

Application

The ECD-635 offers exceptional protection against wind-driven rain under the most severe conditions and is ideally suited for high wind areas or applications that are sensitive to wind-driven rain penetration. The ECD-635 incorporates horizontal blades and is available in a wide array of anodized and painted finishes including custom color matching.

Standard Construction

Material: Mill finish 6063-T5 extruded aluminum.

Frame: 6" deep × 0.081" thick (152 × 2) channel.

Blades: 35° × 0.070" thick (2) horizontal drainable style.

Screen: 1/2" × 0.063" (12.7 × 1.6) expanded and flattened aluminum.

Minimum Size: 4.5" × 7" (114 × 178)

Maximum Size: Single section: 60" × 120" (1524 × 3048)
120" × 60" (3048 × 1524)
Multiple section: Unlimited

Options

- ☐ Factory finish:
 - ☐ High Performance Fluoropolymer - 100% resin Newlar®/ 70% resin Kynar®
 - ☐ Baked Enamel
 - ☐ Clear or Color Anodized, Class 1
 - ☐ Prime Coat
- ☐ Hidden vertical mullion for continuous blade appearance.
- ☐ Flange frame:
 - ☐ 1 1/2" (38) flange
 - ☐ Custom-size flange
 - ☐ Stucco flange
 - ☐ Glazing frame
- ☐ Welded construction.
- ☐ Alternate bird or insect screens.
- ☐ Insulated or non-insulated blank-off panels.
- ☐ Filter racks.
- ☐ Hinged frame.
- ☐ Head and/or sill flashing.
- ☐ Installation hardware:
 - ☐ Clip angles
 - ☐ Continuous angles
- ☐ Burglar bars.
- ☐ Frame closure.

Ratings

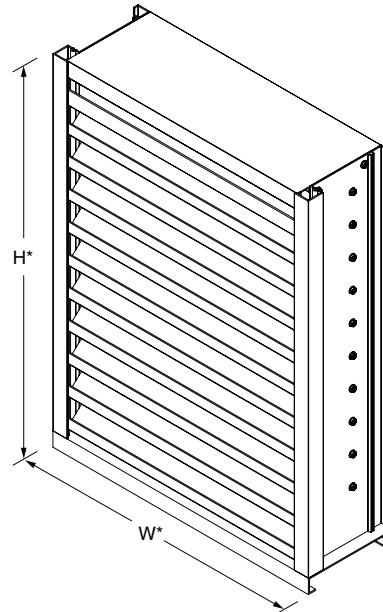
Free Area: [48" × 48" (1219 × 1219) unit]: 8.6 ft² (0.80 m²)
50%

Performance @ Beginning Point of Water Penetration

Free Area Velocity: 1,217 fpm (6.18 m/s)
Air Volume Delivered: 10,508 cfm (4.96 m³/s)
Pressure Loss: 0.29 in.wg. (72 Pa)

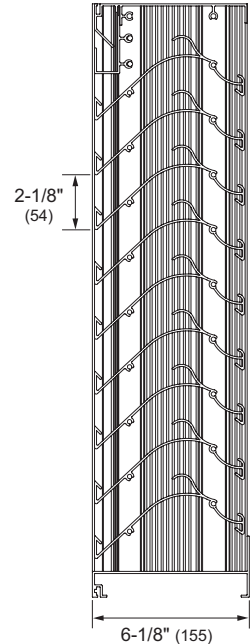
Velocity @ 0.15 in.wg. Pressure Loss: 800 fpm (4.06 m/s)

Design Load: 30 psf



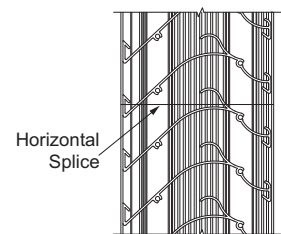
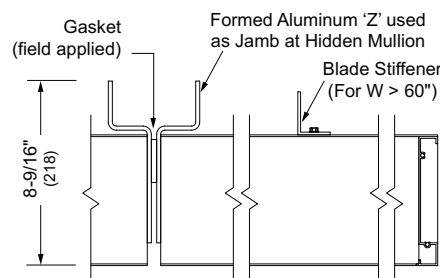
Model **ECD-635**
(standard)

*Louvers dimensions furnished approximately 1/2" (13) undersize.

