

Panasonic

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VF14864CAT



The Undisputed LEADER

HIGH PERFORMANCE
VENTILATION FANS AND
INDOOR AIR QUALITY SOLUTIONS

For over two decades, Panasonic has delivered innovative, high performance ventilation solutions that have set new standards for quiet operation and energy efficiency.

Leading the Way with High Performance Ventilation Fans and Indoor Air Quality Solutions

Panasonic is the premier manufacturer of powerful, energy-efficient ventilation fans that quietly exhaust unhealthy, unpleasant or moist air from your home or business. Contractors, builders, architects and homeowners rely on us for our quality and for the wide array of solutions we offer—from bathroom fans with both motion and humidity sensors to remote in-line fans.

Panasonic is proud to be recognized by the EPA for the **fifth** consecutive year, earning their most prestigious ENERGY STAR® honor, the Sustained Excellence 2014 Award. Sustained excellence is precisely what we strive for as evidenced by our legacy of providing high performance, energy-efficient ventilation solutions. In fact, for over two decades—highlighted by industry-leading quiet fans, revolutionary DC Motor technology, and leading-edge LED lighting—we've continued to demonstrate outstanding leadership, year after year.

Panasonic has been in the ventilation business for over 100 years and is the largest manufacturer of ventilation equipment globally. Panasonic produces the highest quality, most efficient and environmentally friendly products available in the market today. We do this by designing, engineering and manufacturing in our own facilities. Panasonic is known around the world for offering the quietest ENERGY STAR® fans in the industry!

Panasonic Advanced Ventilation Solutions

A LEGACY OF INNOVATION

1993 2003 2006 2007 2011 2012 2013 2014

WhisperCelling WhisperFite WhisperGreen WhisperValue WhisperComfort WhisperSense WhisperRecessed WhisperGreen WhisperGr









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Certified & Code Compliant

Panasonic ventilation fans are certified by the Home Ventilating Institute (HVI) and ENERGY STAR® qualified, where guidelines exist. All models can be used to comply with ASHRAE 62.2, the ventilation standard required by LEED for Homes, ENERGY STAR® IAP, CALGreen, NAHB Green Building Standard, EarthCraft, Washington Ventilation Code and other building programs.

Powerful & Quiet

Fully enclosed DC and AC condenser motors assure remarkable performance and quiet operation at industry standard, 0.25" w.g. static pressure [Installed Performance].

Long Life

Permanently lubricated motors are engineered for trouble-free, continuous operation for 30,000 hours on AC motors, along with rust-proof paint and galvanized housing.

Easy Installation

Integrated duct adapters, adjustable mounting brackets (up to 24" o.c.), fan/motor units that easily detach from the housing and uncomplicated wiring all lend to user-friendly installation. Double-hanger bar systems allow for ideal positioning. Flex-Z Fast™ bracket with articulating joints provides even more flexible, fast and easy installation on select models.

Energy Savings

When it comes to energy efficiency, our wattage requirements are among the lowest in the industry ensuring low cost operation.





Safety

WhisperGreen Select™ models are protected by UL Class 2 Power Unit while all other models are equipped with thermal fuse protection. With the exception of the ERV and heater fans, all models are UL listed for tub/shower enclosure when used with a GFCI protected circuit.

Airflow

A built-in plastic or metal damper (depending on model #) in all ceiling-mounted models helps prevent backdraft. 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.

Illumination

The fan/lights have ENERGY STAR® rated compact fluorescent lamps (CFLs) that can be used to comply with California Title 24, and have 10,000 hours of rated life. The CFL lighted models feature >70LPW, the highest Lumens Per Watt in the industry. A 4W night light is available on most models. Some models feature LED lighting that have 40,000 hours of rated life, along with a 1W LED night light.

Green Manufacturing

All fan only models are RoHS Approved. Restriction of Hazardous Substances Directive (RoHS) restricts the use of the following six substances in the manufacturing process: Lead, Mercury, Cadmium, Hexavalent chromium [CR(VI)], Polybrominated biphenyls (PBB), and Polybrominated diphenyl ether (PBDE).

Warranty

6-Year warranty on DC motor, 5-Year warranty on LED, 1 year on CFLs and 3-Year warranty on all other parts.





One Fan - Multiple IAQ Solutions

WhisperGreen Select™ is a ground-breaking IAQ solution that is revolutionizing the vent fan industry with a unique set of features that enable customization and easy installation.

A built-in **Pick-A-Flow**™ speed selector provides the unique ability to select your required airflow (50-80-110 and 110-130-150 CFM models) with the simple flip of a switch.

A unique set of four patented **Plug 'N Play™** modules that allow you to further customize your fan.

Multi-Speed with Time Delay* (FV-VS15VK1)

Select the proper CFM settings to satisfy ASHRAE 62.2 continuous ventilation requirements. The fan runs continuously at a preset lower level (0, 30-100 or 0, 50-120 CFM, in 10 CFM increments), then elevates to a maximum level of operation (50-80-110 or 110-130-150 CFM) when the wall 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 preset CFM level after a period of time set by the user.

*Applies to both the pre-installed multi-speed with time delay, as well as the FV-VS15VK1 multi-speed with time delay Pluq 'N Play module.

SmartAction® Motion Sensor (FV-MSVK1)

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.

Condensation Sensor (FV-CSVK1)

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 ramp 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.

NiteGlo™ LED Night Light (FV-NLVK1)

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.









WhisperGreenSelect

FV-05-11VKS1 30 to 110 CFM 4" or 6" Duct









SmartAction® Motion Sensor* (FV-MSVK1)

One Fan - Multiple IAQ Solutions

WhisperGreen Select Key Benefits:

- Customizable, all-in-one fan
- Pre-installed multi-speed control with high/low delay timer up to 60 minutes
- Plug 'N Play™ modules provide up to **two** value added features (See page 8-9 for details)
- Revolutionary DC motor with SmartFlow™ technology for optimum CFM output
- Flex-Z Fast™ installation bracket provides flexible, fast and easy installation
- UL listed for tub/shower enclosure when used with a GFCI protected circuit
- Can be used to comply with ASHRAE 62.2, LEED, CALGreen, California Title 24, WA Ventilation Code and ENERGY STAR® for Homes 3.0



Condensation Sensor* (FV-CSVK1)



NiteGlo™ LED Night Light*

(FV-NLVK1)

*Optional Add-On Feature







WhisperSense*

FV-08VQC5 80 CFM 4" or 6" Duct **FV-11VQC5** 110 CFM 4" or 6" Duct





Built-in Controls

Moisture Control for CALGreen Compliance Solution

WhisperSense Key Benefits:

- SmartAction® motion sensor automatically turns fan on when someone enters the room
- Humidity sensor detects rapid rise in relative humidity (RH) and automatically turns fan on to remove moisture to help prevent mold and mildew
- Dual sensor technology provides built-in redundancy that ensures proper fan operation.
- Adjustable time delay 30 seconds to 60 minutes
- Auto shutoff feature helps eliminate unnecessary energy usage and further reduce operating costs
- \bullet UL listed for tub/shower enclosure when used with a GFCI protected circuit
- Can be used to comply with ASHRAE 62.2, LEED, CALGreen and California Title 24





WhisperWelcome -

FV-05VFM2 50 CFM 4" or 3" Duct FV-08VFM2 80 CFM 4" or 3" Duct



Automatic Spot Ventilation Solution

WhisperWelcome Key Benefits:

- Low profile housing design ideal for remodeling
- Built-in SmartAction® motion sensor automatically activates when the room is occupied
- Built-in delay timer turns off the fan after 20 minutes
- Provides flexibility for installation in 2 x 6 or larger construction
- · Ideal for renovation since you can use the existing duct
- UL listed for tub/shower enclosure when used with a GFCI protected circuit
- Can comply with ASHRAE 62.2, LEED, ENERGY STAR® and California Title 24



INCLUDED: Detachable 4" to 3" Duct Adapter







WhisperGreenSelect"

FV-05-11VK1 50-80-110 CFM 4" or 6" Duct **FV-11-15VK1** 110-130-150 CFM 6" Duct





Multi-Speed with Time Delay*
[FV-VS15VK1]



