



## DELTA BREEZ IAQ SOLUTIONS

Perfectly Quiet. Perfectly Green.



STAY FRESH / QUIETLY EFFICIENT IN EVERY WAY



## Performance and Exceptional Value

Delta Breez Indoor Air Quality solutions has been honored with the **ENERGY STAR® Partner of the Year for Sustained Excellence award** for nine consecutive years, a testament to our unwavering commitment to engineering the most innovative products for a better tomorrow.

Delta Breez is the only manufacturer to exclusively use **state-of-the-art brushless DC motors** in all of our fans. Here's a sampling of our standout features:

- **Save more energy** – up to 85% less consumption compared to AC motors
- **Exceed ENERGY STAR® efficiency requirements** by over 300%
- **Exceptional reliability**, outlasts AC motors by 2.5 times for trouble-free operation
- **Virtually silent performance**, as low as <0.3 sones to maximize homeowner satisfaction
- **Smart controls**, optional speed settings, built-in motion, and humidity sensors
- **Enhanced design**, LED lighting, designer grilles, and Bluetooth® speakers

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Smarter. Greener. Together.

# VENTILATION RE-IMAGINED

## Introduction to Delta

In 2009, Delta Breez ushered in a new era for bathroom ventilation and the Indoor Air Quality (IAQ) industry by launching a line of exhaust fans powered exclusively by DC motors—renowned for their legendary reliability, silent performance, and energy efficiency. By reinventing the ubiquitous bath fan, we've helped consumers save significantly on electricity bills and enabled countless families to breathe easier.

### **Corporate Mission: To provide innovative, clean, and energy-efficient solutions for a better tomorrow.**

Founded in 1971, Delta Group began with a mission to provide innovative, clean, and energy-efficient solutions for a better tomorrow. Today, we are the world's largest manufacturer of brushless DC fans, serving applications ranging from consumer electronics to industrial equipment. Our global footprint includes over \$13 billion in annual revenue. Headquartered in Taiwan, we regularly invest over 8% of our annual sales revenues in R&D and have worldwide R&D facilities in China, Europe, Japan, Singapore, Thailand, and the United States. Our U.S. and Americas headquarters is proudly located in the heart of Silicon Valley, Fremont, California.

**Innovation for future generations starts today.** Our commitment and vision run deep, with a focus on developing the most advanced and energy-efficient solutions. As part of this evolution, we're proud to introduce new products such as air movers and ceiling fans for improved air circulation, along with fresh air supply fans and energy recovery ventilators for comprehensive whole-house ventilation. Expanding consumer choice is a priority for us, and Delta will continue to push the boundaries of what's possible.



### FOUNDED

1971

Established by Bruce Cheng in Taipei, Taiwan, to sell various electronic components.



### POWER SUPPLIES

1983

Mass production of switching power supplies to become the world's #1 provider.



### FANS & MOTORS

1985

Mass production of brushless DC motors and fans to become the world's #1 provider.



### DELTA BREEZ IAQ

2009

Global launch of bathroom ventilation fans exclusively powered by DC motors.



### LED LIGHT VENT FANS

2011

Delta launched the industry's first ventilation exhaust fan and LED light combination.



### ENERGY STAR® PARTNER OF THE YEAR

2016

Recognizing Delta's exceptional strides in energy efficiency, the U.S. Environmental Protection Agency named Delta ENERGY STAR® Partner of the Year.



## DC MOTORS EXPLAINED



### ***Reliable. Silent. Efficient. Innovative.***

#### **Legendary Reliability and Performance**

Every Delta Breez fan powered by a DC motor is tested to run continuously for 70,000 hours—the equivalent of 8 years of nonstop operation.

#### **So Quiet, You'll Forget It's On**

Thanks to brushless motor technology and precision engineering, our fans deliver near-silent performance, as low as <0.3 sones—the lowest sound rating in the industry.

#### **An Energy-Efficiency Workhorse**

Our fans consume up to 74% less power than typical AC motor fans and exceed ENERGY STAR® efficiency requirements by up to 339%.

#### **Smart Fan Technology That Protects Your Family**

Our proprietary lock protection system prevents overheating, ensuring safe and reliable operation.



**BLUETOOTH VENT FANS**

**2017**



**EDGE-LIT LED LIGHTS**

**2018**



**SUPPLY FAN**

**2023**



**ENERGY RECOVERY VENTILATOR ERV**

**2024**



**ENERGY STAR®  
PARTNER - 7TH  
SUSTAINED  
EXCELLENCE**

**2024**

Feel the rhythm and jam to your favorite tunes! Delta Breez entered the digital era with the first Bluetooth® enabled fans to stream music, sports and news. décor enthusiasts.

Delta designed the industry's first ever edge-lit LED bathroom ventilation fans. Disguised as a sleek LED light fixture, our edge-lit LED fans give any bathroom a welcome facelift and is perfect for

Breathe easy with Delta BreezFresh FRS200HT is a DC fresh air supply fan. High air flow and low noise fresh air supply fan with temperature and humidity sensor allows you to select your required airflow [30-200 CFM].

Delta has won Partner of the Year for nine consecutive years and was also honored with the "Sustained Excellence" designation since 2018.

# CERTIFICATIONS AND QUALIFICATIONS



## ENERGY STAR

ENERGY STAR, a joint program of the U.S. Department of Energy and the U.S. Environmental Protection Agency, identifies products in over 60 categories that meet rigorous energy efficiency standards. Established in 1992, ENERGY STAR has become an internationally recognized label for U.S.-originating products that reduce greenhouse gas emissions without compromising performance or quality.

ENERGY STAR certified products help protect the environment by reducing energy consumption, which in turn lowers greenhouse gas emissions and saves consumers money on utility bills.

As ENERGY STAR partner, Delta is committed to engineering solutions that meet, and often exceed current energy efficiency standards. At Delta Breez, we take pride in delivering ENERGY STAR certified products, with some models exceeding ENERGY STAR efficiency requirements by over 337%. Most of our models are ENERGY STAR certified, reflecting our dedication to sustainability and innovation.

**For more information, visit**

[www.energystar.gov](http://www.energystar.gov)

## ENERGY STAR Most Efficient 2025



ENERGY STAR Most Efficient is a special designation that highlights the highest-performing products among those that earn the ENERGY STAR label.

Delta Breez currently offers 95 ENERGY STAR® certified bathroom fans, with some models exceeding efficiency criteria by as much as 337%. Notably, 26 fans from the Delta Breez Signature and BreezElite lines meet the most stringent efficiency standards set by the U.S. Environmental Protection Agency under the ENERGY STAR® Most Efficient designation.

## CALGreen

CALGreen is a state building code requirement for California that sets baseline efficiency and sustainability standards. High efficiency products such as Delta Breez ventilation fans help builders meet this requirement.

**For more information, visit**

[www.bsc.ca.gov/Home/CALGreen.aspx](http://www.bsc.ca.gov/Home/CALGreen.aspx)



HVI, the Home Ventilating Institute, is an organization that runs a standardized testing and certification program for a range of home ventilating products. Products are tested to qualify for various performance parameters and undergo random verification. All tests are conducted in third-party facilities that are independent of any manufacturer, while testing procedures are designed by HVI members according to internationally recognized guidelines. All Delta Breez ventilation fans are HVI lab tested and certified.

For more information about HVI, please visit: [www.hvi.org](http://www.hvi.org)



## ASHRAE 62.2

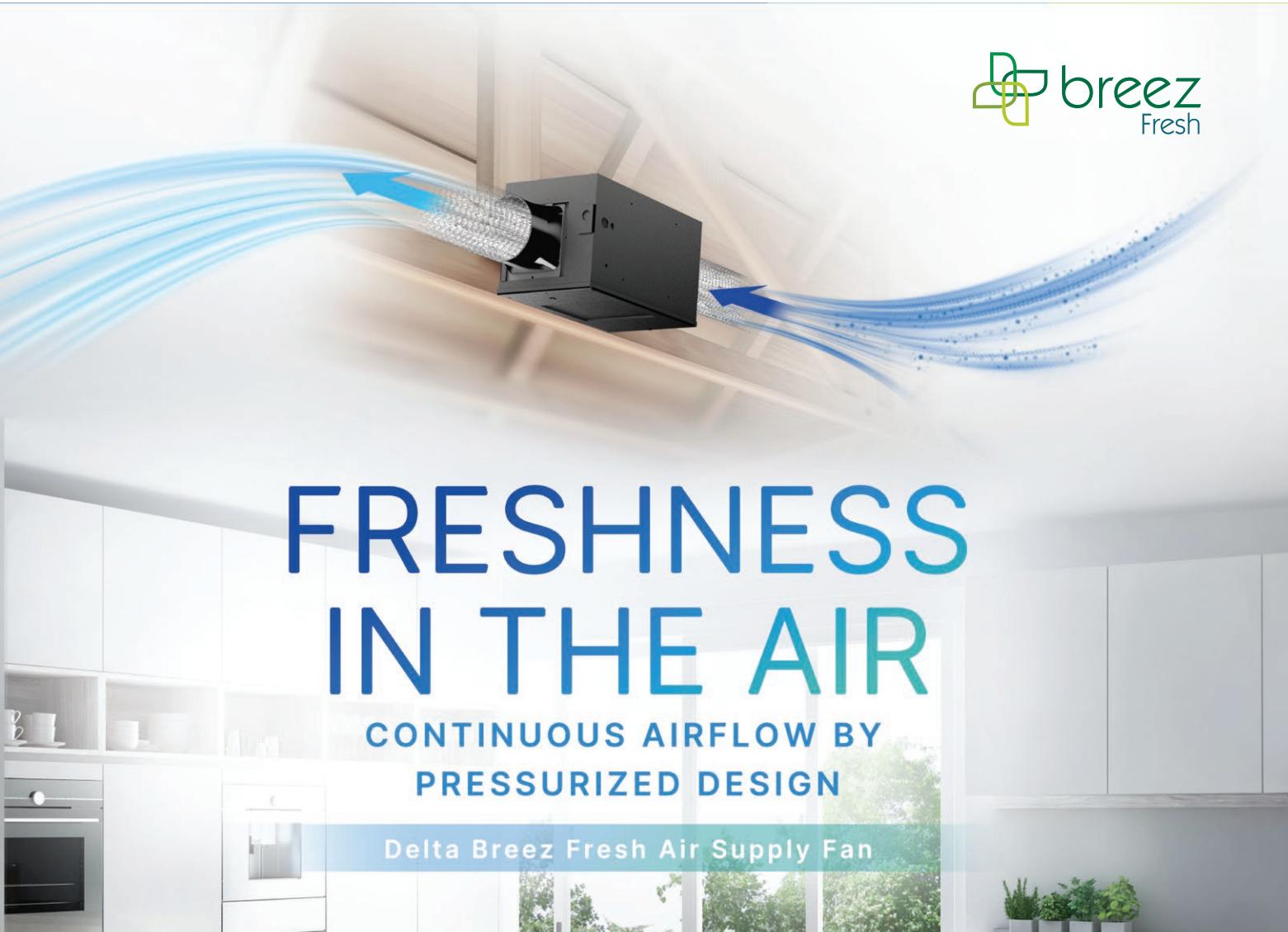
ASHRAE 62.2 publishes a national standard that applies to single-family homes and multi-family dwellings to ensure proper ventilation and acceptable indoor air quality. The standard is referenced in building codes and widely accepted by architects, engineers and mechanical contractors. ASHRAE 62.2 addresses minimum ventilation effectiveness and noise level performance of continuous and intermittent mechanical exhaust systems.

The following table summarizes the ventilation air requirements in CFM for homes of various sizes floor areas:

### Ventilation Air Requirement, CFM

Floor Area (ft <sup>2</sup> )	Bedrooms				
	0-1	2-3	4-5	6-7	>7
<1500	30	45	60	75	90
1501-3000	45	60	75	90	105
3001-4500	60	75	90	105	120
4501-5000	75	90	105	120	135
5001-7500	90	105	120	135	150
>7500	105	120	135	150	165

Most Delta Breez fan models are ASHRAE 62.2 compliant for both intermittent and continuous run applications. This means Delta Breez fans are operable according to 62.2 guidelines for airflow and meet the minimum noise level requirements.



# FRESHNESS IN THE AIR

CONTINUOUS AIRFLOW BY PRESSURIZED DESIGN

Delta Breez Fresh Air Supply Fan



## Delta Fresh Air Supply Fan FRS200 series

For: Bathroom & Bedroom / Dining Room & Living Room / Office



(FRS200HT)

- High efficient DC brushless motor and 13 supply rates 30-40-50-60-70-80-90-110-130-150-170-180-200 CFM.



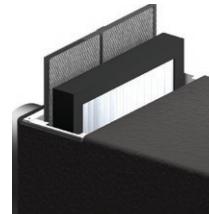
(FRS200HT)

- Adjustable relative humidity level and temperature setting.
- Run time rating function
- Digital display



(FRS200HT)

- The motorized damper ensures proper airflow and prevents unwanted air infiltration.



(FRS200HT)

- Two stage filtration. Pre-filter and MERV13
- Two filtration maintenance alerts (FID) for filter cleaning and replacement.



## Specifications

### FRS200 (Supply fan)

#### FRS200 (VDBFRS200)

Static Pressure (inch w.g.)	0.2									
Air Flow (CFM)	200	170	150	130	110	90	70	50	40	30
Power Consumption (Watts)	42.0	29.3	22.7	19.1	14.1	11.4	8.5	7.2	6.1	5.2
Static Pressure (inch w.g.)	0.4									
Air Flow (CFM)	160	160	150	130	110	90	70	50	40	29
Power Consumption (Watts)	35.2	35.2	33.6	27.7	21.7	17.7	12.8	11.8	9.8	9.0

Performance with pre-filter & MERV 13 filter installed

### FRS200HT (Supply fan with Humidity and Temperature Control)

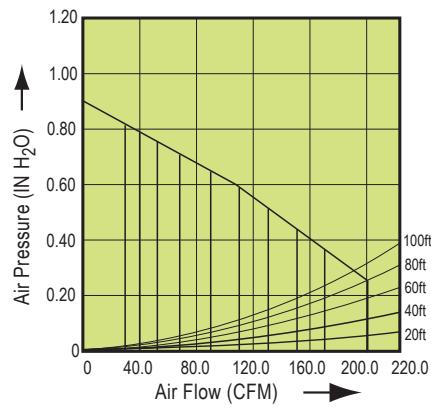
#### FRS200HT (VDBFRS200HT)

Static Pressure (inch w.g.)	0.2									
Air Flow (CFM)	200	170	150	130	110	90	70	50	40	30
Power Consumption (Watts)	42.6	31.6	24.5	19.9	17.2	14.1	12	10.3	9.1	8.6
Static Pressure (inch w.g.)	0.4									
Air Flow (CFM)	N/A	170	150	130	110	90	70	50	40	30
Power Consumption (Watts)	N/A	41.1	34.5	30.2	25.7	21.3	17.3	14.7	13.6	12.3

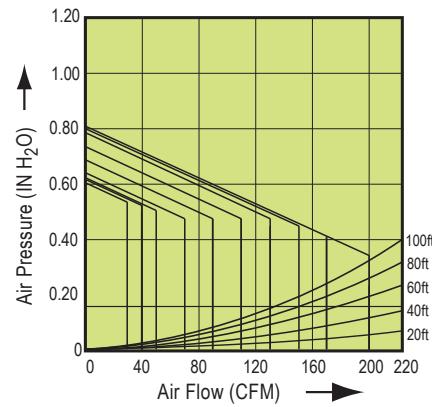
Performance with pre-filter & MERV 13 filter installed

### P&Q Curve

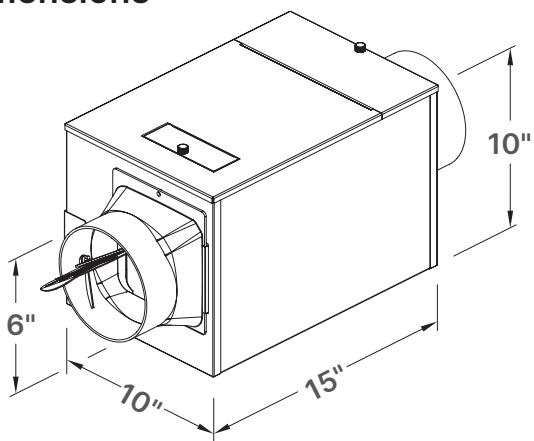
FRS200



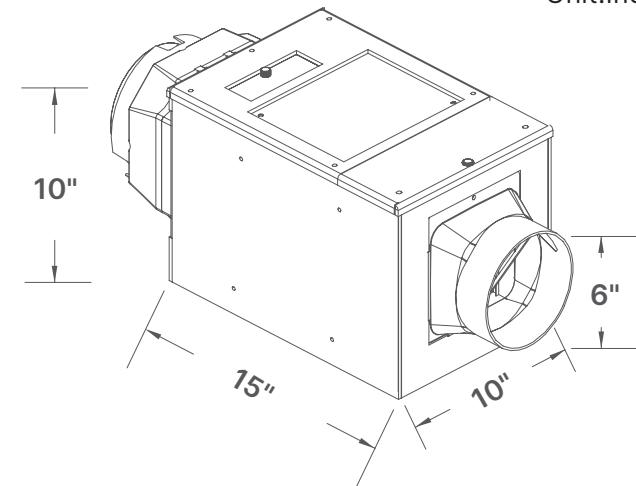
FRS200HT



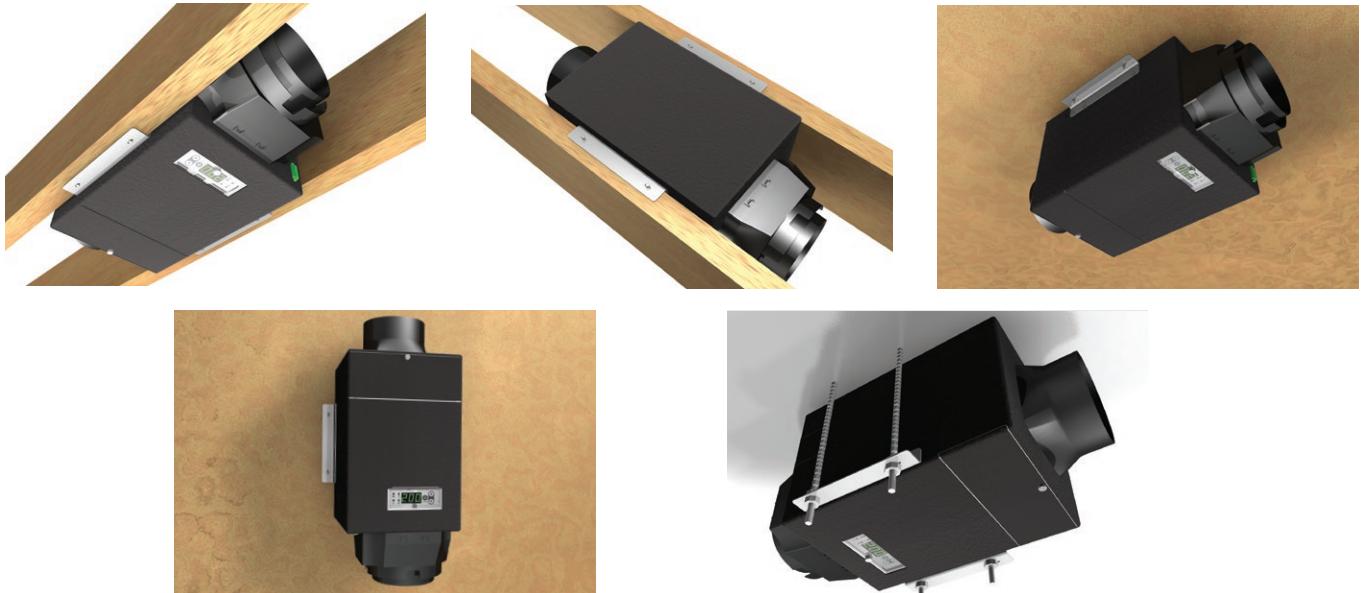
### Dimensions



Unit:Inch

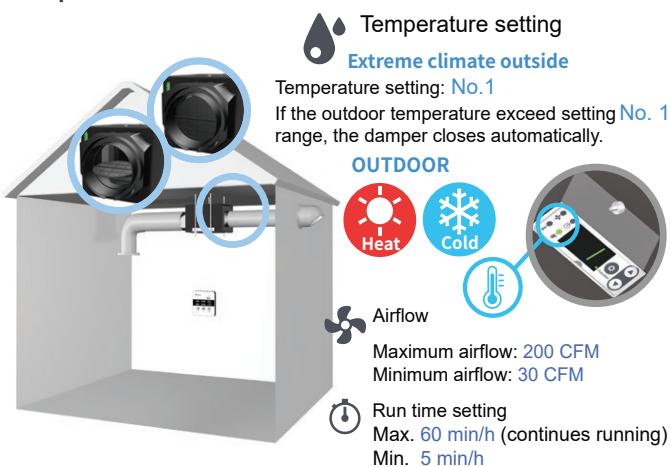


Five installation possibilities: ceiling hung, under ceiling, wall mounted, truss mounted, flush to ceiling