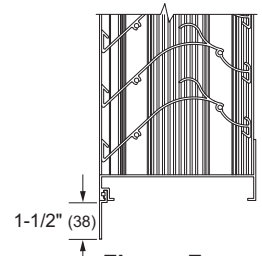


Vertical Section

*Screen adds approximately 3/16" (5) to louver depth.



Horizontal Mullion
(standard)



Flange Frame
(optional)



Certified Ratings:

Pottorff certifies that the model ECD-635 shown herein is licensed to bear the AMCA seal. The ratings shown are based on test 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.

Performance Data

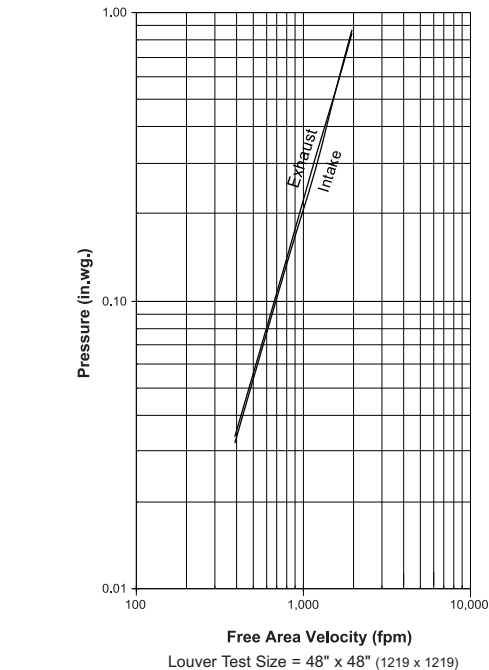
Free Area (ft²)

