



2012 Ventilation Fans



Panasonic Eco Solutions North America
Eco Products Division
One Panasonic Way, 1H-3
Secaucus, NJ 07094
(201) 348-7000

www.panasonic.com/building

For Distributor Order Information
PHONE: 866-292-7299
FAX: 888-553-0723

ventfans@us.panasonic.com



Design and specifications subject to change without notice.

Panasonic ideas for life



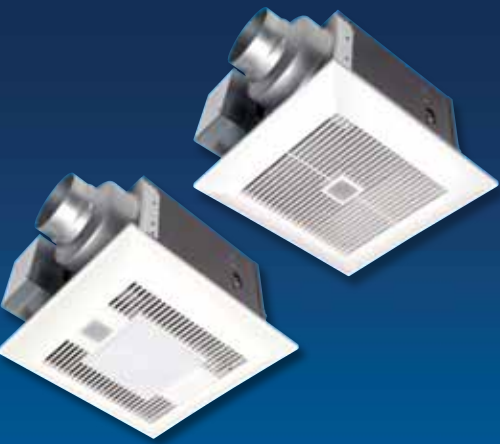
Printed with soy ink on 10%
post-consumer recycled paper.

VF12063CAT





Follow the Leader.



High-performance ventilation 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 also proud to be recognized by the EPA for the third consecutive year, garnering their most prestigious ENERGY STAR® honor, the **Sustained Excellence 2012 Award**.

The idea of delivering a breath of fresh air to our customers is consistent with a simple mission statement eloquently articulated by our founder nearly a century ago: Panasonic serves society with high-quality products that make peoples' everyday lives more healthy, productive and enjoyable. This guiding principle continues to drive everything we do and is what we call "ideas for life."

Fresh air driven by fresh ideas. Breathe new life into your environment with Panasonic Ventilation.

Panasonic Advanced Ventilation Solutions

| | | | |
|------------------------------------------|--------------------------------------|----------------------------------------|----------------------------------------|
| 1993 | 2003 | 2006 | |
| WhisperCoiling VENTILATION FAN | WhisperFit VENTILATION FAN | WhisperGreen VENTILATION FAN | WhisperValue VENTILATION FAN |
| Quiet Solution | Retrofit Solution | ASHRAE 62.2 Compliance Solution | Multi-Family Solution |

A LEGACY OF INNOVATION

| | | |
|------------------------------------------|----------------------------------------|-------------------------------------------|
| 2007 | 2011 | 2012 |
| WhisperComfort VENTILATION FAN | WhisperSense VENTILATION FAN | WhisperRecessed VENTILATION FAN |
| Balanced Air Solution | Cal Green Compliance Solution | Design Solution |

Panasonic ideas for life



Panasonic Ventilation

Fan Benefits

Certified & Code Compliant

Panasonic ventilation fans are certified by the Home Ventilating Institute (HVI) and ENERGY STAR® qualified, where guidelines exist. All models also 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, .25" w.g.

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

Detachable 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 allowing for ideal positioning.

Energy Savings

For high energy efficiency, input wattage readings are among the lowest in the industry.

Safety

WhisperGreen 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 branch circuit wire.

Airflow

A built-in damper in all ceiling-mounted models prevents backdraft.

Illumination

ENERGY STAR rated compact fluorescent light bulbs can be used to comply with Title 24 has 10,000 hours of rated life and a 4-Watt night light are available on select models.

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

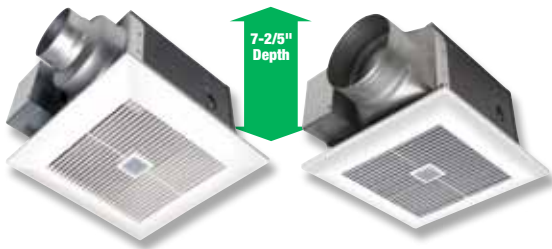
6 Year warranty on DC motor and 3 Year warranty on all other models and parts.



Panasonic ideas for life

Fans with Built-in Controls

WhisperGreen[®] VENTILATION FAN



FV-08VKM3 80 CFM 4" or 6" Duct **FV-13VKM3** 130 CFM 6" Duct
FV-08VKS3 80 CFM 4" or 6" Duct **FV-13VKS3** 130 CFM 6" Duct



WhisperGreen Key Benefits:

- SmartFlow™ technology for optimal CFM output
- Fully enclosed DC motor for long life – rated for 60,000 hours continuous run
- SmartAction® motion sensor (FV-08VKM3, FV-13VKM3)
- Built-in variable speed controls and high/low delay timer up to 60 minutes
- Detachable dual 4" or 6" duct adapter on 80 CFM models
- Fits in 2 x 8 construction



80 CFM
Variable Speed
Models Only



130 CFM
Variable Speed
Models Only

WhisperSense™ VENTILATION FAN



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



WhisperSense Key Benefits:

- Dual motion and humidity sensors with versatile functionality
 Motion On / Motion Off
 Motion On / Humidity Off
 Humidity On / Humidity Off
- Adjustable delay timer from 30 seconds to 60 minutes
- Variable humidity controls from 30-80% RH (Relative Humidity)
- Built-in sensors, timers and controls
- Detachable dual 4" or 6" duct adapter included
- Fits in 2 x 8 construction