SmartAction® Motion Sensor*

One Fan - Multiple IAQ Solutions

WhisperGreen Select Key Benefits:

- Customizable, all-in-one fan
- Pick-A-Flow[™] speed selector one fan, you choose the CFM
- Plug 'N Play $^{\rm M}$ modules provide up to three value added features (See page 8-9 for details)
- Flex-Z Fast™ installation bracket provides flexible, fast and easy installation
- UL listed for tub/shower enclosure when used with a GFCI protected circuit
- Can be used to comply with ASHRAE 62.2, LEED, CALGreen, California Title 24, WA Ventilation Code and ENERGY STAR® for Homes 3.0



Condensation Sensor* (FV-CSVK1)



NiteGlo™ LED Night Light*
(FV-NLVK1)
*Optional Add-On Feature





WhisperCeiling VENTILATION FAN

FV-05VQ5 50 CFM 4" or 6" Duct FV-08VQ5 80 CFM 4" or 6" Duct FV-11VQ5 110 CFM 4" or 6" Duct FV-15VQ5 150 CFM 6" Duct







Quiet, Spot Ventilation Solution

WhisperCeiling Key Benefits:

- Quiet, yet powerful ideal for new and remodel residential applications
- Large volume (190-390) CFM options available for light commercial use [See page 26-27 for more details]
- UL listed for tub/shower enclosure when used with a GFCI protected circuit.
- Can be used to comply with ASHRAE 62.2, LEED, IAP, EarthCraft, California Title 24 and WA Ventilation Code

WhisperFit^{*}

FV-08VF2 80 CFM 4" or 3" Duct **FV-11VF2** 110 CFM 4" or 3" Duct



Ideal Retrofit Solution

WhisperFit Key Benefits:

- Low profile housing design ideal for remodeling projects and manufactured structured homes
- Fits in 2 x 6 or larger construction
- · Additional hanger bars for easier retrofit installation
- UL listed for tub/shower enclosure when used with a GFCI protected circuit
- Can be used to comply with ASHRAE 62.2, LEED, IAP, California Title 24 and WA Ventilation Code



INCLUDED: Detachable 4" to 3" Duct Adapter



Whisper Value

FV-05VS3 50 CFM 4" Oval Duct **FV-08VS3** 80 CFM 4" Oval Duct **FV-10VS3** 100 CFM 4" Oval Duct



Fits in nearly every ceiling cavity.



Optional 4" Oval to 3" Round Duct Adapter(Model #: FV-VS43R)

Ideal Multi-Family Solution

WhisperValue Key Benefits:

- Ideal for residential construction (single and multi-family) and manufactured homes
- 3-3/8" housing depth lowest profile ENERGY STAR® fan available
- UL approved for ceiling or wall mount perfect fit in a 2 x 4 stud bay
- Wall installation eliminates the need and cost for a radiation damper
- UL listed for tub/shower enclosure when used with a GFCI protected circuit
- Can be used to comply with ASHRAE 62.2, LEED, IAP, California Title 24 and WA Ventilation Code

WhisperValue U-Can Contractor Pack*

The Contractor Pack includes four complete fans. The housing and motor/grille are packaged separately for flexibility during installation.

	Universal Housing Can	Motor/Grille Assembly	Complete Fan Unit	Master Pack
	FV-05-10VSA3	FV-05VSB3	FV-05VS3	4
	FV-05-10VSA3	FV-08VSB3	FV-08VS3	4
ĺ	FV-05-10VSA3	FV-10VSB3	FV-10VS3	4

^{*}Must order in quantities of 4, shipment will contain 1 box with 4 units.



Transfer Register Box

FV-JD



Transfer Register Box (TRB) – Room to Room Solution Key Benefits:

- Perfect for room-to-room powered circulation in Multi-family projects with ductless heat pumps
- Designed exclusively for use with WhisperValue[™] fan and fan/light combinations
- Powered 60 CFM transfer at less than 0.3 sone (based on FV-05VS3 fan)
- 26 gauge steel, fire code rated accessory, sold separately as model #FV-JD
- No need for a radiation damper like on jump ducts
- Works with standard size HVAC registers 4" x 10" HVAC supply grille
- Can be used to comply with ASHRAE 62.2, LEED for Homes, CALGreen and ENERGY STAR® for Homes 3.0*

^{*}Specific to WhipserValue™ and WhisperValue Lite™ fans

WhisperGreenSelect

FV-05-11VKSL1 30 to 110 CFM 4" or 6" Duct





Pre-installed Multi-Speed with Time Delay



SmartAction® Motion Sensor* (FV-MSVK1)



INCLUDES: (2) replaceable, 7W ENERGY STAR® rated, GU24 base LED lamps. 3000 Kelvin/80+ CRI/ 550 Lumens per lamp/80 Lumens per watt/40,000 hours rated average life.

One Fan - Multiple IAQ Solutions

WhisperGreen Select Key Benefits:

- Customizable, all-in-one fan/LED light combination
- Pick-A-Flow[™] speed selector one fan, you choose the CFM
- Pre-installed multi-speed control module with high/low delay timer up to 60 minutes
- Plug 'N Play™ modules provide up to two value added features (See page 8-9 for details)
- Revolutionary DC motor with SmartFlow[™] technology for optimum CFM output
- Flex-Z Fast™ installation bracket provides flexible, fast and easy installation
- UL listed for tub/shower enclosure when used with a GFCI protected circuit
- Can be used to comply with ASHRAE 62.2, LEED, CALGreen, California Title 24, WA Ventilation Code and ENERGY STAR® for Homes 3.0



Condensation Sensor* (FV-CSVK1)



(FV-NLVK1)

*Optional Add-On Feature









WhisperSense Lite

FV-08VQCL6 80 CFM 4" or 6" Duct 4" or 6" Duct FV-11VQCL6 110 CFM





INCLUDES: (2) 13W ENERGY STAR® rated self ballasted GU24 base CFL lamps and a 4W night light. 3500 Kelvin/80+ CRI/997 Lumens per lamp/75 Lumens per watt/10,000 hours rated average life at 3 hours per start.

Moisture Control for CALGreen Compliance Solution

WhisperSense Lite Key Benefits:

- SmartAction® motion sensor automatically turns fan on when someone enters the room
- · Humidity sensor detects rapid rise in relative humidity (RH) and automatically turns fan on to remove moisture to help prevent mold and mildew
- · Dual sensor technology provides built-in redundancy that ensures proper fan operation
- Adjustable time delay 30 seconds to 60 minutes
- · Auto shutoff feature helps eliminate unnecessary energy usage and further reduce operating costs
- UL listed for tub/shower enclosure when used with a GFCI protected circuit
- Can be used to comply with ASHRAE 62.2, LEED, IAP, CALGreen. California Title 24 and WA Ventilation Code



Built-in Controls





WhisperGreenSelect -

FV-05-11VKL1 50-80-110 CFM 4" or 6" Duct **FV-11-15VKL1** 110-130-150 CFM 6" Duct





Multi-Speed with Time Delay* (FV-VS15VK1)



SmartAction® Motion Sensor* (FV-MSVK1)



INCLUDES: (2) replaceable, 7W ENERGY STAR® rated, GU24 base LED lamps. 3000 Kelvin/80+ CRI/ 550 Lumens per lamp/80 Lumens per watt/40,000 hours rated average life.

One Fan - Multiple IAQ Solutions

WhisperGreen Select Key Benefits:

- Customizable, all-in-one fan/LED light combination
- Pick-A-Flow[™] speed selector one fan, you choose the CFM
- Plug 'N Play™ modules provide up to three value added features (See page 8-9 for details)
- Revolutionary DC motor with SmartFlow™ technology for optimum CFM output
- Flex-Z Fast™ installation bracket provides flexible, fast and easy installation
- UL listed for tub/shower enclosure when used with a GFCI protected circuit
- \bullet Can be used to comply with ASHRAE 62.2, LEED, CALGreen, California Title 24, WA Ventilation Code and ENERGY STAR® for Homes 3.0



Condensation Sensor* (FV-CSVK1)



NiteGlo™ LED Night Light* (FV-NLVK1)

*Optional Add-On Feature









WhisperRecessed LED

FV-08VRE1 80 CFM 4" or 6" Duct





INCLUDED: (1) 14W ENERGY STAR® rated GU24 base LED lamp/ 3000 Kelvin/90+ CRI/575 Lumens/ 25,000 hours rated average life.

