

# **Specification Submittal Data** / Panasonic Ventilation Fan/Heater/Light

### **Description:**

Ventilating fan/heater/light shall be low noise ceiling mount type rated for continuous run. Fan/heater/light shall be certified by the Home Ventilating Institute (HVI). Heating elements shall be included. Evaluated by Underwriters Laboratories and conform to both UL and cUL safety standards. Fan/heater/light is not intended for installation over a tub/shower enclosure

# Motor/Blower:

- Enclosed brushless ECM motor technology rated for continuous run.
- Fan ventilation rates shall be manually adjustable for 50-80-110 CFM.
- Power rating shall be 120 volts and 60 Hz.
- Motor equipped with thermal-cutoff fuse.
- Removable with permanently lubricated plug-in
- Minimum 20 Amp dedicated circuit required.

# Housing:

- 26 gauge Zinc-Aluminum-Magnesium (ZAM) housing.
- Integrated dual 4" or 6" diameter duct adapter.
- Built-in back draft damper.
- Built-in metal flange provides blocking for penetrations through drywall as an Air Barrier, and assists with the decrease in leakage in the building envelope during blower door testing.
- Suitable for installation in ceilings insulated up to R60
- · Articulating and expandable installation bracket up to 24".

#### Grille:

- Attractive design using Poly Pro material.
- Attaches directly to housing with torsion springs.
- · Circulation grille with built-in diffuser for higher output velocity and directional heat throw.

#### **Heater:**

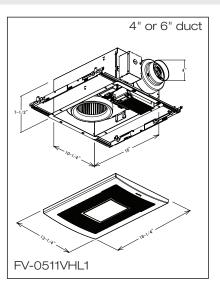
- 1600W Positive Temperature Coefficient (PTC) heater for greater safety and reliability.
- · Heater is self-limiting. As it approaches designed operating temperature, the electrical consumption automatically decreases, which prevents overheating.

#### Warranty:

• 6 years ECM Motor, 5 years LED, 3 years all other

# **Architectural Specifications:**

Ventilation fan/heater/light combination shall be ceiling mount, with built-in speed selector. Select from 50/80/110 CFM and no more than <0.3/<0.3/0.7 sone as certified by the Home Ventilating Institute (HVI) at 0.1 static pressure in inches water gauge (w.g.), with 52/81/111 CFM and no more than 0.7/1.0/1.5 sone as certified by HVI at 0.25 w.g., and no less than 53/82/99 CFM at 0.375 w.g. Power Consumption shall be no greater than 4.7/7.4/12.4 watts at 0.1 w.g., 8.9/13.1/19.8 watts at 0.25 w.g., and 12.7/18.6/26.0 watts at 0.375 w.g. Energy efficiency shall be no less than 10.6/10.8/8.9 CFM/watt at 0.1 w.g., 5.9/6.2/5.6 CFM/watt at 0.25, and 4.2/4.4/3.8 CFM/Watt at 0.375 w.g. Power rating shall be 120v/60Hz. Minimum 20 Amp dedicated circuit required.



Duct diameter shall be inclusive of an integrated dual 4" or 6" duct adapter. Also suitable for installation in ceilings insulated up to R60. Fan/heater/light is not intended for installation over a tub/shower enclosure. Fan/heater/light can be used to comply with ASHRAE 62.2. Heating element power consumption shall be no less than 1600 watts. Fan/heater/light shall also include a circulation grille that incorporates a diffuser for higher output velocity and directional heat throw. Lamp shall be of the LED dimmable type and be no less than (1) 10W. ENERGY STAR® 2.0 certified, JA-8 compliant for CA Title 24, LED chip panel that maintains 50,000 hours rated average life and incorporates a <1W LED night light.



# **LED Lighting:**

Includes 10 Watt Dimmable LED chip panel/3000 Kelvin Warm White/≥90CRI/750 lumens/≥70 LPW/ENERGY STAR 2.0 certified/JA-8 compliant for CA Title 24/50,000 hours rated average life /<1W LED night light included.



# **ECM Motor Technology:**

When the fan senses static pressure, its speed is automatically increased to ensure that the desired CFM is not compromised, which allows the fan to perform as rated.

Performance Curve 4" Duct

10 20 30

Specifications: WhisperWarm DC FV-0511VHL1		4"			4"			4"		
	Static Pressure in inches w.g.	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375
Characteristics (HVI tested data with 4" Duct)	Air Volume (CFM)	110	111	99	80	81	82	50	52	53
	Noise (sones)	0.7	1.5	-	<0.3	1.0	-	<0.3	0.7	-
	Power Consumption (watts)	12.4	19.8	26.0	7.4	13.1	18.6	4.7	8.9	12.7
	Energy Efficiency (CFM/Watt)	8.9	5.6	3.8	10.8	6.2	4.4	10.6	5.9	4.2
	Speed (RPM)	885	1115	1265	745	1022	1194	654	943	1130
	Current (amps)	0.25	0.39	0.48	0.15	0.27	0.37	0.10	0.18	0.26
	MAX. Current (amps)	0.50								
	Power Rating (V/Hz)	120/60								
	Motor Type	ECM								
	ENERGY STAR rated	N/A - No ESTAR category for fan/heater								
Industry research indicates static pressure in typical installations ranges from 0.20" to 0.375".										

Characteristics (HVI tested data											
	Energy Efficiency (CFM/Watt)	8.9	5.6	3.8	10.8	6.2	4.4	10.6	5.9		
	with 4" Duct)	Speed (RPM)	885	1115	1265	745	1022	1194	654	943	1
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*Industry research indicates static pressure in typical installations ranges from 0.20" to 0.375".											

# \*\* HVI testing and certification based on 4" duct. For complete Installation Instructions visit us.panasonic.com/ventfans Model Quantity **Comments Project:** Location: Architect: Engineer: Contractor: Submitted by: Date:

Airflow (CFM)





90 100 110 120

4" 20ft duct

4" 80ft duct

us.panasonic.com/ventfans