Built-in Controls

WhisperWelcome™ VENTILATION FAN



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



WhisperWelcome Key Benefits:

- Low profile housing design – Ideal for remodeling!
- SmartAction® motion sensor with built-in 20-minute delay timer
- Fits in 2 x 6 & 2 x 8 construction



INCLUDED:
4 to 3 inch adapter

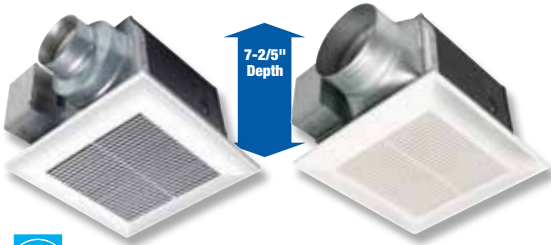
Single Speed Fans (On/Off)



FV-05VK3 50 CFM 4" or 6" Duct **FV-11VK3** 110 CFM 4" or 6" Duct
FV-08VK3 80 CFM 4" or 6" Duct

WhisperGreen Key Benefits:

- SmartFlow™ technology for optimal CFM output
- Fully enclosed DC motor for long life – rated for 60,000 hours continuous run
- Detachable dual 4" or 6" duct adapter included
- Fits 2 X 8 construction



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

WhisperCeiling Key Benefits:

- Detachable dual 4" or 6" duct adapter on 50-110 CFM models
- Fits 2 X 8 construction



FV-05VF2 50 CFM 4" or 3" Duct
FV-08VF2 80 CFM 4" or 3" Duct
FV-11VF2 110 CFM 4" or 3" Duct

WhisperFit Key Benefits:

- Low profile housing design – Ideal for remodeling!
- Fits in 2 X 6 & 2 X 8 construction



INCLUDED:
4 to 3 inch adapter



FV-05VS1 50 CFM 4" Oval Duct
FV-08VS1 80 CFM 4" Oval Duct
FV-10VS1 100 CFM 4" Oval Duct

WhisperValue Key Benefits:

- Super low profile housing design
- UL listed for wall or ceiling installation
- Fits in 2 x 4, 2 x 6 & 2 x 8 construction

WhisperValue U-Can Contractor Pack

| Universal Housing Can | Motor/Grille Assembly | Complete Fan Unit | Master Pack |
|-----------------------|-----------------------|-------------------|-------------|
| FV-05-08VSA1 | FV-05VSB1 | FV-05VS1 | 4 |
| FV-05-08VSA1 | FV-08VSB1 | FV-08VS1 | 4 |
| FV-05-08VSA1 | FV-10VSB1 | FV-10VS1 | 4 |

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

Fan/Lights with Built-in Controls

WhisperGreen-Lite™
VENTILATION FAN



- FV-08VKML3** 80 CFM 4" or 6" Duct
- FV-08VKSL3** 80 CFM 4" or 6" Duct
- FV-13VKML3** 130 CFM 6" Duct
- FV-13VKSL3** 130 CFM 6" Duct

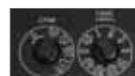


WhisperGreen-Lite Key Benefits:

- SmartFlow™ technology for optimal CFM output
- Fully enclosed DC motor for long life – rated for 60,000 hours continuous run
- SmartAction® motion sensor - (FV-08VKML3, FV-13VKML3)
- Built-in variable speed controls and high/low delay timer up to 60 minutes
- Detachable dual 4" or 6" duct adapter for 80 CFM models included
- Fits in 2 x 8 construction



80 CFM
Variable Speed
Models Only



130 CFM
Variable Speed
Models Only



INCLUDES: One 32-Watt Panasonic CFL/3500 Kelvin/High CRI/2400 Lumens/ENERGY STAR® qualified/10,000 hours rated average life/equivalent to (2) 75-Watt incandescent lamp/electronic ballast for flicker-free operation/plus 4-Watt night-light

WhisperSense-Lite™
VENTILATION FAN



- FV-08VQCL5** 80 CFM 4" or 6" Duct
- FV-11VQCL5** 110 CFM 4" or 6" Duct



WhisperSense-Lite Key Benefits:

- Dual motion and humidity sensors with versatile functionality
 - Motion On / Motion Off
 - Motion On / Humidity Off
 - Humidity On / Humidity Off
- Adjustable delay timer from 30 seconds to 60 minutes
- Variable humidity controls from 30-80% RH (Relative Humidity)
- Built-in sensors, timers and controls
- Detachable dual 4" or 6" duct adapter included
- Fits in 2 x 8 construction



Built-in Controls



INCLUDES: One 32-Watt Panasonic CFL/3500 Kelvin/High CRI/2400 Lumens/ENERGY STAR® qualified/10,000 hours rated average life/equivalent to (2) 75-Watt incandescent lamp/electronic ballast for flicker-free operation/plus 4-Watt night-light

Single Speed Fans with Lights (On/Off)

WhisperRecessed™



7-1/2" Depth

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


WhisperRecessed Key Benefits:

- Adjustable lamp positioning and deeper regression reduces glare
- Beautiful illumination with 6-1/2" aperture



INCLUDED: One 18-Watt GU24 Spiral CFL/2700 Kelvin/84 CRI/1380 Lumens each/ENERGY STAR® qualified/10,000 hours rated average life/equivalent to 75-Watt incandescent lamp/integral electronic ballast for flicker-free operation.

