Panasonic

VENTILATION
& IAQ SOLUTIONS

EIGHT STRAIGHT!

AWARD WINNING COMMITMENT TO INNOVATION

For over two decades, Panasonic has led the industry with an impressive commitment to innovative, high performance ventilation and indoor air quality solutions that have set new standards for quiet operation and energy efficiency.

Panasonic Advanced Ventilation and IAQ Solutions

1993	2003	2006	2007	2011	2012
WhisperCeiling	WhisperFit	WhisperGreen	WhisperValue	WhisperComfort	WhisperSense	WhisperRecessed
Quiet Solution	Retrofit Solution	ASHRAE 62.2 Compliance Solution	Multi-family Solution	Balanced Air Solution	CALGreen Compliance Solution	Design Solution

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

Panasonic is the premier manufacturer of powerful, energy-efficient ventilation fans & indoor air quality solutions. We produce the highest quality, code compliant solutions available in the market today. Builders, contractors, architects and homeowners rely on us to provide high performance, low cost solutions that help create healthy home environments.

Panasonic is proud to be recognized by the EPA for the **eighth** consecutive year, earning their most prestigious ENERGY STAR® honor, the Sustained Excellence 2017 Award. Sustained excellence is precisely what we strive for as evidenced by our legacy of providing an array of ventilation products for virtually any application. 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!

A LEGACY OF INNOVATION

2013	2014	2015		2017	
WhisperGreen LED™	**WhisperGreen** *Select*™	**WhisperFit EZ**™	*SelectCycler*™	**WhisperValue DC**™	**Intelli-Balance 100**™
Ultimate Energy Efficient Fan/Light Solution	One Fan - Multiple IAQ Solutions Most Efficient 2017	Retrofit Solution Customizable Airflow	Low Cost, Whole House Ventilation Solution	Multi-family Solution DC Motor Technology	Code Compliant ERV for Any Climate Zone

Most Efficient 2017
ENERGY STAR www.energystar.gov

*2017 ENERGY STAR® Most Efficient applies to WhisperGreen Select™ fan only models

Table of Contents

Panasonic Ventilation Fan Benefits

High Performance, Low Cost Solutions
Panasonic offers the most cost effective solutions for meeting code and minimizing the impact to your HERS index. Whether utilizing an exhaust only, supply only or balanced ventilation strategy, you can rely on Panasonic for unmatched quality and value.

Certified & Code Compliant
Panasonic ventilation fans are certified by the Home Ventilating Institute (HVI) and ENERGY STAR® certified, where guidelines exist. All models can be used to comply with ASHRAE 62.2, the ventilation standard required by LEED for Homes, ENERGY STAR® for Homes 3.0 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. Our fans have also been engineered to comply with ENERGY STAR® 4.0 requirements for increased efficiency (CFM/Watt), ensuring low cost, energy efficient operation.

ENERGY STAR
AWARD 2017
PARTNER OF THE YEAR
Sustained Excellence

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's and fan/heaters, all models are UL listed for tub/shower enclosure when GFCI protected.

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 an optional 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 motors, 5-Year warranty on LED's, 3-Year warranty on AC motors, CFLs and all other parts.

Why is Ventilation Necessary?

Today's homes are designed and built to improve energy efficiency. However, these airtight homes may actually cause health problems due to the build-up of pollutants and uncirculated stale air. What do they need? Mechanical ventilation!

Airtight Homes

Homes designed and built in recent years are more airtight and energy efficient than in the past. To obtain this airtight design, newly designed windows and doors, sealing caulks and other insulating materials are used to create better energy efficiency. The resulting benefit is fewer drafts, which lowers the cost to heat and air-condition a home. But pollutants retained in airtight buildings can be hazardous to their occupants. That's why Panasonic stresses a "build tight and ventilate right" platform. Proper mechanical ventilation design can address poor indoor air quality, while retaining energy efficiency.

Biological Pollutants

Biological pollutants, to some degree, are found in all homes. These include mold, mildew, pollen, dust mites, pet dander, viruses and bacteria. Accumulation of these biological pollutants can result in hazardous health effects for the occupants, as well as structural damage to the building.

Volatile Organic Compounds (VOCs)

Volatile Organic Compounds are carbon-based compounds that easily evaporate.

Formaldehyde and other types of gases are released from building materials, carpets, furniture and many other household items as part of aging, decomposition or curing, all of which are natural processes known as off-gassing. Some other household items that emit VOCs include hair sprays, paints, lacquers, finishes, oven cleaners and other cleaning solvents, pesticides, etc. Often colorless and odorless, VOCs can ultimately sensitize certain people to react to them.

Ways to Improve Indoor Air Quality

The first step to improve indoor air quality should be to reduce or remove the source of the pollutants.

Unfortunately, indoor pollutants are virtually impossible to eliminate completely, creating the need for a second step to improve indoor air quality—mechanical ventilation. Mechanical ventilation is used to remove stale, moist, polluted air and replace it with fresh outside air.

Whole House Ventilation

All homes need to exhaust stale air and bring in fresh air for the health of the occupants. To meet Whole House Ventilation Standards, a typical solution is to exhaust air on a low, continuous basis and allow outdoor infiltration air to freshen the home. However, it is also possible to mechanically bring in fresh air for Whole House Ventilation by running a fan at a higher speed on an intermittent basis. Either way, continuous or intermittent, it is important to insure fresh air routinely replaces the stale air within the home.
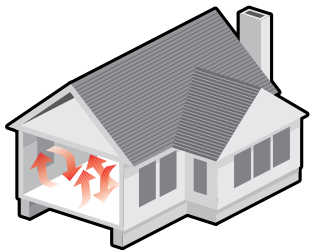
Bad
Pollutants such as smoke, formaldehyde, dust, humidity and VOCs accumulate in a poorly vented building.
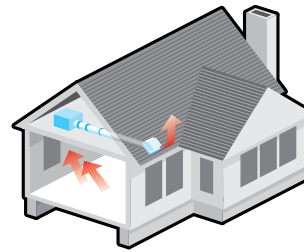
Good
Ventilation fans help to maintain indoor air flow and air quality.

Ideally, an airtight home designed with both continuous and intermittent ventilation will contribute to a healthy and comfortable living environment for the entire family.

Local, or Source, Ventilation

Local, or source ventilation, sometimes referred to as spot ventilation, is used to capture and remove pollutants quickly at the source. Pockets of excessive moisture and pollutants can build up in the bathroom, kitchen, utility room, garage and home office. This secondary process serves to exhaust these problem areas quickly, before bad air can spread throughout the house. Just as important as Whole House ventilation, source ventilation complements the effort to improve indoor air quality.

Both systems exhaust pollutants from the air, but source ventilation is especially effective at removing pollutants where they can become concentrated such as in the batwhroom, kitchen or garage.

Source (spot) ventilation:
The American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) recommends the following minimums for source ventilation: (See ASHRAE on page 80)

I. Bathrooms - 50 CFM minimum. A good rule of thumb for bathrooms is 1 CFM/sq.ft.

II. Kitchens - 100 CFM. A good rule of thumb for kitchens is 2 CFM/sq.ft.

Whole house ventilation:
Most building codes have adopted the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) Standard 62. The most widely-used version, ASHRAE 62.2-2010, calls for continuous mechanical ventilation as shown in the following steps below.

The formula for calculating the needed whole house mechanical ventilation is as follows:

CFM fan = 0.01 A floor + 7.5 (Number of bedrooms + 1)

7.5 CFM/bedroom plus 7.5 CFM (assuming 2 people in the Master Bedroom) and add 1% of the square feet of the house or apartment.

Finally, it would be good to calculate the Equivalent Duct Length of the planned duct run. Bear in mind that some fans are not able to overcome the static pressure of a long, or difficult duct run to the exterior.

Static pressure and duct run:
A ventilating fan must overcome resistance when pulling air through the grille and pushing it through the duct and cap to the outside of the building. This resistance is known as static pressure. The amount of static pressure depends on the duct length, type of duct, elbows and the roof jack or wall cap.

Fan Selection Guide

1. What is the size of the bathroom?

  a. Need 1 CFM (cubic foot per minute) per square foot

  b. Length x Width of floor space (sq.ft.) = CFM (length) x (width) = (Total CFM needed)

  c. Example: 8 ft length x 10 ft wide = 80 CFM is needed to properly ventilate the bathroom

2. What features are needed/wanted? Fan only? Light? Heat? Variable speed? Motion? Humidity? Time delay?

3. What type of access or truss height is available?

  a. 2 x 8 construction – use any fan combination that we have

  b. 2 x 6 construction – use our fan combinations that fit 2 x 6 or 2 x 4 construction

  c. 2 x 4 construction – use our fan combinations that fit 2 x 4 construction

Now that you know the CFM needed, the features wanted and the construction size, you are ready to find your fan combination.

