

MODEL VV-10

6" WIND DRIVEN RAIN FIXED LOUVER

STANDARD CONSTRUCTION:

Frame: .125 Extruded Aluminum, 6" Deep

Blade: .081 Extruded Aluminum

Birdscreen: .75" x .051" Flattened Aluminum in removable frame. Screen is mounted as standard on inside (rear) as looking from exterior of building.

Finish: Mill Aluminum (Std.)

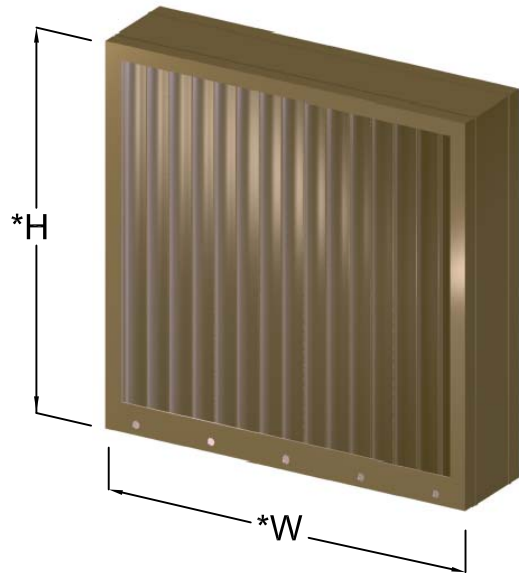
Minimum Size: 12 x12

Maximum Single Section: 60"w x 96"h



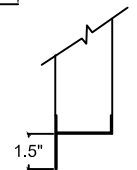
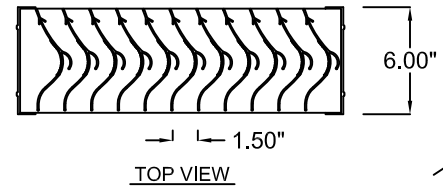
OPTIONS:

- Flanged Frame (1.50" std.), (1" std for shapes R_)
- Custom Flange (1", 2" , or 3"), (1.5", 2", or 3" for shapes R_)
- Extended Sill
- Insect Screen (Other Screens Available, See Screen Page)
- Filter Racks (no screen)
- Security Bars
- Hinged Sub Frame
- Welded Construction
- Blank-off, Alum., non-insulated, no screen, non-removeable
- 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-removeable



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)

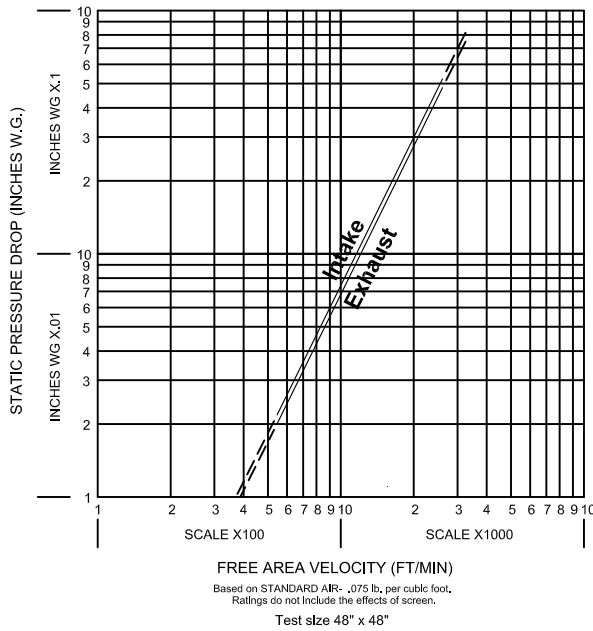
*Width and Height dimensions are approximately 1/4" under listed size.

Due to continuing research, United Enertech reserves the right to change specifications without notice.

