

## Energy Recovery Ventilator

# FV-10VEC2 Cold Climate ERV

## Specification Submittal Data / Panasonic ERV

#### **Description**

Ceiling or wall mount Cold Climate Energy Recovery Ventilator (ERV) provides a tempered air supply, humidity control, and a balanced amount of exhaust to help maintain balanced, positive or negative pressure throughout the home. The Panasonic Intelli-Balance ERV is engineered for use in any North America climate zone. Version 2 includes new Hi/Lo Occupant Controlled Boost Capability. Built-in ASHRAE 62.2 Timing function helps ensure code compliance.

#### Motor/Blower:

- ERV shall have Hi/Lo Speed Occupant Controlled Boost Capability
- Two (2) enclosed DC brushless motors rated for continuous run.
- ERV Supply and Exhaust ventilation rates shall be manually adjustable for 50-60-70-80-90-100 CFM.
- Power rating shall be 120 volts and 60 Hz.
- Motor equipped with thermal cut-off fuse control.
- Removable, permanently lubricated, plug-in motor.

#### **Housing:**

- 22 gauge galvanized steel body.
- Four 4" or 6" intake and exhaust ducts.
- Built in dampers on exhaust and Outdoor Air ducts for defrost and recirculation cycling.
- Filters on supply and exhaust air extend the life of the ERV core.
- (4) Pressure ports allow for easy airflow verification.
- Pre-drilled mounting bracket can accommodate 16", 19", or 24" on center.

#### Maintenance:

- MERV 8 filter included; MERV 8 (FVFL0810VE1) and optional MERV 13 (FVFL1310VE1) replacements available.
- Unobtrusive alarm notifies owner for filter check and maintenance.

## Warranty:

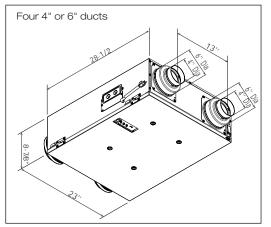
- DC Motors: 6 years from original purchase date
- All Parts: 3 Years from original purchase date.

#### **Architectural Specifications:**

ERV shall be ceiling or wall mount type with built-in speed selectors for both Supply and Exhaust air. Select from 50/60/70/80/90/100 CFM. ERV shall have 100 Net CFM on the exhaust ports and 98 Net CFM on the supply ports as tested in accordance with HVI 915 and 916 standards at 0.1 static pressure in inches water gauge. ERV shall have 100 Net CFM on the exhaust ports and Net 100 CFM on the supply ports at 0.4" w.g. static pressure. ERV shall have Hi/Lo Speed Occupant Controlled Boost Capability. Power consumption shall be no greater than 81 watts at 0.1" w.g. and 100 watts at 0.4" w.g. static pressure. Apparent Sensible Effectiveness for heating shall be no less than 84% at 53 CFM net air flow under 32°F (0°C) as tested in accordance with CSAC439. Sensible Recovery Efficiency for heating shall be no less than 64% at 57 CFM net air flow under 13°F (-25°C). Total Recovery Efficiency for cooling shall be no less than 60% at 49 CFM net air flow under 95°F (35°C). The supply port damper shall close when outdoor temperatures are < -13°F (-25°C) to prevent freezing of the core. The (2) motors shall be totally enclosed DC brushless motors rated for continuous run. DC motor speed shall automatically increase when the fan senses static pressure to maintain selected CFM. ERV shall incorporate an ASHRAE 62.2 Timing function for code compliance. Power rating shall be 120v/60Hz. Duct diameters shall be no less than 4". ERV can be used to comply with ASHRAE 62.2, Ontario, ENERGY STAR®\* and Novoclimat requirements; LEED, IAP, California Title-24, and WA Energy Code Credits.

#### **ERV Core Technology:**

- Indoor and outdoor air passes through Panasonic's capillary core technology. This process tempers supply air while transferring moisture and energy.
- Built in Frost Prevention Mode prevents the core from freezing. Frost Prevention Mode is intuitive and operates without homeowner intervention.
- Core material permeated with anti-mold treatment.



FV-10VEC2

Optional Exterior Wall Cap (see next page)



## **DC Motor Technology**

When the ERV senses static pressure, its speed is automatically increased to ensure that the desired CFM is not compromised.

For complete Installation Instructions visit us.panasonic.com/ventfans

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

**Panasonic Life Solutions Company of America** 

IAQ Division

Two Riverfront Plaza Newark, NJ 07102

us.panasonic.com/ventfans







\*This product meets strict energy efficiency guidelines set by Natural Resources Canada and is ENERGY STAR® certified for the Canadian market only.





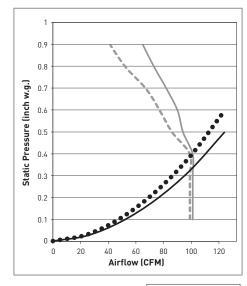
# Specification Submittal Data / Panasonic ERV

(Continued)

Specifications: Intelli-Balance 100 FV-10VEC2							
Static Pressure in inches w. g.	0.1	0.4					
Net Exhaust Air Volume (CFM)	100	100					
Net Supply Air Volume (CFM)	100	100					
Power Consumption (watts)	81	100					
Power Rating (V/Hz)	120/60						
ENERGY STAR® Certified	Yes						

Energy Performance: Intelli-Balance 100 FV-10VEC2									
Supply Temperature		Net Air Flow		Consumed	Sensible Recovery	Apparent Sensible	Net Moisture		
°C	°F	L/S	CFM	(Watts)	Efficiency	Effectiveness	Transfer		
Heating									
0	32	25	53	29	81	84	81		
0	32	31	66	39	77	81	75		
0	32	40	85	68	75	80	74		
-25	-13	27	57	77	64	67	73		
-25	-13	30	64	100	56	60	64		
Cooling			Total Recovery Efficiency						
35	95	23	49	32	60				

## Performance Curve 4" or 6" duct



Net Supply Air
Net Exhaust Air
4" 60ft Duct
4" 70 ft Duct

**Panasonic Life Solutions Company of America** IAQ Division

Two Riverfront Plaza Newark, NJ 07102

us.panasonic.com/ventfans





