The ECD-545-MD is engineered and tested to withstand extreme loads, debris impact, and cyclic fatigue associated with the severe weather effects of hurricanes (Miami-Dade County approval #220131.03). When combined with the optional factory-attached CD-51 damper in the closed position, the ECD-545-MD also protects against high-velocity wind-driven rain per AMCA 550 and TAS 100A. For installation, the ECD-545-MD is available either with standard continuous angles or with an optional factory installed sleeve which eliminates the need for direct anchorage to the substrate. The ECD-545-MD is AMCA 540 listed, making it ideally suited for use in hurricane-prone and wind borne debris regions per the International Building Code.

**Standard Construction**

**Material:** Mill finish 6063-T5 extruded aluminum

**Frame:** 5" deep × 0.125" thick (127 × 3) channel

**Blades:** 45° × 0.063" (1.6) thick horizontal chevron style

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

**Mullion:** Visible

**Minimum Size:** 6" × 6" (152 × 152)

12" × 14" (305 × 356) with CD-51 option

**Maximum Size:**

Single section:

- 60" × 144" (1524 × 3658)
- or 72" × 120" (1829 × 3048)

Multiple section:

- Unlimited width × 144" (3658)
- or 72" (1829) × unlimited height

**Installation Hardware:** Standard continuous angles and associated fasteners (anchors to substrate by others - refer to installation instructions)

**Options**

- **Full Sleeve and Retaining Angles** (eliminates need for anchors to substrate; 1-1/2" (38) flange frame required)

- **Factory finish:**
  - High Performance Fluoropolymer
  - Prime Coat
  - Baked Enamel
  - Clear Anodize
  - Integral Color Anodize

- **Frame Options:**
  - 1-1/2" (38) flange frame

- **Alternate bird or insect screens**

- **Insulated or non-insulated blank-off panels**

- **Filter racks**

- **Head and/or sill flashing**

- **Burglar bars**

- **CD-51 Damper**
**PERFORMANCE**

**ECD-545-MD**

Extruded Aluminum Louver

5” deep • 45° Horizontal Drainable Blade

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**Certified Ratings:**

Pottorff certifies that the model ECD-545-MD 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.

**HIGH VELOCITY RAIN RESISTANT WITH BLADES FULLY CLOSED AND IMPACT RESISTANT LOUVER Enhanced Protection Level E**

(See www.amca.org for certified or listed products.)

**Certified Ratings:**

Pottorff certifies that the model ECD-545-MD shown herein is approved to bear the AMCA listing label. The ratings shown are based on tests and procedures performed in accordance with AMCA publications and comply with the requirements of the AMCA listing label program. The AMCA listing label applies to high velocity rain and impact resistance.

---

**Free Area (ft²)**

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PERFORMANCE

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

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<tr>
<th>Wind Velocity</th>
<th>Rainfall</th>
<th>Airflow</th>
<th>Core Velocity¹</th>
<th>Effectiveness Ratio</th>
<th>Wind-Driven Rain Penetration Class</th>
<th>Discharge Loss Class²</th>
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<tr>
<td>29 mph</td>
<td>3 in/hr</td>
<td>7,361 cfm</td>
<td>684 fpm</td>
<td>99.4%</td>
<td>A</td>
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<tr>
<td>50 mph</td>
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<td>8,478 cfm</td>
<td>787 fpm</td>
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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 ft² (1 m²).
2. Discharge Loss Coefficient is calculated by dividing the louver's actual airflow rate by the theoretical airflow rate for an unobstructed opening. The higher the coefficient, the lower the resistance to airflow.

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 = 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.
Attributes

Vertical Section
†Screen adds approximately 3/16" (5) to louver depth

Visible Vertical Mullion
(standard)

Flange Frame
(optional)

Sleeve
(optional)

Supplemental Options

Insulation Thickness

Burglar Bars

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

Burglar Bars
Shipped Loose or Mounted

Filter Rack

Filter Rack
(by others)

Flashing Options
Head and Sill Available

Sill Flashing