POTTORFF°

ECD-545

5" deep • 45° Horizontal Drainable Blade

The ECD-545 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-545 incorporates horizontal blades and is available in a wide array of anodized and painted finishes including custom color matching.



Material: Mill finish 6063-T5 extruded aluminum **Frame:** 5" deep \times 0.081" thick (127 \times 2) channel

Blades: $45^{\circ} \times 063^{\circ}$ (1.6) thick horizontal chevron style **Screen:** $1/2^{\circ} \times 0.063^{\circ}$ (12.7 × 1.6) expanded and

flattened aluminum

Minimum Size: $4.5" \times 5" (114 \times 127)$

Maximum Size:

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

120" × 60" (3048 × 1524)

Multiple section: Unlimited

Options

■ Factory finish:

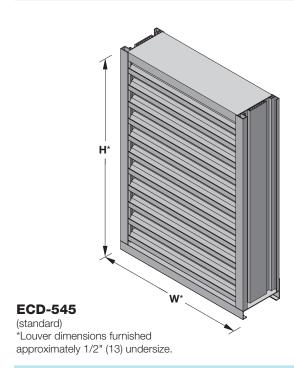
- High Performance Fluoropolymer
 Prime Coat
- Baked Enamel
 Clear Anodize
 Integral Color Anodize

■ Frame Options:

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

■ Installation Hardware

- Clip anglesContinuous 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
- Burglar bars
- Frame closure
- Net OD (actual size)



Ratings

Free Area: $[48" \times 48" (1219 \times 1219) \text{ unit}]: 7.4 \text{ ft}^2 (0.69\text{m}^2)$

46.3%

Performance @ Beginning Point of Water Penetration

Free Area Velocity: Above 1,250 fpm (6.35 m/s) **Air Volume Delivered:** Above 9,250 cfm (4.37 m³/s)

Pressure Loss: 0.24 in.wg. (60 Pa)

Velocity @ 0.15 in.wg. Pressure Loss: 980 fpm (4.98 m/s)

Design Load: 30 psf





Certified Ratings:

Pottorff certifies that the model ECD-545 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-545

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Free Area (ft²)

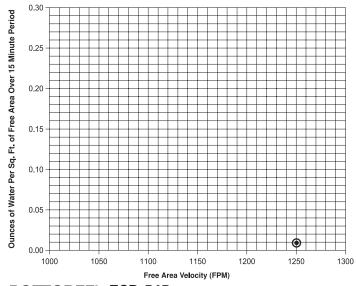
Width (Inches)