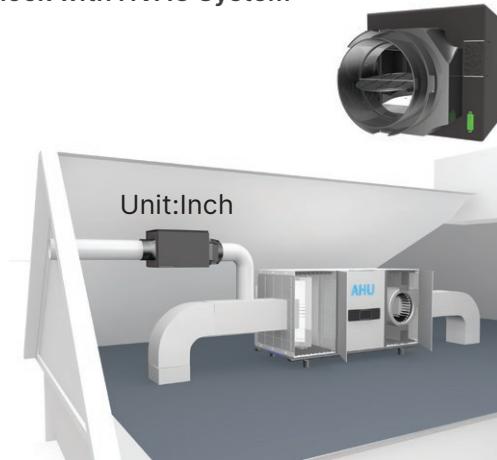


## Application - model FRS200HT

### Temperature and RH limits control



### Interlock with HVAC System



### Balance system - The FRS200 series and bathroom fan





## Delta Breez Fresh series Energy Recovery Ventilator



### Delta Energy Recovery Ventilator VEB120S / VEB165S

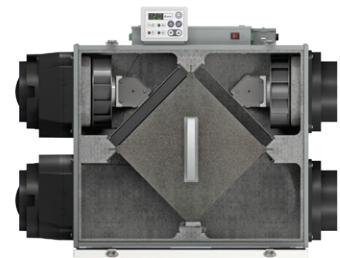
For: Single Family / Multi Family / Townhouse / Apartment

#### Delta BreezFresh ERVs: The Freshest Air, Powered by Innovation

Delta Electronics, the world's largest manufacturer of DC motors, proudly introduces **Delta BreezFresh ERVs**, the ideal solution for indoor air quality (IAQ) and energy recovery in your home. Delta BreezFresh ERVs are powered by the same high-performance DC motors used in our renowned bathroom exhaust fans, delivering unmatched reliability, quiet operation, and energy efficiency. Equipped with **MERV13 filters**, Delta BreezFresh ERVs provide the cleanest fresh air in the industry. In contrast, competitors often use weaker motors and lower-efficiency filters, such as MERV8 or even MERV6—allowing higher levels of pollutants into your home. Delta BreezFresh ERVs truly offers **the freshest air energy recovery systems** on the market today.

#### Designed for Easy Installation and Maintenance

Engineered with installers in mind, each ERV features a built-in controller for quick programming to meet any home's ventilation needs. Weighing less than 36 lbs (120 CFM model) and 46 lbs (165 CFM model), and supporting multiple installation orientations, Delta BreezFresh ERVs are easy to mount, even for a single installer. Airflow balancing is also easy with an individual motor speed adjustments dials, the ventilation level can be programmed to every home's need in any climate. A built-in Fault Indicator Display (FID) alerts homeowners when it's time to clean or replace the MERV13 filter or contact a technician, making maintenance just as effortless.





## Side-ports ERV series

Delta Energy Recovery Ventilator

VEB120S



Can be ceiling  
or wall mounted

VEB165S



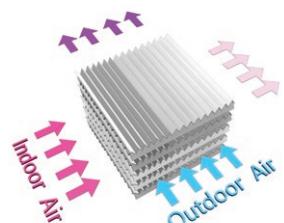
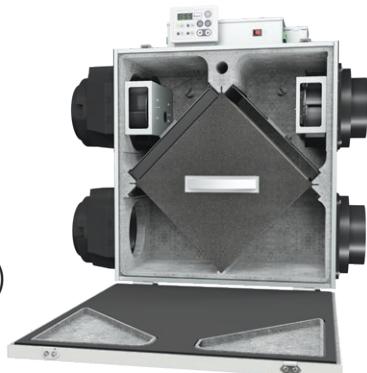
Light weight  
for easy installation



VEB120S



VEB165S  
(Coming soon)



- On-board controls meet ASHRAE 62.2 code requirements
- Air flow tested from 30 to 165CFM are reliable up to 0.4 static pressure
- Boost mode triggers the ERV to maximum CFM, to handle occasional higher needs

- FID (Fault Indicator Display) make filter clean/change and maintenance a BREEZE
- Mirror technology ERV model



\*

*\*This product earned the ENERGY STAR® rating by meeting strict energy efficiency guidelines set by Natural Resources Canada and the US EPA. This product meets ENERGY STAR requirements only when used in Canada.*



- Delta 1" MERV13 has the same surface area as many 2" filters and meets CEC regulation, Equation 150.0-A pressure drop requirement, eliminating the need for additional equipment and 2" filters.
- Achieving up to 90% energy recovery efficiency while regulating relative humidity and maintaining indoor temperature.



- Two Delta-DC motors Airflow balancing adjustments, allow positive, negative, or balanced airflow to meet the needs of any home in any climate.



- Delta BreezFresh ERV motors are so powerful that the airflow ratings are tested with a MERV13 filter, unlike competition weaker motors tested with a MERV6 or MERV8.

**Flexible installation options:** wall mount, attic mount, under ceiling mount, or chain mount

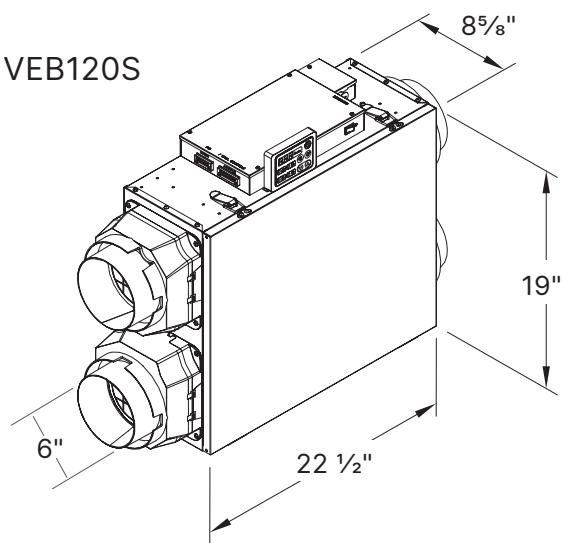


VEB120S series only

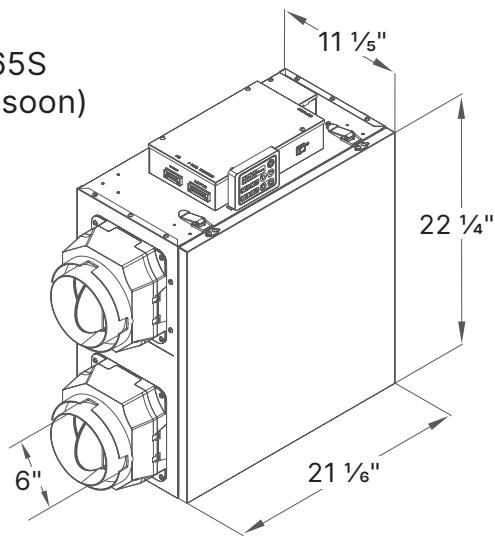


## Dimensions

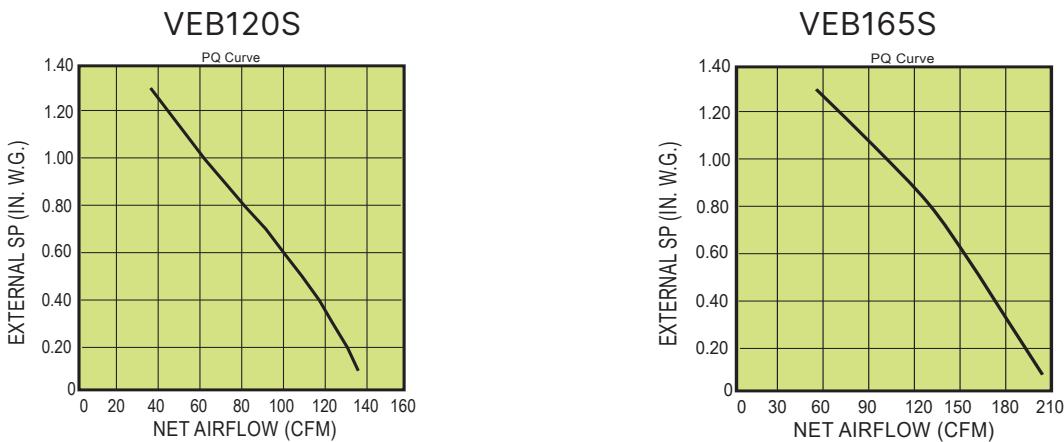
Unit: Inch



VEB165S  
(coming soon)



## P&Q Curve



## Specifications

### Airflow Performance

VEB120S / VEB120S-R					
inch w.g. (Pa)	0.2 (50)	0.4 (100)	0.6 (150)	0.8 (200)	1.0 (250)
Net supply airflow CFM (L/s)	131 (62)	119 (56)	102 (48)	83 (39)	64 (30)

VEB165S						
inch w.g. (Pa)	0.2 (50)	0.4 (100)	0.6 (150)	0.8 (200)	1.0 (250)	1.2 (300)
Net supply airflow CFM (L/s)	184 (87)	165 (78)	146 (69)	125 (59)	97 (46)	68 (32)

### Thermal Performance

#### VEB120S / VEB120S-R

Temp Mode	Supply Temp (Outside)	Net Airflow	Sensible Recovery Efficiency	Adjusted Sensible Recovery Efficiency	Total Recovery Efficiency	Adjusted Total Recovery Efficiency	Latent Recovery / Moisture Transfer	Power Consumed
Heating	32°F (0°C)	36 CFM (17 L/s)	77 %	81 %	-	-	0.65	22W
Heating	32°F (0°C)	64 CFM (30 L/s)	75 %	79 %	-	-	0.54	37W
Heating	32°F (0°C)	106 CFM (50 L/s)	70 %	75 %	-	-	0.44	75W
Heating	-13°F (-25°C)	36 CFM (17 L/s)	57 %	59 %	-	-	0.51	22W
Cooling	95°F (35°C)	36 CFM (17 L/s)	-	-	75 %	78 %	0.81	22W
Cooling	95°F (35°C)	64 CFM (30 L/s)	-	-	62 %	65 %	0.64	42W

#### VEB165S

Temp Mode	Supply Temp (Outside)	Net Airflow	Sensible Recovery Efficiency	Adjusted Sensible Recovery Efficiency	Total Recovery Efficiency	Adjusted Total Recovery Efficiency	Latent Recovery / Moisture Transfer	Power Consumed
Heating	32°F (0°C)	36 CFM (17 L/s)	90 %	94 %	-	-	0.85	18W
Heating	32°F (0°C)	64 CFM (30 L/s)	84 %	87 %	-	-	0.74	27W
Heating	32°F (0°C)	127 CFM (60 L/s)	75 %	78 %	-	-	0.61	65W
Heating	-13°F (-25°C)	61 CFM (29 L/s)	61 %	62 %	-	-	0.56	27W
Cooling	95°F (35°C)	36 CFM (17 L/s)	-	-	81 %	84 %	0.81	19W
Cooling	95°F (35°C)	64 CFM (30 L/s)	-	-	73 %	75 %	0.71	30W

- All readings are typical values at rated voltage.

- Specifications are subject to change without notice.

# IMPORTANCE OF VENTILATION

## Ventilation Matters More Than Ever

Today's homes are built tighter and more insulated than ever before, thanks to increasingly stringent energy efficiency standards in building codes. While this helps reduce energy consumption, it can also trap pollutants indoors, leading to poor indoor air quality as stale, unhealthy air becomes sealed behind windows and doors. Without proper ventilation, the concentration of indoor pollutants can rise dramatically, affecting the health and comfort of occupants.

We now offer supply air fans as well as ERV for balanced ventilation with energy recovery. Delta Breez offers products that meet all your ventilation needs, such a bathroom exhaust, fresh air supply and balanced ventilation with energy recovery. Powered by advanced DC motors, our fans are the result of nearly half a century of engineering innovation and quality craftsmanship. Ventilation is essential for maintaining healthy indoor air. A reliable system must deliver the right airflow for the space and operate consistently to ensure optimal performance and air quality.



## Indoor Air Pollution: A Hidden Health Risk

Indoor air pollutants are generated from a variety of sources throughout the home, including combustion appliances, building materials, and household cleaning products. Biological contaminants such as mold, mildew, bacteria, and pollen also contribute to poor indoor air quality.

Together, these pollutants can trigger or worsen health issues—particularly respiratory conditions. High humidity and uncontrolled moisture levels can further elevate pollutant concentrations and promote the growth of biological contaminants, making proper ventilation essential for a healthier living environment.



# THE DELTA BREEZ PROMISE

## The Path to Fresh Air

Delta Breez fans are designed to help manage and reduce excess moisture, especially in high-humidity areas like bathrooms where showering and bathing are common sources. Proper bathroom ventilation is essential for maintaining healthy indoor air.

Powered by advanced DC motors and backed by nearly 50 years of engineering expertise, Delta Breez fans deliver reliable airflow tailored to your space. To ensure optimal performance, ventilation systems must be appropriately sized, professionally installed and operated regularly.



## A Visionary in Indoor Air Quality

Delta Breez is a leader in the Indoor Air Quality (IAQ) industry, setting the gold standard for energy-efficient bathroom ventilation. Our fans help consumers save energy and reduce utility costs, without compromising performance.

Every Delta Breez fan is powered by our signature brushless DC motor technology, delivering unmatched efficiency, legendary reliability, and super-quiet operation. It's innovation you can trust, backed by decades of engineering excellence.





## Delta Breez Series Ventilation Fans

DeltaDelta Breez is the only residential ventilation exhaust fan manufacturer that delivers a powerful combination of ENERGY STAR® certification, high performance, quiet operation, advanced brushless DC motor technology, and affordability—in every fan. We also offer optional built-in speed, motion, and humidity-sensing controls, along with decorative or edge-lit dimmable LED lighting, heaters, designer fan grilles, and Bluetooth® speakers to meet both consumer preferences and building code requirements.

**Choose from different series:**



**Virtually silent, feature-rich.**

One of our highest-performing and quietest series, operating at less than 0.3 sones. Available in high-speed options of 80 or 110 CFM, ideal for spaces ranging from 80 to 110 sq. ft. Features include adjustable high and/or low speeds, dimmable LED light or dimmable edge-lit LED light, motion sensor and/or adjustable humidity sensor, and Bluetooth® speaker. Optional accessories such as a ceiling radiation damper, designer grille, and metal grille are available separately. UL listed for ceiling mount only.



**Quiet Power for Large Spaces.**

Engineered for larger areas, this series delivers powerful performance with whisper-quiet operation at less than 0.3 sones. Available in high-speed options of 130, 150, or 200 CFM, it's ideal for rooms ranging from 130 to 200 sq. ft. Feature options include adjustable low speeds, integrated LED lighting, and motion or humidity sensors for smart ventilation control. Accessories such as a ceiling radiation damper and metal grille are available separately. UL listed for ceiling mount only.



Affordable performance, feature-rich with very quiet operation from 0.5 to 0.7 sones.

Innovative, pocket mounting brackets stay hidden and slide out for room-size installation in remodeling projects and for time-saving installation in new construction projects, a solution where space is at a premium. High speed 80 or 110 CFM. For spaces 80-110 sq. ft. Options include adjustable high and/or low speeds, dimmable LED light, motion and/or adjustable humidity sensor. Ceiling Radiation Damper available. UL listed for ceiling mount only.



**Builders' best solution.**

High speed 80 or 100 CFM. For spaces 80-100 sq. ft. Quiet operation from 0.8 to 1.5 sones. Options include adjustable low speed, dimmable LED light, and decorative LED light, motion and/or humidity sensor. Ceiling Radiation Damper and designer grille available separately. Fan only and fans with humidity sensor are UL listed for ceiling and wall mount; fans/LED light are UL listed for ceiling mount only.



**Economical solution.**

Single speed 50, 80 or 100 CFM. For spaces 50-100 sq. ft. Quiet operation from 0.7 to 1.5 sones. Options include dimmable LED light or dimmable edge-lit LED light, adjustable humidity sensor, Bluetooth® speaker. Ceiling Radiation Damper and designer grille available separately. Fan only and fans with humidity sensor are UL listed for ceiling and wall mount; fans/LED lights are UL listed for ceiling mount only.



**Ultimate multi-family solution.** Single speed 50, 70, 80, 100, dual speed 70, and high speed 50/80/100/110 CFM. For spaces 50-110 sq. ft. Quiet operation from 0.4 to 2.0 sones. Options include adjustable high and/or low speeds, dimmable LED light, dual speed or built-in humidity sensor. Low profile, with 4" deep housing to fit in 2x4 sidewalls. Designer grille available separately for SLM50, SLM70, SLM70D2, and SLM70H. Ceiling Radiation Damper available separately for SLM50-110-C, SLM50-100, SLM50-100H, SLM50-100D, and SLM50-100LED. UL listed for ceiling and wall mount.



**Fan design solution.** 80 CFM fan disguised as a recessed light with LED main light and night light. For 80 sq. ft. spaces. Quiet operation at 1.5 sones. UL approved for ceiling mount only.