High Performance, Low Cost Ventilation & IAQ Solutions

WhisperRecessed LED™
VENTILATION FAN

Ideal Design Solution
- Architectural grade recessed fan/light
- ENERGY STAR® 2.0 certified LED lamp
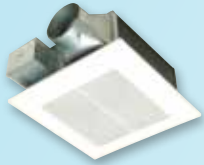
WhisperFit® E2
VENTILATION FAN

Ideal Retrofit Solution
- Low profile, 5-5/8" housing depth
- Pick-A-Flow™ Speed Selector

WhisperWarm™
VENTILATION FAN

Quiet, Fan/Heater Solution
- Quick, 1 minute warm up

ecoVent™

Cost effective, Spot Ventilation Solution
- Ideal for Home Builders
- Ventilation Verification Assurance

WhisperComfort™
VENTILATION FAN

Low Cost and Easy to Install Balanced Air Solution
- UL listed ceiling and wall mount spot ERV

Intelli-Balance™ 100

Cost Effective, Code Compliant ERV for Any Climate Zone
- Two DC motors with Pick-A-Flow™
- Built-in ASHRAE 62.2 timing function

SelectCycler™
WHOLE HOUSE VENTILATION SYSTEM

Lowest Cost Per HERS Point Solution
- Supply or Balanced ventilation
- Designed to work with WhisperGreen Select fans
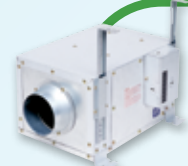
WhisperLine™
VENTILATION FAN

Remote Mount, In-line Spot Ventilation Solution
- Remote mount in-line fans for single or multiple inlets

ENERGY STAR AWARD 2017
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Sustained Excellence

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HVI 2100 CERTIFIED
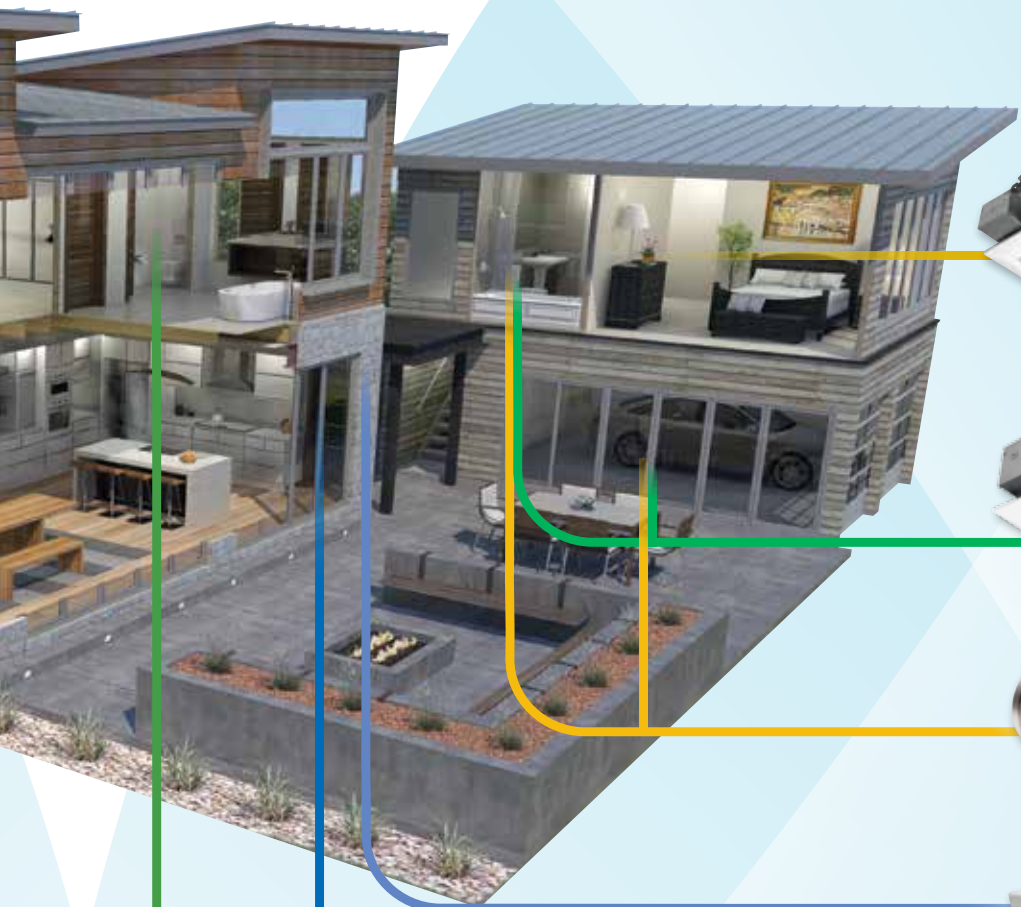
WhisperValue® DC™
VENTILATION FAN

Ideal Multi-Family Solution
- DC motor and Pick-A-Flow™ Speed Selector
- Super low profile, 3-3/8" housing depth
- UL listed ceiling and wall mount
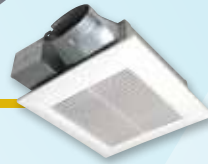
WhisperGreen *Select*™
VENTILATION FAN

One Fan - Multiple IAQ Solutions
- Customizable, all-in-one fan and fan/LED light combinations
- Works with the SelectCycler System

WhisperWall™
VENTILATION FAN

Through the Wall Spot Ventilation
- Through-the-wall application

WhisperSupply Wall™
VENTILATION FAN

Filtered Supply Air Solution
- Filtered supply air fan solution to meet ASHRAE 62.2 requirements

Recessed Inlet™

Design solution for exhaust or supply inlets
- Ideal for use with in-line fans and H/ERVs
- ENERGY STAR® 2.0 certified LED lamp fans

WhisperCeiling™
VENTILATION FAN

Quiet, Spot Ventilation Solution
- Low sone & energy efficient

WhisperSense™
VENTILATION FAN

Moisture Control for CALGreen Compliance Solution
- Built-in dual motion and humidity sensors

WhisperControl

Condensation Sensor Plus Solution
- Automatic dual humidity and temperature sensor

Panasonic

WhisperGreen Select™

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. To the builder and professional installer, Whisper Green Select™ provides unequalled installed performance and quietest operation at 0.25" w.g. static pressure. Its unique design and superior energy efficiency are achieved through engineering expertise, provided by a company who sets the standard for quality and value.

Panasonic brings you the next wave of technological innovation, with a built-in **Pick-A-Flow™** speed selector that 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.

WhisperGreen Select also offers 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)
Allows you to 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 Plug 'N Play module.

SmartAction® Motion Sensor (FV-MSVK1)
Automatically activates the fan 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.

WhisperGreen Select | One Fan - Multiple IAQ Solutions

FV-05-11VK1   50-80-110 CFM   4" or 6" Duct
FV-11-15VK1   110-130-150 CFM   6" Duct
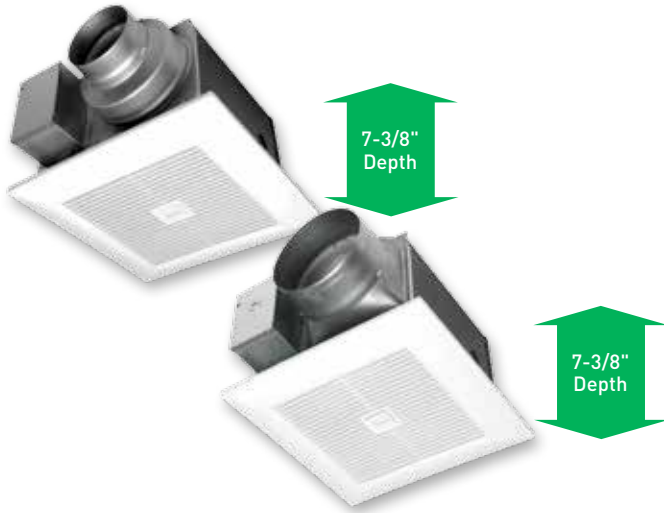
7-3/8" Depth

7-3/8" Depth

WhisperGreen Select Key Benefits:

- Customizable, all-in-one fan
- Pick-A-Flow™ speed selector – one fan, you choose the CFM
- Plug 'N Play™ modules provide up to three value added features (select from Multi-Speed with Time Delay, SmartAction® Motion Sensor, Condensation Sensor or NiteGlo™ LED Night Light) (*See page 10-11 for details*)
- Revolutionary DC motor with SmartFlow™ technology for optimum CFM output
- Flex-Z Fast™ installation bracket provides flexible, fast and easy installation
- Integrated dual 4" or 6" duct adapter (50-80-110 CFM models)
- Fits in 2 x 8 construction
- UL listed for tub/shower enclosure when GFCI protected
- Can be used to comply with ASHRAE 62.2, LEED, CALGreen, California Title 24, WA Ventilation Code and ENERGY STAR® for Homes 3.0

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

SmartAction® Motion Sensor*
(FV-MSVK1)

Condensation Sensor*
(FV-CSVK1)

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

Plug 'N Play Receptacles & Pick-A-Flow Switch

1 Plug 'N Play Modules Sold Separately

2 Plug 'N Play Module Receptacles

3 Pick-A-Flow Speed Selector Switch

Flex-Z Fast installation bracket with articulating joints

BUILT-IN SELF ADJUSTING AIRFLOW TECHNOLOGY

WhisperGreen Select

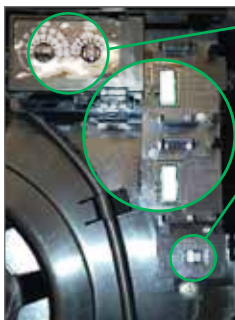| Characteristics	FV-05-11VK1 (Base Fan)						FV-11-15VK1 (Base Fan)					
Static pressure in inches w.g.	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Air Volume (CFM)	110	113	80	82	50	53	150	151	130	130	110	110
Noise (sones)	<0.3	0.8	<0.3	0.4	<0.3	<0.3	<0.3	0.7	<0.3	0.5	<0.3	<0.3
Power Consumption (Watts)	9.8	16.1	5.4	10.2	3.2	6.5	12.7	21.7	9.5	16.8	6.6	12.7
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

Characteristics	FV-05-11VK1 + FV-VS15VK1 (Base Fan with Multi-Speed Time Delay Plug 'N Play™ Module)																	
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	3.2	6.5	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

Characteristics	FV-11-15VK1 + FV-VS15VK1 (Base Fan with Multi-Speed Time Delay Plug 'N Play™ Module)																			
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)	12.7	21.7	9.5	16.8	7.4	14.1	6.6	12.7	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																			

Flex-ZFast™

Most Efficient 2017 ENERGY STAR www.energystar.gov

CALGreen

c(UL)us

WhisperGreen Select™ | One Fan - Multiple IAQ Solutions

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

7-3/8" Depth

Most Efficient **2017**
ENERGY STAR www.energystar.gov

WhisperGreen Select Key Benefits:

- Customizable, all-in-one fan
- 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 (select from SmartAction® Motion Sensor, Condensation Sensor or NiteGlo™ LED Night Light) (*See page 10-11 for details*)
- Revolutionary DC motor with SmartFlow™ technology for optimum CFM output
- Flex-Z Fast™ installation bracket provides flexible, fast and easy installation
- Integrated dual 4" or 6" duct adapter
- Fits in 2 x 8 construction
- UL listed for tub/shower enclosure when GFCI protected
- Can be used to comply with ASHRAE 62.2, LEED, CALGreen, California Title 24, WA Ventilation Code and ENERGY STAR® for Homes 3.0

WhisperGreen Select™ | One Fan/Light - Multiple IAQ Solutions

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

7-3/8" Depth

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.

LED
APPLICABLE TO FV-05-11VKSL1 ONLY

PANASONIC PERFORMANCE PACKAGE
BUILT-IN SELF ADJUSTING AIRFLOW CAPABILITY

WhisperGreen Select

FV-05-11VKS1
(Base Fan with Pre-installed Multi-Speed with Time Delay)

Characteristics																		
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	3.2	6.5	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

FV-05-11VKSL1
(Base Fan with LED Light and Pre-installed Multi-Speed with Time Delay)

Characteristics																		
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	0.5	<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	17.6	8.7	15.0	7.0	12.8	5.8	11.1	4.7	8.9	3.9	3.2	6.6	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																	

Pre-Installed Multi-Speed
with Time Delay

SmartAction® Motion Sensor*

(FV-MSVK1)

Condensation Sensor*

(FV-CSVK1)

NiteGlo™ LED Night Light*

(FV-NLVK1)
*Optional Add-On Feature

Plug 'N Play Receptacles & Pick-A-Flow Switch
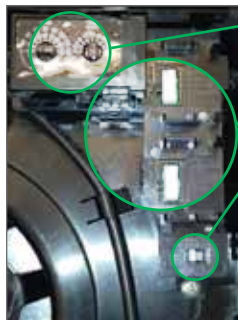
1 **Pre-Installed Multi-Speed Module**

2 **Plug 'N Play Module Receptacles**

3 **Pick-A-Flow Speed Selector Switch**

Flex-Z Fast installation bracket
with articulating joints

WhisperGreen*Select*™ | One Fan/Light - Multiple IAQ Solutions

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

7-3/8" Depth

7-3/8" Depth
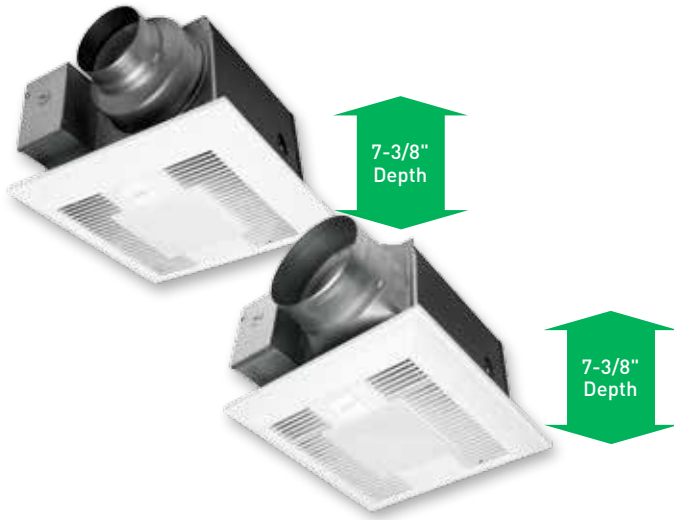
WhisperGreen Select Key Benefits:

- 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 (select from Multi-Speed with Time Delay, SmartAction® Motion Sensor, Condensation Sensor or NiteGlo™ LED Night Light) (*See page 10-11 for details*)
- Revolutionary DC motor with SmartFlow™ technology for optimum CFM output
- Two replaceable, 7W, GU24 base LED lamps
- Flex-Z Fast™ installation bracket provides flexible, fast and easy installation
- Fits in 2 x 8 construction
- UL listed for tub/shower enclosure when GFCI protected
- Can be used to comply with ASHRAE 62.2, LEED, CALGreen, California Title 24, WA Ventilation Code and ENERGY STAR® for Homes 3.0

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

SmartAction® Motion Sensor*

(FV-MSVK1)

Condensation Sensor*

(FV-CSVK1)

NiteGlo™ LED Night Light*

(FV-NLVK1)
*Optional Add-On Feature

Plug 'N Play Receptacles & Pick-A-Flow Switch

1 Plug 'N Play Modules Sold Separately

2 Plug 'N Play Module Receptacles

3 Pick-A-Flow Speed Selector Switch

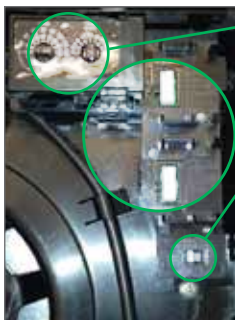Flex-Z Fast installation bracket
with articulating joints

BUILT-IN SELF ADJUSTING AIRFLOW TECHNOLOGY

WhisperGreen Select / Characteristics	FV-05-11VKL1 (Base Fan with LED Light)						FV-11-15VKL1 (Base Fan with LED Light)					
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 / Characteristics	FV-05-11VKL1 + FV-VS15VK1 (Base Fan with LED Light and Multi-Speed Time Delay Plug 'N Play™ Module)																	
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 / Characteristics	FV-11-15VKL1 + FV-VS15VK1 (Base Fan with LED Light and Multi-Speed Time Delay Plug 'N Play™ Module)																			
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)	0.5	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)	16.4	23.3	11.5	19.6	9.5	16.9	7.9	14.8	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																			

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.