WhisperGreen-Lite™



7-2/5" Depth

FV-08VKL3 80 CFM 4" or 6" Duct
FV-11VKL3 110 CFM 4" or 6" Duct

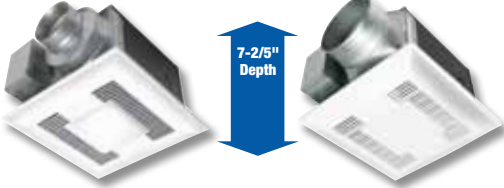
WhisperGreen-Lite Key Benefits:

- SmartFlow™ technology for optimal CFM output
- Fully enclosed DC motor for long life – rated for 60,000 hours continuous run
- Detachable dual 4" or 6" duct adapter included
- Fits in 2 x 8 construction



INCLUDED with WhisperGreen-Lite, WhisperLite, WhisperFit-Lite, and WhisperValue-Lite: One 32-Watt Panasonic CFL/3500 Kelvin/High CRI/2400 Lumens/ENERGY STAR® qualified/10,000 hours rated average life/equivalent to (2) 75-Watt incandescent lamp/electronic ballast for flicker-free operation/plus 4-Watt night-light

WhisperLite™




7-2/5" Depth

FV-08VQL5 80 CFM 4" or 6" Duct
FV-11VQL5 110 CFM 4" or 6" Duct
FV-15VQL5 150 CFM 6" Duct

WhisperLite Key Benefits:

- Detachable dual 4" or 6" duct adapter on 80-110 CFM models included
- Fits in 2 x 8 construction

WhisperFit-Lite™



5-5/8" Depth

FV-05VFL3 50 CFM 4" or 3" Duct
FV-08VFL3 80 CFM 4" or 3" Duct
FV-11VFL3 110 CFM 4" or 3" Duct

WhisperFit-Lite Key Benefits:

- Low profile housing design – Ideal for remodeling!
- Fits in 2 x 6 & 2 x 8 construction



INCLUDED: 4 to 3 inch adapter

WhisperValue-Lite™



3-3/4" Depth

FV-08VSL2 80 CFM 4" Oval Duct
FV-10VSL2 100 CFM 4" Oval Duct

WhisperValue-Lite Key Benefits:

- Super low profile housing design
- First in 2 x 4 , 2 x 6 and 2 x 8 construction

WhisperValue-Lite U-Can Contractor Pack

| Universal Housing Can | Motor/Grille Assembly | Complete Fan Unit | Master Pack |
|-----------------------|-----------------------|-------------------|-------------|
| FV-08VSLA2 | FV-08VSLB2 | FV-08VSL2 | 4 |
| FV-08VSLA2 | FV-10VSLB2 | FV-10VSL2 | 4 |

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

Specialty Fans

WhisperWarm™ VENTILATION FAN



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

WhisperWarm Key Benefits:

- Durable 1400 Watt stainless steel sheathed heating element
- Thermal fuse protection on motor and 3-level safety device for heater
- Quick 1 minute warm-up
- Fits in 2 x 8 construction



INCLUDES: Two 18-Watt Panasonic CFL/3500 Kelvin/High CRI/1200 Lumens each/ENERGY STAR® qualified/10,000 hours rated average life/equivalent to 100-Watt incandescent lamp/electronic ballast for flicker-free operation/plus 4-Watt night-light

WhisperCeiling™ VENTILATION FAN



FV-20VQ3 190 CFM 6" Duct
FV-30VQ3 290 CFM 6" Duct
FV-40VQ3 380 CFM 6" Duct



WhisperCeiling Key Benefits:

- Large volume exhaust fans ideal for light commercial applications

WhisperWall™ VENTILATION FAN



FV-08WQ1 70 CFM



WhisperWall Key Benefits:

- UL listed for through-the-wall application
- 10" galvanized sleeve and steel exterior hood included



Exterior Hood included

WhisperComfort™ VENTILATION FAN



Supply and exhaust air flows through a single exterior opening

FV-04VE1 40/20 CFM or 20/10 CFM 2x4" Ducts
FV-WC04VE1 Optional Exterior Wall Cap
FV-EB04VE1 Optional Elbow

WhisperComfort Key Benefits:

- ERV balances air pressure by supplying fresh exterior air while exhausting stale interior air
- 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 ceilings and 2 x 8 construction
- Sensible Energy Recovery 66%
- Latent Energy Recovery 33%
- Does not require a condensation line or drain

WhisperLine™ VENTILATION FAN



FV-10NLF1 120 CFM 4" Duct
FV-20NLF1 240 CFM 6" Duct
FV-30NLF1 340 CFM 6" Duct
FV-40NLF1 380 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

Complete Specifications on pages 24-33.
WhisperControl Cross Reference on pages 20-21.