Design Solution for Fan/Light Combinations

WhisperRecessed LED Key Benefits:

- · Architectural grade recessed fan/light
- Ideal for use in the bathroom, living room or laundry room
- Quiet and powerful 80 CFM ventilation hidden above the ceiling
- Adjustable recessed light minimizes glare
- Beautiful lighting with 6-1/2" aperture and advanced luminaire design
- $\bullet\,$ UL listed for tub/shower enclosure when used with a GFCI protected circuit
- Can be used to comply with ASHRAE 62.2, LEED, IAP, California Title 24 and WA Ventilation Code





WhisperRecessed Design Solution for Far

FV-08VRL1 80 CFM 4" or 6" Duct





INCLUDED: [1] 18W GU24 base CFL/ 2700 Kelvin/80+ CRI/1380 Lumens/ 10,000 hours rated average life at 3 hours per start/integral electronic ballast for flicker-free operation.

Design Solution for Fan/Light Combinations

WhisperRecessed Key Benefits:

- Architectural grade recessed fan/light
- Ideal for use in the bathroom, living room or laundry room
- Quiet and powerful 80 CFM ventilation hidden above the ceiling
- · Adjustable recessed light minimizes glare
- Beautiful lighting with 6-1/2" aperture and advanced luminaire design
- UL listed for tub/shower enclosure when used with a GFCI protected circuit
- Can be used to comply with ASHRAE 62.2, LEED, IAP, California Title 24 and WA Ventilation Code



WhisperLite^{*}

FV-08VQL6 80 CFM 4" or 6" Duct FV-11VQL6 110 CFM 4" or 6" Duct FV-15VQL6 150 CFM 6" Duct





INCLUDES: [2] 13W ENERGY STAR® rated self ballasted GU24 base CFL lamps and a 4W night light. 3500 Kelvin/80+ CRI/997 Lumens per lamp/75 Lumens per watt/10,000 hours rated average life at 3 hours per start.

Quiet, Spot Ventilation Fan/Light Solution

WhisperLite Key Benefits:

- Quiet, yet powerful ideal for new and remodel residential applications
- UL listed for tub/shower enclosure when used with a GFCI protected circuit
- Can be used to comply with ASHRAE 62.2, LEED, IAP, California Title 24 and WA Ventilation Code



WhisperFit Lite

FV-05VFL4 50 CFM 4" or 3" Duct FV-08VFL4 80 CFM 4" or 3" Duct FV-11VFL4 110 CFM 4" or 3" Duct





INCLUDES: (2) 13W ENERGY STAR® rated self ballasted GU24 base CFL lamps and a 4W night light. 3500 Kelvin/80+ CRI/997 Lumens per lamp/75 Lumens per watt/10,000 hours rated average life at 3 hours per start.

WhisperFit Lite Key Benefits:

- Low profile housing design ideal for remodeling projects and manufactured structured homes
- Fits in 2 x 6 or larger construction
- Additional hanger bars for easier retrofit installation
- UL listed for tub/shower enclosure when used with a GFCI protected circuit
- Can be used to comply with ASHRAE 62.2, LEED, IAP, California Title 24 and WA Ventilation Code



INCLUDED: Detachable 4" to 3" Duct Adapter



WhisperValue Lite

FV-08VSL3 80 CFM 4" Oval Duct **FV-10VSL3** 100 CFM 4" Oval Duct



*Optional 4" oval to 3" round duct adapter (FV-VS43R) and Transfer Register Box (FV-JD) sold separately. See page 16-17 for details.



INCLUDES: (2) 13W ENERGY STAR® rated self ballasted GU24 base CFL lamps and a 4W night light. 3500 Kelvin/80+ CRI/997 Lumens per lamp/75 Lumens per watt/10,000 hours rated average life at 3 hours per start.

Ideal Multi-Family Solution

Ideal Retrofit Solution

WhisperValue Lite Key Benefits*:

- Ideal for residential construction (single/multi-family) and manufactured homes
- L-shaped bracket simplifies installation and provides strong support
- UL approved for ceiling or wall mount perfect fit in a 2 x 4 stud bay
- · Wall installation eliminates the need for a radiation damper
- Can be used to comply with ASHRAE 62.2, LEED, IAP, California Title 24 and WA Ventilation Code

WhisperValue Lite U-Can Contractor Pack*

The Contractor Pack includes four complete fans.

Universal Housing Can	Motor/Grille Assembly	Complete Fan Unit	Master Pack
FV-08-10VSLA3	FV-08VSLB3	FV-08VSL3	4
FV-08-10VSLA3	FV-10VSLB3	FV-10VSL3	4

^{*}Must order in quantities of 4, shipment will contain 1 box with 4 units.



WhisperComfort -

FV-04VE1 40/20 CFM or 20/10 CFM Two 4" Ducts



Supply and exhaust air flows through a single exterior opening







FV-WC04VE1 Optional Exterior Wall Cap

FV-EB04VE1 Optional Elbow

Low Cost and Easy to Install Balanced Air Solution

WhisperComfort Key Benefits:

- ERV balances air pressure by supplying fresh exterior air while exhausting stale interior air
- Low-rate continuous ventilation ideal for multi-family dwellings
- UL listed for ceiling or wall mount, making it ideal for multi-family applications
- MERV 6 supply filter and damper employed
- Exchange capillary core recovers temperature and moisture
- Dual setting air volume for 40/20 or 20/10 CFM
- · Ideal for new air-tight houses built to meet energy-efficiency standards
- Compact size fits in walls and ceilings, and 2 x 8 construction
- Sensible Energy Recovery 66%
- Latent Energy Recovery 32%
- Does not require a condensate line or drain
- Can be used to comply with ASHRAE 62.2, LEED, IAP, CALGreen, California Title 24 and WA Ventilation Code



eco vent

FV-07VBA1 + FV-07VBB1 70 CFM with Veri-Boost™ 4" Duct





Built-in Veri-Boost[™] switch provides a 20 CFM boost

Cost effective, ENERGY STAR® Spot Ventilation Solution

EcoVent Key Benefits:

- · Ideal for new residential construction
- Perfect cost effective ENERGY STAR® solution for Home Builders
- 70CFM 1.1 sones at 0.1" w.g. (56 CFM/1.4 sones at 0.25" w.g.)
- Unique VeriBoost[™] integral switch ensures the fan meets designed airflow requirements and provides Ventilation Verification Assurance: ≥50 CFM installed performance, to help meet the new ENERGY STAR® 3.0 standards
- Small grill design complements the aesthetics of your bathroom, powder room or laundry room
- Fits in 2 x 6 or larger construction
- Available in contractor packs only housing and motor/grille packaged separately reduces risk of parts being lost or damaged on site
- UL listed for tub/shower enclosure when used with a GFCI protected circuit
- Can be used to comply with ASHRAE 62.2, LEED and ENERGY STAR® for Homes 3.0

EcoVent U-Can Contractor Packs

	Model #	Model # Description Contents						
ı	FV-07VBA1	Universal Housing Can	Housing Can, Duct Adapter & Junction Box	4				
F	FV-07VBB1	Motor/Grille Assembly	Motor & Grille	4				

^{*}Must order in quantities of 4, shipment will contain 1 box with 4 pieces of each item.



WhisperWarm

Quiet Heat Solution

FV-11VH2 110 CFM FV-11VHL2 110 CFM

4" Duct 4" Duct







FV-11VHL2 INCLUDES: (2) 13W ENERGY STAR® rated self ballasted GU24 base CFL lamps and a 4W night light, 3500 Kelvin/80+ CRI/997 Lumens per lamp/ 75 Lumens per watt/10,000 hours rated average life at 3 hours per start.

