ALL-LITE

ECD-745

Extruded Aluminum Louver 7" deep • 45° Horizontal Drainable Blade

The ECD-745 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-745 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:** 7" deep \times 0.081" thick (178 \times 2) channel

Blades: $45^{\circ} \times 0.081$ " (2) thick horizontal drainable style

Screen: $1/2" \times 0.063" (12.7 \times 1.6)$ expanded and

flattened aluminum

Minimum Size: $4.5" \times 6.5" (114 \times 165)$

Maximum Size:

Single section: $60" \times 120" (1524 \times 3048)$ $120" \times 60" (3048 \times 1524)$

Multiple section: Unlimited

Shipping Weight (approximate): 8 lbs/ft² (39 kg/m²)

Options

■ Factory finish:

■ High Performance Fluoropolymer ■ Prime Coat

Baked Enamel
 Clear Anodize
 Integral Color Anodize

■ Frame Options:

1-1/2" (38) flange frame
Custom-size flange

Stucco flangeGlazing frame

■ Installation Hardware

Clip angles
 Continuous angles

■ Alternate bird or insect screens

■ Insulated or non-insulated blank-off panels

■ Hidden vertical mullion

■ Filter racks

Hinged frame

Subframe

■ Head and/or sill flashing

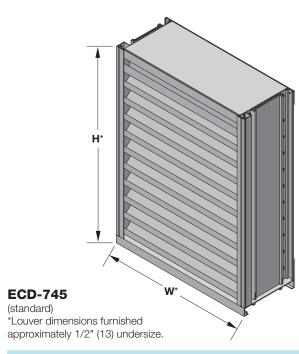
■ Frame closure

Burglar bars

■ Net OD (actual size)



amca International www.amca.org



Ratings

Free Area: $[48" \times 48" (1219 \times 1219) \text{ unit}]: 8.1 \text{ ft}^2 (0.75\text{m}^2)$

50.6%

Performance @ Beginning Point of Water Penetration

Free Area Velocity: 1,218 fpm (6.19 m/s)

Air Volume Delivered: 9,866 cfm (4.66 m³/s)

Pressure Loss: 0.57 in.wg. (141 Pa)

Velocity @ 0.15 in.wg. Pressure Loss: 631 fpm (3.21 m/s)

Design Load: 30 psf





Certified Ratings:

All-Lite certifies that the model ECD-745 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.

NOTE: Dimensions in parentheses () are millimeters. Information is subject to change without notice or obligation.

PERFORMANCE

ECD-745

Extruded Aluminum Louver 7" deep • 45° Horizontal Drainable Blade

Free Area (ft²)

Height (Inches)

84

90

96

102

108

114

120

8.0

0.9

0.9

1.0

1.0

1.1

1.2

3.2

3.5

3.7

4.0

4.2

4.4

4.7

5.2

5.5

5.9

6.3

6.7

7.1

7.5

7.1

7.6

8.2

8.7

9.2

9.8

10.3

9.0

9.7

10.4

11.1

11.8

12.4

13.1

10.9

11.8

12.6

13.4

14.3

15.1

15.9

12.9

13.9

14.8

15.8

16.8

17.8

18.7

14.8

15.9

17.1

18.2

19.3

20.4

21.6

16.7

18.0

19.3

20.6

21.8

23.1

Width (Inches)

	4.5	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
6	0.01	0.04	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5
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	8.0	1.2	1.5	1.8	2.1	2.4	2.8	3.1	3.4	3.7	4.0	4.3	4.7	5.0	5.3	5.6	5.9	6.3
24	0.2	0.8	1.2	1.7	2.2	2.6	3.1	3.6	4.0	4.5	5.0	5.4	5.9	6.3	6.8	7.3	7.7	8.2	8.7	9.1
30	0.3	1.0	1.6	2.2	2.9	3.5	4.1	4.7	5.3	5.9	6.5	7.1	7.7	8.4	9.0	9.6	10.2	10.8	11.4	12.0
36	0.3	1.3	2.0	2.8	3.5	4.3	5.1	5.8	6.6	7.3	8.1	8.8	9.6	10.4	11.1	11.9	12.6	13.4	14.1	14.9
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	1.8	2.8	3.9	4.9	6.0	7.0	8.1	9.1	10.2	11.2	12.3	13.3	14.4	15.4	16.5	17.5	18.6	19.6	20.7
54	0.5	2.0	3.2	4.4	5.6	6.8	8.0	9.2	10.4	11.6	12.8	14.0	15.2	16.4	17.6	18.8	20.0	21.2	22.4	23.6
60	0.6	2.2	3.6	4.9	6.3	7.6	9.0	10.3	11.7	13.0	14.3	15.7	17.0	18.4	19.7	21.1	22.4	23.8	25.1	26.4
66	0.6	2.5	4.0	5.5	7.0	8.5	9.9	11.4	12.9	14.4										
72	0.7	2.7	4.4	6.0	7.6	9.3	10.9	12.6	14.2	15.8										
78	0.7	3.0	4.8	6.5	8.3	10.1	11.9	13.7	15.5	17.3										