WhisperControl

Condensation Sensor

On/Off—

FV-WCCS1-W (White)

FV-WCCS1-A (Light Almond)

On/Off/Light—

FV-WCCS2-W (White)

FV-WCCS2-A (Light Almond)



WhisperControl Condensation Sensor

Features & Benefits:

- Humidity Control – Automatically turns on when relative humidity and temperature change is detected
- 30 minute countdown timer
- Manual On/Off Control
- Compatible with single-speed fans or fan/lights
- Stylish design with wall plate included
- 1 year limited warranty
- ENERGY STAR®, LEED for Homes, ASHRAE 62.2, and CALGreen compliant
- LED indicator

WhisperControl

Switches

1 Function Control

FV-WCSW11-W (White)

FV-WCSW11-A (Light Almond)



WhisperControl Switches

Features & Benefits:

- Pilot light rocker visible when fan is on
- Back & side wiring terminals accept both solid & stranded wire for easier installation
- Full-rated current capacity with fluorescent or resistive loads. Motor capacity is 80% of switch rating
- Commercial grade
- Includes matching wall plate

WhisperControl

Switches

2 Function Control

FV-WCSW21-W (White)

FV-WCSW21-A (Light Almond)



WhisperControl Switches

Features & Benefits:

- Multi-switch combination saves space and adds convenience
- Common feed shunted internally to all switches
- Includes matching wall plate
- Commercial grade
- Elegant styling provides multiple controls in a single-gang wall box

WhisperControl

Switches

3 Function Control

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



WhisperControl Switches

Features & Benefits:

- 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

WhisperControl

Switches

4 Function Control

FV-WCSW41-W (White only)
 Designed for model FV-11VHL2
 Heater/Fan/Light/Night-light



WhisperControl Switches

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

WhisperControl

Switches

Preset Count Down Delay Off Timer Switch

FV-WCD01-W (White)
FV-WCD01-A (Light Almond)



WhisperControl Switches

Features & Benefits:

- Timer switch has four preset buttons options: 10-20-30 or 60 minutes
- LED light indicates countdown time and flashes two minutes before OFF warning
- Press and hold override timer function allows you to hold down the button until LED light indicates it is on
- Multi-switch combination saves space and adds convenience
- Common feed shunted internally to all switches
- Commercial grade
- Elegant styling provides multiple controls in a single-gang wall box
- Easy installation in single gang wallbox
- Includes matching wallplate

Cross Reference for Applicable Combination
of WhisperControl to Product

| | Model | FV-WCCS1-W/A | FV-WCCS2-W/A | FV-WCDD01-W/A | FV-WCSW11-W/A | FV-WCSW21-W/A | FV-WCSW31-W/A | FV-WCSW41-W |
|------------------------|--------------------|-----------------------------------|-----------------------------------------|------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| | Switch Type | Condensation Sensor On/Off | Condensation Sensor On/Off/Light | Delay Off Timer | 1 Function Control | 2 Function Control | 3 Function Control | 4 Function Control |
| WhisperGreen | FV-05VK3 | X | | X | X | | | |
| | FV-08VK3 | X | | X | X | | | |
| | FV-11VK3 | X | | X | X | | | |
| | FV-08VKL3 | | X | | | X | X | |
| | FV-11VKL3 | | X | | | X | X | |
| | FV-08VKSL3 | | | | | X** | | |
| | FV-08VKML3 | | | | | X** | | |
| | FV-13VKSL3 | | | | | X** | | |
| FV-13VKML3 | | | | | X** | | | |
| WhisperRecessed | FV-08VRL1 | | X | | | X | | |
| WhisperCeiling | FV-05VQ5 | X | | X | X | | | |
| | FV-08VQ5 | X | | X | X | | | |
| | FV-11VQ5 | X | | X | X | | | |
| | FV-15VQ5 | X | | X | X | | | |
| | FV-20VQ3 | X | | X | X | | | |
| | FV-30VQ3 | X | | X | X | | | |
| | FV-40VQ3 | X | | X | X | | | |
| | FV-08VQL5 | | X | | | X | X | |
| FV-11VQL5 | | X | | | X | X | | |
| FV-15VQL5 | | X | | | X | X | | |
| WhisperSense | FV-08VQCL5 | | | | | X** | | |
| | FV-11VQCL5 | | | | | X** | | |
| WhisperFit | FV-05VF2 | X | | X | X | | | |
| | FV-08VF2 | X | | X | X | | | |
| | FV-11VF2 | X | | X | X | | | |
| | FV-05VFL3 | | X | | | X | X | |
| | FV-08VFL3 | | X | | | X | X | |
| | FV-11VFL3 | | X | | | X | X | |
| WhisperValue | FV-05VS1 | X | | X | X | | | |
| | FV-08VS1 | X | | X | X | | | |
| | FV-10VS1 | X | | X | X | | | |
| | FV-08VSL2 | | X | | | X | X | |
| | FV-10VSL2 | | X | | | X | X | |
| WhisperWall | FV-08WQ1 | X | | X | X | | | |
| WhisperWarm | FV-11VH2* | | | X* | X* | | | |
| | FV-11VHL2* | | | X* | | | | X* |
| WhisperLine | FV-10NLF1 | X | | X | X | | | |
| | FV-20NLF1 | X | | X | X | | | |
| | FV-30NLF1 | X | | X | X | | | |
| | FV-40NLF1 | X | | X | X | | | |
| WhisperComfort | FV-04VE1 | | | | | X | | |

WhisperWelcome, WhisperSense, and WhisperGreen S/M3 models are not compatible with the above switches.