WhisperWarm Key Benefits:

- Durable 1400W stainless steel sheathed heating element
- Totally enclosed condenser motor for long life rated 30,000 hours continuous run
- Thermal fuse protection on motor and 3-level safety device for heater
- · Quick 1 minute warm-up
- Minimum 20 Amp dedicated circuit required
- For optimum performance, install heater no more than 8 feet from floor to ceiling



WhisperCeiling*

FV-20VQ3 190 CFM 6" Duct FV-30VQ3 290 CFM 6" Duct FV-40VQ4 390 CFM 6" Duct



Quiet, Spot Ventilation Solution

WhisperCeiling Key Benefits:

- · Quiet, yet powerful, large volume exhaust fans ideal for light commercial applications
- UL listed for tub/shower enclosure when used with a GFCI protected circuit
- · Can be used to comply with ASHRAE 62.2, LEED, IAP, California Title 24 and WA Ventilation Code



WhisperSupply Wall

FV-01WS2 FV-04WS2 10 CFM/On/Off switch 20 CFM/40 CFM/Off switch 4" Duct 6" Duct



Filtered Supply Air Solution

WhisperSupply Wall Benefits:

- Filtered supply air fan solution to meet ASHRAE 62.2 requirements for make-up/supply air
- · Easy installation in new construction or retrofits
- Designed for use in conjunction with furnace blower in Combustion Appliance Zone (CAZ) depressurization situations
- · Interior deflector enhances airflow for improved Indoor Air Quality (IAQ)
- · Merv 8 filter included
- · Includes interior wall duct and exterior ventilation cap
- · Can be used to comply with ASHRAE 62.2, LEED, and California Title 24



Whisper Wall

FV-08WQ1 70 CFM 8" Duct



Through the Wall Spot Ventilation Solution

WhisperWall Key Benefits:

- UL listed for through-the-wall application
- 10" galvanized sleeve and steel exterior hood included
- UL listed for tub/shower enclosure when used with a GFCI protected circuit
- Can be used to comply with ASHRAE 62.2, LEED, IAP, California Title 24 and WA Ventilation Code



Exterior Hood included



WhisperLine Tentument

FV-10NLF1 120 CFM 4" Duct FV-20NLF1 240 CFM 6" Duct FV-30NLF1 340 CFM 6" Duct FV-40NLF1 440 CFM 8" Duct



Remote Mount, In-line Spot Ventilation Solution

WhisperLine Key Benefits:

- Remote mount in-line fan for single or multiple inlets
- Insulated housing to prevent condensation and noise
- Tapered duct adapter for easy connection
- 5 positions for installation
- Joist or truss attachment brackets included
- Suspension brackets included
- Can be used to comply with ASHRAE 62.2, LEED, IAP, California Title 24 and WA Ventilation Code





*Complete Installation Kit Specifications on pages 56-57



WhisperControl

Condensation Sensor Plus

On/Off-

FV-WCCS1-W (White), FV-WCCS1-A (Light Almond)

On/Off/Light-

FV-WCCS2-W (White),

FV-WCCS2-A (Light Almond)

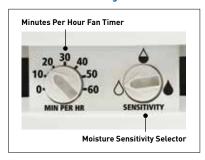




FV-WCCS1-W

FV-WCCS2-A

Timer and Sensor Settings



Condensation Sensor Plus Features & Benefits:

- Intelligent and advanced sensor technology monitors humidity and temperature to anticipate dew point, automatically operating the fan to control moisture
- Automatic seasonal adaptability with optional Moisture Sensitivity Selector allows fine tuning for dry or moist environments
- Adjustable Minutes Per Hour (MPH) Fan Timer ensures consistent and controlled ventilation throughout the day for compliance with ASHRAE 62.2
- Automatic Fan Control 30 minute countdown timer initiates after moisture returns to normal levels
- Manual Fan Control 20 minute countdown timer initiates once fan is turned on
- Blue LED indicates when the fan is on
- Commercial Grade 8 Amp max load, 2 year limited warranty*
- Engineered to efficiently control current LED lighting and DC motor loads
- · For indoor use. Includes matching wall plate
- Can be used to comply with ASHRAE 62.2, LEED, ENERGY STAR® 3.0 and CALGreen
- *One year additional fan warranty available when a Panasonic WhisperCeiling/ Lite, WhisperValue or WhisperFit/Lite fan is controlled by a Panasonic Condensation Sensor Plus.

Moisture Sensitivity Selector Settings



High Sensitivity – Setting the Condensation Sensor Plus to it's most sensitive setting covers the widest range of humidity. This is a setting for dryer climates and/or larger rooms. In a very dry environment, higher sensitivity is needed.



Average Sensitivity – The Condensation Sensor Plus comes factory set to this most common setting.



Low Sensitivity – The least sensitive setting is used in hotter and more humid climates. In a very moist environment, low moisture sensitivity may be needed to avoid excessive fan run-time





WhisperControl

Preset Countdown and Hourly Timer

On/Off-

FV-WCD01-W (White),

FV-WCD01-A (Light Almond)

On/Off/Light-

FV-WCD02-W (White),

FV-WCD02-A (Light Almond)





FV-WCD01-W

FV-WCD02-A

Preset Countdown and Hourly Timer Features & Benefits:

- Preset the fan timer anywhere from 5-60 minutes
- Adjustable Minutes Per Hour (MPH) Fan Timer ensures consistent and controlled ventilation throughout the day for compliance with ASHRAE 62.2
- Manual On/Off Fan Control
- Blue LED indicates when the fan is on
- Commercial Grade, 8 Amp max load, 2 year limited warranty
- Engineered to efficiently control current LED lighting and DC motor loads
- For indoor use. Includes matching wall plate
- Can be used to comply with ASHRAE 62.2, LEED and ENERGY STAR® 3.0

Timer Settings







ecoswitch

FV-WCSW11-W (White)
FV-WCSW11-A (Light Almond)



1 Function EcoSwitch Features & Benefits:

- Fan On/Off Switch
- Engineered to efficiently control current LED lighting and DC motor loads
- Back and side wiring terminals accept both solid and stranded wire to ease installation
- Full-rated current capacity with fluorescent or resistive loads.
 Motor capacity is 80% of switch rating
- Fits single gang box / Includes matching wall plate
- Commercial Grade



ecoswitch

FV-WCSW21-W (White)
FV-WCSW21-A (Light Almond)



2 Function EcoSwitch Features & Benefits:

- Multi-switch combination devices save space and add convenience
- Engineered to efficiently control current LED lighting and DC motor loads
- Common feed shunted internally to all switches
- Elegant decorator styling provides multiple controls in a single-gang wall box
- Fits single gang box / Includes matching wall plate
- Commercial Grade



ecoswitch

FV-WCSW31-W (White)
FV-WCSW31-A (Light Almond)



3 Function EcoSwitch Features & Benefits:

- Multi-switch combination devices save space and add convenience
- Engineered to efficiently control current LED lighting and DC motor loads
- Common feed shunted internally to all switches
- Elegant decorator styling provides multiple controls in a single-gang wall box
- Fits single gang box / Includes matching wall plate
- Commercial Grade



ecoswitch

FV-WCSW41-W (White only)

Designed for model FV-11VHL2 Heater/Fan/Light/Night-light



4 Function EcoSwitch Features & Benefits:

- Single pole/double throw on-off-on top switch, two single pole on-off switches
- Multi-switch combination saves space and adds convenience
- · Common feed shunted internally to all switches
- · Commercial grade
- Includes matching wall plate
- Elegant styling provides multiple controls in a single-gang wall box
- 2 year limited warranty



SmartExhaust™

Controls

FV-WCPT1-W

Fan/Light Control Delay Timer Wall plate not included



SmartExhaust™ Features & Benefits:

- \bullet Earn LEED and ENERGY STAR $\!\!\!^{\circledcirc}$ points for enhanced exhaust ventilation
- Replaces both fan and light switches for one easy operation
- Microprocessor technology provides precise ventilation times
- Programmable DELAY and VENTILATION settings
- Excess manual and/or delay operation is subtracted from the next hours programmed ventilation time
- Works with ALL incandescent, CFL, fluorescent and LED lights
- Make standard bath fans ASHRAE 62.2 complaint when used with ASHRAE 62.2 complaint fans

SmartExhaust™ Settings:

 $\mbox{\bf VENTILATION}$ setting allows the user to set the number of minutes per hour the fan should run.