LED

Flex-ZFast™

CALGreen

Performance Curves on pages 60-67 / Dimensional Drawings on pages 68-73 / Cross Reference for Applicable WhisperControl & EcoSwitch to Panasonic Fans on page 59

Panasonic   17

+

WhisperGreen Select™
VENTILATION FAN

(FV-05-11VK1 shown*)

Most Efficient
2017
ENERGY STAR www.energystar.gov

*Other WhisperGreen Select fan
 and fan/light models are available
 for use with this system*

SelectCycler™
WHOLE HOUSE VENTILATION SYSTEM

Low Cost, Whole House Ventilation Solution

The SelectCycler™ System is a cost effective, whole house ventilation solution for ASHRAE 62.2 compliance. By combining the best parts of both central fan integrated ventilation (typically forced air HVAC/AHU) and exhaust fan ventilation, the SelectCycler System provides the ultimate energy efficient ventilation solution.

SelectCycler System at a Glance

Thermostat

Range Hood Pressure Sensor

Controller

FanConnect™ Fan/Light Wall Switch

WhisperGreenSelect™

Supply Damper

HVAC/AHU

Scan code to view
SelectCycler animation

WhisperGreen Select Provides Customizable Airflow

**Pick-A-Flow
Speed Selector
Switch**

The SelectCycler System was designed exclusively to work with WhisperGreen Select fans, which incorporate Pick-A-Flow™ adjustable CFM technology for optimal use in Balanced mode.

SMART FLOW™
DC
TECHNOLOGY

WhisperGreen Select features an ultra-quiet DC motor that incorporates intelligent SmartFlow® technology, so it automatically adjusts its speed to ensure optimal CFM output, even in the case of a complicated duct run.

NEW

SelectCycler™ | Low Cost, Whole House Ventilation Solution

Controller, Supply Damper & FanConnect™ Wall Switch Kit
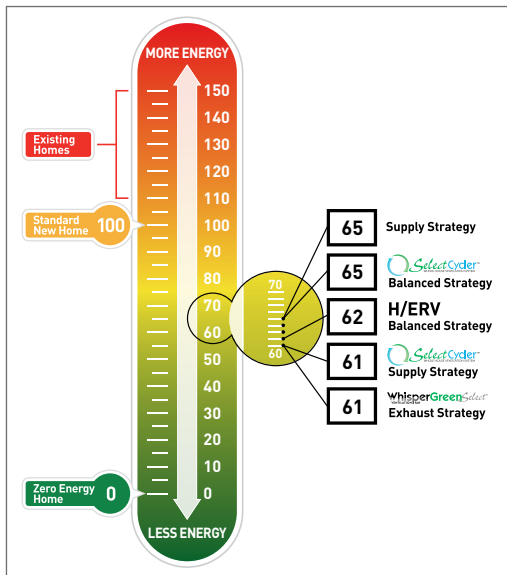**SACG2K-04/06/08/10**   4", 6", 8" or 10" Duct Options
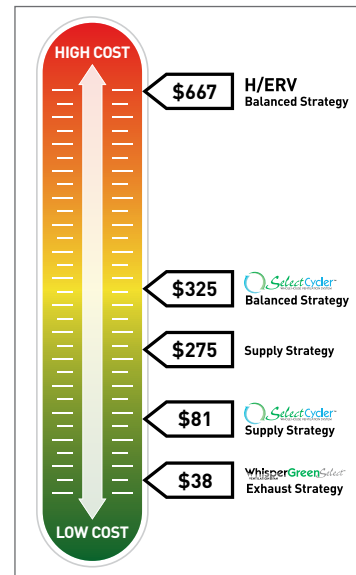
SelectCycler Key Benefits:

- Ideal for single and multi-family construction
- Provides whole house ventilation control that's integrated into the home's Central HVAC system
- Durable, powered open/close damper alleviates damper chatter
- Controls WhisperGreen Select™ (or any 110VAC ventilation fan), to provide supplemental ventilation as needed to meet ASHRAE 62.2
- Two operational modes help a home achieve the lowest cost per HERS point for either supply or balanced ventilation strategies
- Works in tandem with spot exhaust fan to achieve hybrid supply or balanced ventilation
- Features a patented setup process, including two simple options: Flow vs Time
- Digital display panel shows system status and aids in troubleshooting
- Fan/light wall switch can be programmed from the controller to provide a delay timer function

SelectCycler™ System offers the most cost effective solution for meeting ventilation code and minimizing the impact to your HERS Index.

HERS Index Per Ventilation Design Strategy*

MORE ENERGY

Existing Homes

Standard New Home 100

65	Supply Strategy
65	SelectCycler Balanced Strategy
62	H/ERV Balanced Strategy
61	SelectCycler Supply Strategy
61	WhisperGreen Select Exhaust Strategy

Zero Energy Home 0

LESS ENERGY

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0

WhisperGreenSelect
VENTILATION FAN
DC Motor and low watt consumption contribute to a low HERS Index Score and Cost Per HERS Point Index

Ventilation Cost Per HERS Point Index*

HIGH COST

$667	H/ERV Balanced Strategy
$325	SelectCycler Balanced Strategy
$275	Supply Strategy
$81	SelectCycler Supply Strategy
$38	WhisperGreen Select Exhaust Strategy

LOW COST

SelectCycler System Balanced Mode
Lowest cost per HERS point for **Balanced Ventilation**

SelectCycler System Hybrid Mode
Lowest cost per HERS point for **Supply Ventilation**

WhisperGreen Select™
Lowest cost per HERS point for **Exhaust Ventilation**

*Modeling conducted by third-party RESNET Provider EPX/NRGLogic

SelectCycler Kit (SACG2K)

Programmable Wall Mounted Controller

- Ideal for single and multi-family construction
- Calculates supply duct and exhaust fan run cycles to meet ASHRAE 62.2
- Patented algorithm calculates operation time to meet ASHRAE 62.2 ventilation requirements
- Allows for programmable hours of operation
- Calculated flow or calculated time setup
- LCD display for system operation feedback and easy trouble shooting
- Communicates to the FanConnect wall switch to control the bathroom exhaust fan
- Operating Voltage: 24VAC (up to 30VAC max)
- Current Draw: 0.07 Amps
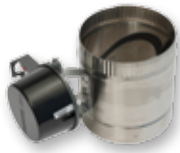
Motorized Supply Damper

- Stainless steel, power open/close damper
- Available in 4", 6", 8" or 10" duct size
- Operating Voltage: 24VAC (up to 30VAC max)
- Current Draw: 0.07 A idle; 0.125 A for 15 second damper transit time
- Power Draw (VA): >1W idle; 3W for 15 second damper transit time
- Wiring requirements: 19 gauge minimum
- Includes pigtail and damper for wiring
- Damper can be installed in any position

FanConnect™ Bathroom Fan/Light Wall Switch

- Compatible with single, or multi-speed fans, set to a single speed setting
- Light: 450 Watts @ 120VAC (blue wire)
- Fan: 150 Watts @ 120VAC (red wire)
- Operation: 120VAC +/– 10%

Optional Accessories

- The range hood pressure sensor works exclusively with the SelectCycler System to solve depressurization issues by allowing make up air to enter as soon as the range hood is turned on
- Hot and cold temperature sensors disable the fresh air damper in extreme temperatures

Range Hood Pressure Sensor (SACRR)

Unique, Low Cost Solution!