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

Ceiling Radiation Damper

PC-RD05C4



CLASSIFIED



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, |
| | WhisperGreen-Lite, |
| | WhisperCeiling 50-150 CFM, |
| | WhisperLite, WhisperSense, |
| | WhisperSenseLite, |
| | WhisperWelcome, WhisperFit, |
| | WhisperValue |

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

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

Designer Grilles



FV-GL3MTL

FV-GL3TDA

FV-GL3TDB

| Characteristics | FV-GL3TDA | FV-GL3TDB | FV-GL3MTL |
|-------------------------------------|-------------|-------------|---------------------------|
| Grille Size (inches sq.) | 13 | 14-1/5 | 13 |
| Shipping Gross Weight (lbs) | 1.1 | 1.3 | 1.5 |
| Trend Style Category | Traditional | Traditional | Commercial |
| Material | ABS | ABS | 26 Gauge Galvanized Steel |
| UL Approved ¹ | Yes | Yes | Yes |
| HVI Certified ¹ | Yes | Yes | Yes |
| Mfg. in ISO 9001 Certified Facility | Yes | Yes | Yes |

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: FV-13VKS3, FV-11VK3, FV-08VKS3, FV-08VK3, FV-05VK3

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

WhisperFit: FV-11VF2, FV-08VF2, FV-05VF2

WhisperValue: FV-10VS1, FV-08VS1, FV-05VS1 (For FV-GL3MTL only)

Fans with Built-in Controls



| WhisperGreen | FV-08VKS3 FV-08VKM3 | | | | | | | | | | | | FV-13VKS3 FV-13VKM3 | | | | | | | | | | | |
|---------------------------------|-----------------------|------|------|------|------|------|------|------|------|------|------|------|-----------------------|------|------|------|------|------|------|------|------|------|-----|------|
| 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 | 0.1 | 0.25 | 0.1 | 0.25 | 0.1 | 0.25 |
| Air Volume (CFM) | 80 | 79 | 70 | 75 | 60 | 59 | 50 | 54 | 40 | 39 | 30 | 32 | 130 | 135 | 110 | 111 | 90 | 93 | 70 | 71 | 50 | 53 | | |
| Noise (sones) | <0.3 | 0.4 | <0.3 | 0.4 | <0.3 | 0.3 | <0.3 | 0.3 | <0.3 | <0.3 | <0.3 | <0.3 | <0.3 | 0.7 | <0.3 | 0.6 | <0.3 | 0.6 | <0.3 | 0.4 | <0.3 | <0.3 | | |
| Power Consumption (Watts) | 7.0 | 11.0 | 5.4 | 10.1 | 5.0 | 8.7 | 4.3 | 7.5 | 3.7 | 6.6 | 3.2 | 5.8 | 11.6 | 21.1 | 8.7 | 15.1 | 6.0 | 12.1 | 4.1 | 9.6 | 2.4 | 5.8 | | |
| Energy Efficiency (CFMs/Watt) | 12.1 | 7.6 | 13.3 | 7.7 | 13.6 | 7.7 | 12.4 | 7.7 | 12.8 | 7.1 | 11.4 | 6.7 | 11.2 | 6.4 | 12.5 | 7.3 | 15.2 | 7.8 | 18.7 | 7.9 | 23.3 | 10.0 | | |
| Speed | 832 | 1130 | 791 | 1125 | 773 | 1106 | 749 | 1101 | 740 | 1093 | 745 | 1087 | 662 | 917 | 643 | 912 | 580 | 900 | 506 | 874 | 430 | 781 | | |
| Current | 0.02 | 0.01 | 0.03 | 0.01 | 0.05 | 0.01 | 0.05 | 0.02 | 0.05 | 0.03 | 0.06 | 0.04 | 0.01 | 0.12 | 0.03 | 0.09 | 0.02 | 0.07 | 0.04 | 0.01 | 0.06 | 0.03 | | |
| Power Rating (V/Hz) | 120/60 | | | | | | | | | | | | 120/60 | | | | | | | | | | | |



| WhisperSense | FV-08VQC5 | | FV-11VQC5 | |
|---------------------------------|-----------|--|-----------|--|
| Characteristics | | | | |
| Static pressure in inches w. g. | 0.1 | | 0.25 | |
| Air Volume (CFM) | 80 | | 110 | |
| Noise (sones) | <0.3 | | 0.3 | |
| Power Consumption (Watts) | 15.8 | | 24.3 | |
| Energy Efficiency (CFMs/Watt) | 5.1 | | 4.6 | |
| Speed | 825 | | 957 | |
| Current | 0.14 | | 0.21 | |
| Power Rating (V/Hz) | 120/60 | | 120/60 | |



| WhisperWelcome | FV-05VFM2 | | | | FV-08VFM2 | | | |
|---------------------------------|-----------|------|---------|------|-----------|------|---------|------|
| 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 | | | | 120/60 | | | |