		Width (Inches)																			
Height (Inches)		4.5	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	8	0.03	0.13	0.2	0.3	0.4	0.4	0.5	0.6	0.7	0.7	0.8	0.9	1.0	1.0	1.1	1.2	1.3	1.3	1.4	1.5
	12	0.1	0.3	0.5	0.6	0.8	1.0	1.1	1.3	1.5	1.7	1.8	2.0	2.2	2.3	2.5	2.7	2.9	3.0	3.2	3.4
	18	0.1	0.5	0.8	1.1	1.4	1.7	2.0	2.3	2.6	2.9	3.2	3.5	3.8	4.1	4.4	4.7	5.0	5.2	5.5	5.8
	24	0.2	0.8	1.2	1.7	2.1	2.6	3.0	3.5	3.9	4.4	4.8	5.3	5.7	6.2	6.6	7.1	7.5	8.0	8.4	8.9
	30	0.3	1.0	1.6	2.2	2.8	3.4	4.1	4.7	5.3	5.9	6.5	7.1	7.7	8.3	8.9	9.5	10.1	10.7	11.3	12.0
	36	0.3	1.3	2.0	2.8	3.6	4.3	5.1	5.8	6.6	7.4	8.1	8.9	9.6	10.4	11.2	11.9	12.7	13.4	14.2	15.0
	42	0.4	1.5	2.4	3.3	4.2	5.1	6.0	6.9	7.8	8.7	9.7	10.6	11.5	12.4	13.3	14.2	15.1	16.0	16.9	17.8
	48	0.4	1.7	2.8	3.8	4.9	5.9	7.0	8.0	9.1	10.1	11.2	12.2	13.3	14.3	15.4	16.4	17.5	18.5	19.6	20.6
	54	0.5	2.0	3.1	4.3	5.5	6.7	7.9	9.0	10.2	11.4	12.6	13.7	14.9	16.1	17.3	18.5	19.6	20.8	22.0	23.2
	60	0.6	2.2	3.6	4.9	6.2	7.6	8.9	10.2	11.6	12.9	14.2	15.6	16.9	18.2	19.6	20.9	22.2	23.6	24.9	26.2
	66	0.6	2.5	4.0	5.5	6.9	8.4	9.9	11.4	12.9	14.4	15.9	17.4	18.9	20.3	21.8	23.3	24.8	26.3	27.8	29.3
	72	0.7	2.7	4.4	6.0	7.6	9.3	10.9	12.6	14.2	15.8	17.5	19.1	20.7	22.4	24.0	25.7	27.3	28.9	30.6	32.2
	78	0.7	3.0	4.8	6.5	8.3	10.1	11.9	13.7	15.4	17.2	19.0	20.8	22.6	24.3	26.1	27.9	29.7	31.5	33.3	35.0
84	0.8	3.3	5.2	7.2	9.1	11.1	13.0	15.0	16.9	18.9	20.9	22.8	24.8	26.7	28.7	30.6	32.6	34.5	36.5	38.4	
90	0.9	3.4	5.5	7.5	9.6	11.7	13.7	15.8	17.8	19.9	22.0	24.0	26.1	28.1	30.2	32.2	34.3	36.4	38.4	40.5	
96	0.9	3.7	5.9	8.1	10.3	12.5	14.8	17.0	19.2	21.4	23.6	25.8	28.0	30.3	32.5	34.7	36.9	39.1	41.3	43.5	
102	1.0	3.9	6.3	8.7	11.1	13.4	15.8	18.2	20.5	22.9	25.3	27.6	30.0	32.4	34.7	37.1	39.5	41.9	44.2	46.6	
108	1.0	4.2	6.7	9.2	11.7	14.2	16.8	19.3	21.8	24.3	26.8	29.3	31.8	34.4	36.9	39.4	41.9	44.4	46.9	49.5	
114	1.1	4.4	7.1	9.7	12.4	15.1	17.7	20.4	23.0	25.7	28.4	31.0	33.7	36.3	39.0	41.6	44.3	47.0	49.6	52.3	
120	1.2	4.6	7.4	10.2	13.0	15.8	18.6	21.3	24.1	26.9	29.7	32.5	35.3	38.0	40.8	43.6	46.4	49.2	52.0	54.7	



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Pressure Loss
(Data corrected to standard air density)



Pressure loss tested in accordance with Figure 5.5 of AMCA Standard 500-L

Water Penetration

AMCA defines the beginning point of water penetration as the free area velocity at the intersection of a simple linear regression of test data and the line of 0.01 ounces of water per square foot of free area and is measured through a 48" x 48" louver during a 15 minute period. The AMCA water penetration test provides a method for comparing louver models and designs as to their efficiency in resisting the penetration of rainfall under specific lab conditions. All-Lite recommends that intake louvers are selected with a reasonable margin of safety below the beginning point of water penetration in order to avoid unwanted penetration during severe storm conditions.

Wind Driven Rain Performance — AMCA 500-L Wind Driven Rain Test

Test louver Core Area₁ is 39 3/8" x 39 3/8".

Wind Velocity	Rainfall	Airflow	Core Velocity	Effectiveness Ratio	Wind Class ₂	Discharge Class ₃
29 mph	3 in/hr	8473 cfm	787 fpm	99%	A	2
50 mph	8 in/hr	7441 cfm	691 fpm	99.4%	A	2

Wind Driven Rain ₂		Discharge Loss ₃	
Class	Effectiveness	Class	Coefficient
A	1.000 to 0.99	1	0.4 to 1.000
B	0.989 to 0.95	2	0.3 to 0.399
C	0.949 to 0.80	3	0.2 to 0.299
D	0.799 to 0.00	4	0.0 to 0.199

NOTES 1. Core Area is the open area of the louver face (face area less louver frame). 2. Wind Driven Rain Penetration Classes. 3. Discharge Loss Coefficient is calculated by dividing the louvers' actual airflow rate by the theoretical airflow rate for an unobstructed opening. The higher the coefficient the lower the resistance to air flow.

Information is subject to change without notice or obligation.

NOTE: Dimensions in parentheses () are millimeters.