Specification Submittal Data / Panasonic Ventilation Fan

Description
Customizable Ventilation Fan/Light shall be low sone ceiling mount rated for continuous run. Fan shall be ENERGY STAR® rated and certified by the Home Ventilating Institute (HVI). Fan shall include energy efficient LED lighting. Evaluated by Underwriters Laboratories and conform to both UL and cUL safety standards.

Motor/Blower:
- Enclosed DC brushless 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.
- Fan shall be UL listed for tub/shower enclosure when used with a GFCI protected circuit and used in insulated ceiling (TYPE I.C.).
- Fan equipped with thermal cutoff fuse.
- Removable, permanently lubricated, plug-in motor.

Housing:
- Rust proof paint, galvanized steel body.
- Integrated dual 4" or 6" diameter duct adapter.
- 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.
- Built in backdraft damper.
- Articulating and expandable installation bracket up to 24".

Grille:
- Attractive design using Poly Pro material.
- Attaches directly to housing with torsion springs.
- Includes a motion sensor cap for use as a cover when the motion sensor Plug 'n Play™ module has not been selected.

Light:
- Two replaceable, ENERGY STAR® rated, 7W GU24 base LED lamps included.

Warranty:
- ALL Parts: 3 Years from original purchase date.
- DC Motor: 6 Years from original purchase date.
- LED: 5 years from original purchase date.

Architectural Specifications:
Customizable Ventilation Fan/Light shall be ceiling mount, ENERGY STAR® rated type with built-in speed selector. Select from 50/80/110 CFM and no more than <0.3/<0.3/0.4 sone as certified by the Home Ventilating Institute (HVI) at 0.1 w.g. with no less than 53/66/114 CFM and no more than <0.3/0.6/0.9 sones at .25 w.g. Power Consumption shall be no greater than 4.0/6.0/11.1 watts at 0.1 w.g. and 7.0/11.0/18.6 watts at 0.25 w.g. ENERGY STAR® rated with an efficiency of no less than 12.8/13.3/9.9 CFM/watt at 0.1 w.g. and than 7.7/7.7/6.3 CFM/watt at 0.25 w.g. The motor shall be enclosed with brushless DC motor engineered to run continuously. DC motor speed shall automatically increase when the fan senses static pressure to maintain selected CFM. Power rating shall be 120v/60Hz. Duct diameter shall be no less than 4", inclusive of an integrated dual 4" or 6" duct adapter. Plug 'N Play™ modules provide up to three features. Select from Multi-Speed with Time Delay, Condensation Sensor, LED Night Light and Motion Sensor. Fan shall be UL and cUL listed for tub/shower enclosure when used with a GFCI protected circuit. Fan can be used to comply with ASHRAE 62.2, LEED, ENERGY STAR®, IAP, EarthCraft, California Title-24 and WA Ventilation Code. Lamps shall be of the LED type with the fan utilizing no less than two 7 Watt, ENERGY STAR® rated, GU24 base LED lamps.

DC Motor Technology:
When 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.

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

<table>
<thead>
<tr>
<th>Model</th>
<th>Quantity</th>
<th>Comments</th>
<th>Project</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Location:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Architect:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Engineer:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Contractor:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Submitted by:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Date:</td>
</tr>
</tbody>
</table>
**Plug 'N Play™ Modules**

Plug 'N Play™ modules provide up to three additional features. Select from Multi-Speed with Time Delay, Motion Sensor, Condensation Sensor and LED Night Light.

### FV-VS15VK1: Multi-Speed with Time Delay

Allows you to select the proper CFM settings to satisfy ASHRAE 62.2 continuous ventilation requirements. The fan runs continuously at a pre-set lower level (0, 30-100 CFM, in 10 CFM increments), then elevates to a maximum level of operation (50-80-110 CFM) when the switch is turned on, or when the motion sensor or Condensation Sensor module is activated. A High/Low delay timer returns the fan to the pre-set CFM level after a period of time set by the user.