Single Speed Fans (On/Off)



| WhisperGreen | FV-05VK3 | | FV-08VK3 | | FV-11VK3 | |
|---------------------------------|----------|------|----------|------|----------|------|
| Characteristics | | | | | | |
| Static pressure in inches w. g. | 0.1 | 0.25 | 0.1 | 0.25 | 0.1 | 0.25 |
| Air Volume (CFM) | 50 | 54 | 80 | 79 | 110 | 112 |
| Noise (sones) | <0.3 | 0.3 | <0.3 | 0.4 | 0.3 | 0.8 |
| Power Consumption (Watts) | 4.3 | 7.5 | 7.0 | 11.0 | 11.5 | 16.2 |
| Energy Efficiency (CFMs/Watt) | 12.4 | 7.7 | 12.1 | 7.6 | 9.7 | 70 |
| Speed | 749 | 1101 | 832 | 1130 | 953 | 1229 |
| Current | 0.05 | 0.02 | 0.02 | 0.01 | 0.21 | 0.30 |
| Power Rating (V/Hz) | 120/60 | | 120/60 | | 120/60 | |



| WhisperCeiling | FV-05VQ5 | | FV-08VQ5 | | FV-11VQ5 | | FV-15VQ5 | |
|---------------------------------|----------|------|----------|------|----------|------|----------|------|
| Characteristics | | | | | | | | |
| 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 | FV-05VF2 | | | | FV-08VF2 | | | | FV-11VF2 | | | |
|---------------------------------|----------|------|---------|------|----------|------|---------|------|----------|------|---------|------|
| | 4" Duct | | 3" Duct | | 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 | 0.1 | 0.25 | 0.1 | 0.25 |
| Air Volume (CFM) | 50 | 30 | 50 | 31 | 80 | 60 | 70 | 53 | 110 | 94 | 90 | 78 |
| Noise (sones) | 0.4 | 0.9 | 0.5 | 1.1 | 0.8 | 1.0 | 0.8 | 1.1 | 1.5 | 1.5 | 1.5 | 2.0 |
| Power Consumption (Watts) | 15.0 | 14.7 | 15.0 | 14.8 | 24.5 | 24.3 | 24.0 | 24.0 | 33.5 | 33.2 | 33.8 | 33.5 |
| Energy Efficiency (CFMs/Watt) | 3.3 | 2.0 | 2.0 | 2.1 | 3.3 | 2.5 | 2.9 | 2.2 | 3.3 | 2.8 | 2.7 | 2.3 |
| Speed | 637 | 932 | 741 | 978 | 757 | 956 | 845 | 1007 | 830 | 1000 | 1029 | 1128 |
| Current | 0.13 | 0.12 | 0.13 | 0.12 | 0.20 | 0.20 | 0.20 | 0.20 | 0.28 | 0.28 | 0.28 | 0.28 |
| Power Rating (V/Hz) | 120/60 | | | | 120/60 | | | | 120/60 | | | |



| WhisperValue | FV-05VS1 | | FV-08VS1 | | FV-10VS1 | |
|---------------------------------|--------------|------|--------------|------|--------------|------|
| 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) | 50 | 38 | 80 | 71 | 100 | 90 |
| Noise (sones) | 0.8 | N/A | 1.3 | 1.5 | 1.5 | 1.5 |
| Power Consumption (Watts) | 15.8 | 15.3 | 27.4 | 27.6 | 36.4 | 36.1 |
| Energy Efficiency (CFMs/Watt) | 3.2 | 2.4 | 3.4 | 2.8 | 2.9 | 2.7 |
| Speed (RPM) | 759 | 948 | 878 | 1026 | 840 | 979 |
| Current (amps) | 0.04 | 0.04 | 0.11 | 0.11 | 0.30 | 0.30 |
| Power Rating (V/Hz) | 120/60 | | 120/60 | | 120/60 | |