- Solves depressurization issues
- Max Operating Pressure –10kPa
- Pressure Range: 20 – 200 Pa +/–15%
- Operating Temperature: –40°C to 85°C
- Electrical Rating: 1.5A (1.4A) / 250V
- Mounting: Diaphragm in any vertical plane

Hot Temperature Sensor (SACTG-H01)

- System control in extreme hot climates
- OFF Temperature: 95°F +/– 5°
- ON Temperature: 4°F lower
- Operation: 2A @ 24VAC

Cold Temperature Sensor (SACTG-C02)

- System control in extreme cold climates
- OFF Temperature: 35°F +/– 5°
- ON Temperature: 4°F higher
- Operation: 2A @ 24VAC

Performance Curves on pages 60-67 / Dimensional Drawings on pages 68-73 / Cross Reference for Applicable WhisperControl & EcoSwitch to Panasonic Fans on page 59

Panasonic   21

WhisperSense™ | Moisture Control for CALGreen Compliance Solution

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

7-3/8" Depth

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
- Integrated dual 4" or 6" duct adapter
- Fits in 2 x 8 construction
- UL listed for tub/shower enclosure when GFCI protected
- Can be used to comply with ASHRAE 62.2, LEED, CALGreen and California Title 24

WhisperFit® EZ | Automatic Spot Ventilation Solution

FV-08-11VFM5   80 or 110 CFM   4" or 3" Duct
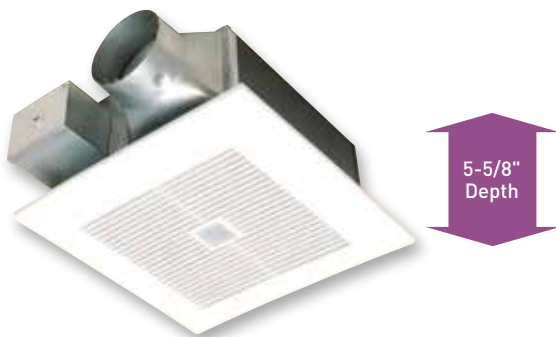
5-5/8" Depth

WhisperFit EZ Key Benefits:

- Ideal for remodeling and hotel new construction or renovation
- Pick-A-Flow™ Speed Selector – one fan, you choose the CFM (80 or 110)
- SmartAction® Motion Sensor with 20 minute delay off timer
- Flex-Z Fast™ bracket provides flexible, fast and easy installation
- Detachable installation adapter provides even greater flexibility
- Low profile housing design fits in 2 x 6 construction
- 4" duct with 3" duct adapter included
- UL listed for tub/shower enclosure when GFCI protected
- Can be used to comply with ASHRAE 62.2, LEED, IAP, California Title 24 and WA Ventilation Code

*WhisperFit EZ replaced WhisperFit and WhisperWelcome

WhisperSense		FV-08VQC5		FV-11VQC5	
Characteristics					
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	

Three ways the fan can function

- Motion on/Motion off
- Motion on/Humidity off
- Humidity on/Humidity off
- Variable humidity controls from 30-80% relative humidity (RH)
- Adjustable delay timer from 30 seconds to 60 minutes

Built-in Controls

Installation is as Easy as 1-2-3!

WhisperFit EZ	FV-08-11VFM5							
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)	110	102	100	88	80	71	70	59
Noise (sones)	0.8	1.2	1.3	1.5	0.3	0.8	0.5	1.1
Power Consumption (Watts)	27.0	26.8	26.8	26.3	21.6	21.1	21.4	20.8
Energy Efficiency (CFMs/Watt)	4.1	3.8	3.8	3.3	3.7	3.3	3.5	3.0
Speed	955	1174	1197	1352	847	1131	1008	1229
Current	0.23	0.23	0.23	0.22	0.18	0.18	0.18	0.17
Power Rating (V/Hz)	120/60				120/60			

INCLUDED:
4" to 3" Duct Adapter

1 — Insert Flex-Z Fast™ installation bracket

2 — Connect the wiring and attach duct to installation adapter

3 — Install Fan

Flex-Z Fast™

WhisperValue® DC™ | Ideal Multi-Family Solution

FV-0510VS1   50-80-100 CFM   4" Oval Duct

3-3/8" Depth

Lowest profile, perfect fit in a 2 x 4!

Fits in nearly every ceiling cavity.

WhisperValue DC Key Benefits:

• Ideal for residential construction (single and multi-family) and manufactured homes
• **Revolutionary DC motor with SmartFlow™ technology for optimum CFM output**
• **Pick-A-Flow™ Speed Selector – one fan, you choose the CFM (50, 80 or 100 CFM)**
• 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
• Optional 24 gauge steel, fire code rated 4" oval to 3" round duct adapter, sold separately (Model # FV-VS43R)
• UL listed for tub/shower enclosure when GFCI protected
• Can be used to comply with ASHRAE 62.2, LEED, IAP, California Title 24 and WA Ventilation Code

Coming Soon! Q2, 2017

WhisperValue DC fans with built-in Multi-Speed for ASHRAE 62.2 compliance, or Condensation Control options.

WhisperValue® DC™   WhisperValue Lite™

Transfer Register Box

FV-JD

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

• **Designed exclusively for use with the WhisperValue DC fan and WhisperValue fan/light combinations**
• Perfect for room-to-room powered circulation in Multi-family projects with ductless heat pumps
• Powered 50 CFM transfer at less than 0.3 sone (based on FV-0510VS1)
• 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 WhisperValue® DC™, and WhisperValue Lite™ fans

WhisperValue DC	FV-0510VS1					
Characteristics	4" Oval Duct		4" Oval Duct		4" Oval Duct	
Static pressure in inches w.g.	0.1	0.25	0.1	0.25	0.1	0.25
Air Volume (CFM)	100	100	80	81	50	53
Noise (sones)	0.9	1.3	0.4	0.8	<0.3	0.5
Power Consumption (Watts)	11.1	16.0	7.2	11.5	4.4	7.5
Energy Efficiency (CFMs/Watt)	9.2	6.4	11.4	7.2	12.8	7.9
Speed (RPM)	902	1121	797	1070	708	1025
Current (amps)	0.20	0.27	0.13	0.20	0.09	0.14
Power Rating (V/Hz)	120/60		120/60		120/60	

WhisperValue DC Contractor Pack*

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

Housing Can	Motor/Grille Assembly	Complete Fan Unit	Master Pack
FV-0510VSA1	FV-0510VSB1	FV-0510VS1	4

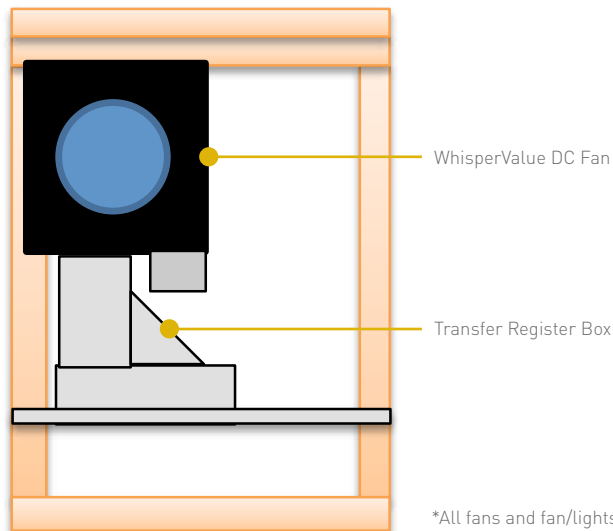*Must order in quantities of 4, shipment will contain 1 box with 4 units.

Pick-A-Flow Speed Selector Switch

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

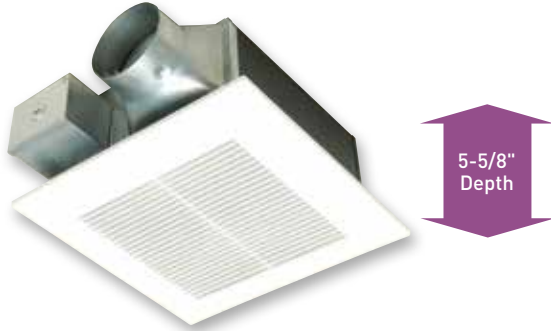### WhisperValue Fan & Transfer Register Box

WhisperValue DC Fan

Transfer Register Box

*All fans and fan/lights sold separately.

WhisperFit® EZ | Ideal Retrofit Solution

FV-08-11VF5   80 or 110 CFM   4" or 3" Duct

5-5/8" Depth

*WhisperFit EZ replaced WhisperFit
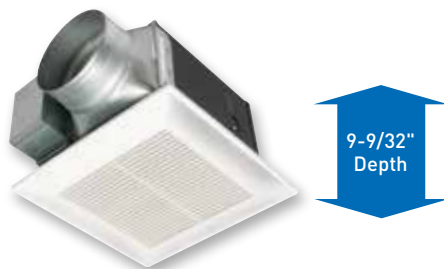
WhisperFit EZ Key Benefits:

- Ideal for remodeling and hotel new construction or renovation
- Pick-A-Flow™ Speed Selector – one fan, you choose the CFM (80 or 110)
- Flex-Z Fast™ bracket provides flexible, fast and easy installation
- Detachable installation adapter provides even greater flexibility
- Low profile housing design fits in 2 x 6 construction
- 4" duct with 3" duct adapter included
- UL listed for tub/shower enclosure when GFCI protected
- Can be used to comply with ASHRAE 62.2, LEED, IAP, California Title 24 and WA Ventilation Code

WhisperCeiling™ | Quiet, Spot Ventilation Solution

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

7-3/8" Depth

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

9-9/32" Depth

WhisperCeiling Key Benefits:

- Quiet, yet powerful – ideal for new and remodel residential applications
- Integrated dual 4" or 6" duct adapter on 50-110 CFM models
- 50-110 CFM models fit in 2 x 8 construction
- Large volume (190-390) CFM options available for light commercial applications
- UL listed for tub/shower enclosure when GFCI protected
- Can be used to comply with ASHRAE 62.2, LEED, IAP, EarthCraft, California Title 24 and WA Ventilation Code

*FV-40VQ4 does not comply with the ENERGY STAR® 4.0 requirement for increased efficiency (CFM/Watt).