### FV-MSVK1: Motion Sensor

Automatically activates when someone enters the room. Once the settings have been applied, the fan becomes truly automatic. This module also activates a 20 minute delay off timer for the fan.

### FV-CSVK1: Condensation Sensor

Helps control bathroom condensation to prevent mold and mildew. Sensor technology detects relative humidity and temperature to anticipate dew point, automatically turning the fan on to control humidity. Built-in Relative Humidity (RH) sensitivity adjustment enables fine tuning for moist conditions and for satisfying CalGreen requirements. When the condensation sensor is used in conjunction with multi-speed functionality, the fan will kick up to high speed when the condensation sensor detects moisture in the room. This module also activates a 20 minute delay off timer for the fan.

### FV-NLVK1: LED Night Light

A photocell automatically turns on the 1 watt LED night light when darkness is sensed in the room. High/Low brightness switch enables you to fine tune the photocell to work in conjunction with the darkness level of your bathroom. This module also activates an automatic 20 minute delay off timer for the fan.

---

### Specifications

<table>
<thead>
<tr>
<th>Fan Specifications</th>
<th>WhisperGreen Select™: FV-05-11VKL1</th>
<th>WhisperGreen Select™: FV-05-11VKL1 + FV-VS15VK1 (Multi Speed Plug 'N Play™ module)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static Pressure in inches w.g.</td>
<td>0.1 0.25 0.1 0.25 0.1 0.25</td>
<td>0.1 0.25 0.1 0.25 0.1 0.25 0.1 0.25 0.1 0.25 0.1 0.25 0.1 0.25 0.1 0.25 0.1 0.25</td>
</tr>
<tr>
<td>Air Volume (CFM)</td>
<td>110 114 80 86 50 53</td>
<td>110 114 80 86 50 53 110 114 80 86 50 53 110 114 80 86 50 53</td>
</tr>
<tr>
<td>Noise (sones)</td>
<td>0.4 0.9 &lt;0.3 0.6 &lt;0.3 &lt;0.3</td>
<td>0.4 0.9 &lt;0.3 0.6 &lt;0.3 &lt;0.3 0.4 0.9 &lt;0.3 0.6 &lt;0.3 &lt;0.3 0.4 0.9 &lt;0.3 &lt;0.3 &lt;0.3</td>
</tr>
<tr>
<td>Power Consumption (watts)</td>
<td>11.1 18.0 6.0 11.1 4.0 7.0</td>
<td>11.1 18.0 6.0 11.1 4.0 7.0 11.1 18.0 6.0 11.1 4.0 7.0 11.1 18.0 6.0 11.1 4.0 7.0</td>
</tr>
<tr>
<td>Energy Efficiency (CFM/Watt)</td>
<td>9.9 6.3 13.3 7.7 12.8 7.7</td>
<td>9.9 6.3 13.3 7.7 12.8 7.7 9.9 6.3 13.3 7.7 12.8 7.7 9.9 6.3 13.3 7.7 12.8 7.7</td>
</tr>
<tr>
<td>Speed (RPM)</td>
<td>960 1237 837 1157 740 1081</td>
<td>960 1237 837 1157 740 1081 960 1237 837 1157 740 1081</td>
</tr>
<tr>
<td>Current (amps)</td>
<td>0.12 0.17 0.07 0.12 0.04 0.07</td>
<td>0.12 0.17 0.07 0.12 0.04 0.07</td>
</tr>
<tr>
<td>MAX. Current(amps)</td>
<td>0.42</td>
<td>0.42</td>
</tr>
<tr>
<td>Power Rating (V/Hz)</td>
<td>120/60</td>
<td>120/60</td>
</tr>
<tr>
<td>ENERGY STAR rated</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

---

Panasonic Eco Solutions Company of North America
Eco Products Division
Two Riverfront Plaza
Newark, NJ 07102
us.panasonic.com/ventfans