Fan/Lights with Built-in Controls



| WhisperGreen-Lite | FV-08VKSL3 FV-08VKML3 | | | | | | | | | | | | FV-13VKSL3 FV-13VKML3 | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|-------------------------|------|------|------|------|------|------|------|------|------|------|------|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|------|
| 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 | 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) | 80 | 79 | 70 | 78 | 60 | 60 | 50 | 52 | 40 | 42 | 30 | 35 | 130 | 137 | 110 | 115 | 90 | 91 | 70 | 69 | 50 | 57 | 130 | 137 | 110 | 115 | 90 | 91 | 70 | 69 | 50 | 57 | | |
| Noise (sones) | <0.3 | 0.6 | <0.3 | 0.6 | <0.3 | 0.5 | <0.3 | 0.5 | <0.3 | 0.5 | <0.3 | 0.5 | 0.8 | 1.3 | 0.6 | 1.2 | 0.3 | 1.1 | <0.3 | 0.9 | <0.3 | 0.8 | 0.8 | 1.3 | 0.6 | 1.2 | 0.3 | 1.1 | <0.3 | 0.9 | <0.3 | 0.8 | | |
| Power Consumption (Watts) | 7.4 | 12.4 | 6.0 | 11.6 | 5.3 | 9.0 | 4.2 | 7.8 | 3.8 | 6.7 | 3.5 | 6.2 | 14.2 | 24.2 | 10.7 | 19.4 | 7.8 | 14.9 | 5.9 | 10.5 | 4.1 | 8.5 | 14.2 | 24.2 | 10.7 | 19.4 | 7.8 | 14.9 | 5.9 | 10.5 | 4.1 | 8.5 | | |
| Energy Efficiency (CFMs/Watt) | 11.2 | 6.6 | 11.9 | 6.8 | 12.1 | 7.2 | 12.5 | 7.0 | 11.1 | 6.6 | 8.8 | 5.8 | 9.0 | 5.5 | 10.1 | 5.8 | 11.5 | 6.1 | 12.0 | 6.7 | 12.3 | 6.7 | 9.0 | 5.5 | 10.1 | 5.8 | 11.5 | 6.1 | 12.0 | 6.7 | 12.3 | 6.7 | | |
| Speed | 866 | 1166 | 815 | 1157 | 675 | 941 | 765 | 1106 | 758 | 1084 | 611 | 879 | 742 | 968 | 707 | 972 | 676 | 969 | 669 | 932 | 648 | 939 | 742 | 968 | 707 | 972 | 676 | 969 | 669 | 932 | 648 | 939 | | |
| Current | 0.01 | 0.02 | 0.03 | 0.02 | 0.05 | 0.09 | 0.04 | 0.02 | 0.06 | 0.05 | 0.04 | 0.06 | 0.04 | 0.15 | 0.05 | 0.12 | 0.03 | 0.09 | 0.03 | 0.01 | 0.04 | 0.01 | 0.04 | 0.15 | 0.05 | 0.12 | 0.03 | 0.09 | 0.03 | 0.01 | 0.04 | 0.01 | | |
| Power Rating (V/Hz) | 120/60 | | | | | | | | | | | | 120/60 | | | | | | | | | | | | | | | | | | | | | |



| WhisperSense-Lite | FV-08VQCL5 | | FV-11VQCL5 | |
|---------------------------------|------------|--|------------|--|
| Characteristics | | | | |
| Static pressure in inches w. g. | 0.1 | | 0.25 | |
| Air Volume (CFM) | 80 | | 62 | |
| Noise (sones) | <0.3 | | 0.4 | |
| Power Consumption (Watts) | 17.5 | | 17.6 | |
| Energy Efficiency (CFMs/Watt) | 4.7 | | 3.6 | |
| Speed | 825 | | 1110 | |
| Current | 0.14 | | 0.14 | |
| Power Rating (V/Hz) | 120/60 | | 120/60 | |

Single Speed Fans with Lights (On/Off)



| WhisperGreen-Lite | | FV-08VKL3 | | FV-11VKL3 | |
|---------------------------------|--|-----------|------|-----------|------|
| Characteristics | | | | | |
| Static pressure in inches w. g. | | 0.1 | 0.25 | 0.1 | 0.25 |
| Air Volume (CFM) | | 80 | 79 | 110 | 108 |
| Noise (sones) | | <0.3 | 0.6 | 0.7 | 1.1 |
| Power Consumption (Watts) | | 7.4 | 12.4 | 12.5 | 18.0 |
| Energy Efficiency (CFMs/Watt) | | 11.2 | 6.6 | 8.9 | 6.0 |
| Speed | | 866 | 1166 | 1019 | 1256 |
| Current | | 0.01 | 0.02 | 0.25 | 0.34 |
| Power Rating (V/Hz) | | 120/60 | | 120/60 | |



| WhisperLite | | FV-08VQL5 | | FV-11VQL5 | | FV-15VQL5 | |
|---------------------------------|--|-----------|------|-----------|------|-----------|------|
| 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 | |



| WhisperFit-Lite Characteristics | FV-05VFL3 | | | | FV-08VFL3 | | | | FV-11VFL3 | | | |
|------------------------------------|-----------|------|---------|------|-----------|------|---------|------|-----------|------|---------|------|
| | 4" Duct | | 3" Duct | | 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 | 0.1 | 0.25 | 0.1 | 0.25 |
| Air Volume (CFM) | 50 | 35 | 50 | 35 | 80 | 67 | 70 | 60 | 110 | 96 | 90 | 78 |
| Noise (sones) | <0.3 | 0.4 | <0.3 | 0.5 | 0.5 | 0.8 | 0.5 | 0.8 | 1.3 | 1.5 | 1.5 | 2.0 |
| Power Consumption (Watts) | 15.9 | 15.8 | 15.9 | 15.8 | 28.8 | 28.6 | 28.4 | 28.0 | 33.0 | 32.6 | 32.5 | 32.1 |
| Energy Efficiency (CFMs/Watt) | 3.5 | 2.5 | 3.1 | 2.2 | 2.8 | 2.4 | 2.6 | 2.3 | 3.3 | 2.9 | 2.9 | 2.6 |
| Speed | 703 | 917 | 769 | 989 | 763 | 962 | 895 | 1050 | 906 | 1033 | 1048 | 1162 |
| Current | 0.13 | 0.13 | 0.13 | 0.13 | 0.24 | 0.24 | 0.24 | 0.23 | 0.28 | 0.27 | 0.27 | 0.27 |
| Power Rating (V/Hz) | 120/60 | | | | 120/60 | | | | 120/60 | | | |