WhisperFit EZ	FV-08-11VF5							
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)	110	104	100	88	80	73	70	61
Noise (sones)	0.8	1.2	1.3	1.5	0.3	0.6	0.5	1.1
Power Consumption (Watts)	26.5	26.4	26.4	25.9	21.1	20.7	20.9	20.3
Energy Efficiency (CFMs/Watt)	4.2	4.0	3.9	3.5	3.8	3.5	3.5	3.2
Speed	961	1179	1215	1369	848	1123	1005	1236
Current	0.23	0.23	0.22	0.22	0.18	0.17	0.17	0.17
Power Rating (V/Hz)	120/60				120/60			

INCLUDED:
4" to 3" Duct Adapter

Installation is as Easy as 1-2-3!

1 — Insert Flex-Z Fast™ installation bracket

2 — Connect the wiring and attach duct to installation adapter

3 — Install Fan

Flex-ZFast™

ENERGY STAR

c(UL)us

WhisperCeiling	FV-05VQ5		FV-08VQ5		FV-11VQ5		FV-15VQ5		FV-20VQ3		FV-30VQ3		FV-40VQ4*	
Characteristics														
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
Air Volume (CFM)	50	36	80	62	110	91	150	127	190	145	290	257	390	356
Noise (sones)	<0.3	0.4	<0.3	0.4	<0.3	0.5	<0.3	0.5	0.8	1.4	2.0	N/A	3.0	3.0
Power Consumption (Watts)	11.1	11.7	14.7	14.5	21.1	20.7	28.4	27.3	44.5	43.6	64.0	62.0	111.4	109.6
Energy Efficiency (CFMs/Watt)	4.7	3.2	5.8	4.5	5.3	4.5	5.3	4.7	4.6	3.6	4.5	4.1	3.5	3.3
Speed	731	1060	829	1089	950	1161	691	911	761	949	877	990	793	874
Current	0.09	0.10	0.12	0.12	0.18	0.17	0.24	0.23	0.34	0.33	0.53	0.52	0.99	0.98
Power Rating (V/Hz)	120/60		120/60		120/60		120/60		120/60		120/60		120/60	

ENERGY STAR

c(UL)us

ecoVent™ | Cost-effective, Spot Ventilation Solution

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

4-6/8" Depth

EcoVent Key Benefits:

- Ideal for new residential construction
- Perfect cost effective ENERGY STAR® solution for Home Builders
- 70 CFM – 0.7 sones at 0.1" w.g. (56 CFM/1.3 sones at 0.25" w.g.)
- Unique Veri-Boost™ 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 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 GFCI protected
- Can be used to comply with ASHRAE 62.2, LEED and ENERGY STAR® for Homes 3.0

FIELD ADJUSTABLE AIRFLOW CAPABILITY

EcoVent	FV-07VBA1 + FV-07VBB1			
Characteristics	Standard		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)	0.7	1.3	1.5	1.5
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			

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

EcoVent U-Can Contractor Packs

Model #	Description	Contents	Master Pack*
FV-07VBA1	Universal Housing Can	Housing Can, Duct Adapter & Junction Box	4
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.

Scan code to view EcoVent installation

WhisperSense Lite™ | Moisture Control for CALGreen Compliance Solution

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

7-3/8" Depth

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
- (2) 13W self ballasted GU24 base CFL lamps and a 4W night light
- Integrated dual 4" or 6" duct adapter
- Fits in 2 x 8 construction
- UL listed for tub/shower enclosure when GFCI protected
- Can be used to comply with ASHRAE 62.2, LEED, IAP, CALGreen, California Title 24 and WA Ventilation Code

WhisperSense Lite Characteristics	FV-08VQCL6		FV-11VQCL6	
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	

Built-in Controls

See page 23 for details on three ways this fan can function.

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.

THE ART AND DESIGN OF
SPOT
VENTILATION

WhisperRecessed LED™
VENTILATION FAN

Design Solution for Fan/Light Combinations

Combining performance and beauty, WhisperRecessed LED™ incorporates a powerful yet quiet 80 CFM fan behind an elegant recessed LED light. Its stylish all-in-one design delivers the quietest, most efficient ENERGY STAR® certified recessed fan/light combo unit available. In fact, you'll only know it's working because of the clean, fresh air in your bathroom. The warm white dimmable LED lamp uses up to 40% less energy than CFLs.

Best of all, the environmentally friendly WhisperRecessed LED helps you comply with the industry's most stringent green building standards.

• ENERGY STAR® rated architectural grade recessed fan/LED light

• Quiet, energy efficient and powerful 80 CFM ventilation hidden above the ceiling

• Includes (1) replaceable 11W, ENERGY STAR® 2.0 certified, GU24 base LED lamp

• Ultra energy efficient LED lamp uses up to 40% less energy than CFLs

• LED lamp is dimmable

• Beautiful lighting with 6-1/2" aperture and advanced luminaire design

WhisperRecessed LED | Design Solution for Fan/Light Combinations

VENTILATION FAN

FV-08VRE2   80 CFM   4" or 6" Duct

7-1/2" Depth

See Page 46 for Recessed Inlet, a light only option to match WhisperRecessed LED 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
• **(1) replaceable 11W, ENERGY STAR® 2.0 certified, GU24 base LED lamp**
• Beautiful lighting with 6-1/2" aperture and advanced luminaire design
• Integrated dual 4" or 6" duct adapter
• Fits in 2 x 8 construction
• UL listed for tub/shower enclosure when GFCI protected
• Can be used to comply with ASHRAE 62.2, CALGreen*, LEED, IAP, California Title 24 and WA Ventilation Code

*Can be used to comply with CALGreen when controlled by the Panasonic Condensation Sensor Plus (*See page 48*).

WhisperLite® | Quiet, Spot Ventilation Fan/Light Solution

VENTILATION FAN

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

7-3/8" Depth

7-3/8" Depth

WhisperLite Key Benefits:

• Quiet, yet powerful – ideal for new and remodel residential applications
• (2) 13W self ballasted GU24 base CFL lamps and a 4W night light
• Integrated dual 4" or 6" duct adapter on 80-110 CFM models
• Fits in 2 x 8 construction
• UL listed for tub/shower enclosure when GFCI protected
• Can be used to comply with ASHRAE 62.2, LEED, IAP, California Title 24 and WA Ventilation Code

WhisperRecessed LED	FV-08VRE2	
Characteristics		
Static pressure in inches w.g.	0.1	0.25
Air Volume (CFM)	80	66
Noise (sones)	1.0	0.8
Power Consumption (Watts)	18.5	17.6
Energy Efficiency (CFMs/Watt)	4.4	3.8
Speed	1342	1480
Current	0.15	0.15
Power Rating (V/Hz)	120/60	

New LED Lamp!
INCLUDED: (1) 11 Watt GU24 base
LED lamp/2700 Kelvin Warm White/
>90CRI/750 lumens/68 LPW/
ENERGY STAR 2.0 certified/
25,000 hours rated average life.

WhisperLite	FV-08VQL6		FV-11VQL6		FV-15VQL6	
Characteristics						
Static pressure in inches w.g.	0.1	0.25	0.1	0.25	0.1	0.25
Air Volume (CFM)	80	62	110	90	150	128
Noise (sones)	<0.3	0.4	0.5	0.6	0.9	1.0
Power Consumption (Watts)	14.9	14.7	23.4	23.0	31.8	30.9
Energy Efficiency (CFMs/Watt)	5.5	4.3	4.7	3.9	4.8	4.2
Speed	863	1117	1006	1193	800	988
Current	0.12	0.12	0.20	0.19	0.27	0.26
Power Rating (V/Hz)	120/60		120/60		120/60	

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.

