

FIT® 120E

Energy Recovery Ventilator

Part I – General

Product Specification

- Energy recovery ventilator shall be manufactured by “Fantech” or an approved equal provided all specifications are met. Fantech ERV residential series shall be used as the basis of design.

Requirements

- Unit shall comply with the UL 1812 requirements regulating the construction and installation of Heat Recovery Ventilators.
- Complies with the CSA C22.2 no. 113 Standard applicable to ventilators.
- Complies with the CSA F326 requirements regulating the installation of Heat Recovery Ventilators.
- Technical data was obtained from publishing results of test relating to CSA C439 Standards.
- The unit shall be HVI certified.

Part II – Product

Cabinet

- Cabinet shall be constructed of G90 galvanized, 24 gauge steel sheet. All seams shall be sealed, requiring no caulking at job site.
- Cabinet shall be insulated with 1 in. (25 mm) of foil-faced high density polystyrene foam and 0.25 in. (6 mm) of closed-cell foam on the top of the unit.
- Cabinet shall be of a height of 8.75" (222mm)

Energy Recovery Core

- The energy recovery core shall be manufactured from a flame rated polymer membrane which is designed to transfer sensible and latent energy. The flame spread index of the energy recovery core shall not be over 25 and its smoke developed index shall not be over 50 when tested in accordance with the Standard for Tests for Surface Burning Characteristics of Building Material, UL723.
- Energy recovery core features polymer membrane with ISO 846 certified antimicrobial protection.
- The energy recovery core shall be freeze tolerant and water washable.
- Energy recovery core shall be AHRI listed for performance.

Frost Prevention

- A preset frost prevention sequence is activated at an outdoor air temperature of 14°F (-10°C) and lower. During the frost prevention sequence, the supply blower shuts down and 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 cycle.

Electrical

- Electrical box shall be isolated from the airflows and all integral wires and connections protected.
- All internal electrical components shall be factory wired for single point power connection.
- All electrical components shall be UL Listed or Recognized and CSA Certified or Accepted where applicable and wired in compliance with the National Electrical Code.

Control

- Low-voltage remote controls connections.
- Field selectable Reduced or Normal speed continuous operation switch.

Fan Sections & Motors

- Fans shall be Ebm-Papst backward curved blades.
- Fan motor shall have maintenance-free permanently lubricated sealed ball bearings.
- Fan motor shall be UL listed to UL1004 and/or UL2111, CSA C22.2 No. 77 and No.100.
- Fan motor shall have IP protection class 44 according to IEC 60529
- Separate fans for exhaust and supply blowers shall be provided.

Filters

- Unit shall have Two (2) washable electrostatic panel type air filters. Exhaust air filter dimensions 11.2" (284mm) x 7" (176 mm) x 0.125" (3mm). Supply air filter dimensions 11.4" (289mm) x 7.7" (196 mm) x 0.125" (3mm).

Part III – Execution

Serviceability

- Unit shall have a metal hinged access panel with metal latches on the bottom of the unit.
- Core, filters and fans shall be serviceable from the bottom of the unit.
- Fan assemblies shall be mounted on a removable sliding base. Energy recovery core and filters shall be mounted in slide-out rails for ease of inspection, removal, and cleaning.
- Accessibility to the plugin connectors shall be maintained for any unit installation.

Installation

- Collar shall be provided for suitable ductwork connection.
- Unit shall be provided with ceiling-installed mounting bracket.
- Unit shall be adaptable for easy service of electrical components.
- Condensate drain connection is not required in usual residential applications.

Warranty

- Fantech ERV's have a warranty that is limited to 5 years on all parts, 5 years on energy recovery core and 7 years on the motors from the date of purchase, including parts replaced during this time period. If there is no proof of purchase available, the date associated with the serial number will be used for the beginning of the warranty period.