DELAY setting allows the user to set the number of minutes the fan should run after the bathroom light has been turned off. This setting provides additional run time for the fan to complete the remaining necessary ventilation after use. **SmartExhaust™** replaces an existing switch, there are no additional labor costs required for installation. Simple and economical fan and light operation is provided by one switch.

Ceiling Radiation Damper

PC-RD05C4



Radiation Damper Features:

- UL classification (UL standard 555C) for use in 1, 2 or 3 hour fire-rated floor/ceiling and roof/ceiling designs
- Compatible with 50-150 CFM fans, fans with motion sensor and select fan/lights
- Galvanized steel frame with 165°F fusible link
- High temperature, non-asbestos, reinforced fiber thermal fabric

	Fan Model approved for:
Damper Model PC-RD05C4	WhisperGreen Select™, WhisperCeiling 50-150 CFM, WhisperLite, WhisperSense, WhisperSense Lite, WhisperWelcome, WhisperFit, WhisperFit Lite, WhisperValue, WhisperValue Lite







Passive Inlet Vent

FV-GKF32S1





Inlet Vent Features:

Panasonic Passive Inlet provides make-up air to help balance indoor vs. outdoor air pressure.

- Foam pad reduces outdoor noise and condensation
- Insulation lining to prevent condensation
- Durable ABS and PP resin body
- 7 stainless steel installation screws included
- Sturdy open/close lever
- 2-position air delivery

P	assive Inlet	FV-GKF32S1
Specifications	Air Volume Positions	2
Specifications	CFM Settings	12 & 18
	Open/Close Louver Setting	Yes
	Washable Air Filter	Yes
Features	Bug Screen	Yes
	3" x 12" Sleeve Included	Yes
	Body	ABS & PP
Installation	Wall Opening (diameter)	3 inch
mstattation	Installation Screw Included	Yes

Designer Grilles



FV-GL3TDB

Designer Grille Features:

- Easy and affordable to change
- Change your grille to fit your room decor without compromising the performance and quality of the unit
- Applicable Models

WhisperGreen Select[™] (Fan only models): FV-05-11VK1, FV-11-15VK1, FV-05-11VKS1

WhisperCeiling: FV-15VQ5, FV-11VQ5, FV-08VQ5, FV-05VQ5

WhisperFit: FV-11VF2, FV-08VF2

	FV-GL3TDA	FV-GL3TDB
Characteristics		
Grille Size (inches sq.)	13	14-1/5
Shipping Gross Weight (lbs)	1.1	1.3
Trend Style Category	Traditional	Traditional
Material	ABS	ABS
UL Approved ¹	Yes	Yes
HVI Certified ¹	Yes	Yes
Mfg. in ISO 9001 Certified Facility	Yes	Yes

¹ Approved with applicable models.

Cross Reference for Applicable WhisperControl & EcoSwitch to Panasonic Fans

	Model	FV-WCCS1-W/A	FV-WCCS2-W/A	FV-WCD01-W/A	FV-WCD02-W/A	FV-WCSW11-W/A	FV-WCSW21-W/A	FV-WCSW31-W/A	FV-WCSW41-W
		Condensation Sensor	Condensation Sensor	Countdown &	Countdown &				
	Switch Type	On/Off	On/Off/Light	Hourly Timer	Hourly Timer	1 Function Control	2 Function Control	3 Function Control	4 Function Control
	FV-05-11VK1	Х		X		X			
	FV-11-15VK1	Х		X		X			
WhisperGreen	FV-05-11VKS1	X		X		Х			
Select	FV-05-11VKL1		Х		Х		Х		
	FV-11-15VKL1		Х		Х		Х		
	FV-05-11VKSL1				Х		X**		
WhisperRecessed/	FV-08VRL1		Х				Х		
Recessed LED	FV-08VRE1		Х				Х		
	FV-05VQ5	Х		Х		Х			
	FV-08VQ5	Х		X		х			
	FV-11VQ5	X		X		Х			
	FV-15VQ5	Х		X		X			
WhisperCeiling	FV-20VQ3	X		X		Х			
**maper ceruing	FV-30VQ3	Х		X		Х			
	FV-40VQ3	X		Х		X			
	FV-08VQL6		X		X		X	X	
	FV-11VQL6		X		X		X	X	
	FV-15VQL6		X		X		х	X	
WhisperSense	FV-08VQCL6				X		X**		
Lite	FV-11VQCL6				X		X**		
	FV-08VF2	Х		Х		х			
	FV-11VF2	Х		X		X			
WhisperFit	FV-05VFL4		х		х		х	х	
	FV-08VFL4		х		х		х	X	
	FV-11VFL4		Х		Х		Х	Х	
	FV-05VS3	Х		Х		х			
	FV-08VS3	Х		X		х			
WhisperValue	FV-10VS3	Х		Х		х			
	FV-08VSL3		х		х		х	х	
	FV-10VSL3		Х		Х		Х	Х	
FacVant	FV-07VBA1	Х		Х		Х			
EcoVent	FV-07VBB1	Х		Х		х			
WhisperSupply	FV-01WS2	X		X		Х			
Wall	FV-04WS2	Х		Х					
WhisperWall	FV-08WQ1	Х		Х		Х			
Whiene	FV-11VH2*			Х*		Х*			
WhisperWarm	FV-11VHL2*			Х*	Х				Х*
	FV-10NLF1	X		X		Х			
	FV-20NLF1	Х		Х		Х			
WhisperLine	FV-30NLF1	Х		Х		Х			
	FV-40NLF1	Х		Х		Х			
WhisperComfort	FV-04VE1						Х		

 $\label{thm:whisper} WhisperSense, and WhisperGreen Select S/M \ models \ are \ not \ compatible \ with \ the \ above \ switches.$

*Needs 1 control per function **Switch is for light and night-light only

WhisperGreenSelect

WhisperGreen Select		FV-05-11VKS1																
Characteristics		(Base Fan with Pre-installed Multi-Speed with Time Delay)																
Static pressure in inches w.g.	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
Air Volume (CFM)	110	113	100	106	90	95	80	82	70	71	60	66	50	53	40	43	30	33
Noise (sones)	<0.3	0.8	<0.3	0.7	<0.3	0.6	<0.3	0.4	<0.3	0.4	<0.3	0.3	<0.3	0.3	<0.3	<0.3	<0.3	<0.3
Power Consumption (Watts)	9.8	16.1	8.0	14.0	6.5	11.7	5.5	10.2	4.3	8.6	3.6	7.8	3.5	7.0	2.7	5.7	2.4	5.0
Energy Efficiency (CFMs/Watt)	11.5	7.2	13.0	7.9	14.5	8.5	15.3	8.4	17.2	8.7	17.5	8.8	15.1	8.1	16.3	8.2	14.2	7.6
Speed	931	1205	895	1179	852	1146	814	1131	772	1112	750	1107	747	1072	731	1073	718	1062
Current	0.10	0.16	0.09	0.14	0.07	0.12	0.06	0.10	0.05	0.09	0.04	0.08	0.04	0.07	0.08	0.06	0.03	0.06
Power Rating (V/Hz)		120/60																

WhisperSense"

WhisperSense	FV-08	VOCS	FV-11V0C5			
Characteristics		1400		V 400		
Static pressure in inches w.g.	0.1	0.25	0.1	0.25		
Air Volume (CFM)	80	59	110	91		
Noise (sones)	<0.3	<0.3	0.3	0.5		
Power Consumption (Watts)	15.8	15.6	24.3	24.2		
Energy Efficiency (CFMs/Watt)	5.1	3.9	4.6	3.9		
Speed	825	1110	957	1170		
Current	0.14	0.14	0.22	0.21		
Power Rating (V/Hz)	120	/60	120/60			

WhisperWelcome*

WhisperWelcome		FV-05	VFM2			FV-08	VFM2		
Characteristics	4" [Duct	3" [Duct	4" [Duct	3" Duct		
Static pressure in inches w.g.	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	
Air Volume (CFM)	50	30	50	34	80	62	70	56	
Noise (sones)	<0.3	0.7	0.4	0.8	0.9	1.1	0.8	1.0	
Power Consumption (Watts)	16.3	16.0	16.1	16.0	24.5	24.3	24.3	24.0	
Energy Efficiency (CFMs/Watt)	3.6	2.4	3.3	2.2	3.5	2.7	3.1	2.5	
Speed	678	924	740	958	749	945	868	1003	
Current	0.13	0.13	0.13	0.13	0.20	0.19	0.20	0.19	
Power Rating (V/Hz)		120	/60			120	0/60		