	4.5	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
7	0.02	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7
12	0.1	0.3	0.5	0.7	0.8	1.0	1.2	1.4	1.6	1.8	1.9	2.1	2.3	2.5	2.7	2.8	3.0	3.2	3.4	3.6
18	0.1	0.5	0.8	1.1	1.5	1.8	2.1	2.4	2.7	3.0	3.3	3.6	3.9	4.2	4.6	4.9	5.2	5.5	5.8	6.1
24	0.2	0.7	1.2	1.6	2.1	2.5	2.9	3.4	3.8	4.3	4.7	5.1	5.6	6.0	6.5	6.9	7.3	7.8	8.2	8.7
30	0.2	0.9	1.5	2.1	2.7	3.2	3.8	4.4	4.9	5.5	6.1	6.6	7.2	7.8	8.4	8.9	9.5	10.1	10.6	11.2
36	0.3	1.2	1.9	2.6	3.3	4.0	4.7	5.4	6.1	6.8	7.5	8.2	8.9	9.6	10.3	10.9	11.6	12.3	13.0	13.7
42	0.3	1.4	2.2	3.0	3.9	4.7	5.5	6.4	7.2	8.0	8.8	9.7	10.5	11.3	12.1	13.0	13.8	14.6	15.5	16.3
48	0.4	1.6	2.6	3.5	4.5	5.4	6.4	7.4	8.3	9.3	10.2	11.2	12.1	13.1	14.0	15.0	16.0	16.9	17.9	18.8
54	0.5	1.8	2.9	4.0	5.1	6.2	7.2	8.3	9.4	10.5	11.6	12.7	13.8	14.9	15.9	17.0	18.1	19.2	20.3	21.4
60	0.5	2.0	3.2	4.5	5.7	6.9	8.1	9.3	10.5	11.8	13.0	14.2	15.4	16.6	17.8	19.1	20.3	21.5	22.7	23.9
66	0.6	2.2	3.6	4.9	6.3	7.6	9.0	10.3	11.7	13.0	14.4	15.7	17.0	18.4	19.7	21.1	22.4	23.8	25.1	26.5
72	0.6	2.5	3.9	5.4	6.9	8.4	9.8	11.3	12.8	14.3	15.7	17.2	18.7	20.2	21.6	23.1	24.6	26.1	27.5	29.0
78	0.7	2.7	4.3	5.9	7.5	9.1	10.7	12.3	13.9	15.5	17.1	18.7	20.3	21.9	23.5	25.1	26.7	28.3	30.0	31.6
84	0.7	2.9	4.6	6.4	8.1	9.8	11.6	13.3	15.0	16.8	18.5	20.2	22.0	23.7	25.4	27.2	28.9	30.6	32.4	34.1
90	0.8	3.1	5.0	6.8	8.7	10.6	12.4	14.3	16.1	18.0	19.9	21.7	23.6	25.5	27.3	29.2	31.1	32.9	34.8	36.6
96	0.8	3.3	5.3	7.3	9.3	11.3	13.3	15.3	17.3	19.3	21.3	23.2	25.2	27.2	29.2	31.2	33.2	35.2	37.2	39.2
102	0.9	3.5	5.7	7.8	9.9	12.0	14.1	16.3	18.4	20.5	22.6	24.8	26.9	29.0	31.1	33.2	35.4	37.5	39.6	41.7
108	0.9	3.8	6.0	8.3	10.5	12.8	15.0	17.3	19.5	21.8	24.0	26.3	28.5	30.8	33.0	35.3	37.5	39.8	42.0	44.3
114	1.0	4.0	6.3	8.7	11.1	13.5	15.9	18.3	20.6	23.0	25.4	27.8	30.2	32.5	34.9	37.3	39.7	42.1	44.4	46.8
120	1.0	4.2	6.7	9.2	11.7	14.2	16.7	19.2	21.8	24.3	26.8	29.3	31.8	34.3	36.8	39.3	41.8	44.3	46.9	49.4

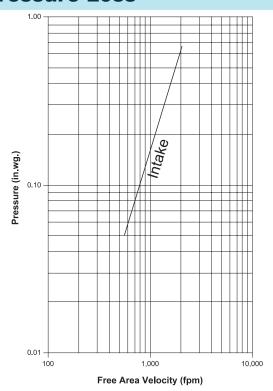
Water Penetration

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" \times 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 = Above 1,250 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	9,276 (4.4)	862 (4.4)	1,727 (8.8)	99.4%	А
50 mph	8 in/hr	10,502 (5.0)	975 (5.0)	1,956 (9.9)	95.3%	В

NOTE

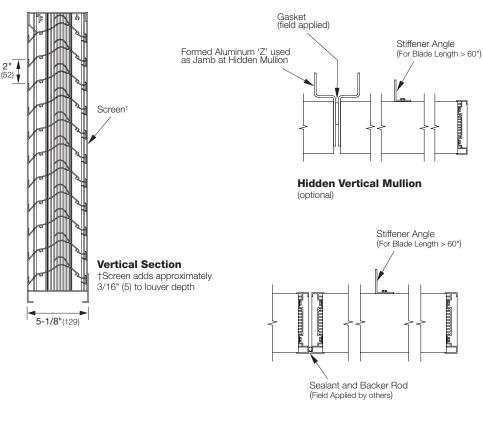
1. Core area is the open area of the louver face (face area less louver frame). Core velocity is the airflow divided by core area. Test louver core area is $10.77~{\rm ft^2}~(1~{\rm m^2})$.

2. Free area velocity is the airflow divided by free area. Test louver free area is 5.4 ft² (0.5 m²).

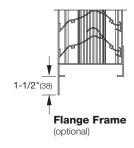
Wind Driven Rain

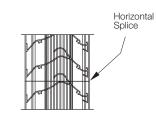
Class	Effectiveness
Α	99% and above
В	95% to 98.9%
С	80% to 94.9%
D	below 80%

Attributes



Visible Vertical Mullion (standard)



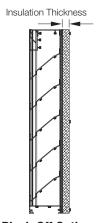


Horizontal Mullion (standard)

ECD-545

Extruded Aluminum Louver 5" deep • 45° Horizontal Drainable Blade

Supplemental Options



Blank-Off Options

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