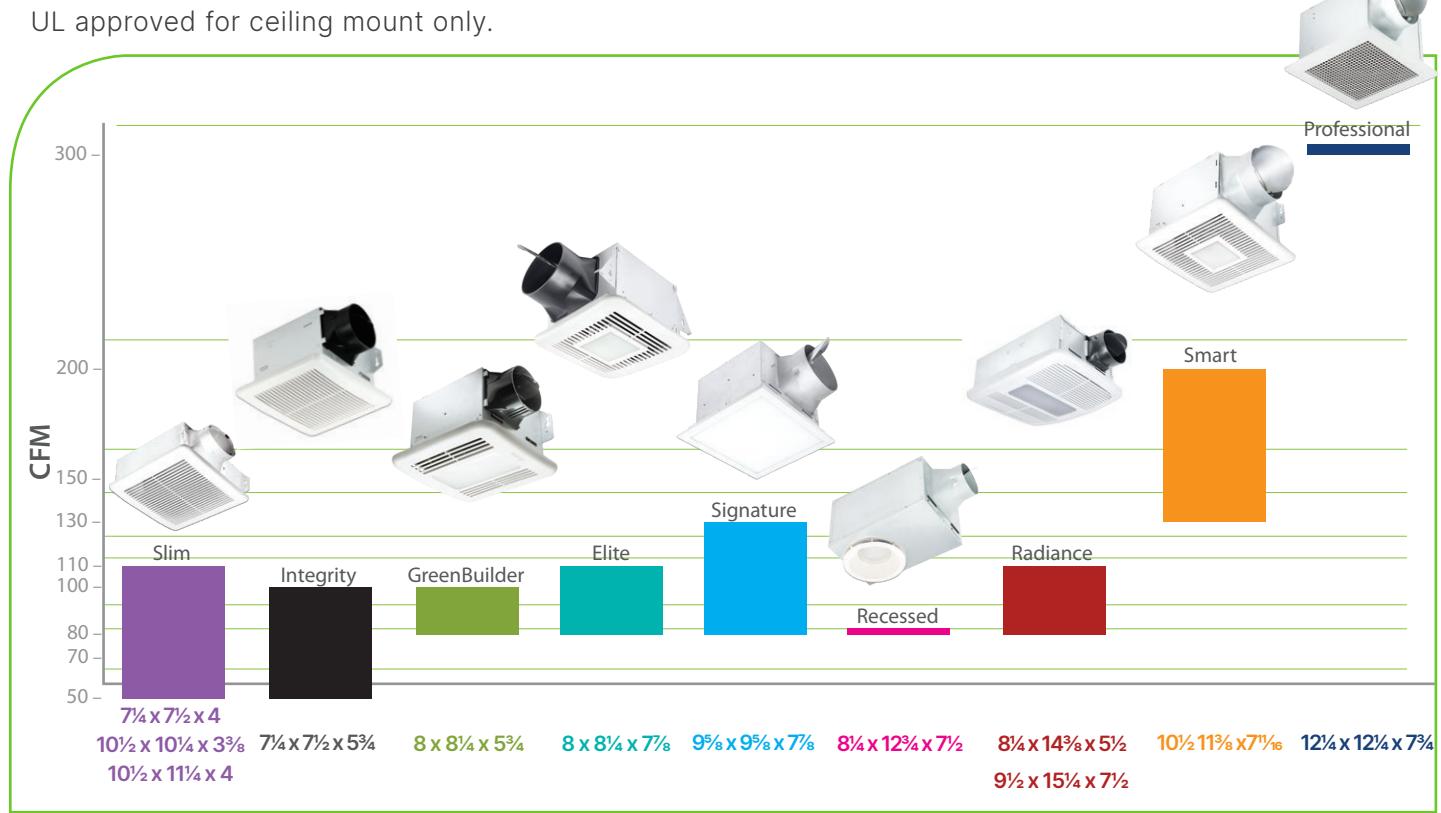


**Fan/heater solution to warm and delight.** Quiet operation from 0.7 to 1.5 sones. 80 or 110 CFM for spaces 80-110 sq. ft. Options include dimmable LED light, or fan/heater only. Built-in thermostat to regulate room temperature for maximum comfort. UL approved for ceiling mount only.



**Large space solution.**

Single speed 300 CFM. Quiet operation at 2 sones. For spaces 300 sq. ft. Perfect for large bathrooms, laundry rooms, conference rooms. UL approved for ceiling mount only.



Ventilation Fan Housing Size in inches (W x H x D)



## 6 and 4 Inch Duct Series

### Virtually silent, feature-rich.

Our highest-performing and quietest series, operating at less than 0.3 sones. Available in high-speed options of 80 or 110 CFM, ideal for spaces ranging from 80 to 110 sq. ft. Feature options include adjustable high and/or low speeds, dimmable LED light or edge-lit dimmable LED light, motion sensor and/or adjustable humidity sensor. Accessories such as a ceiling radiation damper, designer grille, and metal grille are available separately. UL listed for ceiling mount only.

### Features:

- Energy savings up to 127%<sup>1</sup> with 6" metal duct
- <0.3 sones - lowest noise level among competing fans
- Exceed ENERGY STAR efficiency standards by 450%<sup>2</sup>
- Adjustable high speed of 80 or 110 CFM
- Dual speed operation with motion-sensing and humidity-sensing options, plus continuous adjustable low-speed
- Includes 6" to 4" duct reducer

### Fan/Dimmable LED Light:

- 13-Watt LED main light and 2-Watt LED night light
- Main light output: 950 lumens, 3000K and 90 CRI
- Dimmable LED light (dimmer switch not included)

### Fan/Edge-Lit Dimmable LED Light with Adjustable Color Temperature 3000K, 4000K and 5000K

- 13-Watt LED main light output 1000 lumens

1. Based upon SIG80-110 vs. market AC motor.

2. Based upon SIG80 CFM vs. ENERGY STAR v4.2 criteria for residential ventilating fans



Fan only and Fan with Humidity Sensor or Dual Speed



Fan/Edge-lit Dimmable LED Light/adjustable color temp

- 3000K
- 4000K
- 5000K



Fan/ Dimmable LED Light/ Night-Light  
(Options: Fan with Dual Speed, Humidity Sensor or Motion Sensor)



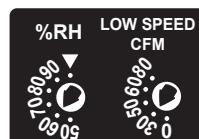
High Speed Switch



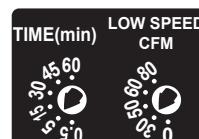
Adapter 4" duct

### Built-in Controls:

SIG80-110H  
SIG80-110HLED  
SIG80-110MH  
SIG80-110MHLED  
Controls



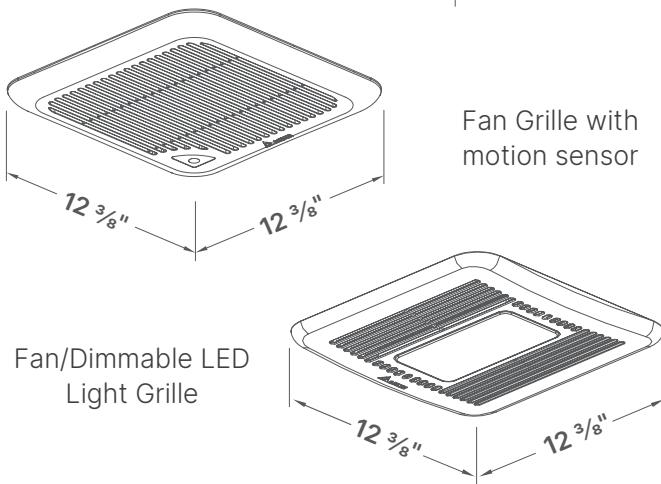
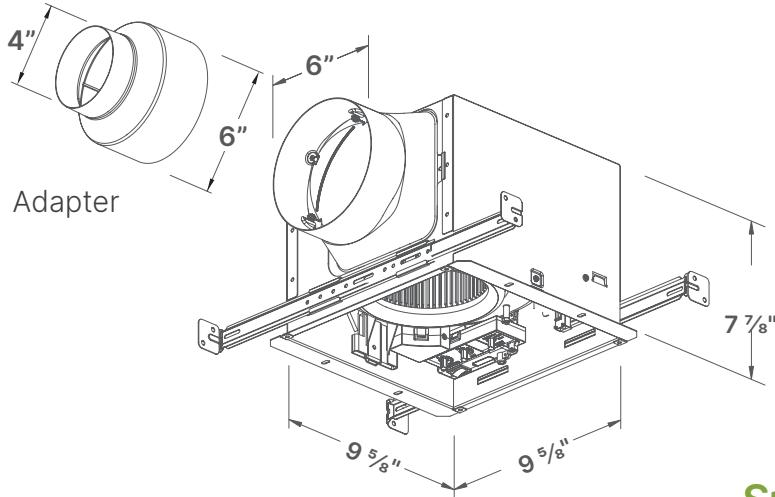
SIG80-110D  
SIG80-110DLED  
Controls



SIG80-110MHLED  
Motion  
Controls



### BreezSignature Series Dimensions



Fan/Dimmable LED Light Grille

### Operation Indicator Light:

**SIG80-110**

**SIG80-110LED**

Full Speed



**SIG80-110D**

Low Speed



Full Speed



**SIG80-110DLED**

Low Speed



Full Speed



**SIG80-110MHLED**

Low Speed



Full Speed



**SIG80-110H**

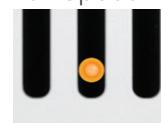
**SIG80-110MH**

**SIG80-110HLED**

Humidity Sensing



Full Speed



	Delta Breez	Market AC Motor
Energy Use (Watts)	6.2	31.4
Noise Level (Sones)	<0.3	0.7
Annual Energy Cost per Fan (24/7) <sup>1</sup>	\$6.50	\$33.03

1. Calculations based upon U.S. average retail electricity. Actual results may vary

## Specifications

**SIG80-110\*** - 80/110 CFM Fan



	6" Duct Standard			
	0.1	0.25	0.1	0.25
Static Pressure (Inches w.g.)	0.1	0.25	0.1	0.25
Air Flow (CFM)	80	80	110	110
Sones	<0.3	0.5	<0.3	0.8
Power Consumption (Watts)	6.2	9.9	8.2	14.1
Energy Efficiency (CFM/Watts)	15.4	9.0	15.3	8.7
Current (Amps)	0.38 Max			
Power Rating (V/Hz)	120 / 60			

**SIG80-110\*** - 80/110 CFM Fan



	4" Duct Standard			
	0.1	0.25	0.1	0.25
Static Pressure (Inches w.g.)	0.1	0.25	0.1	0.25
Air Flow (CFM)	80	80	110	110
Sones	<0.3	1.2	1.0	2.0
Power Consumption (Watts)	7.4	11.8	12	17.5
Energy Efficiency (CFM/Watts)	12.5	7.9	10.5	6.9
Current (Amps)	0.38 Max			
Power Rating (V/Hz)	120 / 60			

**SIG80-110LED\*** - 80/110 CFM Fan/Dimmable LED Light/Night-Light



	6" Duct Standard			
	0.1	0.25	0.1	0.25
Static Pressure (Inches w.g.)	0.1	0.25	0.1	0.25
Air Flow (CFM)	80	80	110	110
Sones	<0.3	0.5	<0.3	0.8
Power Consumption (Watts)	6.8	9.9	9.7	15.5
Energy Efficiency (CFM/Watts)	13.8	8.4	12.7	8.0
Current (Amps)	0.48 Max			
Power Rating (V/Hz)	120 / 60			
Light (Watts/Lumens)	13 / 800			
Night Light (Watts)	2			

**SIG80-110LED** - 80/110 CFM Fan/Dimmable LED Light/Night-Light



	4" Duct Standard			
	0.1	0.25	0.1	0.25
Static Pressure (Inches w.g.)	0.1	0.25	0.1	0.25
Air Flow (CFM)	80	80	110	106
Sones	<0.3	1.2	1.0	2.0
Power Consumption (Watts)	7.8	12.5	13.5	18.0
Energy Efficiency (CFM/Watts)	12.2	7.5	9.3	6.5
Current (Amps)	0.48 Max			
Power Rating (V/Hz)	120 / 60			
Light (Watts/Lumens)	13 / 800			
Night Light (Watts)	2			



## 6 and 4 Inch Duct Series Specifications (Cont.)

### SIG80-110ELED\* - 80/110 CFM Fan



Edge-lit Dimmable LED Light w/ adjustable color temperature

6" Duct Standard				
Static Pressure (Inches w.g.)	0.1	0.25	0.1	0.25
Air Flow (CFM)	80	80	110	109
Sones	<0.3	0.8	0.5	1.0
Power Consumption (Watts)	7.5	11.5	9.9	15.5
Energy Efficiency (CFM/Watts)	11.7	7.6	11.8	7.3
Current (Amps)	0.48 Max			
Power Rating (V/Hz)	120 / 60			
LED Light (Watts/Lumens)	13 / 1000			
Night Light (Watts)	2			

### SIG80-110ELED - 80/110 CFM Fan/



Edge-lit Dimmable LED Light w/ adjustable color temperature

4" Duct Standard				
Static Pressure (Inches w.g.)	0.1	0.25	0.1	0.25
Air Flow (CFM)	80	79	110	99
Sones	0.3	1.1	1.0	1.4
Power Consumption (Watts)	8.5	12.5	14	15.5
Energy Efficiency (CFM/Watts)	10.7	7	8.1	6.6
Current (Amps)	0.48 Max			
Power Rating (V/Hz)	120 / 60			
LED Light (Watts/Lumens)	13 / 1000			
Night Light (Watts)	2			

### SIG80-110D\* - 80/110 CFM Fan with Dual Speed



6" Duct Standard									
Fan Speed	Continuous Low Speed					Full Speed			
Static Pressure (in w.g.)	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1
Air Flow (CFM)	30	30	50	50	60	60	80	80	110
Sones	<0.3	<0.3	<0.3	<0.3	<0.3	0.3	<0.3	0.5	<0.3
Power (Watts)	4.4	6.3	4.8	7.3	5.5	8.6	6.2	9.9	8.2
Efficiency (CFM/Watts)	9	5.9	13.5	8	13.3	8	15.4	9	15.3
Current (Amps)	0.38 Max								
Power Rating (V/Hz)	120 / 60								

### SIG80-110D\* - 80/110 CFM Fan with Dual Speed



4" Duct Standard									
Fan Speed	Continuous Low Speed					Full Speed			
Static Pressure (in w.g.)	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1
Air Flow (CFM)	30	30	50	50	60	60	57	80	80
Sones	<0.3	<0.3	<0.3	0.5	<0.3	0.8	<0.3	1.2	1.0
Power (Watts)	4.5	6.9	5.2	8.2	5.8	9	7.4	11.8	12
Efficiency (CFM/Watts)	8.9	6	12	7	13.3	7.6	12.5	7.9	10.5
Current (Amps)	0.38 Max								
Power Rating (V/Hz)	120 / 60								
Power Rating (V/Hz)	120 / 60								

### SIG80-110DLED\* - 80/110 CFM Fan/Dimmable LED Light/Night-Light with Dual Speed



6" Duct Standard									
Fan Speed	Continuous Low Speed					Full Speed			
Static Pressure (in w.g.)	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1
Air Flow (CFM)	30	30	50	50	60	60	80	80	110
Sones	<0.3	<0.3	<0.3	0.5	<0.3	0.8	<0.3	1.2	1.0
Power (Watts)	4.4	6.7	5.2	8.2	5.6	8.7	6.8	9.9	9.7
Efficiency (CFM/Watts)	9.5	5.8	12.3	7.1	13.2	8	13.8	8.4	12.7
Current (Amps)	0.48 Max								
Power Rating (V/Hz)	120 / 60								
Light (Watts/Lumens)	13 / 1000								
Night Light (Watts)	2								

### SIG80-110DLED - 80/110 CFM Fan/Dimmable LED Light/Night-Light with Dual Speed



4" Duct Standard									
Fan Speed	Continuous Low Speed					Full Speed			
Static Pressure (in w.g.)	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1
Air Flow (CFM)	30	30	50	50	60	60	58	80	80
Sones	<0.3	<0.3	<0.3	0.5	<0.3	0.8	<0.3	1.2	1.0
Power (Watts)	4.5	7.1	5.4	8.2	6.3	9.5	7.8	12.5	13.5
Efficiency (CFM/Watts)	9.1	6	11.7	7.1	12.2	7.3	12.2	7.5	9.3
Current (Amps)	0.48 Max								
Power Rating (V/Hz)	120 / 60								
Light (Watts/Lumens)	13 / 1000								
Night Light (Watts)	2								

### SIG80-110H\* - 80/110 CFM

Fan with Humidity Sensor



6" Duct Standard									
Fan Speed	Continuous Low Speed					Full Speed			
Static Pressure (in w.g.)	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1
Air Flow (CFM)	30	30	50	50	60	60	80	80	110
Sones	<0.3	<0.3	<0.3	<0.3	<0.3	0.3	<0.3	0.5	<0.3
Power (Watts)	4.4	6.3	4.8	7.3	5.5	8.6	6.2	9.9	8.2
Efficiency (CFM/Watts)	9	5.9	13.5	8	13.3	8	15.4	9	15.3
Current (Amps)	0.38 Max								
Power Rating (V/Hz)	120 / 60								

**SIG80-110H\* - 80/110 CFM**  
Fan with Humidity Sensor



4" Duct Standard											
Fan Speed	Continuous Low Speed						Full Speed				
Static Pressure (in w.g.)	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1
Air Flow (CFM)	30	30	50	50	60	57	80	80	110	110	
Sones	<0.3	<0.3	<0.3	0.5	<0.3	0.8	<0.3	1.2	1.0	2.0	
Power (Watts)	4.5	6.9	5.2	8.2	5.8	9	7.4	11.8	12	17.5	
Efficiency (CFM/Watts)	8.9	6	12.0	7	13.3	7.6	12.5	7.9	10.5	6.9	
Current (Amps)	0.38 Max										
Power Rating (V/Hz)	120 / 60										

**SIG80-110HLED\* - 80/110 CFM**  
Fan/Dimmable LED Light/Night-Light with Humidity Sensor



6" Duct Standard											
Fan Speed	Continuous Low Speed						Full Speed				
Static Pressure (in w.g.)	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1
Air Flow (CFM)	30	30	50	50	60	60	80	80	110	110	
Sones	<0.3	<0.3	<0.3	<0.3	<0.3	0.3	<0.3	0.5	<0.3	0.8	
Power (Watts)	4.4	6.7	5.2	8.2	5.6	8.7	6.8	9.9	9.7	15.5	
Efficiency (CFM/Watts)	9.5	5.8	12.3	7.1	13.2	8	13.8	8.4	12.7	8	
Current (Amps)	0.48 Max										
Power Rating (V/Hz)	120 / 60										
Light (Watts/Lumens)	13 / 800										
Night Light (Watts)	2										

**SIG80-110HLED - 80/110 CFM**  
Fan/Dimmable LED Light/Night-Light with Humidity Sensor



4" Duct Standard											
Fan Speed	Continuous Low Speed						Full Speed				
Static Pressure (in w.g.)	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1
Air Flow (CFM)	30	30	50	50	60	58	80	80	110	106	
Sones	<0.3	<0.3	<0.3	0.5	<0.3	0.8	<0.3	1.2	1.0	2.0	
Power (Watts)	4.5	7.1	5.4	8.2	6.3	9.5	7.8	12.5	13.5	18	
Efficiency (CFM/Watts)	9.1	6	11.7	7.1	12.2	7.3	12.2	7.5	9.3	6.5	
Current (Amps)	0.48 Max										
Power Rating (V/Hz)	120 / 60										
Light (Watts/Lumens)	13 / 800										
Night Light (Watts)	2										

**SIG80-110MH\* - 80/110 CFM**  
Fan with Motion and Humidity Sensor



6" Duct Standard											
Fan Speed	Continuous Low Speed						Full Speed				
Static Pressure (in w.g.)	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1
Air Flow (CFM)	30	30	50	50	60	60	80	80	110	110	
Sones	<0.3	<0.3	<0.3	<0.3	<0.3	0.3	<0.3	0.5	<0.3	0.6	
Power (Watts)	4.4	6.3	4.8	7.3	5.5	8.6	6.2	9.9	8.2	14.1	
Efficiency (CFM/Watts)	9	5.9	13.5	8	13.3	8	15.4	9	15.3	8.7	
Current (Amps)	0.38 Max										
Power Rating (V/Hz)	120 / 60										

