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 x 12
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-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 I (AA-C22A31) (0.4 to 0.7 mil)
☐ Clear Anodize 215 R-1 Class I (AA-C22A41) (0.4 to 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

"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:
CLJ
DATE: January 2004
REV. DATE: September 13, 2010
REV. NO. 7
APPROVED BY:
BGT
DWG. NO. A-20
Model VV-10 Louver Selection and Application

**FREE AREA CHART (square feet)**

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**VW-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 millons 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 testing 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 0.7" (intake & exhaust) water gage based on 1000 fpm free area velocity. Louver shall carry a Class A ventilation 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 ventilation 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.

**Wind Driven Rain Performance**

- **AMCA 500-L**
  - Test size: 1.1 m x 1.0 m (39"x39") core

**75 mm/h (3 in/h) Rainfall & 13 m/s (29 mph) Wind Velocity**

- Core Velocity (fpm) 980 (5.0)
- Airflow cfm (m³/s) 10597 (5.00)
- Free Area Velocity (fpm) 2111 (10.7)
- Effectiveness Ratio 100.0
- AMCA Effectiveness Class A

**202.4 mm/h (8 in/h) Rainfall & 22 m/s (50 mph) Wind Velocity**

- Core Velocity (fpm) 969 (4.9)
- Airflow cfm (m³/s) 10430 (4.92)
- Free Area Velocity (fpm) 2078 (10.6)
- Effectiveness Ratio 100.0
- AMCA Effectiveness Class A

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

* Discharge Loss Intake

- **Wind Velocity (m/s)**
  - Class        | Discharge Loss Coefficient
  - 0.0 to 1.0 m/s | 1
  - 0.1 to 0.9 m/s | 2
  - 0.2 to 0.9 m/s | 3
  - 0.3 to 2.0 m/s | 4
  - 0.4 to 4.0 m/s | 5

(1.0 is less)