WhisperGreenSelect

WhisperGreen Select		ı		- 11VK 1					/-11-1 (Base			
Characteristics			(Dase	: Fall)				'	Dase	rdii)		
Static pressure in inches w.g.	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Air Volume (CFM)	110	113	80	82	50	53	150	151	130	130	110	110
Noise (sones)	<0.3	0.8	<0.3	0.4	<0.3	0.3	<0.3	0.7	<0.3	0.5	<0.3	<0.3
Power Consumption (Watts)	9.8	16.1	5.5	10.2	3.5	7.0	13.0	22.0	10.0	17.0	7.0	13.5
Energy Efficiency (CFMs/Watt)	11.5	7.2	15.3	8.4	15.1	8.1	11.5	6.8	13.1	7.8	15.7	8.2
Speed	931	1205	814	1131	747	1072	664	904	635	891	616	889
Current	0.10	0.16	0.06	0.10	0.04	0.07	0.13	0.21	0.10	0.17	0.07	0.13
Power Rating (V/Hz)	120/60											

WhisperGreen Select										(1 + FV								
Characteristics					(B	ase Fa	n with	Multi-	Speed	Time	Delay	Plug 'N	l Play	" Modu	ıle)			
Static pressure in inches w.g.	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
Air Volume (CFM)	110	113	100	106	90	95	80	82	70	71	60	66	50	53	40	43	30	33
Noise (sones)	<0.3	0.8	<0.3	0.7	<0.3	0.6	<0.3	0.4	<0.3	0.4	<0.3	0.3	<0.3	0.3	<0.3	<0.3	<0.3	<0.3
Power Consumption (Watts)	9.8	16.1	8.0	14.0	6.5	11.7	5.5	10.2	4.3	8.6	3.6	7.8	3.5	7.0	2.7	5.7	2.4	5.0
Energy Efficiency (CFMs/Watt)	11.5	7.2	13.0	7.9	14.5	8.5	15.3	8.4	17.2	8.7	17.5	8.8	15.1	8.1	16.3	8.2	14.2	7.6
Speed	931	1205	895	1179	852	1146	814	1131	772	1112	750	1107	747	1072	731	1073	718	1062
Current	0.10	0.16	0.09	0.14	0.07	0.12	0.06	0.10	0.05	0.09	0.04	0.08	0.04	0.07	0.08	0.06	0.03	0.06
Power Rating (V/Hz)		120/60																

WhisperGreen Select												/S15V								
Characteristics						(Bas	se Fan	with M	1ulti-S	peed T	ime D	elay P	lug 'N	Play™ I	Modul	e)				
Static pressure in inches w.g.	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	0.1	0.25
Air Volume (CFM)	150	151	130	130	120	121	110	110	100	102	90	96	80	84	70	72	60	62	50	51
Noise (sones)	<0.3	0.7	<0.3	0.5	<0.3	0.4	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.4	<0.3	0.4	<0.3	0.4	<0.3	0.4
Power Consumption (Watts)	13.0	22.0	10.0	17.0	7.4	14.1	7.0	13.5	5.6	11.3	4.9	10.7	4.4	9.6	3.8	8.6	3.6	7.7	3.1	6.8
Energy Efficiency (CFMs/Watt)	11.5	6.8	13.1	7.8	16.2	8.6	15.7	8.2	17.9	9.0	18.6	9.0	18.2	8.8	18.4	8.4	16.7	8.1	16.1	7.5
Speed	664	904	635	891	615	884	616	889	603	886	595	891	604	911	602	918	622	919	616	928
Current	0.13	0.21	0.10	0.17	0.08	0.14	0.07	0.13	0.06	0.11	0.06	0.11	0.05	0.10	0.05	0.09	0.04	0.08	0.04	0.07
Power Rating (V/Hz)		120/60																		

WhisperCeiling*

WhisperCeiling	EV-0	5VQ5	EV-0	8VQ5	EV-1	1VQ5	EV-1	5VQ5
Characteristics	11-0	3743	1 4-0	5 V 4 5		1143		3743
Static pressure in inches w.g.	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Air Volume (CFM)	50	36	80	62	110	91	150	127
Noise (sones)	<0.3	0.4	<0.3	0.4	<0.3	0.5	<0.3	0.5
Power Consumption (Watts)	11.1	11.7	14.7	14.5	21.1	20.7	28.4	27.3
Energy Efficiency (CFMs/Watt)	4.7	3.2	5.8	4.5	5.3	4.5	5.3	4.7
Speed	731	1060	829	1089	950	1161	691	911
Current	0.09	0.10	0.12	0.12	0.18	0.17	0.24	0.23
Power Rating (V/Hz)	120	/60	120)/60	120)/60	120)/60

WhisperFit*

WhisperFit		FV-0	8VF2			FV-1	1VF2			
Characteristics	4" [Duct	3" [Duct	4" [uct	3" [Duct		
Static pressure in inches w.g.	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25		
Air Volume (CFM)	80	60	70	53	110	94	90	78		
Noise (sones)	0.8	1.0	0.8	1.1	1.5	1.5	1.5	2.0		
Power Consumption (Watts)	24.5	24.3	24.5	24.2	33.1	32.8	33.0	32.7		
Energy Efficiency (CFMs/Watt)	3.3	2.5	2.9	2.2	3.4	2.9	2.9	2.5		
Speed	757	956	845	1007	830	1000	1029	1128		
Current	0.20	0.20	0.20	0.20	0.27	0.28	0.27	0.28		
Power Rating (V/Hz)		120	0/60	120/60						

Whisper Value Ventilation Fan

WhisperValue	FV-0	5VS3	FV-0	8VS3	FV-1	0VS3
Characteristics	4" Ova	al Duct	4" Ova	l Duct	4" Ova	l Duct
Static pressure in inches w.g.	0.1	0.25	0.1	0.25	0.1	0.25
Air Volume (CFM)	60	53	80	72	100	92
Noise (sones)	0.4	1.0	1.0	1.2	1.4	1.5
Power Consumption (Watts)	15.9	16.3	21.2	21.5	29.6	29.9
Energy Efficiency (CFMs/Watt)	3.8	3.3	3.8	3.3	3.4	3.1
Speed (RPM)	706	980	778	997	868	1056
Current (amps)	0.13	0.14	0.18	0.18	0.25	0.26
Power Rating (V/Hz)	120)/60	120	1/60	120	/60

Fan/Lights with Built-in Controls

WhisperGreenSelect

WhisperGreen Select									5-11V									
Characteristics				Base	Fan wi	th LEC	Light	and P	re-inst	alled I	Multi-S	Speed	with Ti	me De	layJ			
Static pressure in inches w.g.	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
Air Volume (CFM)	110	114	100	105	90	94	80	86	70	71	60	62	50	53	40	43	30	35
Noise (sones)	0.4	0.9	<0.3	0.8	<0.3	0.6	<0.3	0.6	<0.3	0.4	<0.3	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Power Consumption (Watts)	11.1	18.0	8.7	15.0	7.0	12.8	6.0	11.1	4.7	8.9	3.9	7.6	4.0	7.0	2.8	5.7	2.5	5.0
Energy Efficiency (CFMs/Watt)	9.9	6.3	11.6	7.1	13.1	7.5	13.3	7.7	15.3	8.2	15.9	8.4	12.8	7.7	14.6	7.7	12.8	7.4
Speed	960	1237	926	1213	872	1184	837	1157	796	1119	769	1102	740	1081	739	1077	731	1058
Current	0.12	0.17	0.09	0.15	0.08	0.13	0.07	0.12	0.05	0.09	0.05	0.08	0.04	0.07	0.04	0.06	0.03	0.06
Power Rating (V/Hz)	120/60																	