**SIG80-110MH\* - 80/110 CFM**

Fan with Motion and Humidity Sensor



4" Duct Standard											
Fan Speed	Continuous Low Speed						Full Speed				
Static Pressure (in w.g.)	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1
Air Flow (CFM)	30	30	50	50	60	57	80	80	110	110	
Sones	<0.3	<0.3	<0.3	0.5	<0.3	0.8	<0.3	1.2	1.0	2.0	
Power (Watts)	4.5	6.9	5.2	8.2	5.8	9	7.4	11.8	12	17.5	
Efficiency (CFM/Watts)	8.9	6	12.0	7	13.3	7.6	12.5	7.9	10.5	6.9	
Current (Amps)	0.38 Max										
Power Rating (V/Hz)	120 / 60										

**SIG80-110MHLED\* - 80/110 CFM**

Fan/Dimmable LED Light/Night-Light with Motion and Humidity Sensor



6" Duct Standard											
Fan Speed	Continuous Low Speed						Full Speed				
Static Pressure (in w.g.)	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1
Air Flow (CFM)	30	30	50	50	60	60	80	80	110	110	
Sones	<0.3	<0.3	<0.3	<0.3	<0.3	0.3	<0.3	0.5	<0.3	0.8	
Power (Watts)	4.4	6.7	5.2	8.2	5.6	8.7	6.8	9.9	9.7	15.5	
Efficiency (CFM/Watts)	9.5	5.8	12.3	7.1	13.2	8	13.8	8.4	12.7	8	
Current (Amps)	0.48 Max										
Power Rating (V/Hz)	120 / 60										
Light (Watts/Lumens)	13 / 800										
Night Light (Watts)	2										

**SIG80-110MHLED - 80/110 CFM Fan**

Dimmable LED Light/Night-Light with Motion and Humidity Sensor



4" Duct Standard											
Fan Speed	Continuous Low Speed						Full Speed				
Static Pressure (in w.g.)	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1
Air Flow (CFM)	30	30	50	50	60	60	80	80	110	106	
Sones	<0.3	<0.3	<0.3	<0.3	<0.3	0.3	<0.3	0.5	<0.3	0.8	
Power (Watts)	4.5	7.1	5.4	8.2	6.3	9.5	7.8	12.5	13.5	18	
Efficiency (CFM/Watts)	9.1	6	11.7	7.1	12.2	7.3	12.2	7.5	9.3	6.5	
Current (Amps)	0.48 Max										
Power Rating (V/Hz)	120 / 60										
Light (Watts/Lumens)	13 / 800										
Night Light (Watts)	2										

\* Product is designated ENERGY STAR Most Efficient 2025 and ENERGY STAR certified





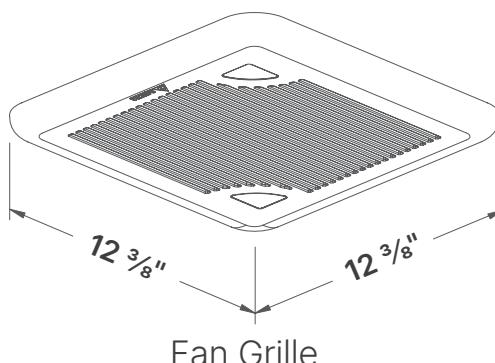
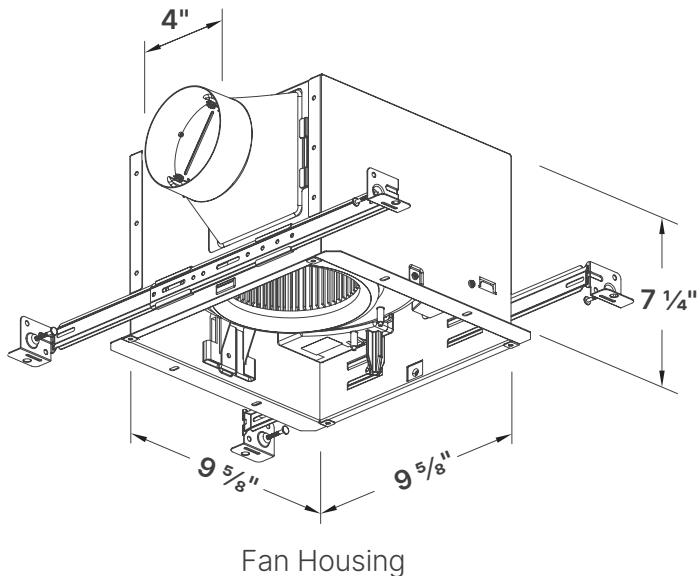
## 4 Inch Duct Series

**Innovative DC brushless motor design for long life, low noise, and low power consumption.**

The Delta BreezSignature boasts a <0.3 Sones sound level at 80 or 110 CFM and enhanced airflow at 0.25" static pressure. Add an LED indicator light so you know the fan is running, a fresh grille design, and the exceptional reliability and efficiency of Delta's DC brushless motor, and you have a winner. The BreezSignature is available with single speed or dual speed.

### Features:

- ENERGY STAR® qualified with innovative brushless DC motor technology
- Perfectly quiet operation at less than 0.3 sones
- Ceiling mount ventilating fan for continuous running
- Energy efficiency at 9.0 CFM/Watt
- Green LED indicator light to show power is on

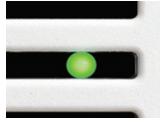


### LED Indicator Light: SIG80 and SIG110

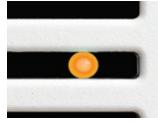


### LED Indicator Light: SIG80D

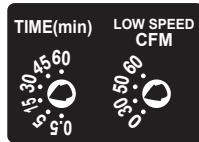
Continuous  
Low Speed



Full Speed



### SIG80D Controls





## 4 Inch Duct Series

### Specifications

#### SIG80 - 80 CFM Single Speed Exhaust Fan

Static Pressure (in w.g.)	0.1	0.25
Air Flow (CFM)	80	79
Sones	<0.3	0.5
Power Consumption (Watts)	8.7	14
Energy Efficiency (CFM/Watts)	9.7	6.3
Current (Amps)	0.30 Max	
Power Rating (V/Hz)	120 / 60	



#### SIG80D - 80 CFM Dual Speed Exhaust Fan

Static Pressure (in w.g.)	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Air Flow (CFM)	30	31	50	50	60	61	80	79
Sones	<0.3	<0.3	<0.3	<0.3	<0.3	0.3	<0.3	0.5
Power (Watts)	4.8	8.9	6.6	9.8	6.7	11.8	8.7	14
Efficiency (CFM/Watts)	7.7	4.1	8.4	5.2	9.9	5.6	9.7	6.3
Current (Amps)	0.30 Max							
Power Rating (V/Hz)	120/60							



#### SIG110 - 110 CFM Single Speed Exhaust Fan

Static Pressure (in w.g.)	0.1	0.25
Air Flow (CFM)	110	95
Sones	<0.3	0.6
Power Consumption (Watts)	13.6	16
Efficiency (CFM/Watts)	9	6.4
Current (Amps)	0.38 Max	
Power Rating (V/Hz)	120 / 60	

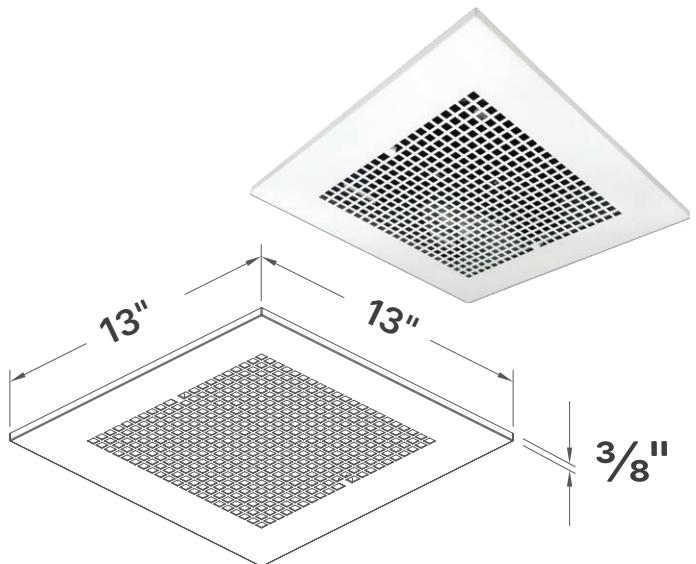


### Metal Grille SIG-MTL

The SIG-MTL metal grille is offered as an alternative to the standard grille on Delta Breez SIG80, SIG80D, SIG110, SIG80-110, SIG80-110D, SIG80-110H.

#### Features:

- Adds modern aesthetic to bathroom
- Made of galvanized steel material and painted white
- Paintable for added customization
- Size: 13 x 13 x 3/8 inches



Delta Breez	Market AC Motor
Energy Use (Watts)	8.7
Noise Level (Sones)	<0.3
Annual Energy Cost per Fan (24/7) <sup>1</sup>	\$9.15

1. Calculations based upon U.S. average retail electricity. Actual results may vary

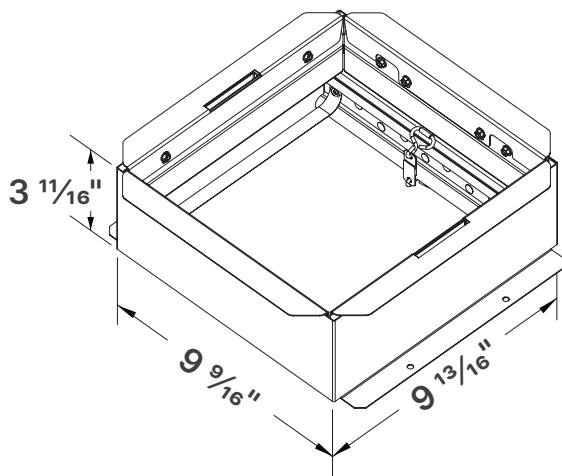


## Ceiling Radiation Damper SIG-CRD2

The SIG-CRD2 Ceiling Radiation Damper is engineered to limit radiant heat transfer through air inlet/outlet openings in ceiling membranes. It is fire resistance-rated for up to 3 hours in both floor/ceiling and roof/ceiling assemblies. Intended for installation with the following UL Listed Delta Electronic Fan Models SIG80, SIG80D, SIG110, SIG110D, SIG80-110, SIG80-110D, SIG80-110H, SIG80-110MH, SIG80-110LED, SIG80-110DLED, SIG80-110HLED and SIG80-110MHLED.

### Features:

- UL listed as fan/damper assembly for the following Wood Frame Construction designs: L528, L558, L562, L563, L574, L585, L587, P533, P544, P545, P547, P556 and P580
- Meets both UL555C and UL263. UL and cUL listed and exceeds UL 555C for use in 3-hour fire rated assemblies.
- CSFM Listing: 3226-1250:0106
- UL 555C Listing: R16833
- Meets NFPA Standards: 90A and 101
- Meets Building Code Standards: IBC, NBC, NFPA, SBC, & UBC

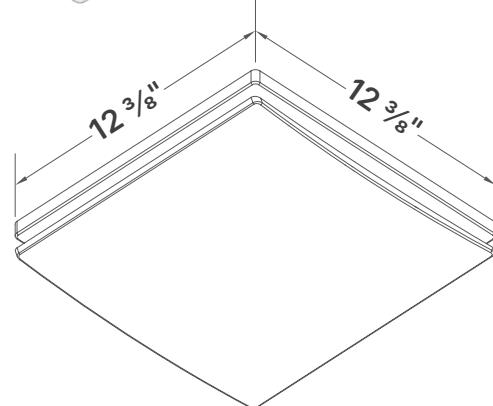


## Designer Grille SIG-DGL

The SIG-DGL designer fan grille is offered as an alternative to the standard grille on Delta Breez SIG80, SIG80D, SIG110, SIG80-110, SIG80-110D, SIG80-110H

### Features:

- Adds modern aesthetic to bathroom
- Made of long lasting ABS material
- Paintable to coordinate with any style bathroom
- Size: 12 3/8" x 12 3/8"





## Professional (6" duct)

### Large space solution.

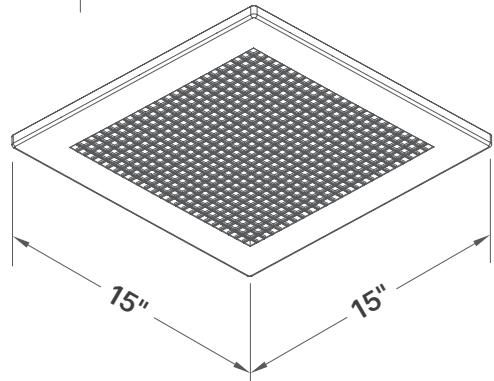
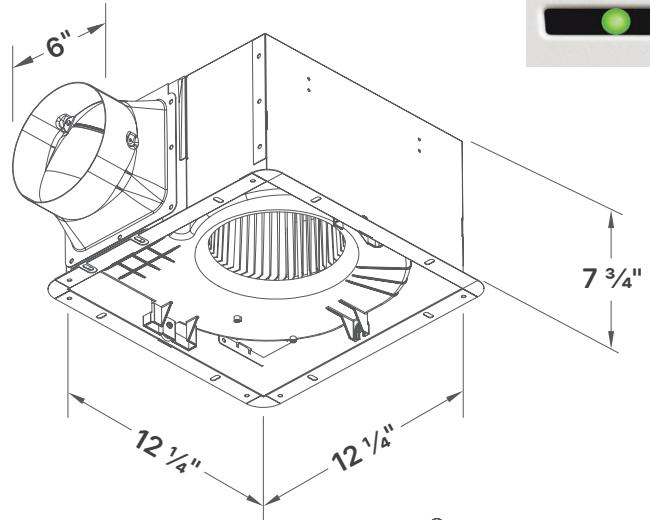
Single speed 300 CFM. Quiet operation at 2 sones. For spaces 300 sq. ft. Perfect for large bathrooms, laundry rooms, conference rooms. UL approved for ceiling mount only.

### Features:

- DC motor technology, energy saving up to 60% <sup>1</sup>
- Galvanized steel body
- Detachable 6" diameter metal duct adapter
- Built-in backdraft damper
- LED indicator light green when power is on



LED Indicator Light:



	Delta Breez	Market AC Motor
Energy Use (Watts)		
	41	64
Noise Level (Sones)		
	2.0	2.0
Annual Energy Cost per Fan (24/7) <sup>2</sup>		
	\$43.13	\$67.32

1. Based upon Breez Pro300 vs. Market AC motor

2. Calculations based upon U.S. average retail electricity. Actual results may vary

### Specifications

#### Pro300 - 300 CFM Fan

Static Pressure (Inches w.g.)	<b>0.1</b>	<b>0.25</b>
Air Flow (CFM)	300	268
Sones	2.0	2.5
Power Consumption (Watts)	41	43
Energy Efficiency (CFM/Watts)	7.3	6.2
Current (Amps)	0.72 Max	
Power Rating (V/Hz)	120 / 60	





## 4 Inch Duct Series

### Affordable Performance, Feature-Rich, and Quiet Operation

Enjoy very quiet performance ranging from 0.3 to 0.5 sones. Available in high-speed options of 50, 80 or 110 CFM, suitable for spaces between 80 and 110 sq. ft.

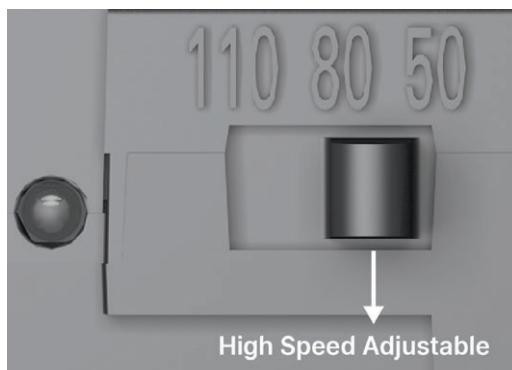
Feature options include adjustable high and/or low speeds, dimmable LED light, motion sensor, and/or adjustable humidity sensor. Ceiling Radiation Damper available separately. UL listed for ceiling mount only.

#### Features:

- Innovative brushless DC motor design for long life, low noise, and low power consumption
- Energy savings up to 48.1%<sup>1</sup> with standard 4" duct
- Lowest sone level rated by HVI as low as 0.5 sones
- Power consumption down to 13 Watts
- Exceeds ENERGY STAR efficiency<sup>2</sup> requirement by 143%
- Adjustable high speed of 50, 80 or 110 CFM
- Dual-speed operation with motion-sensing and humidity-sensing options, plus continuous adjustable low-speed
- Ceiling Radiation Damper available (compatible with SLM-CRD2)

#### Fan/Dimmable LED Light:

- 13-watt LED light with output of 850 lumens, 3000K color temperature, and 90 CRI (<1 W night light)
- Dimmable LED light (dimmer switch not included)

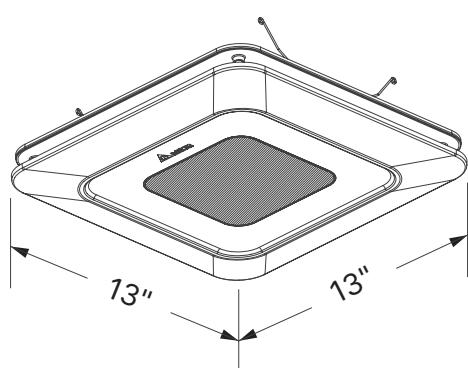
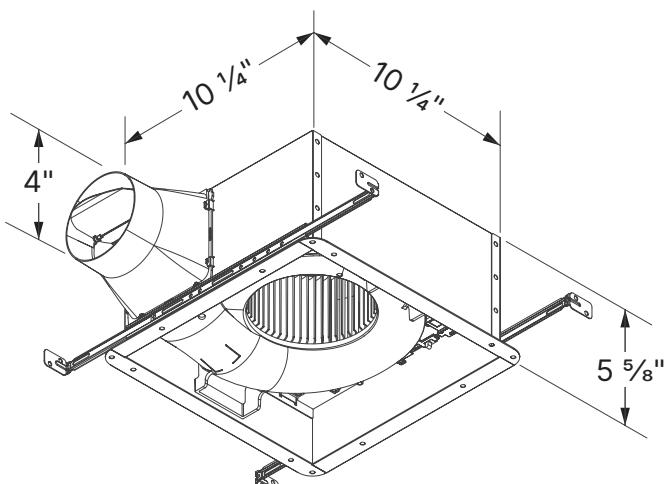


1. Based upon ELT50-110 vs. market AC motor with 4" duct.

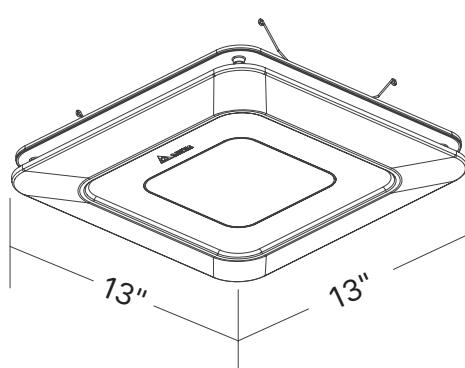
2. Based upon ELT 110 CFM vs. ENERGY STAR v4.2 criteria for residential ventilating fans