| WhisperValue-Lite | | FV-08VSL2 | | FV-10VSL2 | |
|---------------------------------|--|--------------|------|--------------|------|
| Characteristics | | 4" Oval Duct | | 4" Oval Duct | |
| Static pressure in inches w. g. | | 80 | 67 | 100 | 90 |
| Air Volume (CFM) | | 1.3 | 1.5 | 1.5 | 2.5 |
| Noise (sones) | | 24.6 | 25.0 | 36.6 | 36.3 |
| Power Consumption (Watts) | | 3.3 | 2.7 | 2.7 | 2.5 |
| Energy Efficiency (CFMs/Watt) | | 944 | 1063 | 911 | 1019 |
| Speed (RPM) | | 0.21 | 0.21 | 0.31 | 0.30 |
| Current (amps) | | 0.21 | 0.21 | 0.31 | 0.30 |
| Power Rating (V/Hz) | | 120/60 | | 120/60 | |



| WhisperRecessed | | FV-08VRL1 | |
|---------------------------------|--|-----------|------|
| 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 | |

Specialty Fans



| WhisperWarm | 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 | |



| WhisperCeiling | FV-20VQ3 | | FV-30VQ3 | | FV-40VQ3 | |
|---------------------------------|----------|------|----------|------|----------|------|
| Characteristics | | | | | | |
| 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 | 359 |
| Noise (sones) | 0.8 | 1.4 | 2 | N/A | 3 | 3 |
| Power Consumption (Watts) | 43.7 | 42.9 | 64 | 62 | 112 | 110 |
| Energy Efficiency (CFMs/Watt) | 4.6 | 3.6 | 4.5 | 4.1 | 3.4 | 3.2 |
| Speed | 761 | 949 | 877 | 990 | 774 | 858 |
| Current | 0.34 | 0.33 | 0.53 | 0.52 | 0.97 | 0.96 |
| Power Rating (V/Hz) | 120/60 | | 120/60 | | 120/60 | |



| 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 |



| WhisperComfort | FV-04VE1 | | |
|---------------------------------|----------|--------|--------|
| | 40 CFM | 20 CFM | 10 CFM |
| Characteristics | | | |
| 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 | | |



| WhisperLine | FV-10NLF1 | | | 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 | 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-Adaptor |
| FV-NLF04G | 4" Inlet Grille | 1 (4") | - | - | - |
| FV-NLF06G | 6" Inlet Grille | 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-Adaptor | - | - | - | 1 (8"- 6"x 2) |

Sizing

Information and Instructions

Fan Selection Guide

- What is the size of the bathroom?
 - Need 1 CFM (cubic foot per minute) per square foot
 - Length x Width = CFM
(length) x (width) = (Total CFM needed)
 - Example: 8 ft length x 10 ft wide = 80 CFM is needed to properly ventilate the bathroom
- What features are needed/wanted? Fan only? Light? Heat? Variable speed? Motion? Humidity? Time delay?
- What type of construction is available? Truss size is necessary if it is smaller than 2 x 8 construction so the selected fan housing size will fit the installation.
 - 2 x 8 construction – can use any fan combination that we have
 - 2 x 6 construction – can use our fan combinations that fit 2 x 6 or 2 x 4 construction
 - 2 x 4 construction – can 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.

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.

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 duct.

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

Step 1: Determine application

$$\text{Bathroom} = 1 \text{ CFM/square foot}$$

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

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

$$8 \text{ ft} \times 10 \text{ ft} = 80 \text{ sq ft}$$

Step 3: Calculate your required CFM

$$1 \text{ CFM} \times 80 \text{ sq ft} = 80 \text{ CFM}$$

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

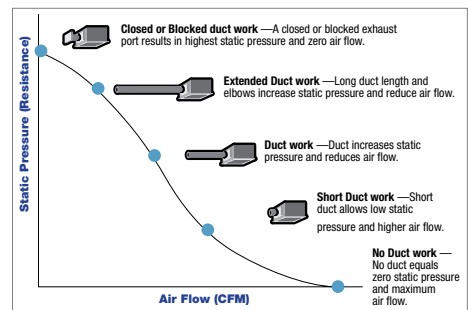
$$15 \text{ ft} + 15 \text{ ft} + 30 \text{ ft} = 60 \text{ ft EDL}$$

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.

FIG. A



| | | 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