18.7

20.1

21.5

22.9

24.3

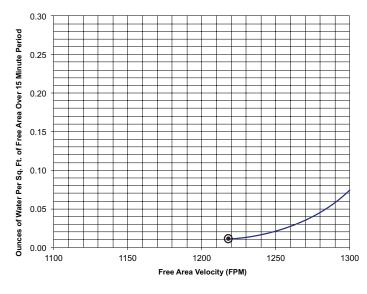
25.8

27.2

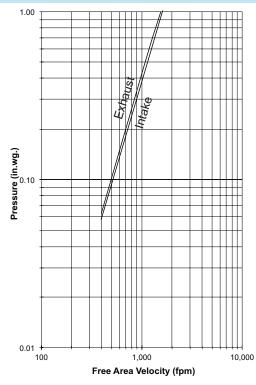
Water Penetration

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 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. We recommend 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.

Beginning Point of Water Penetration = 1,218 fpm



Pressure Loss



Louver Test Size = 48" x 48" (1219 x 1219)

Pressure loss tested in accordance with Figure 5.5 of AMCA

Standard 500-L. Data corrected to standard air density.

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

Wind Velocity	Rainfall	Airflow cfm (m³/s)	Core Velocity ¹ fpm (m/s)	Free Area Velocity ² fpm (m/s)	Effectiveness Ratio	Wind-Driven Rain Penetration Class
29 mph	3 in/hr	6,260 (3.0)	581 (3.0)	1,054 (5.4)	99.6%	А
50 mph	8 in/hr	5,312 (2.5)	493 (2.5)	894 (4.5)	99.2%	А

NOTE

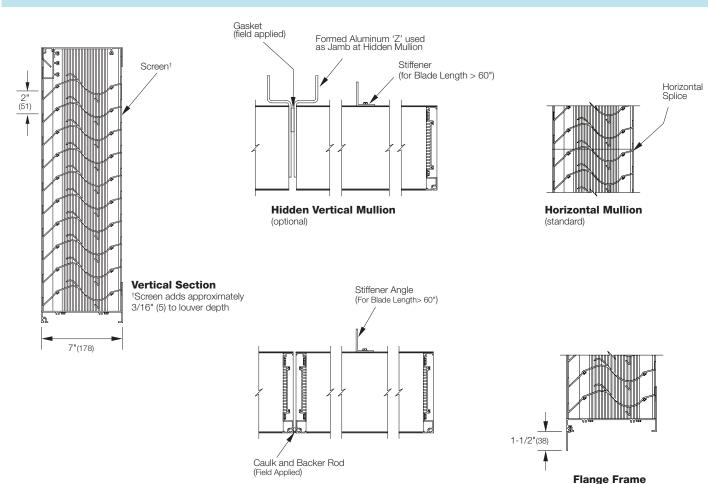
1. Core area is the open area of the louver face (face area less louver frame). Core velocity is the airflow divided by core area. Test louver core area is $10.77~\rm{ft}^2~(1~m^2)$.

2. Free area velocity is the airflow divided by free area. Test louver free area is 5.9 ft² (0.55 m²).

Wind Driven Rain

Class	Effectiveness
Α	99% and above
В	95% to 98.9%
С	80% to 94.9%
D	below 80%

Attributes



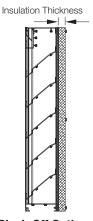
Visible Vertical Mullion

(standard)

(optional)

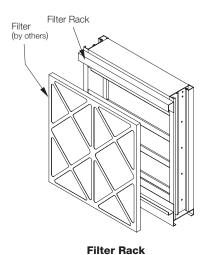
Supplemental Options

7" deep • 45° Horizontal Drainable Blade

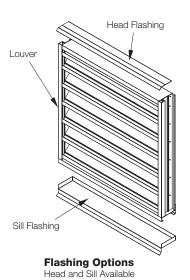


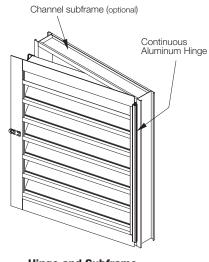
Blank-Off Options

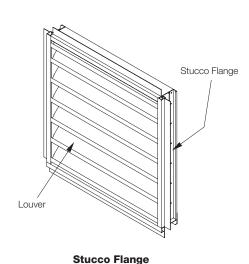
Non-Insulated and Gasketed 1" Insulated (4.25 R-value) 2" Insulated (8.75 R-value)



Window/ Curtainwall System (by others) Glazing Frame **Glazing Frame**







Hinge and Subframe

Right or Left Side Option Available