## 4 Inch Round Duct Series



Fan/Dimmable LED Light Grille



Fan Grille

### Built-in Controls

ELT50-110H, ELT50-110HLED  
ELT50-110MH, ELT50-110MHLED



ELT50-110D  
ELT50-110DLED



**LED Indicator Light:**  
ELT50-110, ELT50-110LED



**ELT50-110D, ELT50-110DLED**  
Low Speed      Full Speed



**ELT50-110H, ELT50-110HLED,  
ELT50-110MH, & ELT50-110MHLED**  
Humidity Sensing      Full Speed



## Specifications

	Delta Breeze	Market AC Motor
Energy Use (Watts)	13	25
Noise Level (Sones)	0.5	0.7
Annual Energy Cost per Fan (24/7) <sup>1</sup>	\$19.2	\$37

1 Calculations based upon U.S. average retail electricity. Actual results may vary



## Specifications (Cont.)

### ELT50-110 - 50/80/110 CFM Fan



	4" Duct Standard					
Static Pressure (Inches w.g.)	<b>0.1</b>	<b>0.25</b>	<b>0.1</b>	<b>0.25</b>	<b>0.1</b>	<b>0.25</b>
Air Flow (CFM)	50	50	80	80	110	110
Sones	<0.3	0.4	<0.3	0.7	0.5	1
Power Consumption (Watts)	4.5	7.5	7.5	12.5	13	19.5
Energy Efficiency (CFM/Watts)	11.1	6.7	10.7	6.4	8.5	5.6
Current (Amps)	0.45 Max					
Power Rating (V/Hz)	120 / 60					

### ELT50-110LED - 50/80/110 CFM Fan/Dimmable LED Light



	4" Duct Standard					
Static Pressure (Inches w.g.)	<b>0.1</b>	<b>0.25</b>	<b>0.1</b>	<b>0.25</b>	<b>0.1</b>	<b>0.25</b>
Air Flow (CFM)	50	50	80	80	110	110
Sones	<0.3	0.5	<0.3	0.7	0.5	1.1
Power Consumption (Watts)	4.5	7.6	7	12.5	13	19
Energy Efficiency (CFM/Watts)	11.1	6.6	11.4	6.4	8.5	5.8
Current (Amps)	0.57 Max					
Power Rating (V/Hz)	120 / 60					
LED Light (Watts/Lumens)	13 / 850					

### ELT50-110D - 50/80/110 CFM Fan with Dual Speed



	4" Duct Standard							
Fan Speed	Continuous Low Speed				Full Speed			
Static Pressure (in w.g.)	0.1	0.25	0.1	0.25	<b>0.1</b>	<b>0.25</b>	<b>0.1</b>	<b>0.25</b>
Air Flow (CFM)	30	30	50	50	50	50	80	80
Sones	<0.3	<0.3	<0.3	0.4	<0.3	0.4	<0.3	0.7
Power (Watts)	4	6	4.5	7.5	4.5	7.5	7.5	12.5
Efficiency (CFM/Watts)	7.5	5	11.1	6.7	11.1	6.7	10.7	6.4
Current (Amps)	0.45 Max							
Power Rating (V/Hz)	120 / 60							

### ELT50-110DLED - 50/80/110 CFM Fan/Dimmable LED Light with Dual Speed



	4" Duct Standard							
Fan Speed	Continuous Low Speed				Full Speed			
Static Pressure (in w.g.)	0.1	0.25	0.1	0.25	<b>0.1</b>	<b>0.25</b>	<b>0.1</b>	<b>0.25</b>
Air Flow (CFM)	30	30	50	50	50	50	80	80
Sones	0.3	0.4	<0.3	0.5	<0.3	0.5	<0.3	0.7
Power (Watts)	3.5	6	4.5	7.6	4.5	7.6	7	12.5
Efficiency (CFM/Watts)	8.6	5	11.1	6.6	11.1	6.6	11.4	6.4
Current (Amps)	0.57 Max							
Power Rating (V/Hz)	120 / 60							
Light (Watts/Lumens)	13 / 850							


**ELT50-110H - 50/80/110 CFM Fan with Humidity Sensor**

Fan Speed	4" Duct Standard									
	Continuous Low Speed				Full Speed					
Static Pressure (in w.g.)	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Air Flow (CFM)	30	30	50	50	50	50	80	80	110	110
Sones	<0.3	<0.3	<0.3	0.4	<0.3	0.4	<0.3	0.7	0.5	1
Power (Watts)	4	6	4.5	7.5	4.5	7.5	7.5	12.5	13	19.5
Efficiency (CFM/Watts)	7.5	5	11.1	6.7	11.1	6.7	10.7	6.4	8.5	5.6
Current (Amps)	0.45 Max									
Power Rating (V/Hz)	120 / 60									

**ELT50-110HLED - 50/80/110 CFM Fan/Dimmable LED Light with Humidity Sensor**

Fan Speed	4" Duct Standard									
	Continuous Low Speed				Full Speed					
Static Pressure (in w.g.)	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Air Flow (CFM)	30	30	50	50	50	50	80	80	110	110
Sones	0.3	0.4	<0.3	0.5	<0.3	0.5	<0.3	0.7	0.5	1
Power (Watts)	3.5	6	4.5	7.6	4.5	7.6	7	12.5	13	19
Efficiency (CFM/Watts)	8.6	5	11.1	6.6	11.1	6.6	11.4	6.4	8.5	5.8
Current (Amps)	0.57 Max									
Power Rating (V/Hz)	120 / 60									
Light (Watts/Lumens)	13 / 850									

**ELT50-110MH - 50/80/110 CFM Fan with Motion and Humidity Sensor**

Fan Speed	4" Duct Standard									
	Continuous Low Speed				Full Speed					
Static Pressure (in w.g.)	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Air Flow (CFM)	30	30	50	50	50	50	80	80	110	110
Sones	<0.3	<0.3	<0.3	0.4	<0.3	0.4	<0.3	0.7	0.5	1
Power (Watts)	4	6	4.5	7.5	4.5	7.5	7.5	12.5	13	19.5
Efficiency (CFM/Watts)	7.5	5	11.1	6.7	11.1	6.7	10.7	6.4	8.5	5.6
Current (Amps)	0.45 Max									
Power Rating (V/Hz)	120 / 60									

**ELT50-110MHLED - 50/80/110 CFM Fan/Dimmable LED Light w/Motion & Humidity Sensor**

Fan Speed	4" Duct Standard									
	Continuous Low Speed				Full Speed					
Static Pressure (in w.g.)	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Air Flow (CFM)	30	30	50	50	50	50	80	80	110	110
Sones	0.3	0.4	<0.3	0.5	<0.3	0.5	<0.3	0.7	0.5	1
Power (Watts)	3.5	6	4.5	7.6	4.5	7.6	7	12.5	13	19
Efficiency (CFM/Watts)	8.6	5	11.1	6.6	11.1	6.6	11.4	6.4	8.5	5.8
Current (Amps)	0.57 Max									
Power Rating (V/Hz)	120 / 60									
Light (Watts/Lumens)	13 / 850									



## 4 Inch Oval Duct

### BreezSlim Series – Compact, Quiet, and Easy to Install

The BreezSlim series of fans are suitable for ceiling or sidewall installation, offering full speed options of 50, 80, or 100 CFM, ideal for spaces between 50, 80 or 100 sq. ft. Delta BreezSlim options include single-speed, dual-speed, dimmable LED light, and/or dual speed. UL listed for wall and ceiling mount.

Models SLM50-100, SLM50-100LED, SLM50-100D, SLM50-100H are compatible with the Ceiling Radiation Damper SMT-CRD2.

### Features:

- Innovative brushless DC motor design for long life, low noise, and low power consumption
- Full speed adjustable, 50CFM, 80CFM, or 100CFM
- Perfectly quiet operation 0.9 sones at 100 CFM @ 0.1"SP
- Constant airflow can hold up to 0.4"SP of 100 CFM
- Energy efficiency is 8.0 CFM/Watt at 100CFM
- Optional built-in controls for dual-speed/humidity sensor with continuous low-speed operation
- UL approved for ceiling and wall mount installation
- Flat cover enhances the modern aesthetic
- Low profile housing with a 3-3/8" depth fits in a 4" wall
- Duct installation available in two ways: inside-out or outside-in
- 13W Dimmable LED light output 850 lumens, 3000K and 90CRI, <1W night light (SLM50-100LED only)

### Fan with Dimmable LED Light:

- 13-watt LED light with output of **850 lumens**, **3000K** color temperature, and **90 CRI** (<1 W night light, SLM50-100LED only)
- Dimmable LED light (compatible dimmer switch not included)



SLM50-100LED Fan/Dimmable LED Light



SLM50-100,  
SLM50-100H,  
SLM50-100D

SLM50-100  
Project Pack  
Components  
Available



### LED Indicator Light:

#### SLM50-110-C

Full Speed



#### SLM50-100D

Low Speed



Full Speed



#### SLM50-100 SLM50-100LED

Full Speed



#### SLM50-100H

Humidity  
Sensor

Full Speed

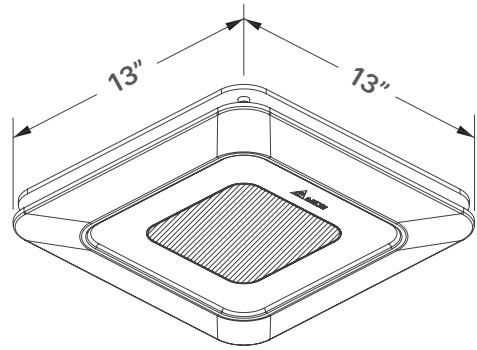
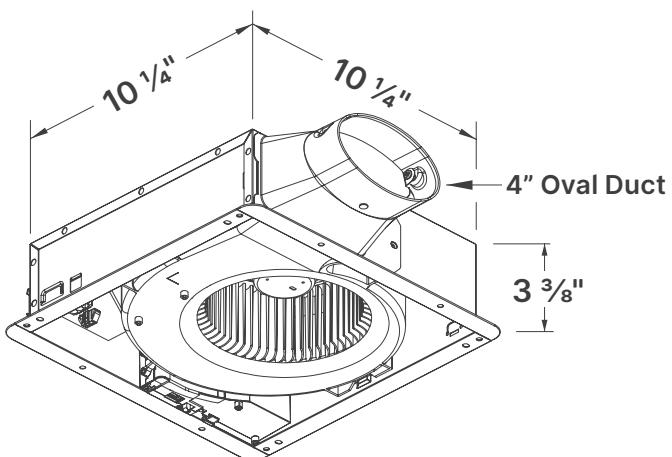


Full Speed



## Dimensions

Housing for  
SLM50-100  
SLM50-100LED  
SLM50-100D  
SLM50-100H



SLM50-100LED  
Fan/Dimmable LED Light grille

## High Speed Switch

SLM50-100  
SLM50-100H  
SLM50-100D  
SLM50-100LED

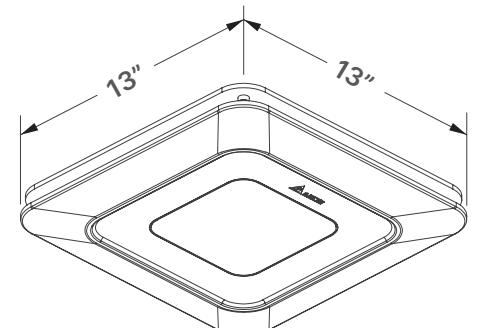


## Built-in control

SLM50-100D



SLM50-100H

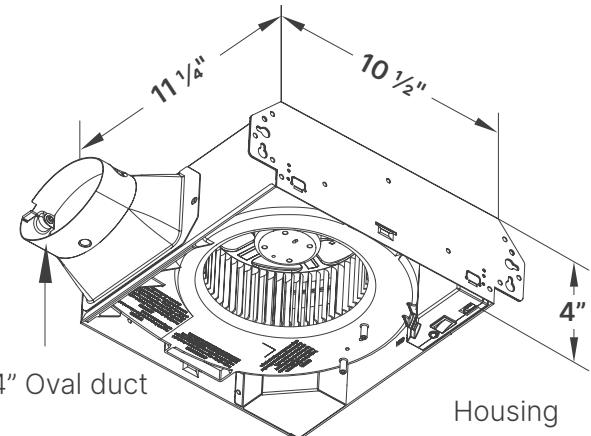


Fan Grille



SLM50-110-C

Mounting ears



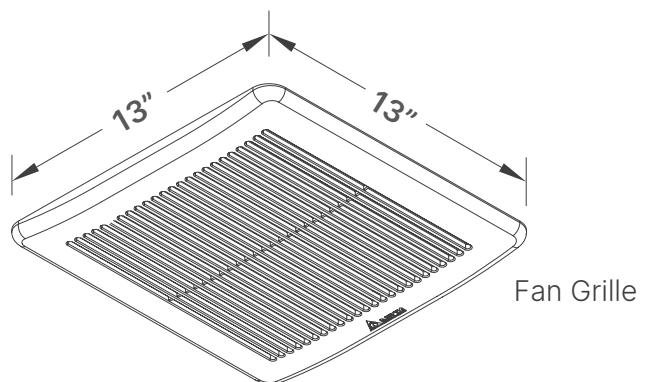
Housing

SLM50-110-C  
Project Pack  
Components  
Available



## Built-in control

SLM50-110-C



Fan Grille



## 4 Inch Oval Duct - Specifications

SLM50-110-C - 50/80/110 CFM Exhaust Fan



	Full speed					
Static Pressure (Inches w.g.)	0.1	0.25	0.1	0.25	0.1	0.25
Air Flow (CFM)	50	50	80	80	110	110
Sones	<0.3	0.8	0.4	1.0	1.2	1.5
Power Consumption (Watts)	6	9.5	8.5	14.5	16.5	24
Energy Efficiency (CFM/Watts)	8.3	5.2	9.4	5.5	6.6	4.5
Current (Amps)	0.6 Max.					
Power Rating (V/Hz)	120 / 60					

SLM50-110-C Project Pack Components Available SLM-A3C (housing) and SLM50-110-B(motor and grille)

SLM50-100 - 50/80/100 CFM Exhaust Fan



	Full speed								
Static Pressure (Inches w.g.)	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375
Air Flow (CFM)	50	50	50	80	80	80	100	100	100
Sones	<0.3	0.7	-	0.4	1	-	0.9	1.4	-
Power Consumption (Watts)	5.2	8.2	12	8.2	12.8	17.2	12.5	17.4	22.1
Energy Efficiency (CFM/Watts)	9.6	6.1	4.2	9.7	6.3	4.6	8	5.7	4.5
Current (Amps)	0.6 Max.								
Power Rating (V/Hz)	120 / 60								

SLM50-100 Project Pack Components Available SLM-A4 (housing) and SLM50-100-B (motor and grille)

SLM50-100D - 50/80/100 CFM, Fan with Dual Speed



	Continuous low speed						Full speed					
Static Pressure (Inches w.g.)	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375
Air Flow (CFM)	30	30	30	50	50	50	50	50	50	80	80	80
Sones	<0.3	0.6	-	<0.3	0.7	-	<0.3	0.7	-	0.4	1	-
Power Consumption (Watts)	3.8	7.6	9.8	5.2	8.2	12	5.2	8.2	12	8.2	12.8	17.2
Energy Efficiency (CFM/Watts)	7.8	3.9	3	9.6	6.1	4.2	9.6	6.1	4.2	9.7	6.3	4.6
Current (Amps)	0.6 Max.											
Power Rating (V/Hz)	120 / 60											

SLM50-100H - 50/80/100 CFM, Fan with Humidity Sensor



	Continuous low speed						Full speed					
Static Pressure (Inches w.g.)	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375
Air Flow (CFM)	30	30	30	50	50	50	50	50	50	80	80	80
Sones	<0.3	0.6	-	<0.3	0.7	-	<0.3	0.7	-	0.4	1	-
Power Consumption (Watts)	3.8	7.6	9.8	5.2	8.2	12	5.2	8.2	12	8.2	12.8	17.2
Energy Efficiency (CFM/Watts)	7.8	3.9	3	9.6	6.1	4.2	9.6	6.1	4.2	9.7	6.3	4.6
Current (Amps)	0.6 Max.											
Power Rating (V/Hz)	120 / 60											

## 4 Inch Oval Duct - Specifications

SLM50-100LED - 50/80/100 CFM, Fan/Dimmable LED Light



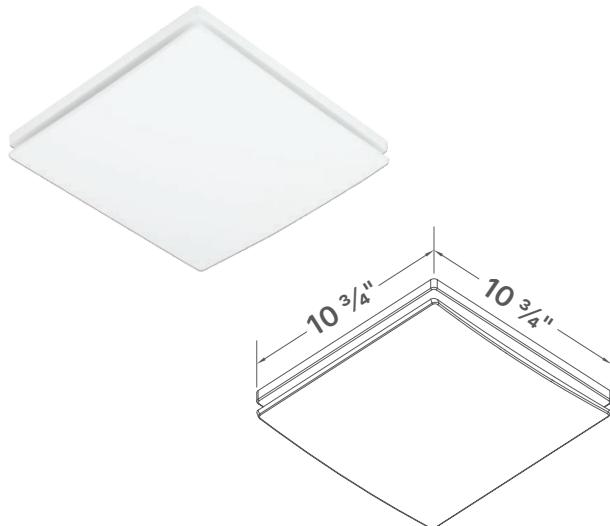
	Continuous low speed						Full speed								
	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375
Static Pressure (Inches w.g.)	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375
Air Flow (CFM)	50	50	50	80	80	80	100	100	100	80	80	80	100	100	100
Sones	<0.3	0.7	-	0.4	1	-	0.9	1.4	-	0.4	1	-	0.9	1.4	-
Power Consumption (Watts)	5.2	8.2	12	8.2	12.8	17.2	12.5	17.4	22.1	8.2	12.8	17.2	12.5	17.4	22.1
Energy (CFM/Watts)	9.6	6.1	4.2	9.7	6.3	4.6	8	5.7	4.5	9.7	6.3	4.6	8	5.7	4.5
Current (Amps)	0.6 Max.														
Power Rating (V/Hz)	120 / 60														
Light (Watts/Lumens)	13														

## Delta Designer Grille SLM-DGL

The **SLM-DGL** designer fan grille is offered as an alternative to the standard grille on Delta Breez SLM50, SLM70, SLM70H, ITG50, ITG80, ITG80H, and ITG100.

