



LIGHT COMMERCIAL E1800-Fi & E1800-Ri Energy Recovery Ventilator

PRODUCT
SPECIFICATIONS
& TECHNICAL
DATA



E1800-Fi & E1800-Ri

The E1800 ventilator provides high-efficiency energy recovery. The unit uses a polymeric membrane core that can withstand a wide range of environmental conditions. The E1800 produces approximately **1800 CFM** at 0.20 in.w.g (ESP). It is powerful enough for restaurants, offices, and other small businesses.

The E1800 is ideal for cold-weather applications. The E1800-Fi shuts down the fan for the outdoor air supply during defrost cycles, while the E1800-Ri uses a fifth port with a motorized damper to defrost the core with recirculated warm air from inside the building.

FEATURES

- Plate-type polymeric membrane cores
- Quiet operation
- Multiple filter options
- Efficient and economical operation
- Indoor application

CASING

Material: Painted galvanized steel 22GA
Insulation: 1"(25 mm) Fiberglass with FSK
Drain Connection: Ø 1/2" (Ø 13 mm)
Duct Connections: 24" x 8" (610 mm x 203 mm)
Width: 45-5/8" (1158 mm)
Height: 29-5/8" (753 mm)
Depth: 48-7/8" (1242 mm)
Unit Weight: 230 lbs (105 kg); 243 lbs (110 kg) with recirculation
Shipping Weight: 297 lbs (135 kg)
310 lbs (141 kg) with recirculation

PLATE EXCHANGER

Standard: Polymeric Membrane
(sensible and latent heat transfer)

Quantity: 3
Pitch: 0.13" (3.3 mm)
Dimensions: 16.34" x 16.34" x 15.67"
(415 mm x 415 mm x 398 mm)



MOUNTING

Supplied with base rails. Support rod by others.

BLOWERS

Quantity: 4

Type: Backward-inclined motorized impeller, direct-drive PSC, variable speed, external rotor

FILTERS

Number: 6

Type: Aluminum (P/N: 612414)

Optional: MERV 8 (P/N: 612411), Carbon (P/N: 612413), or High Efficiency/MERV13 Equivalent (P/N: 612412)

Additional Air Pressure Drop with Optional Filters				
Filter Type	Airflow CFM (m³/h)			
	600 (1020)	1000 (1700)	1400 (2380)	1800 (3060)
MERV 8	0.04	0.08	0.15	0.22
Carbon	0.04	0.08	0.15	0.22
High Efficiency	0.22	0.35	0.48	0.63

ELECTRICAL REQUIREMENTS

120 VAC, 60 Hz, 14 A, 1680 W
20A breaker required

FROST CONTROL

Cycles controlled by a temperature sensor when outdoor temperatures fall below 14°F (-10°C).

- Standard: Exhaust Defrost (E1800-Fi)
- Optional: Recirculation Defrost (E1800-Ri)

CONTROLS

24 VAC, 10 VA output for supply and exhaust dampers
Low-voltage dry contact (24 VAC, 20 VA) for:

- Occupancy Control (start/stop)
- Fan Interlock (NO and NC)
- Speed Selection
- Exhaust/Recirculation (with E1800-Ri)

Compatible With:

- Digital Multifunction Control (P/N: 611242)
- Mode Control (exchange or recirculation) (P/N: 611230)
- Humidity Control (P/N: 611224)
- Speed Control (Low/Intermittent/High) (P/N: 611229)
- 20/40/60 Minute Timer (P/N: 611228)