WhisperSense Lite

WhisperSense Lite	FV-08\	/nci 4	EV_11	VQCL6
Characteristics	1 1-00	T G C C		VUULU
Static pressure in inches w.g.	0.1	0.25	0.1	0.25
Air Volume (CFM)	80	62	110	89
Noise (sones)	<0.3	0.4	0.7	0.7
Power Consumption (Watts)	17.5	17.6	26.0	25.7
Energy Efficiency (CFMs/Watt)	4.7	3.6	4.3	3.5
Speed	881	1125	1017	1202
Current	0.16	0.15	0.23	0.22
Power Rating (V/Hz)	120	/60	120)/60

WhisperGreenSelect

WhisperGreen Select				11VKL th LEC		1				15VKI		1
Characteristics					9			,			9	ſ
Static pressure in inches w.g.	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Air Volume (CFM)	110	114	80	86	50	53	150	143	130	131	110	111
Noise (sones)	0.4	0.9	<0.3	0.6	<0.3	<0.3	0.6	0.9	<0.3	0.8	<0.3	0.6
Power Consumption (Watts)	11.1	18.0	6.0	11.1	4.0	7.0	16.5	24.0	12.0	21.0	8.5	16.0
Energy Efficiency (CFMs/Watt)	9.9	6.3	13.3	7.7	12.8	7.7	9.2	6.0	10.9	6.3	13.1	7.1
Speed	960	1237	837	1157	740	1081	730	941	679	926	652	914
Current	0.12	0.17	0.07	0.12	0.04	0.07	0.16	0.22	0.12	0.19	0.08	0.15
Power Rating (V/Hz)	120/60											

WhisperGreen Select					D [LIED			(L1 + F\			Norm PALL	DI-∵™ M	- 4-4-1			
Characteristics				U	раѕе г	an wit	h LED	Light	ana mu	iii-Spee	a rime	Delay F	rug iv i	Play™ M	odutej			
Static pressure in inches w.g.	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
Air Volume (CFM)	110	114	100	105	90	94	80	86	70	71	60	62	50	53	40	43	30	35
Noise (sones)	0.4	0.9	<0.3	0.8	<0.3	0.6	<0.3	0.6	<0.3	0.4	<0.3	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Power Consumption (Watts)	11.1	18.0	8.7	15.0	7.0	12.8	6.0	11.1	4.7	8.9	3.9	7.6	4.0	7.0	2.8	5.7	2.5	5.0
Energy Efficiency (CFMs/Watt)	9.9	6.3	11.6	7.1	13.1	7.5	13.3	7.7	15.3	8.2	15.9	8.4	12.8	7.7	14.6	7.7	12.8	7.4
Speed	960	1237	926	1213	872	1184	837	1157	796	1119	769	1102	740	1081	739	1077	731	1058
Current	0.12	0.17	0.09	0.15	0.08	0.13	0.07	0.12	0.05	0.09	0.05	0.08	0.04	0.07	0.04	0.06	0.03	0.06
Power Rating (V/Hz)		120/60																

WhisperGreen Select												-VS15								
Characteristics					(B	ase Fa	n with	LED L	ight ar	id Muli	ti-Spee	ed Time	e Delay	/ Plug	'N Pla	/™ Mod	ule)			
Static pressure in inches w.g.	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	0.1	0.25
Air Volume (CFM)	150	143	130	131	120	122	110	111	100	102	90	90	80	82	70	71	60	62	50	52
Noise (sones)	0.6	0.9	<0.3	0.8	<0.3	0.6	<0.3	0.6	<0.3	0.5	<0.3	0.4	<0.3	0.4	<0.3	0.3	<0.3	0.3	<0.3	0.4
Power Consumption (Watts)	16.5	24.0	12.0	21.0	9.5	16.9	8.5	16.0	6.9	13.5	5.7	11.6	5.0	10.4	4.3	8.8	4.0	7.9	3.2	7.2
Energy Efficiency (CFMs/Watt)	9.2	6.0	10.9	6.3	12.8	7.3	13.1	7.1	14.8	7.7	16.0	7.8	16.0	7.9	16.3	8.1	15.5	8.1	16.3	7.5
Speed	730	941	679	926	669	917	652	914	644	923	631	917	633	918	624	904	634	910	607	928
Current	0.16	0.22	0.12	0.19	0.10	0.17	0.08	0.15	0.07	0.14	0.06	0.12	0.06	0.11	0.05	0.09	0.05	0.08	0.04	0.08
Power Rating (V/Hz)		120/60																		

WhisperRecessed LED VENTILIZION FRANCES

WhisperRecessed LED Characteristics	FV-08	BVRE1
Static pressure in inches w.g.	0.1	0.25
Air Volume (CFM)	80	66
Noise (sones)	0.8	0.7
Power Consumption (Watts)	20.5	19.5
Energy Efficiency (CFMs/Watt)	4.0	3.4
Speed	1378	1501
Current	0.17	0.17
Power Rating (V/Hz)	120)/60

WhisperRecessed VENTILATION FRAN

WhisperRecessed	FV-08	BVRL1	
Characteristics			
Static pressure in inches w.g.	0.1	0.25	
Air Volume (CFM)	80	66	
Noise (sones)	0.8	0.7	
Power Consumption (Watts)	20.5	19.5	
Energy Efficiency (CFMs/Watt)	4.0	3.4	
Speed	1378	1501	
Current	0.17 0.17		
Power Rating (V/Hz)	120/60		

WhisperLite*

EV-09VOL4		FV_11	A IOV	EV_15	A IOV
	77420		Value	FV-13VGEO	
0.1	0.25	0.1	0.25	0.1	0.25
80	62	110	90	150	128
<0.3	0.4	0.5	0.6	0.9	1.0
14.9	14.7	23.4	23.0	31.8	30.9
5.5	4.3	4.7	3.9	4.8	4.2
863	1117	1006	1193	800	988
0.12	0.12	0.20	0.19	0.27	0.26
120/60		120	/60	120	/60
	0.1 80 <0.3 14.9 5.5 863 0.12	80 62 <0.3 0.4 14.9 14.7 5.5 4.3 863 1117 0.12 0.12	0.1 0.25 0.1 80 62 110 <0.3 0.4 0.5 14.9 14.7 23.4 5.5 4.3 4.7 863 1117 1006 0.12 0.12 0.20	0.1 0.25 0.1 0.25 80 62 110 90 <0.3 0.4 0.5 0.6 14.9 14.7 23.4 23.0 5.5 4.3 4.7 3.9 863 1117 1006 1193 0.12 0.12 0.20 0.19	0.1 0.25 0.1 0.25 0.1 80 62 110 90 150 <0.3

WhisperValue Lite

WhisperValue Lite	FV-08	FV-08VSL3		VSL3	
Characteristics	4" Ova	l Duct	4" Oval Duct		
Static pressure in inches w.g.	0.1	0.25	0.1	0.25	
Air Volume (CFM)	80	72	100	91	
Noise (sones)	1.0	1.2	1.4	1.5	
Power Consumption (Watts)	22.5	22.9	30.2	30.3	
Energy Efficiency (CFMs/Watt)	3.6	3.1	3.3	3.0	
Speed (RPM)	825	1021	918	1087	
Current (amps)	0.19	0.19	0.26	0.26	
Power Rating (V/Hz)	120	/60	120	/60	

WhisperFit Lite

WhisperFit Lite	FV-05VFL4			L4 FV-08VFL4				FV-11VFL4				
Characteristics	4" [Duct	3" [Ouct	4" D	uct	3" [Ouct	4" [Duct	3" [Ouct
Static pressure in inches w.g.	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Air Volume (CFM)	50	34	50	35	80	67	70	60	110	95	90	78
Noise (sones)	<0.3	0.4	<0.3	0.5	0.5	0.8	0.6	0.8	1.3	1.4	1.5	1.5
Power Consumption (Watts)	14.8	14.7	14.8	14.6	28.4	28.1	28.3	28.0	32.6	32.1	32.1	31.6
Energy Efficiency (CFMs/Watt)	3.6	2.4	3.4	2.4	2.8	2.4	2.6	2.3	3.4	3.0	3.0	2.7
Speed	692	962	747	983	803	1005	908	1064	897	1068	1077	1177
Current	0.12	0.12	0.12	0.12	0.24	0.24	0.24	0.24	0.27	0.27	0.27	0.27
Power Rating (V/Hz)		120	1/60			120,	/60			120	/60	