### Features:

- Adds modern aesthetic to bathroom
- Made of long-lasting ABS material
- Paintable to coordinate with any style bathroom
- Size: 10 3/4" x 10 3/4"

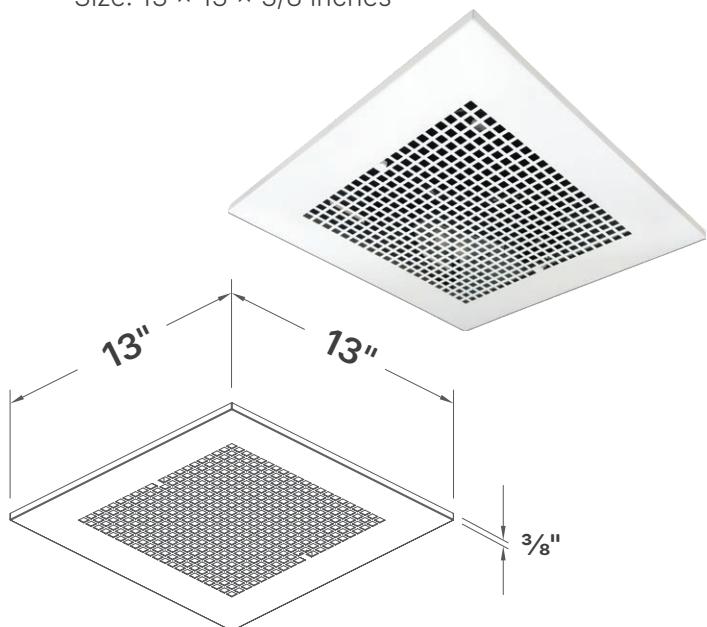


## Smart SMT-MTL metal grille

The SMT-MTL metal grille is offered as an alternative to the standard grille on Delta Breez SMT130, SMT130H, SMT150, SMT150D, SMT150-200, SLM80-110D-C, SLM80-110DLED-C, SLM50-110-C, SLM50-110LED-C and SLM80-110H-C.

### Features:

- Adds modern aesthetic to bathroom
- Made of galvanized steel material and white painted
- Paintable for added customization
- Size: 13 x 13 x 3/8 inches





## 3 Inch Round Duct

### Super Low Profile. Super Low Energy Consumption.

Weighing less than 5 lbs., the powerful and compact Delta BreezSlim sets the bar for performance in the popular small fan size of 7 1/2" x 7 1/4" x 4". Operating at just 1.0 sone, this quiet fan features Delta's super reliable brushless DC motor, an LED indicator light so you know it's running, and a modern grille design. Perfect for retrofit into an existing space or for ceiling mount or wall mount installation (UL listed for both) into your next multifamily or single-family project. BreezSlim breaks the mold of the everyday bathroom exhaust fan. Available in contractor packs.

#### Features:

Innovative brushless DC motor design for long life, low noise and low power consumption.

- Energy savings up to 85%<sup>1</sup> and 3" duct (standard)
- 1 sone – The quietest ever in a 7 1/2" x 7 1/4" bath fan
- Exceeds ENERGY STAR requirements by 217% in energy efficiency<sup>2</sup>
- UL listed for both ceiling-mount and wall-mount installation

1. Based upon SLM50 vs. market AC motor

2. Based upon ENERGY STAR v4.2 criteria for residential ventilating fans

3. Calculations based upon U.S. average retail electricity. Actual results may vary

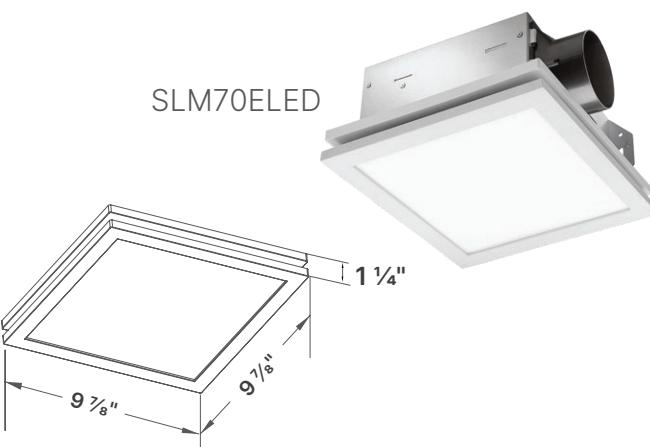
	Delta Breez	Market AC Motor
Energy Use (Watts)		6.4
Noise Level (Sones)		1.0
Annual Energy Cost per Fan (24/7) <sup>3</sup>		\$6.73
		45.2
		4.0
		\$47.56



SLM50, SLM70,  
SLM70D2, and  
SLM70H

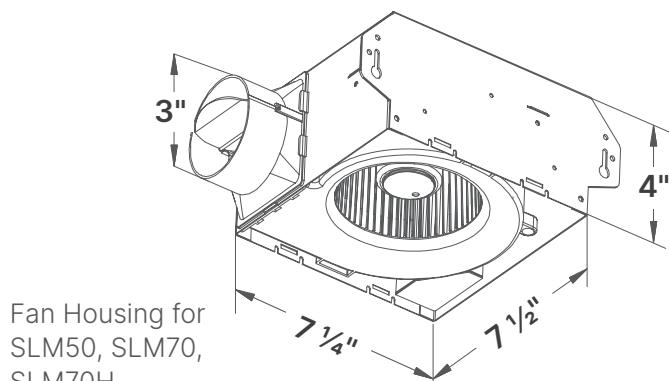


Available with  
Project Pack  
Components

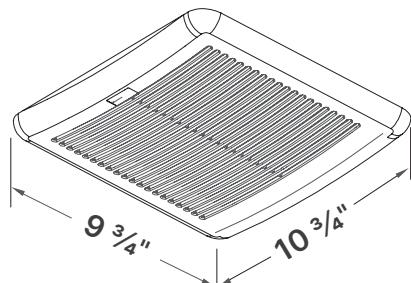


SLM70ELED





Fan Housing for  
SLM50, SLM70,  
SLM70H,  
SLM70D2, and  
SLM70ELED



Fan Grille

**LED Indicator Light:**  
SLM50, SLM70



**LED Indicator Light:**  
SLM70H



**LED Indicator Light:**  
SLM70D2



**SLM70D2 Delay Timer**



## Specifications

**SLM50\*** - 50 CFM Single Speed Exhaust Fan



3" Duct (Standard)

Static Pressure (Inches w.g.)	0.1	0.25
Air Flow (CFM)	50	36
Sones	1.0	1.2
Power Consumption (Watts)	6.4	6.3
Energy Efficiency (CFM/Watts)	11.6	7.4
Current (Amps)	0.18 Max	
Power Rating (V/Hz)	120 / 60	
Project Pack Components Available SLM-A (housing) and SLM50-B (motor grille)		

**SLM70** - 70 CFM Single Speed Exhaust Fan



3" Duct (Standard)

Static Pressure (Inches w.g.)	0.1	0.25
Air Flow (CFM)	70	54
Sones	2.0	1.5
Power Consumption (Watts)	13.2	11.6
Energy Efficiency (CFM/Watts)	5.8	5
Current (Amps)	0.29 Max	
Power Rating (V/Hz)	120 / 60	
Project Pack Components Available SLM-A (housing) and SLM70-B (motor grille)		

**SLM70H** - 70 CFM Fan with Humidity sensor



3" Duct (Standard)

Static Pressure (Inches w.g.)	0.1	0.25
Air Flow (CFM)	70	54
Sones	2.0	1.5
Power Consumption (Watts)	13.2	11.6
Energy Efficiency (CFM/Watts)	5.8	5
Current (Amps)	0.29 Max	
Power Rating (V/Hz)	120 / 60	
Project Pack Components Available SLM-A (housing) and SLM70H-B (motor grille)		

**SLM70D2** - 70 CFM Fan with Dual Speed



Continuous low speed

Full Speed

Static Pressure (Inches w.g.)	0.1	0.25	0.1	0.25
Air Flow (CFM)	40	25	70	60
Sones	0.3	0.8	1.1	1.3
Power Consumption (Watts)	4.0	5.3	11.3	12.0
Energy Efficiency (CFM/Watts)	10.0	4.7	6.1	5.0
Current (Amps)	0.22 Max			
Power Rating (V/Hz)	120 / 60			

**SLM70ELED** - 70 CFM Fan

Edge-Lit Dimmable LED Light



3" Duct (Standard)

Static Pressure (Inches w.g.)	0.1	0.25
Air Flow (CFM)	70	53
Sones	2.0	1.5
Power Consumption (Watts)	13.2	11.6
Energy Efficiency (CFM/Watts)	6	5.4
Current (Amps)	0.29 Max	
Power Rating (V/Hz)	120 / 60	
LED Light (Watts/Lumens)	13 / 850	



## 6 Inch Duct Series

### The Smart Choice. Virtually silent, feature-rich.

Delta BreezSmart Series is the perfect ventilation solution for today's larger, spa-style bathrooms. One of our highest performing, most quiet at less than 0.3 sones. Single speed 130 or 150 CFM, or adjustable high speed 150-200 CFM. For spaces 130-200 sq. ft. Options include LED light, motion sensor, or adjustable humidity sensor.

Ceiling Radiation Damper and metal grille available separately. UL listed for ceiling mount only.

#### Features:

- Energy savings up to 57.9%<sup>1</sup>
- <0.3 sones - lowest noise level among competing fans
- Exceeds ENERGY STAR efficiency<sup>2</sup> requirements by 151%
- Motion-sensing, humidity-sensing, LED and dual-speed options available with adjustable continuous low speed

#### Fan w/Dimmable LED light:

- 13-Watt LED main light and 2-Watt LED night light
- Main light output of 850 Lumens, 3000K and 90 CRI Dimmable LED light. Dimmer switch not included.

#### Fan/Dimmable LED light with Adjustable Color Temperature 3000K, 4000K and 5000K:

- 13-Watt LED light output of 850 Lumens and 90 CRI

1. Based upon BreezSmart SMT150-200 (200 CFM) vs. market AC motor fan

2. Based upon SMT 150 CFM vs. ENERGY STAR v4.2 criteria for residential fans

	Delta Breez	Market AC Motor
Energy Use (Watts)	24	57
Noise Level (Sones)	1.0	1.2
Annual Energy Cost per Fan (24/7) <sup>3</sup>	\$24.67	\$58.59

3. Calculations based upon U.S. average retail electricity. Actual results may vary

### Fans with adjustable high speed options (150-200 CFM)



High Speed Switch



Fan/Dimmable

LED Light

- 3000K
- 4000K
- 5000K



### High Speed Fans (130 CFM or 150 CFM)



**LED Indicator Light: SMT130, SMT150,  
SMT150LED, SMT150-200, & SMT150-200LED**



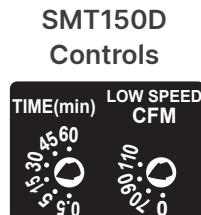
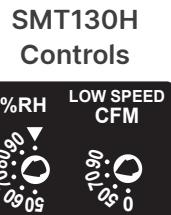
**LED Indicator Light: SMT130M, SMT150D**  
Continuous Low Speed      Full Speed



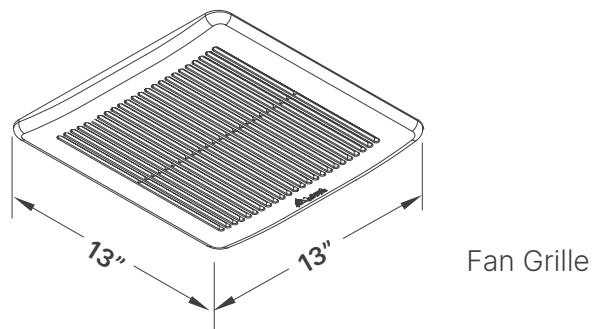
**LED Indicator Light: SMT130H**  
Humidity Sensing      Full Speed



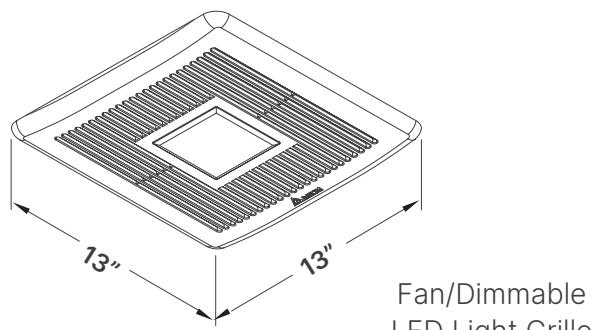
#### Built-in Controls



#### BreezSmart Series Dimensions

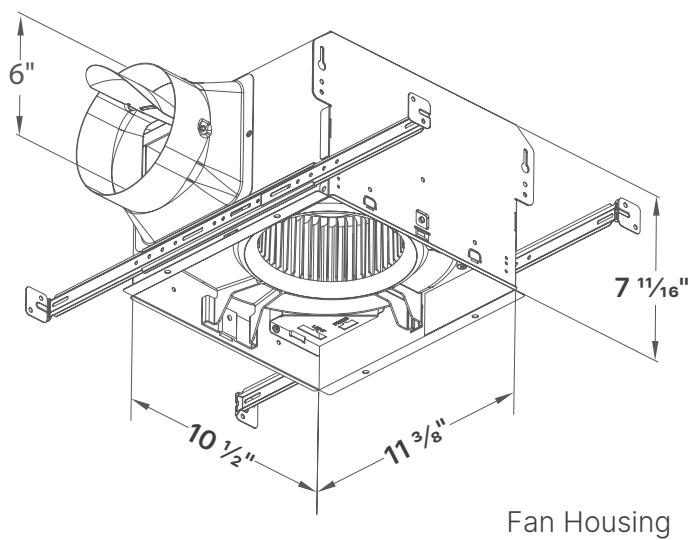


Fan Grille

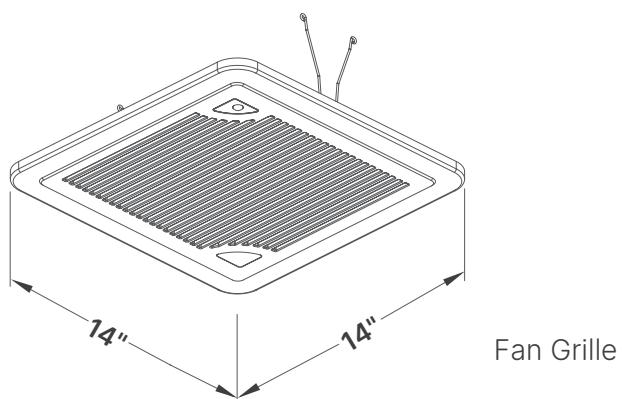


Fan/Dimmable LED Light Grille

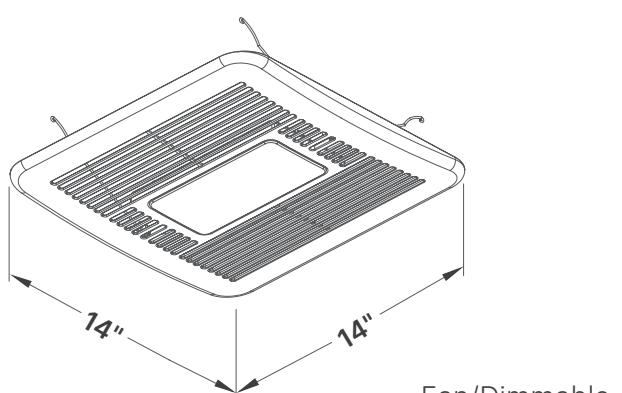
#### BreezSmart Series Dimensions



Fan Housing



Fan Grille



Fan/Dimmable LED Light Grille



## Specifications

### SMT130 - 130 CFM Single Speed Exhaust Fan

Static Pressure (Inches w.g.)	0.1		0.25	
Air Flow (CFM)	130			124
Sones	<0.3			1.0
Power Consumption (Watts)	11.6			20
Energy Efficiency (CFM/Watts)	11.2			6.2
Current (Amps)	0.44 Max			
Power Rating (V/Hz)	120 / 60			



### SMT130H - 130 CFM with Humidity Sensor

Fan Speed	Continuous Low Speed				Full Speed	
Static Pressure (Inches w.g.)	0.1	0.25	0.1	0.25	0.1	0.25
Air Flow (CFM)	50	49	70	68	90	88
Sones	<0.3	1.0	<0.3	1.0	<0.3	1.0
Power Consumption (Watts)	5.6	12.2	6.9	13.5	8	15.5
Energy Efficiency (CFM/Watts)	8.9	4	10.1	5	11.2	5.6
Current (Amps)	0.44 Max					
Power Rating (V/Hz)	120 / 60					



### SMT130M - 130 CFM with Motion Sensor

Fan Speed	Continuous Low Speed				Full Speed	
Static Pressure (Inches w.g.)	0.1	0.25	0.1	0.25	0.1	0.25
Air Flow (CFM)	50	49	70	68	90	88
Sones	<0.3	1.0	<0.3	1.0	<0.3	1.0
Power Consumption (Watts)	5.6	12.2	6.9	13.5	8	15.5
Energy Efficiency (CFM/Watts)	8.9	4	10.1	5	11.2	5.6
Current (Amps)	0.44 Max					
Power Rating (V/Hz)	120 / 60					



### SMT150D - 0-110/150 CFM Fan with adjustable Dual Speed



Fan Speed	Continuous Low Speed				Full Speed		
Static Pressure (Inches w.g.)	0.1	0.25	0.1	0.25	0.1	0.25	0.1 0.25
Air Flow (CFM)	70	68	90	88	110	109	150 149
Sones	<0.3	1.0	<0.3	1.0	<0.3	1.0	<0.3 1.3
Power Consumption (Watts)	6.9	13.5	8	15.5	9.8	18.4	16.9 23.7
Energy Efficiency (CFM/Watts)	10.1	5	11.2	5.6	11.2	5.9	8.8 6.2
Current (Amps)	0.47 Max						
Power Rating (V/Hz)	120 / 60						

### SMT150LED - 150 CFM Fan/Dimmable LED Light / Night-Light



Static Pressure (Inches w.g.)	0.1		0.25	
Air Flow (CFM)	150			150
Sones	0.5			1.3
Power Consumption (Watts)	17.6			25.4
Energy Efficiency (CFM/Watts)	8.5			5.9
Current (Amps)	0.62 Max			
Power Rating (V/Hz)	120 / 60			
LED Main Light (Watts/Lumens)	13 / 850			
LED Night Light (Watts)	2			

### SMT150-200 - 150/200 CFM Fan



Static Pressure (Inches w.g.)	0.1	0.25	0.1	0.25
Air Flow (CFM)	150	150	200	200
Sones	0.4	1.3	1.0	1.5
Power Consumption (Watts)	14	22	24	36
Energy Efficiency (CFM/Watts)	10.7	6.8	8.3	5.5
Current (Amps)	0.68 Max			
Power Rating (V/Hz)	120 / 60			

### SMT150-200LED - 150/200 CFM Fan w/Dimmable LED Light with adjustable color temperature



Static Pressure (Inches w.g.)	0.1	0.25	0.1	0.25
Air Flow (CFM)	150	150	200	200
Sones	0.6	1.3	1.0	1.5
Power Consumption (Watts)	15	23	25	37
Energy Efficiency (CFM/Watts)	10	6.5	8	5.4
Current (Amps)	0.78 Max			
Power Rating (V/Hz)	120 / 60			
LED Light (Watts/Lumens)	13 / 850			

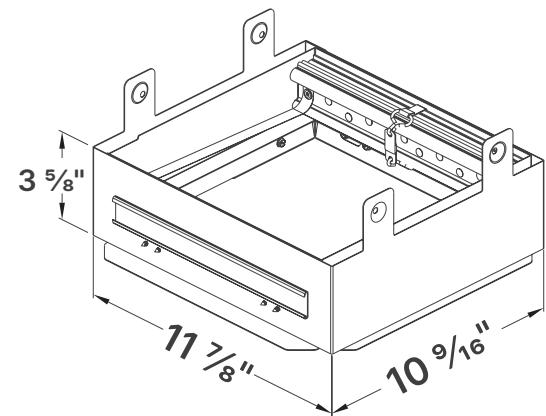
## Ceiling Radiation Damper

The damper employs a folded curtain style blade for point-of-origin control of radiant heat in a ventilation system. SMT-CRD2 installs in the ceiling membrane for floor/ceiling or roof/ceiling assemblies with a fire resistance rating up to and including 3 hours.