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		MODEL VV-10 (WIND DRIVEN RAIN LOUVER)			
DRAWN BY:	DATE:	REV. DATE:	REV. NO.	APPROVED BY:	DWG. NO.:
CLJ	January 2004	May 20, 2010	5	BGT	A-20

Model VV-10 Louver Performance Data

AIR FLOW RESISTANCE



Model VV-10 Louver Selection and Application

FREE AREA CHART (square feet)

Louver Height Inches	Louver Width In Inches									Louver Height Inches
	12	18	24	30	36	42	48	54	60	
12	0.12	0.19	0.26	0.33	0.41	0.47	0.54	0.62	0.68	12
18	0.35	0.56	0.78	0.99	1.20	1.42	1.63	1.84	2.06	18
24	0.59	0.94	1.30	1.65	2.00	2.37	2.72	3.07	3.43	24
30	0.82	1.31	1.81	2.31	2.80	3.30	3.81	4.30	4.80	30
36	1.07	1.72	2.37	3.02	3.66	4.31	4.96	5.61	6.26	36
42	1.30	2.09	2.88	3.68	4.47	5.26	6.04	6.83	7.62	42
48	1.57	2.52	3.46	4.42	5.37	6.32	7.27	8.23	9.18	48
54	1.75	2.80	3.87	4.94	5.99	7.06	8.11	9.18	10.24	54
60	1.99	3.21	4.42	5.63	6.84	8.06	9.27	10.48	11.69	60
66	2.23	3.58	4.94	6.29	7.64	9.01	10.36	11.72	13.07	66
72	2.47	3.99	5.49	6.99	8.50	10.01	11.51	13.02	14.52	72
78	2.72	4.37	6.02	7.68	9.33	10.98	12.63	14.28	15.94	78
84	2.82	4.54	6.26	7.89	9.69	11.41	13.12	14.85	16.57	84
90	2.93	4.71	6.49	8.27	10.05	11.83	13.61	15.40	17.18	90
96	3.16	5.07	6.99	8.91	10.83	12.75	14.67	16.59	18.51	96

VV-10 Specifications

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall possess stationary vertical blades designed to prevent the penetration of wind driven rain. Louver blades shall be placed on 1.5" centers within a 6" deep frame. Louver components (heads, jambs, and blades shall be factory assembled by United Enertech. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall limit span between visible mullions to 5 feet, and shall withstand a wind load of 25 lbs. per sq. ft. (equivalent of a 100 mph wind). Louver shall meet the performance requirements established by the AMCA 500L test procedure and shall be licensed to bear the AMCA certified rating seal for air performance and wind driven rain at 29 mph and 50 mph. Louver shall have a minimum free area of 7.27 sq. ft. based on the standard 48"x48" test specimen. Louver shall have a maximum static pressure drop of .07" (intake & exhaust) water gage based on 1000 fpm free area velocity. Louver shall carry a class A water penetration classification based on a ventilation core velocity of 980 fpm at a rainfall rate of 3" per hour and a 29 mph simulated wind velocity. Louver shall carry a class A water penetration classification based on a ventilation core velocity of 969 fpm at a rainfall rate of 8" per hour and a 50 mph simulated wind velocity.



United Enertech certifies that the VV-10 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 rating seal applies to air performance ratings and wind driven rain ratings.

Wind Driven Rain Performance -AMCA 500-L-

Test size 1m x 1m(39"x39")core

75 mm/h (3 in/h) Rainfall & 13 m/s (29 mph) Wind Velocity				
Core Velocity fpm (m/s)	Airflow cfm (m³/s)	Free Area Velocity fpm (m/s)	Effectiveness Ratio	AMCA Effectiveness Class
980 (5.0)	10597 (5.00)	2111 (10.7)	100.0	A

202.4 mm/h (8 in/h) Rainfall & 22 m/s (50 mph) Wind Velocity				
Core Velocity fpm (m/s)	Airflow cfm (m³/s)	Free Area Velocity fpm (m/s)	Effectiveness Ratio	AMCA Effectiveness Class
969 (4.9)	10430 (4.92)	2078 (10.6)	100.0	A

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 0.8

Discharge Loss Coefficient is calculated by dividing a louvers' actual airflow rate vs. a theoretical airflow for the opening. It provides an indication of the louvers' airflow characteristics.

* Discharge Loss Intake	
Wind Velocity (mph)	Class
29	1
50	1

Class	Discharge Loss Coefficient
1	0.4 and above
2	0.3 to 0.399
3	0.2 to 0.299
4	.0199 and below

(the higher the coefficient, the less resistance to airflow.)