

## PROFILE 1.2E-D-EC-M Series

Energy Recovery Ventilator (ERV)



\* This product earned the ENERGY STAR® by meeting strict efficiency guidelines set by Natural Resources Canada and the US EPA. It meets ENERGY STAR® requirements only when used in Canada.

PROFILE 1.2E-D-EC-M part # – 499510  
PROFILE 1.2E-D-EC-M-HC part # – 499516

PROFILE 1.2 E - D - EC - M - HC  
Product Name Approximately 120 CFM @ 0.4 in. w.g. Energy Recovery Damper Electronically Commutated Mirrored Hard Connect

These ERVs are specifically designed for multi-family applications with a mirrored floor plan. They can be programmed to supply balanced ventilation continuously or intermittently. Powered by EC motors, this product line includes code-compliant solutions and damper solutions to stop the free-flow of unconditioned, outdoor air.

### Features

- Electronically commutated (EC) motors
- Mechanical shutoff damper
- Warm supply and return air on the left-hand side
- Hard-connect system, no power cord provided (-HC products)
- No drain required
- Easy to install on ceiling or wall with mounting bracket included
- Energy recovery core (washable)
- Electrostatic filters (washable)
- Removable screw terminal for easy connection with external access
- Multiple speed operation

### Specifications

- Duct size – 5 in. (125 mm) round
- Voltage/Phase – 120/1
- Rated power – 74W
- Maximum amperage – 2.3 A
- Average airflow – 129 CFM (61 L/s) @ 0.4 in. w.g. (100Pa)
- Weight – 35 lbs (16 kg) including core

### Requirements and standards

- UL 1812
- CSA C22.2 no. 113
- CSA F326
- Technical data was obtained from published results of test relating to CSA C439 Standards
- HVI and ENERGY STAR® certified\*

### Fans

Two (2) electronically commutated motors. EC motors use intelligent technology to reduce energy usage that results in lower operating costs, less maintenance over the lifetime of the unit, and increased longevity of the motor.

### Energy Recovery Core

Energy recovery core made from water vapor transport durable polymer membrane that is highly permeable to humidity. The ERV core is cold climate tested and ready, water washable, and is resistant to mold and bacteria. Core dimensions are 12 in. x 12 in. (305 x 305 mm.) with a 1/8 in. (207 mm.) depth.

### Frost Prevention

A preset frost prevention sequence is activated at an outdoor air temperature of 14°F (-10°C) and lower. During the sequence, the supply blower shuts down, the mechanical shutoff damper closes & the exhaust blower switches into high speed to maximize the effectiveness of the frost prevention strategy. The unit then returns to normal operation, and continues the cycle.

### Serviceability

Core, filters, fans and electronic panel can be accessed easily. Core conveniently slides out with only 8 1/2 in. (216 mm.) clearance. Only needs 2 3/8 in. (61 mm.) above the electrical box to do the wire connections.

### Duct Connections

5 in. (125 mm.) round metal duct connections with rubberized seal.

### Case

22 gauge galvanized steel cabinet with a pre-painted steel corrosion resistant door.

### Insulation

Insulated with 3/4 in. (20 mm.) high density expanded polystyrene.

### Filters

Two (2), MERV 3, UL900 certified, washable electrostatic panel type air filters 11 5/16 in. (287 mm.) x 8 1/8 in. (207 mm.) x 1/8 in. (3 mm.)

### Compatible Controls

Compatible with all Greentek controls.

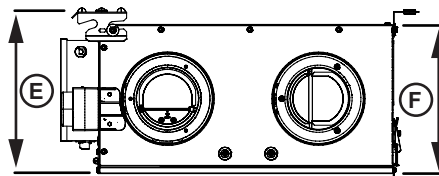
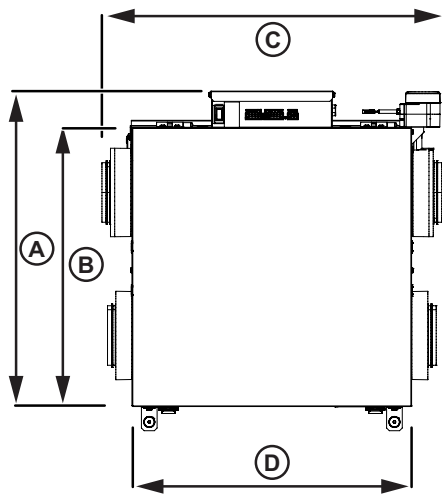
### Installation

This appliance is typically mounted on the ceiling or wall using the included mounting bracket.

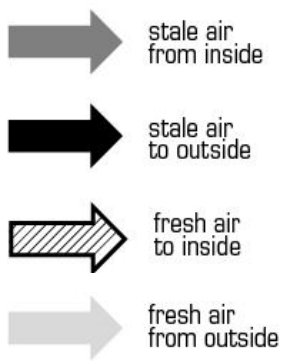
### Limited Warranty

7 years on the motor, 5 years on the electrical components and the core.