### SMT-CRD2

#### Features:

- UL and cUL listed and exceeds UL 555C for use in 3-hour fire rated assemblies
- Delta BreezSmart SMT-CRD2 - Ceiling Radiation Damper helps to limit the radiant heat transfer through an air inlet/outlet opening in the ceiling membrane
- SMT-CRD2 Ceiling Radiation Damper is UL and cUL listed, and exceeds UL 555C for use in 3-hour fire rated assemblies
- CSFM listing: 3226-1650:0106
- UL 555C listing: R16833
- Meets NFPA Standards: 90A and 101
- Meets Building Code Standards: IBC, NBC, NFPA, SBC, and UBC
- Installation is valid for the following UL rated wood truss ceilings:
- Floor-Ceiling = L587 (Owned) Also found in the following floor-ceiling designs: L528, L558, L562, L563, L574, and L585
- Roof Ceiling = P556 (Owned) Also found in the following roof-ceiling designs: P533, P544, P545, P547, and P580
- Intended for installation with the following UL Listed Delta Electronic Fan Models SMT130, SMT130M, SMT130H, SMT150, SMT150D, SMT150LED, SMT150-200, SMT150-200LED, SLM80-110-C, SLM80-110LED-C, SLM80-110D-C, SLM80-110DLED-C, SLM80-110H-C, SLM50-110-C, and SLM50-110LED-C. (for SLM series to use combustible installation need to purchase VFRU-21-13HB separately).

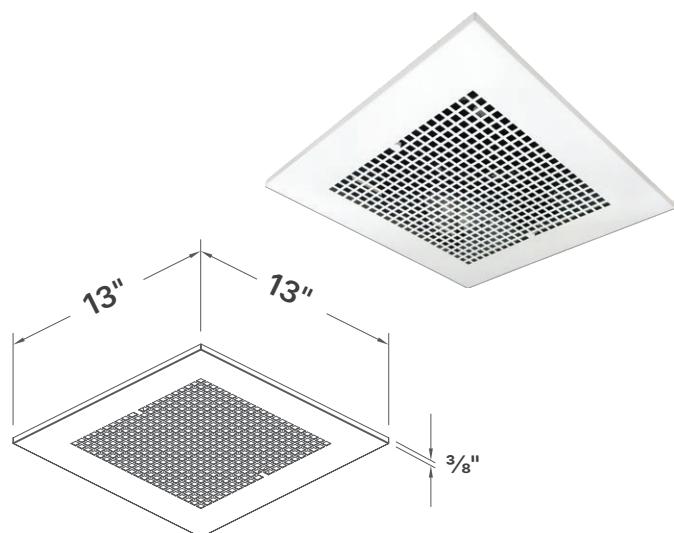


## Smart SMT-MTL metal grille

The SMT-MTL metal grille is offered as an alternative to the standard grille on Delta Breez SMT130, SMT130H, SMT150, SMT150D, SMT150-200, SLM80-110D-C, SLM80-110DLED-C, SLM50-110-C, SLM50-110LED-C and SLM80-110H-C.

#### Features:

- Adds modern aesthetic to bathroom
- Made of galvanized steel material and white painted
- Paintable for added customization
- Size: 13 x 13 x 3/8 inches





## 4 Inch Duct Series

### Builder's best solution

Delta BreezGreenBuilder ventilation fans were designed with green builders and contractors in mind. High speed 80 CFM or 100 CFM. For spaces 80-100 sq. ft. Quiet operation from 0.8 to 1.4 sones. Options include adjustable low speed, dimmable LED light, decorative dimmable LED light, and humidity sensor. Ceiling Radiation Damper and designer grille available separately. Fans only and fans with humidity sensor are UL listed for ceiling and wall mount; fans/LED light are UL listed for ceiling mount onlyLED light are UL listed for ceiling mount only.



Fan Only



Fan/Dimmable LED Light



Project Pack Components Available



### Fan/Dimmable LED Light:

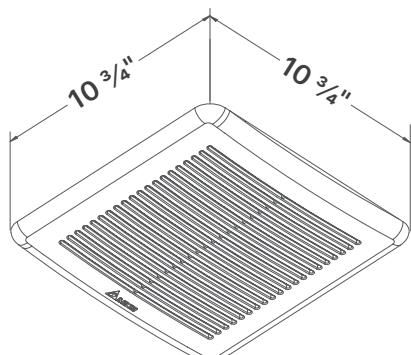
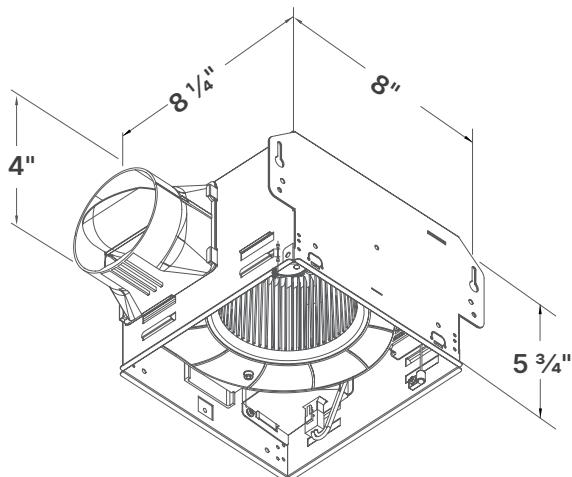
- 13-Watt Dimmable LED light included (60 watt equivalent). Dimmer switch not included
- Main light output of 850 lumens, 3000K and 90 CRI



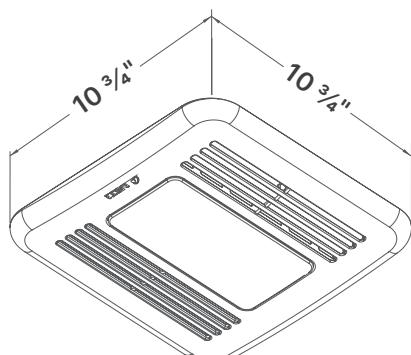
1. Based on GreenBuilder GBR80 vs. market AC motor fan

2. Based upon GBR80CFM vs. ENERGY STAR v4.2 criteria for residential ventilating fans

## BreezGreenBuilder Series Dimensions



Grille for Fan Only



Grille for Fan/ Dimmable LED Light

**LED Indicator Light:**  
GBR80, GBR80LED  
GBR100, GBR100LED

**LED Indicator Light:**  
GBR80H, GBR100H

Fan is running

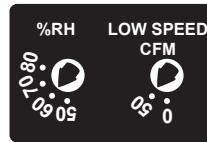


Humidity Sensing Full Speed



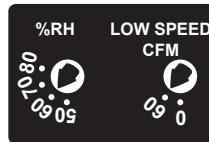
## Built-in Controls

GBR80H, GBR80HLED



## Built-in Controls

GBR100H



## Specifications

### GBR80 - 80 CFM Single Speed Exhaust Fan

Static Pressure (Inches w.g.)	0.1	0.25
Air Flow (CFM)	80	64
Sones	0.8	1.5
Power Consumption (Watts)	10.5	12.5
Energy Efficiency (CFM/Watts)	7.6	5.1
Current (Amps)	0.21 Max	
Power Rating (V/Hz)	120 / 60	

Project Pack Components Available GBR-A (housing) and GBR80-B (motor/grille)



### GBR80H - 80 CFM Fan with Humidity Sensor

Fan Speed	Continuous Low Speed	Full Speed	
Static Pressure (Inches w.g.)	0.1	0.25	0.1
Air Flow (CFM)	50	35	80
Sones	<0.3	1.0	0.8
Power Consumption (Watts)	4	6	9.7
Energy Efficiency (CFM/Watts)	12.5	5.8	8.2
Current (Amps)	0.22 Max		
Power Rating (V/Hz)	120 / 60		



### GBR80LED - 80 CFM Fan/Dimmable LED Light



Static Pressure (Inches w.g.)	0.1	0.25
Air Flow (CFM)	80	63
Sones	0.8	1.5
Power Consumption (Watts)	11	13
Energy Efficiency (CFM/Watts)	7.2	4.8
Current (Amps)	0.33 Max.	
Power Rating (V/Hz)	120 / 60	
LED Light (Watts/Lumens)	13 / 850	



## 4 Inch Duct Series Specifications

### GBR80HLED - 80 CFM Fan

Dimmable LED Light with Humidity Sensor



Fan Speed	Continuous Low Speed		Full Speed	
Static Pressure (Inches w.g.)	0.1	0.25	<b>0.1</b>	<b>0.25</b>
Air Flow (CFM)	50	33	80	63
Sones	0.5	1.0	0.8	1.5
Power Consumption (Watts)	4.4	6	11	13
Energy Efficiency (CFM/Watts)	11.3	5.5	7.2	4.8
Current (Amps)	0.33 Max			
Power Rating (V/Hz)	120 / 60			
LED Light (Watts/Lumens)	13 / 850			

### GBR100 - 100 CFM Single Speed Exhaust Fan



Static Pressure (Inches w.g.)	<b>0.1</b>	<b>0.25</b>
Air Flow (CFM)	100	77
Sones	1.4	1.5
Power Consumption (Watts)	12.6	13.5
Energy Efficiency (CFM/Watts)	7.9	5.7
Current (Amps)	0.22 Max.	
Power Rating (V/Hz)	120 / 60	
Project Pack Components Available GBR-A (housing) and GBR100-B (motor/grille)		

### GBR100H - 100 CFM Fan with Humidity Sensor



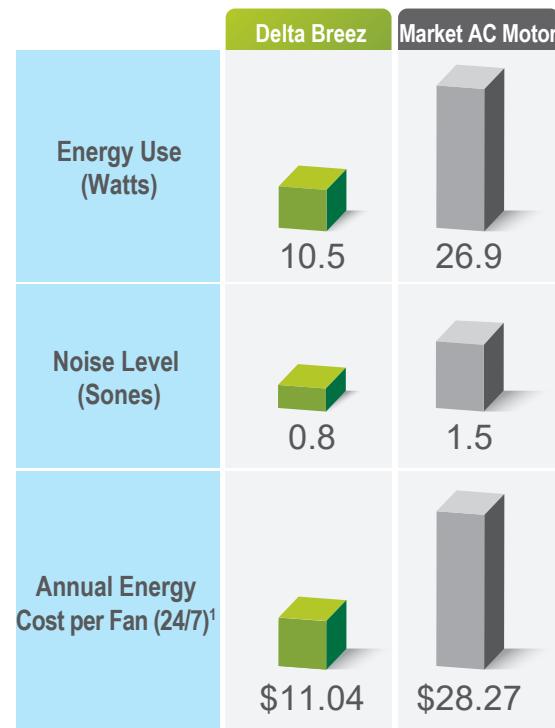
Fan Speed	Continuous Low Speed		Full Speed	
Static Pressure (Inches w.g.)	0.1	0.25	<b>0.1</b>	<b>0.25</b>
Air Flow (CFM)	60	42	100	77
Sones	0.5	0.7	1.4	1.5
Power Consumption (Watts)	4.9	6.3	12.6	13.5
Energy Efficiency (CFM/Watts)	12.2	6.6	7.9	5.7
Current (Amps)	0.24 Max.			
Power Rating (V/Hz)	120 / 60			

### GBR100LED - 100 CFM Fan/Dimmable LED Light



Static Pressure (Inches w.g.)	<b>0.1</b>	<b>0.25</b>
Air Flow (CFM)	100	72
Sones	1.5	1.5
Power Consumption (Watts)	13.6	11.6
Energy Efficiency (CFM/Watts)	7.3	6.2
Current (Amps)	0.35 Max.	
Power Rating (V/Hz)	120 / 60	
LED Light (Watts/Lumens)	13 / 850	

#### Energy Use (Watts)



1. Calculations based upon U.S. average retail electricity. Actual results may vary

## Ceiling Radiation Damper

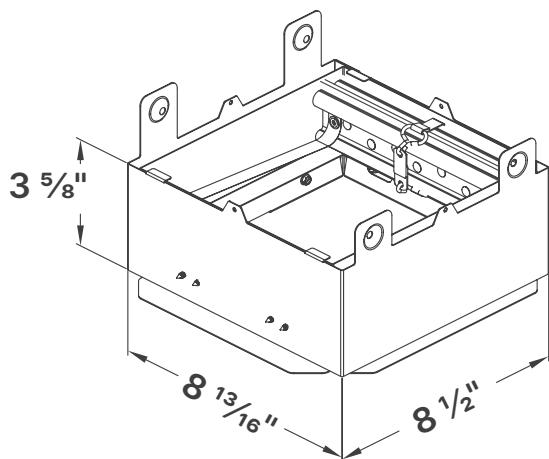
The damper employs a folded curtain style blade for point-of-origin control of radiant heat in a ventilation system. GBR-CRD2 installs in the ceiling membrane for floor/ceiling or roof/ceiling assemblies with a fire resistance rating up to and including 3 hours.

### Features:

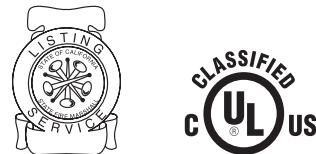
- UL and cUL listed and exceeds UL 555C for use in 3-hour fire rated assemblies
- Warnock-Hersey certified for use in fire rated floor/ceiling or roof/ceiling assemblies
- CSFM listing: 3226-0368:104
- Meets NFPA Standards: 90A and 101
- Meets Building Code Standards: IBC, NBC, NFPA, SBC and UBC

### GBR-CRD2

- Installation is valid for the following UL rated wood truss ceilings:
- Floor-Ceiling = L587 (Owned) Also found in the following floor-ceiling designs: L528, L558, L562, L563, L574, and L585
- Roof Ceiling = P556 (Owned) Also found in the following roof-ceiling designs: P533, P544, P545, P547, and P580
- Intended for installation with the following UL Listed Delta Electronic Fan Models GBR80, GBR80H, GBR80HLED, GBR80LED, GBR100, GBR100H, GBR100LED, ELT80-110, ELT80-110D, ELT80-110H, ELT80-110MH, ELT80-110LED, ELT80-110DLED, ELT80-110HLED, and ELT80-110MHLED



GBR-CRD2

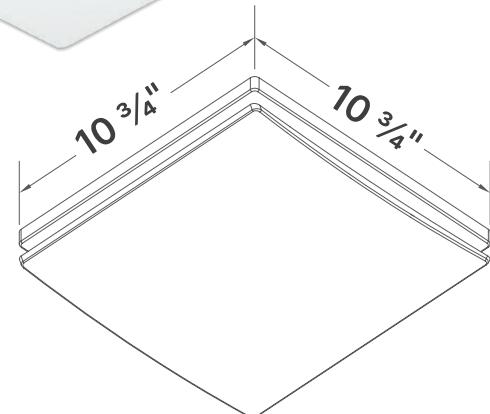


## Designer Grille GBR-DGL

The GBR-DGL designer fan grille is offered as an alternative to the standard grille on GBR80, GBR80H, GBR100, and GBR100H.

### Features:

- Adds modern aesthetics to the bathroom
- Made of long-lasting ABS material
- Paintable to coordinate with any style bathroom
- Size: 10 3/4" x 10 3/4"





## 4 Inch Duct Series

### Economical ventilation solution

Single speed 50, 80, or 100 CFM. For spaces 50-100 sq. ft. Quiet operation from 0.7 to 1.5 sones. Options include dimmable LED light or edge-lit dimmable LED light, adjustable humidity sensor, and Bluetooth® speaker. Ceiling Radiation Damper and designer grille available separately. Fans only and fan with humidity sensor are UL listed for ceiling and wall mount; fans/dimmable LED light are UL listed for ceiling mount only.

### Features:

Innovative brushless DC motor design for long life, low noise and low power consumption

- Power rating of 120 volts/60Hz
- Brushless DC motor engineered to run continuously
- Motor equipped with thermal cutoff fuse
- Removable with permanently lubricated plug-in motor
- Built-in soft start function increases bearing life
- Automatically powers off when impeller is locked abnormally

### Fan/Dimmable LED Light:

- 13-Watt LED light included (equivalent to a 60-Watt incandescent bulb)
- Main light output of 850 lumens, 3000K and 90 CRI
- Dimmable LED light (dimmer switch not included)

### Fan/Edge-lit Dimmable LED Light:

- 13-Watt LED light
- Main light output of 1000 lumens, 3000K, and 80 CRI
- Dimmable LED light. Dimmer switch not included.
- 13-Watt integrated dimmable edge-lit LED light lasts up to 30,000 hours

### Bluetooth® Speaker:

- Bluetooth® 3.0, speaker 3W and 4 Ohm
- Play audio through most Bluetooth® wireless devices

The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth® SIG, Inc. and any use of such marks by Delta Electronics, Inc. is under license. Other trademarks and trade names are those of their respective owners.