Performance Curves on pages 60-67 / Dimensional Drawings on pages 68-73 / Cross Reference for Applicable WhisperControl & EcoSwitch to Panasonic Fans on page 59

Panasonic   35

WhisperValue Lite™ | Ideal Multi-Family Fan/Light Solution

FV-08VSL3   80 CFM   4" Oval Duct
FV-10VSL3E 100 CFM 4" Oval Duct

3-3/8" Depth

Lowest profile, perfect fit in a 2 x 4!

Fits in nearly every ceiling cavity.

WhisperValue Lite Key Benefits*:

- Ideal for residential construction (single and multi-family) and manufactured homes
- 3-3/8" housing depth – lowest profile ENERGY STAR® fan available
- 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
- (2) 13W self ballasted GU24 base CFL lamps and a 4W night light
- UL listed for tub/shower enclosure when GFCI protected
- Can be used to comply with ASHRAE 62.2, LEED, IAP, California Title 24 and WA Ventilation Code

*Optional 4" oval to 3" round duct adapter (FV-VS43R) and Transfer Register Box (FV-JD) sold separately. *See page 26-27 for details.*

Coming Soon! Q2, 2017

WhisperValue fan/LED lights with DC motor and Pick-A-Flow technology (50-80-100 CFM). Built-in Multi-Speed for ASHRAE 62.2 compliance and Condensation Control options will also be available.

WhisperFit® EZ | Ideal Retrofit Fan/Light Solution

FV-08-11VFL5   80 or 110 CFM   4" or 3" Duct

5-5/8" Depth

(with 3" duct adapter)

*WhisperFit EZ replaced WhisperLite

WhisperFit EZ Key Benefits:

- Ideal for remodeling and hotel new construction or renovation
- Pick-A-Flow™ Speed Selector – one fan, you choose the CFM (80 or 110)
- (2) 13W self ballasted GU24 base CFL lamps and a 4W night light
- Flex-Z Fast™ bracket provides flexible, fast and easy installation
- Detachable installation adapter provides even greater flexibility
- Low profile housing design fits in 2 x 6 construction
- 4" duct with 3" duct adapter included
- UL listed for tub/shower enclosure when GFCI protected
- Can be used to comply with ASHRAE 62.2, LEED, IAP, California Title 24 and WA Ventilation Code

WhisperValue Lite	FV-08VSL3		FV-10VSL3E	
Characteristics	4" Oval Duct		4" Oval Duct	
Static pressure in inches w.g.	0.1	0.25	0.1	0.25
Air Volume (CFM)	80	72	100	88
Noise (sones)	0.5	0.7	1.0	1.1
Power Consumption (Watts)	22.5	22.9	27.3	27.0
Energy Efficiency (CFMs/Watt)	3.6	3.1	3.7	3.3
Speed (RPM)	825	1021	896	1059
Current (amps)	0.19	0.19	0.23	0.22
Power Rating (V/Hz)	120/60		120/60	

WhisperValue Lite 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-08-10VSLA3	FV-08VSLB3	FV-08VSL3	4
FV-08-10VSLA3	FV-10VSLB3E	FV-10VSL3E	4

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

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.

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

Optional Transfer Register Box (Model #: FV-JD)

WhisperFit EZ	FV-08-11VFL5							
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)	110	102	100	86	80	72	70	60
Noise (sones)	1.0	1.3	1.3	1.5	0.4	0.7	0.6	1.0
Power Consumption (Watts)	26.6	26.5	26.4	25.8	20.9	20.5	20.8	20.2
Energy Efficiency (CFMs/Watt)	4.2	3.9	3.9	3.4	3.8	3.5	3.7	3.2
Speed	1033	1240	1270	1399	905	1164	1065	1263
Current	0.23	0.22	0.22	0.22	0.17	0.17	0.17	0.17
Power Rating (V/Hz)	120/60				120/60			

Installation is as Easy as 1-2-3!

1. Insert Flex-Z Fast™ installation bracket

2. Connect the wiring and attach duct to installation adapter

3. Install Fan

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.

INCLUDED: 4" to 3" Duct Adapter

Flex-ZFast™

Intelli-Balance 100

Cost Effective, Code Compliant ERV for Any Climate Zone

Ideal for tight single family homes and multi-family units, the Intelli-Balance 100 is a customizable, high performance, high efficiency Energy Recovery Ventilator (ERV) that's designed to help you meet ASHRAE 62.2 requirements. This unique and cost effective ERV was engineered for total versatility and installation flexibility, in any climate zone.

The Panasonic Intelli-Balance 100 ERV is designed to run continuously at a low CFM setting to exhaust stale air, moisture, and indoor pollutants, while bringing in clean, tempered air from outside. Homeowners and tenants will enjoy a healthier and cleaner home; while builders and installers comply with the industry's most stringent codes, including the Department of Energy's Zero Net Energy Ready program, ENERGY STAR® for Homes 3.0, Indoor airPLUS, LEED for Homes and CALGreen.

Intelli-Balance 100 can be installed in a ceiling or on a wall, making it ideal for apartments where tenants may not run the air conditioner or bath exhaust fans on a regular basis. The Intelli-Balance 100 ERV allows for regular air exchange which decreases the potential for maintenance or major renovation issues due to humid, stale air. Intelli-Balance 100 does not require connection to the central HVAC or the addition of a condensate line. As a result, installation and routine maintenance is hassle free making this ERV an even more value-driven, cost-effective choice.

Balanced Ventilation: Tightly built homes and buildings utilizing exhaust only fans can create negative pressure. Intelli-Balance 100 solves this by supplying air to replace exhausted air, helping to balance air pressure within the home. By coupling a balanced approach with an energy recovery or heat recovery ventilator (H/ERV), incoming air can be conditioned and dehumidified, saving on heating and cooling expenses for the home.

Built-in Controls: Built-in controls like a Pick-A-Flow Speed Selector Switch (50 to 100 CFM) and ASHRAE timing function help minimize the time it takes to determine desired airflow, verify and maintain performance and ensure code compliance. Intelli-Balance 100 allows you to simply design and specify your ventilation system requirements, improve IAQ and reduce ventilation costs.

Exchange Capillary Core: Intelli-Balance 100's unique and patented capillary core is made from a paper-like material that allows the airstream of inside air to pass right next to airstreams of outside air. The airstreams don't touch each other or mix but the core design allows heat and moisture to transfer to the other airstream. In winter, heat is transferred from the warm outgoing air to the cooler incoming air. In summer, heat is extracted from the warm incoming air and transferred to the cool outgoing air. The result is better air quality and lower energy bills.

DC Motor Technology: Intelli-Balance 100 uses two (2) DC brushless motors with built-in SmartFlow technology. When the ERV senses static pressure, its speed is automatically increased to ensure optimal CFM output; regardless of a complicated duct run. This feature provides peace of mind, as the installer doesn't have to worry about compromising the ERV's performance.

Filters and Maintenance: Easy access panel allows for quick and easy product maintenance and filter checks. Intelli-Balance 100 has two filters that clean the exhaust and supply air before passing through the ERV core, extending the life of the core. Intelli-Balance 100 comes equipped with a MERV 8 filter that can easily be upgraded to a MERV 13. Convenient light and sound indicators signal when it's time to clean the filters using the soft brush attachment of a vacuum.
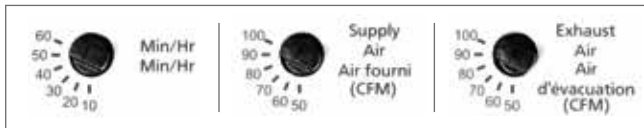
Intelli-Balance 100 | Cost Effective, Code Compliant ERV for Any Climate Zone

FV-10VEC1 (Cold Climate)   50 to 100 CFM   Four 4" or 6" Ducts
FV-10VE1 (Temperate Climate) 50 to 100 CFM   Four 4" or 6" Ducts

8-7/8" Depth

Built-In Controls

Intelli-Balance 100 Key Benefits:

• Engineered for use in any North America Climate Zone
• Two (2) revolutionary DC motors with Smart Flow™ technology ensure optimum CFM output
• Pick-A-Flow speed selector (50 to 100 CFM) provides customizable airflow to create balanced, positive or negative pressure within the home
• Exclusive built-in ASHRAE 62.2 timing function helps ensure code compliance
• MERV 8 filter included; optional MERV 8 and MERV 13 replacements available
• Patented exchange capillary core recovers heat and moisture
• Total Recovery Efficiency: FV-10VEC1 = 65; FV-10VE1 = 73
• Connect to existing ductwork or use as a standalone, whole-house ventilation solution
• Wall or ceiling mount capability
• Can be used to meet green building code requirements and helps minimize the impact to your HERS index
• Model FV-10VEC1 meets Ontario, ENERGY STAR®* and Novoclimat requirements

