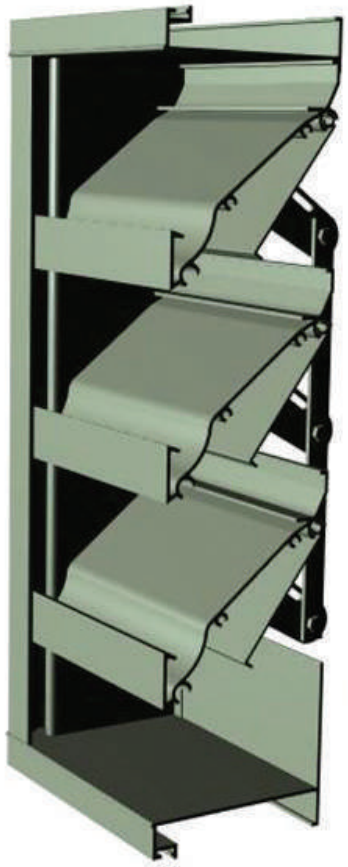
RD-8
8" deep, fixed blade, drainable, wind/rain/sand, extruded aluminum

DHV-4
4" deep, fixed blade, drainable, wind/rain, extruded aluminum

XSD-130
5" deep wind driven rain louver

Model Angle	Depth	Blade Style	FA sq.ft.	Wind Velocity	Rainfall (in/hr)	fpm Core	Effectiveness Ratio	Class	fpm	CFM	W.G.
SED-4	4.16	Drainable	35% 5.57	29,50	3,8	137	99.8	A	1086	6049	.21
RD-4	4.16	Vertical	40% 6.32	29,50	3,8	484	99.5	A	1000	6320	.35
RD-8	8.5	Sand/Rain	29% 4.58				99.9	A	940	4580	.13
DHV-4	4.16	Drainable	48% 7.75	29,50	3,8	974	99	A	1250	9688	.28
XSD-130	5.1	Drainable	46% 7.38	29,50	3,8	468	99.2	A	1000	7380	0.16

Combination Louver/Damper



CVS

LOUVER SERIES

Combination Louver/Damper

CFL-D-4
4" deep, drainable,
extruded aluminum

CFL-D-6
6" deep, drainable,
extruded aluminum

Model	Depth Angle	Blade Style	Blade	Material	FA sq. ft.	fpm	CFM	W.G
CFL-D-4	4.16	37°	Combo	.081 EA	46%	924	6754	.07
CFL-D-6	6.2	37°	Combo	.125 EA	47%	1250	9463	.11

Adjustable Louvers

CVS

LOUVER SERIES

Adjustable Louvers

SAFL-4
4" deep, adjustable, "J" blade, formed steel

SAFL-6
6" deep, adjustable, "J" blade, formed steel

AFL-D-4
4" deep, adjustable blade, extruded aluminum

AFL-D-6
6" deep, adjustable blade, extruded aluminum

Model	Depth Angle	Blade Style	Blade	Material	FA sq. ft.	fpm	CFM	W.G.
SAFL-4	4.13	45°	Adj/Drain	18 ga galv	47%	840	6342	.09
SAFL-6	6.13	45°	Adj/Drain	18 ga galv	47%	896	6783	.13
AFL-D-4	4.25	37°	Adj/Drain	.081 EA	43%	1217	8288	.11
AFL-D-6	6.2	37°	Adj/Drain	.081 EA	54%	922	7892	.08

Projects References

Bvlgari Hotel and Residences

Four Seasons Hotel

Louvre Museum

Sheikh Zayed Grand Mosque
Visitors Centre & Plaza

Projects References


New Al Ain Hospital


Al Mafraq Hospital


Saadiyat Rotana hotel
& Resort Complex


SKMC Dialysis Center


Khalidiya Plaza View

Product Range

- Fire-Resisting Ductwork (BS & EN)
- Fire-rated Insulation (ASTM & UL)
- Sound Attenuators (ASTM & BS)
- VAV Boxes (AHRI)
- Life Safety Dampers (UL)
- Control Dampers (AMCA & BS)
- Access Doors (BS & EN)
- Louvers (AMCA)
- Smoke Exhaust, Building, Car Park & Tunnel Ventilation Fans (AMCA & EN)
- Domestic and Industrial Ventilation Fans
- AHU, FAHU, FCU, RTU, ERV & Ecology Units (Eurovent, TUV & AHRI)
- Electrostatic Precipitators (ESPs) & UL Listed Air Filters (UL)

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Non-Coated Fire-Resisting Ductwork & Life Safety Dampers

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