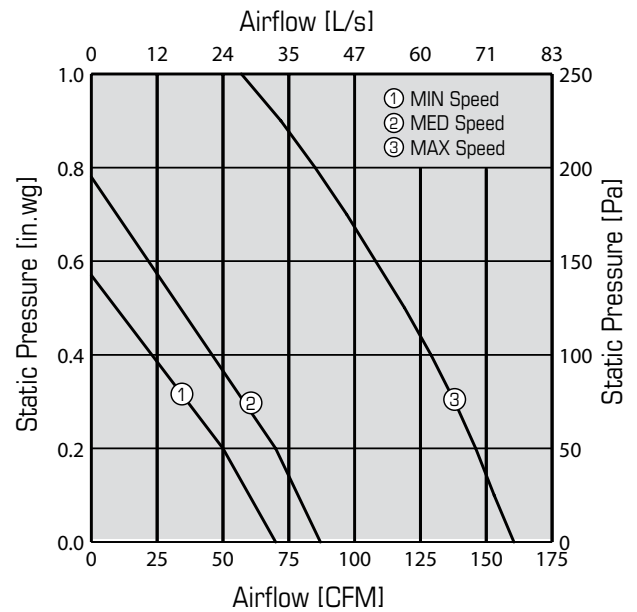
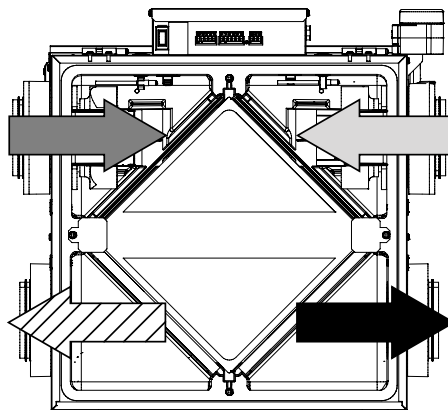
## Dimensions & Airflow



| A       |     | B      |     | C  |     | D        |     | E       |     | F     |     | ØD |     |
|---------|-----|--------|-----|----|-----|----------|-----|---------|-----|-------|-----|----|-----|
| in      | mm  | in     | mm  | in | mm  | in       | mm  | in      | mm  | in    | mm  | in | mm  |
| 23 5/32 | 588 | 20 3/4 | 527 | 25 | 636 | 20 27/32 | 529 | 10 1/16 | 255 | 9 1/4 | 235 | 5  | 125 |



Mirrored ERV Airflow



## Ventilation Performance

| in. w.g. (Pa)         | 0.1 (25)  | 0.2 (50)  | 0.3 (75)  | 0.4 (100) | 0.5 (125) | 0.6 (150) | 0.7 (175) | 0.8 (200) |
|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|                       | CFM (L/s) | CFM (L/s) | CFM (L/s) | CFM (L/s) | CFM (L/s) | CFM (L/s) | CFM (L/s) | CFM (L/s) |
| Net supply airflow    | 153 (72)  | 146 (69)  | 138 (65)  | 129 (61)  | 119 (56)  | 108 (51)  | 97 (46)   | 85 (40)   |
| Gross supply airflow  | 157 (74)  | 150 (71)  | 142 (67)  | 133 (63)  | 123 (58)  | 112 (53)  | 100 (47)  | 89 (42)   |
| Gross exhaust airflow | 157 (74)  | 148 (70)  | 140 (66)  | 129 (61)  | 119 (56)  | 108 (51)  | 95 (45)   | 83 (39)   |

## Energy performance

|         | Supply temperature |     | Net airflow |     | Consumed power | Fan efficacy | Sensible recovery efficiency | Adjusted sensible recovery efficiency | Latent recovery/moisture transfer |
|---------|--------------------|-----|-------------|-----|----------------|--------------|------------------------------|---------------------------------------|-----------------------------------|
|         | °F                 | °C  | CFM         | L/s | W              | CFM/W        | %                            | %                                     | %                                 |
| Heating | 32                 | 0   | 51          | 24  | 23             | 2.2          | 77                           | 80                                    | 74                                |
|         | 32                 | 0   | 70          | 33  | 28             | 2.5          | 71                           | 74                                    | 70                                |
|         | 32                 | 0   | 125         | 59  | 62             | 2.0          | 64                           | 67                                    | 61                                |
|         | -13                | -25 | 51          | 24  | 24             | 2.1          | 61                           | 62                                    | 53                                |
|         | Supply temperature |     | Net Airflow |     | Consumed power | Fan efficacy | Total recovery efficiency    | Adjusted total recovery efficiency    | Latent recovery/moisture transfer |
|         | °F                 | °C  | CFM         | L/s | W              | CFM/W        | %                            | %                                     | %                                 |
| Cooling | 95                 | 35  | 51          | 24  | 22             | 2.3          | 70                           | 72                                    | 70                                |

## Contacts

|               |             |
|---------------|-------------|
| Submitted by: | Date:       |
| Quantity:     | Model:      |
| Comments:     | Project #:  |
| Location:     |             |
| Architect:    |             |
| Engineer:     | Contractor: |

## Distributed by:

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