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

WhisperComfort™ | Low Cost and Easy to Install Balanced Air Solution

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

7-7/8" Depth

See page 58 for Recommended Zones Map

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

Intelli-Balance-100	FV-10VEC1		FV-10VE1	
Characteristics	COLD CLIMATE		TEMPERATE CLIMATE	
Static pressure in inches w.g.	0.1	0.4	0.1	0.4
Net Exhaust Air Volume (CFM)	96	95	95	95
Net Supply Air Volume (CFM)	98	96	99.0	101
Power Consumption (Watts)	64.0	84.0	62.0	80.0
Power Rating (V/Hz)	120/60		120/60	

FV-FL0810VE1: MERV 8 Replacement Filter
FV-FL1310VE1: MERV 13 Optional Replacement Filter

FV-WC04VE1*
Optional Exterior Wall Cap
(*See page 41 for details*)

FV-10VEC1

Supply Temperature		Net Air Flow		Power Consumed (Watts)	Sensible Recovery Efficiency	Apparent Sensible Effectiveness	Net Moisture Transfer
°C	°F	L/S	CFM				
Heating							
0	32	25	53	24	81	88	0.8
0	32	31	67	34	77	86	0.76
0	32	40	86	54	75	83	0.72
-25	-13	27	57	66	65	85	0.7
-25	-13	32	68	84	64	80	0.7
Cooling					Total Recovery Efficiency		
35	95	23	48	16	65		

FV-10VE1

Supply Temperature		Net Air Flow		Power Consumed (Watts)	Sensible Recovery Efficiency	Apparent Sensible Effectiveness	Net Moisture Transfer
°C	°F	L/S	CFM				
Heating							
0	32	25	54	20	79	90	0.76
0	32	32	67	28	79	88	0.76
0	32	41	87	46	75	85	0.72
-25	-13	-	-	-	-	-	-
-25	-13	-	-	-	-	-	-
Cooling					Total Recovery Efficiency		
35	95	25	52	22	73		

*FV-WC04VE1 is NOT recommended for use at CFM settings higher than 50 CFM.

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		

Supply and exhaust air flows through a single exterior opening

FV-WC04VE1
Optional Exterior Wall Cap

FV-EB04VE1
Optional Elbow

Panasonic

WhisperWarm™ WhisperWarm Lite™ | Quiet Fan/Heater/Light Solution

FV-11VH2	110 CFM	4" Duct
FV-11VHL2	110 CFM	4" Duct

7-3/4"
Depth

WhisperWarm/Warm Lite 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
- Light option includes (2) 13W self ballasted GU24 base CFL lamps and a 4W night light
- Minimum 20 Amp dedicated circuit required
- For optimum performance, install heater no more than 8 feet from floor to ceiling
- Fits in 2 x 8 construction

WhisperSupply Wall™ | Filtered Supply Air Solution

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

WhisperSupply Wall Key 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

WhisperWarm/Warm Lite	FV-11VH2		FV-11VHL2	
Characteristics				
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	

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.

WhisperSupply Wall	FV-01WS2	FV-04WS2	
Characteristics			
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	

Performance Curves on pages 60-67 / Dimensional Drawings on pages 68-73 / Cross Reference for Applicable WhisperControl & EcoSwitch to Panasonic Fans on page 59

Panasonic 43

WhisperWall | Through the Wall Spot Ventilation Solution

FV-08WQ1   70 CFM   8" Duct

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 GFCI protected
- Can be used to comply with ASHRAE 62.2, LEED, IAP, California Title 24 and WA Ventilation Code

WhisperLine | Remote Mount, In-line Spot Ventilation Solution

FV-10NLF1E	120 CFM	4" Duct
FV-20NLF1	240 CFM	6" Duct
FV-30NLF1*	340 CFM	6" Duct
FV-40NLF1*	440 CFM	8" Duct

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

*FV-30NLF1 and FV-40NLF1 do not comply with the ENERGY STAR® 4.0 requirement for increased efficiency (CFM/Watt).

WhisperWall	FV-08WQ1
Characteristics	
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

Exterior Hood included

WhisperLine	FV-10NLF1E			FV-20NLF1			FV-30NLF1*			FV-40NLF1*		
Characteristics												
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	108	89	230	223	205	340	322	302	440	421	407
Power Consumption (Watts)	27.5	25.6	24.3	56.5	55.1	53.1	95.2	93.5	91.5	136	132	130
Energy Efficiency (CFMs/Watt)	4.4	4.4	3.9	4.1			3.2			3.2		
Speed	1562	1596	1637	1260			1337			1150		
Current	0.24	0.22	0.21	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)

Performance Curves on pages 60-67 / Dimensional Drawings on pages 68-73 / Cross Reference for Applicable WhisperControl & EcoSwitch to Panasonic Fans on page 59

Panasonic 45

Recessed Inlet™ | Design Solution for Exhaust or Supply Inlets

FV-NLF46RES   4" or 6" Duct

7-1/2" Depth

Recessed Inlet Key Benefits:

- Multi-purpose exhaust or supply recessed inlet is ideal for use with remote mount in-line fans and H/ERVs
- Can be used as a light only option matching the WhisperRecessed LED™ fan/light
- Incorporates an architectural grade recessed can light design
- Includes (1) replaceable 11W, ENERGY STAR® 2.0 certified, GU24 base LED lamp
- Ultra-energy efficient LED lamp uses up to 40% less energy than CFLs
- LED lamp is dimmable
- Beautiful lighting with 6" aperture and advanced luminaire design
- Can be used to comply with California Title 24
- UL listed for tub/shower enclosure when GFCI protected
- IC rated

LED Lamp
INCLUDED: (1) 11 Watt GU24 base
LED lamp/2700 Kelvin Warm White/
>90CRI/750 lumens/68 LPW/
ENERGY STAR 2.0 certified/
25,000 hours rated average life.

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

Condensation Sensor Plus Key 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 or fan/light warranty available when a Panasonic WhisperCeiling/ Lite, WhisperValue/Value Lite or WhisperFit EZ fan or fan/light is controlled by a Panasonic Condensation Sensor Plus.

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 Key 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

WhisperControl Condensation Sensor Plus	FV-WCCS1-W/A	FV-WCCS2-W/A
Ground	Grounding	Grounding
Feature	Blue LED	Blue LED
Amperage	15 Amp	15 Amp
Maximum Fan Load	8 Amp	8 Amp
Voltage	120 Volts	120 Volts
Termination	6" Leads	6" Leads
Dry Contact Switching	24 Volt AC Input/Output	24 Volt AC Input/Output
Connections (Copper Wire Connections)	Use #14 or #12	Use #14 or #12
Max. Fluorescent Light Load	NA	400 Watt
Standard Certifications	UL/CSA Listed	UL/CSA Listed
Warranty	2 Year Limited	2 Year Limited

Timer and Sensor Settings

Minutes Per Hour Fan Timer

Moisture Sensitivity Selector
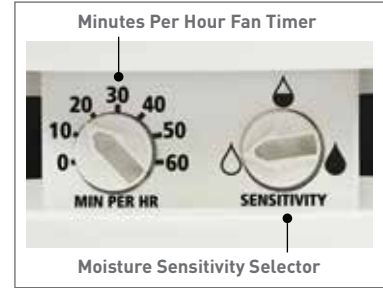
Moisture Sensitivity Selector Settings

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.

*CAL*Green

Preset Countdown and Hourly Timer	FV-WCD01-W/A	FV-WCD02-W/A
Ground	Grounding	Grounding
Feature	Blue LED Light	Blue LED Light
Amperage	8 Amp	8 Amp
Dry Contact Switching	24V AC input/output	24V AC input/output
Max. Fluorescent Light Load	N/A	400 Watt
Termination	6" Leads	6" Leads
Standard Certifications	UL/CSA Listed	UL/CSA Listed
Warranty	2 Year Limited	2 Year Limited

Timer Settings

Preset Countdown Fan Timer

Minutes Per Hour (MPH) Fan Timer

ecoswitch

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

1 Function EcoSwitch Key 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 Key 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 Key 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