WhisperComfort VENTILATION FAN

WhisperComfort		FV-04VE1	
Characteristics	40 CFM	20 CFM	10 CFM
Static pressure in inches w.g.	0.1	0.1	0.1
Air Volume Exhaust (CFM)	40	20	10
Air Volume Supply (CFM)	30	20	10
Noise (sones)	0.8	<0.3	N/A
Power Consumption (Watts)	23	21	17
Speed	1479	1292	1095
Current	0.15	0.10	0.09
Power Rating (V/Hz)		120/60	

WhisperCeiling VENTILATION FAN

WhisperCeiling	FV-2	0VQ3	EV_3	0VQ3	EV-/	0VQ4
Characteristics		FV-20VG3			F V 40 V G-4	
Static pressure in inches w.g.	0.1	0.25	0.1	0.25	0.1	0.25
Air Volume (CFM)	190	145	290	257	390	356
Noise (sones)	0.8	1.4	2.0	N/A	3.0	3.0
Power Consumption (Watts)	43.7	42.9	64.0	62.0	111.4	109.6
Energy Efficiency (CFMs/Watt)	4.6	3.6	4.5	4.1	3.5	3.3
Speed	761	949	877	990	793	874
Current	0.34	0.33	0.53	0.52	0.99	0.98
Power Rating (V/Hz)	120/60		120/60 120/		120	/60



EcoVent	FV-07VBA1 + FV-07VBB1			B1
Characteristics	Stan	dard	Veri-Boost	™ Activated
Static pressure in inches w.g.	0.1	0.25	0.1	0.25
Air Volume (CFM)	70	56	90	75
Noise (sones)	1.1	1.4	1.5	2.0
Power Consumption (Watts)	20.0	20.0	24.0	24.0
Energy Efficiency (CFMs/Watt)	3.5	2.8	3.8	3.1
Speed	907	1200	1019	1266
Current	0.15	0.14	0.19	0.18
Power Rating (V/Hz)	120/60			

WhisperSupply Wall VERTILATION FAN

WhisperSupply Wall	FV-01WS2	FV-0	4WS2
Characteristics	11-011132		
Static pressure in inches w.g.	0.3	0.3	0.3
Air Volume (CFM)	10	20	40
Noise (sones)	<0.3	<0.3	1.2
Power Consumption (Watts)	3	5.2	8.2
Energy Efficiency (CFMs/Watt)	4.7	4.8	5.6
Speed	2662	1738	2559
Current	0.03	0.06 0.07	
Power Rating (V/Hz)	120/60	120/60	

WhisperWarm"

WhisperWarm	FV-1	1VH2	FV-11	IVHL2	
Characteristics			1.4-1101122		
Static pressure in inches w.g.	0.1	0.25	0.1	0.25	
Air Volume (CFM)	110	89	110	89	
Noise (sones)	0.6	1.0	0.7	1.0	
Power Consumption (Watts)	30.7	30.5	30.6	30.5	
Energy Efficiency (CFMs/Watt)	3.6	2.9	3.6	2.9	
Speed	778	935	812	956	
Current	0.25	0.25	0.25	0.25	
Power Rating (V/Hz)	120	/60	120)/60	



WhisperWall	FV-08WQ1
Characteristics	1.1-001141
Static pressure in inches w.g.	0.03
Air Volume (CFM)	70
Noise (sones)	1.1
Power Consumption (Watts)	18.0
Energy Efficiency (CFMs/Watt)	4.3
Speed	660
Current	0.20
Power Rating (V/Hz)	120/60

WhisperLine VENTILATION FAN

WhisperLine	FV-10NLF1		EV-10NLE1 EV-20		V-20NL	E1	Ε\	FV-30NLF1		FV-40NLF1		
Characteristics			FV-TONEFT FV-ZONEFT		FV-SUNLFI			FV-40NLF1				
Static pressure in inches w.g.	0.2	0.3	0.4	0.2	0.3	0.4	0.2	0.3	0.4	0.2	0.3	0.4
Air Volume (CFM)	120	105	82	240	225	200	340	322	302	440	421	407
Power Consumption (Watts)	36.2	35.0	33.5	55.5	53.5	51.1	95.2	93.5	91.5	136	132	130
Energy Efficiency (CFMs/Watt)		3.5		4.1		3.2			3.2			
Speed		1590		1260		1337			1150			
Current	0.31				0.46			0.86			1.10	
Power Rating (V/Hz)		120/60		120/60		120/60			120/60			

	WhisperLine Installation Kits										
Model No.	Description	Inlet Grille	Backdraft Damper	Clamp	Y-Adapter						
FV-NLF04G	4" Inlet Grille + Metal Plate	1 (4")	-	-	-						
FV-NLF06G	6" Inlet Grille + Metal Plate	1 (6")	-	-	-						
PC-NLF04S	4" Single Inlet Kit	1 (4")	1 (4")	6	-						
PC-NLF06S	6" Single Inlet Kit	1 (6")	1 (6")	6	-						
PC-NLF04D	4" Double Inlet Kit	2 (4")	2 (4")	12	1 (4"- 4"x 2)						
PC-NLF06D	6" Double Inlet Kit	2 (6")	2 (6")	12	1 (6"- 6"x 2)						
PC-NLF64D	6"-4" Double Inlet Kit	2 (4")	2 (4")	12	1 (6"- 4"x 2)						
PC-NLF86Y	8"-6" Y-Adapter	-	-	-	1 (8"- 6"x 2)						

Sizing

Information and Instructions

Equivalent Duct Length (EDL): The Equivalent Duct Length Table (Figure B) shows you how to calculate the equivalent straight duct length in order to overcome static pressure. The EDL chart helps ensure fan performs as expected under the airflow resistance caused by the listed components.

A ventilating fan's performance is plotted on a graph called a performance curve. The performance curve shows airflow in cubic feet per minute (CFM) along the horizontal axis and static pressure (resistance) along the vertical axis. Figure A shows how a performance curve works. The fan with a "Closed Duct" has high static pressure and no airflow; and the fan with "No Duct" has low static pressure and high airflow. In reality, an installed fan will be somewhere in between these two points.

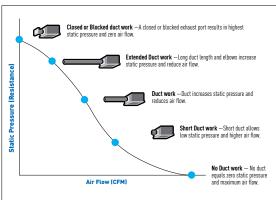


FIG A

Sizing and selecting a Ceiling Mounted Fan:

Proper sizing requires that you determine the needed CFM, the square footage of the room or home, and the length and type of du ct.

Example: Sizing for an 8 ft \times 10 ft \times 8 ft ceiling bathroom using 12 foot long, 4 inch diameter aluminum flex duct, one elbow, one wall cap.

Step 1: Determine application

Bathroom = 1 CFM/square foot

Step 2: Calculate the area to be ventilated in square feet.

Assuming an 8 ft ceiling:
room length x width = area in square feet

8 ft x 10 ft = 80 sq.ft.

Step 3: Calculate your required CFM

1 CFM x 80 sq.ft. = <u>80 CFM</u>

Step 4: Use the Equivalent Duct Length chart above to calculate duct run.

4a. 12 ft aluminum flex duct x 1.25 = 15 ft

4b. One elbow = 15 ft EDL

4c. One wall cap = 30 ft EDL

15 ft + 15 ft + 30 ft = 60 ft EDL

This is the equivalent duct length (or resistance) the fan must overcome to move air through the duct to the outside.

Step 5: Review models in catalog pages to find a model with desired feature. Features may include light fixture, heater or low-profile housing.

Note: Check with your local building inspector to confirm that these methods are accepted in your area.

Equivalent Duct Length					
		Duct Diameter			
		3"	4"	6"	8"
Duct	Smooth Metal	Same as measured duct length			
Material	Flex Aluminum	1.25 X duct length	1.25 X duct length	1.5 X duct length	1.5 X duct length
	Insulated Flex	1.5 X duct length	1.5 X duct length	1.75 X duct length	1.75 X duct length
Terminal	Wall Cap	30 feet	30 feet	40 feet	40 feet
Device	Roof Jack	30 feet	30 feet	40 feet	40 feet
Elbow	Adjustable	15 feet	15 feet	20 feet	20 feet

FIG. B