WARRANTY

Core Assembly: Limited 3-year warranty

All Other Covered Components: Limited 2-year warranty

APPROVALS

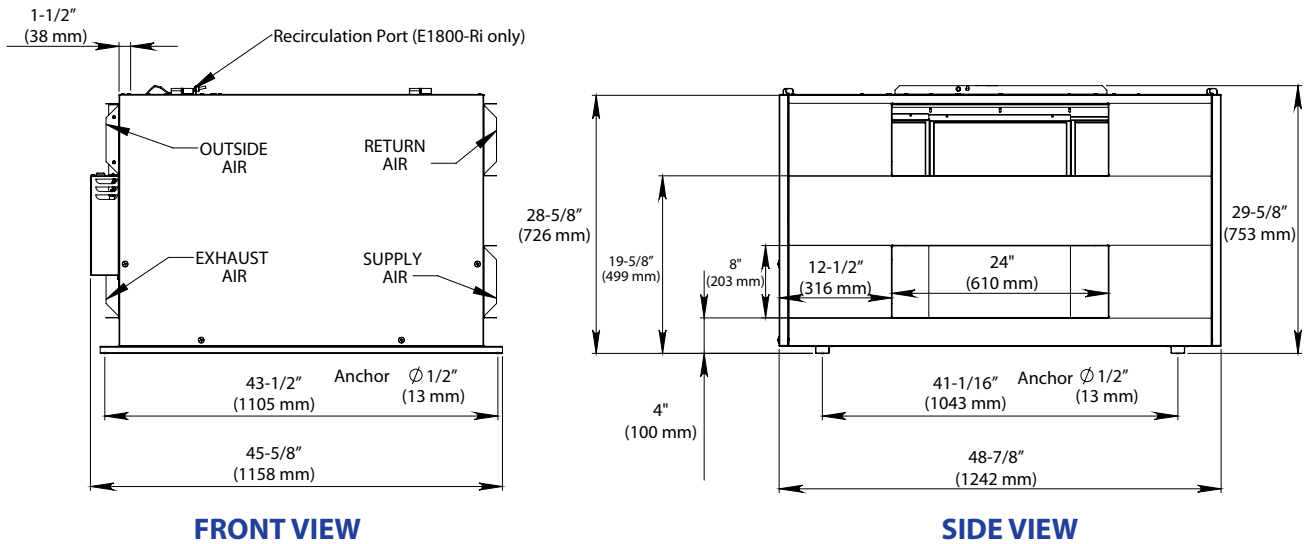
Meets Standards:

- UL 1812 and C22.2 no113

Listed:

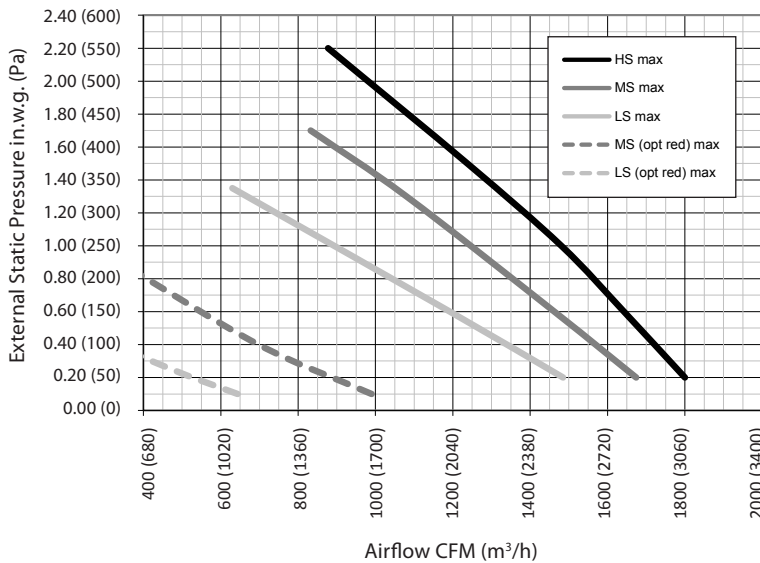


Dimensions

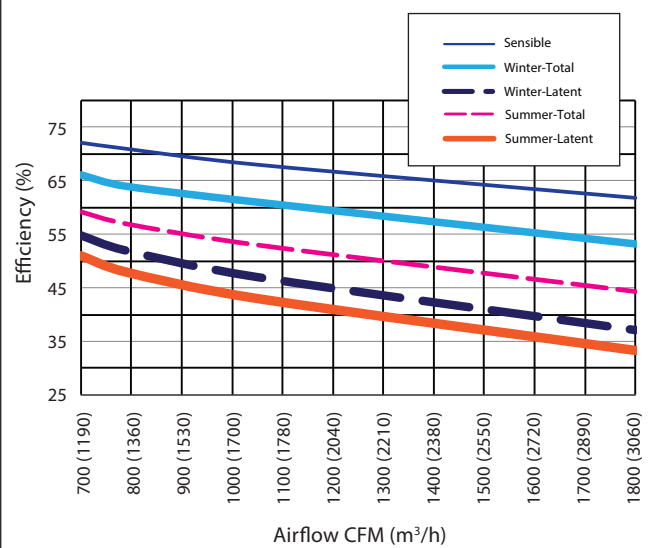


Performance

**E1800-Fi & E1800-Ri
Ventilation Performance**



**E1800-Fi & E1800-Ri
Efficiency**



Project:		Architect:	
Location:		Engineer:	
Model #:		Contractor:	
Quantity:		Comments:	
Submitted By:			
Date:			

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