Fan Only



Fan/Dimmable LED light

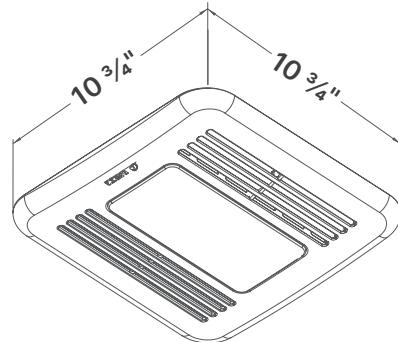


Fan/Edge-lit  
Dimmable LED light



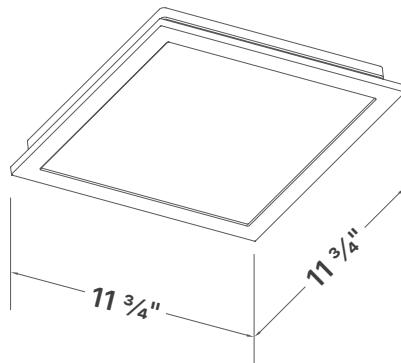
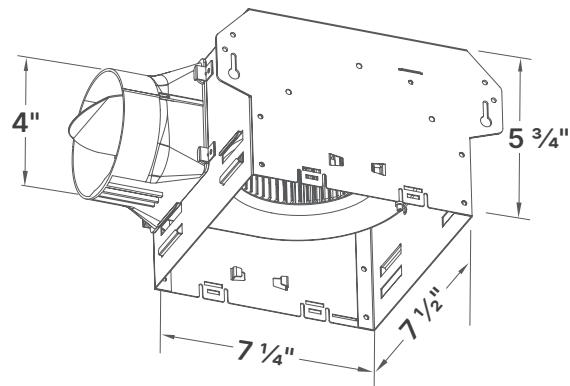


Fan/LED Edge-Lit Dimmable LED light,  
Flat Round Panel

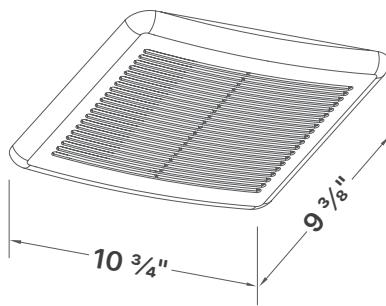


Grille for Fan/LED Light

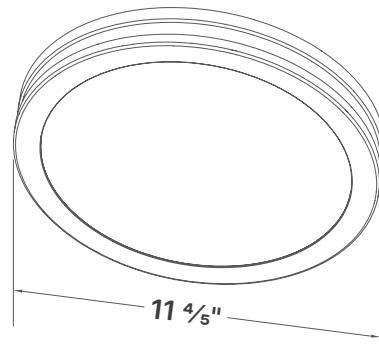
#### BreezeIntegrity Series Dimensions



Grille for Fan/Edge-lit LED Light



Grille for Fan Only



Grille for Fan/Edge-lit LED Light  
Flat Round Panel



### LED Indicator Light:

#### ITG80H

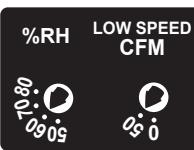
Humidity Sensing



Full Speed



#### ITG80H Controls



Project Pack  
Components  
Available



## Specifications

### ITG50\* - 50 CFM Fan



Static Pressure (Inches w.g.)	0.1	0.25
Air Flow (CFM)	50	37
Sones	0.7	1.3
Power Consumption (Watts)	5	7
Energy Efficiency (CFM/Watts)	12.5	6.7
Current (Amps)	0.14 Max	
Power Rating (V/Hz)	120 / 60	

Project Pack Components Available ITG-A (housing) and ITG50-B (motor grille)

### ITG50LED\* - 50 CFM Fan/Dimmable LED Light



Static Pressure (Inches w.g.)	0.1	0.25
Air Flow (CFM)	50	38
Sones	0.7	1.3
Power Consumption (Watts)	5	7
Energy Efficiency (CFM/Watts)	11	6.5
Current (Amps)	0.22 Max	
Power Rating (V/Hz)	120 / 60	
LED Light (Watts/Lumens)	13 / 850	

\* Product is ENERGY STAR Most Efficient 2025 distinction and ENERGY STAR certified

### ITG80 - 80 CFM Single Speed Exhaust Fan



Static Pressure (Inches w.g.)	0.1	0.25
Air Flow (CFM)	80	60
Sones	1.3	1.4
Power Consumption (Watts)	10	12
Energy Efficiency (CFM/Watts)	8.4	6.6
Current (Amps)	0.20 Max	
Power Rating (V/Hz)	120/60	

Project Pack Components Available ITG-A (housing) and ITG80-B (motor grille)

### ITG80H - 80 CFM Fan with Humidity Sensor



Fan Speed	Continuous Low Speed		Full Speed	
	0.1	0.25	0.1	0.25
Air Flow (CFM)	50	36	80	60
Sones	0.7	1.0	1.5	1.5
Power Consumption (Watts)	5	7	10	12
Energy Efficiency (CFM/Watts)	12	6.9	9	6.2
Current (Amps)	0.20 Max			
Power Rating (V/Hz)	120/60			

### ITG80LED - 80 CFM Fan/ Dimmable LED Light



Static Pressure (Inches w.g.)	0.1	0.25
Air Flow (CFM)	80	60
Sones	1.3	1.5
Power Consumption (Watts)	11.3	11.5
Energy Efficiency (CFM/Watts)	7.2	6.2
Current (Amps)	0.14 Max	
Power Rating (V/Hz)	120 / 60	
LED Light (Watts/Lumens)	13 / 850	

### ITG80RLED-ADJ - 80 CFM Fan/LED Edge-Lit Flat Round Panel with Adjustable Color Temperature



Static Pressure (Inches w.g.)	0.1	0.25
Air Flow (CFM)	80	56
Sones	1.5	1.5
Power Consumption (Watts)	11.5	11.5
Energy Efficiency (CFM/Watts)	7.2	6.2
Current (Amps)	0.14 Max	
Power Rating (V/Hz)	120/60	
LED Light (Watts/Lumens)	13 / 1000	

ITG100 - 100 CFM Single Speed Exhaust Fan		
Static Pressure (Inches w.g.)	<b>0.1</b>	<b>0.25</b>
Air Flow (CFM)	100	85
Sones	1.5	2.0
Power Consumption (Watts)	17	21
Energy Efficiency (CFM/Watts)	7.6	5.3
Current (Amps)	0.33 Max	
Power Rating (V/Hz)	120 / 60	
Project Pack Components Available ITG-A2 (housing) and ITG100-B (motor grille)		



ITG100ELED - 100 CFM Fan		
Edge-lit Dimmable LED Light		
Static Pressure (Inches w.g.)	<b>0.1</b>	<b>0.25</b>
Air Flow (CFM)	100	84
Sones	1.5	2.0
Power Consumption (Watts)	17	20
Energy Efficiency (CFM/Watts)	7.5	5.9
Current (Amps)	0.47 Max	
Power Rating (V/Hz)	120 / 60	
LED Light (Watts/Lumens)	13 / 1000	



ITG100RLED - 100 CFM Fan		
LED Edge-lit, Flat Round Panel		
Static Pressure (Inches w.g.)	<b>0.1</b>	<b>0.25</b>
Air Flow (CFM)	100	85
Sones	1.5	2.0
Power Consumption (Watts)	17	21
Energy Efficiency (CFM/Watts)	7.5	5.9
Current (Amps)	0.47 Max	
Power Rating (V/Hz)	120 / 60	
LED Light (Watts/Lumens)	13 / 1000	



VFB080B4A1-LVDC - 80 CFM, 48V DC Fan		
Static Pressure (Inches w.g.)	<b>0.1</b>	<b>0.25</b>
Air Flow (CFM)	80	60
Sones	1.3	1.4
Current (Amps)	0.23	
Voltage (VDC)	48	

## Ceiling Radiation Damper

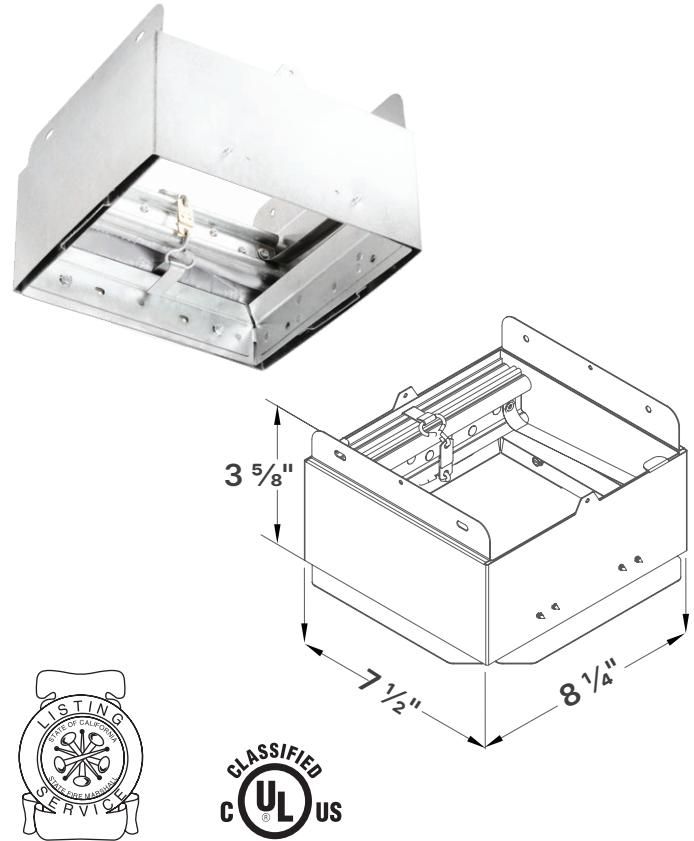
ITG-CRD2 Ceiling Radiation Damper helps to limit the radiant heat transfer through an air inlet/outlet opening in the ceiling membrane. Fire resistance is rated up to 3 hours floor/ceiling or roof/ceiling assemblies.

### Features:

- UL and cUL listed and exceeds UL 555C for use in 3-hour fire rated assemblies
- UL and cUL listed and exceeds UL 555C for use in 3-hour fire rated assemblies
- CSFM listing: 3226-1250:0106
- UL 555C listing: R16833
- Meets NFPA Standards: 90A and 101
- Meets Building Code Standards: IBC, NBC, NFPA, SBC, and UBC
- Installation is valid for the following UL rated wood truss ceilings:
  - Floor-Ceiling = L587 (Owned) Also found in the following for-ceiling designs: L528, L558, L562, L563 L574, and L585
  - Roof Ceiling = P556 (Owned) Also found in the following roof-ceiling designs: P533, P544, P545, P547, and P580

## ITG-CRD2

- Intended for installation with the following UL Listed Delta Electronic Fan Models ITG50, ITG80, ITG80H, ITG100, ITG50LED and ITG80LED





## 4 Inch Duct Series

### Fan/heater solution to warm and delight.

Quiet operation from 0.7 to 1.5 sones. 80 or 110 CFM for spaces 80-110 sq. ft. Options include dimmable LED or fan/heater only. Built-in thermostat to regulate room temperature for maximum comfort. UL approved for ceiling mount only. Not UL approved for mounting over bathtub or shower.

### Features:

- Energy saving DC motor technology
- Built-in thermostat for consistent temperature
- Metal guard to prevent user contact with heating element
- Heater module equipped with thermal cut off fuse
- Duct diameter of 4"
- 1300/1600 Watts heating element evaluated by cUL for safety standards

### Fan/LED Light:

- 13-Watt LED lamp included (equivalent to a 60-Watt incandescent bulb)
- Main light output of 850 lumens, 3000K and 90 CRI
- Dimmable LED Light (dimmer switch not included)



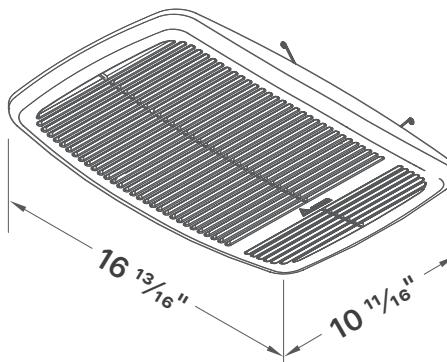
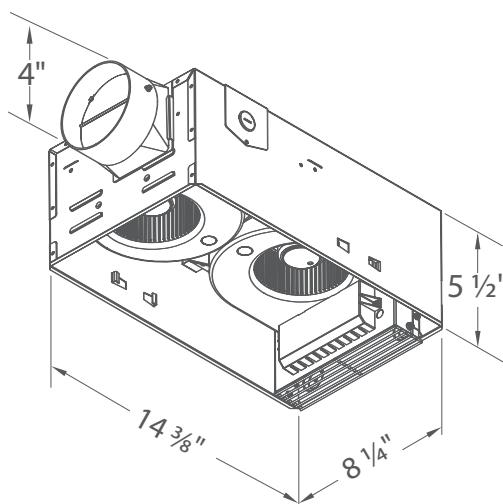
Built-in thermostat

	Delta Breez	Market AC Motor
Energy Use (Watts)	11.7	58
Noise Level (Sones)	1.5	4.0
Annual Energy Cost per Fan (24/7) <sup>1</sup>	\$12.31	\$60.54

1. Calculations based upon U.S. average retail electricity. Actual results may vary



RAD80 Fan with Heater



## Specifications

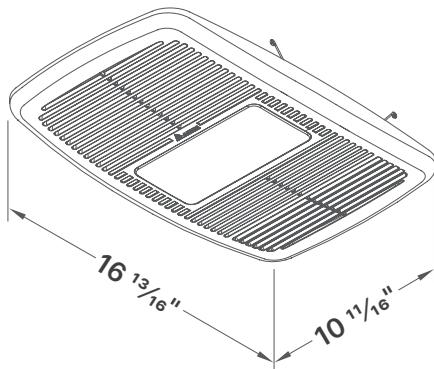
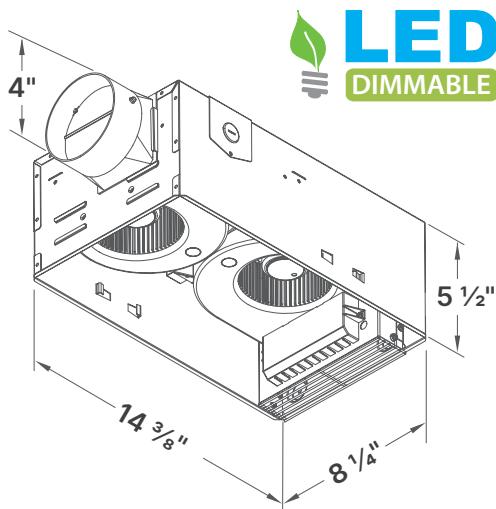
### RAD80 - 80 CFM Fan with Heater

Static Pressure (Inches w.g.)	0.1
Air Flow (CFM)	80
Sones	1.5
Power Consumption (Watts)	11.7
Energy Efficiency (CFM/Watts)	7
Current (Amps)	11
Power Rating (V/Hz)	120 / 60
Heating element (Watts)	1300
Total power (Watts)	1314





RAD80LED Fan/Dimmable LED Light/Heater



#### RAD80LED - 80 CFM

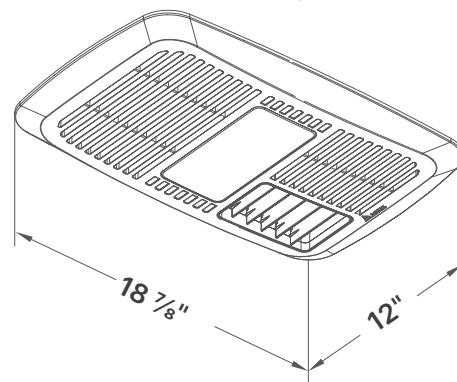
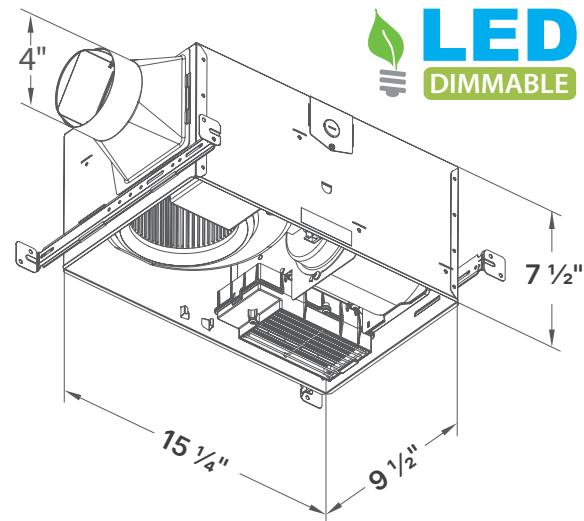
Fan/Dimmable LED Light w/ Heater



Static Pressure (Inches w.g.)	0.1
Air Flow (CFM)	80
Sones	1.5
Power Consumption (Watts)	11.7
Energy Efficiency (CFM/Watts)	7
Current (Amps)	11
Power Rating (V/Hz)	120 / 60
Heating element (Watts)	1300
LED (Watts)	13
Total power (Watts)	1327



RAD110LED Fan/Dimmable LED Light/Heater



#### RAD110LED - 110 CFM

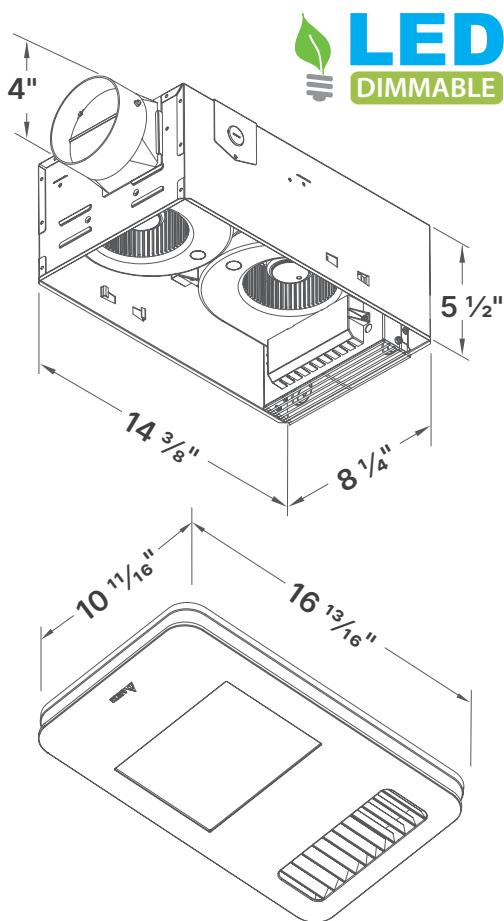
Fan/Dimmable LED Light w/ Heater



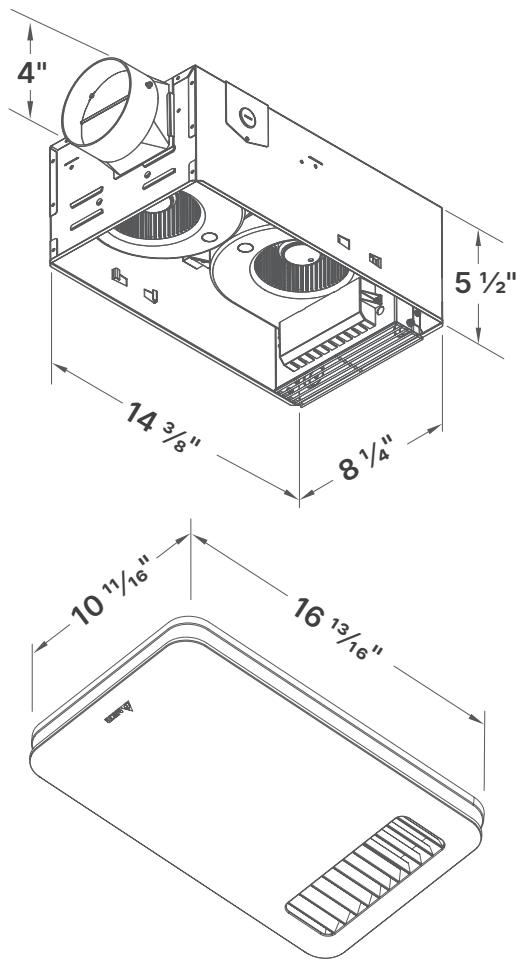
Static Pressure (Inches w.g.)	0.1	0.25
Air Flow (CFM)	110	85
Sones	0.7	1.0
Power Consumption (Watts)	12	13
Energy Efficiency (CFM/Watts)	11	7.8
Current (Amps)	14	
Power Rating (V/Hz)	120 / 60	
Heating element (Watts)	1600	
LED Light (Watts/Lumens)	13 / 850	
Total power (Watts)	1650	



RAD80ELED Fan/Edge-lit Dimmable LED Light/Heater



RAD80-DGL Designer Grille/Heater



#### RAD80ELED - 80 CFM

Fan/Edge-lit Dimmable LED Light w/ Heater



Static Pressure (Inches w.g.)	0.1
Air Flow (CFM)	80
Sones	1.5
Power Consumption (Watts)	11.7
Energy Efficiency (CFM/Watts)	7
Current (Amps)	11
Power Rating (V/Hz)	120 / 60
Heating element (Watts)	1300
LED (Watts)	13
Total power (Watts)	1327

#### RAD80-DGL - 80 CFM

Fan/Designer Grille with Heater



Static Pressure (Inches w.g.)	0.1
Air Flow (CFM)	80
Sones	1.5
Power Consumption (Watts)	11.7
Energy Efficiency (CFM/Watts)	7
Current (Amps)	11
Power Rating (V/Hz)	120 / 60
Heating element (Watts)	1300
Total power (Watts)	1314



## 4 Inch Duct Series

### Designer fan solution

80 CFM fan disguised as a recessed light with Dimmable LED light and night light. For 80 sq. ft. space. Quiet operation at 1.5 sones. UL approved for ceiling mount only.

### Features:

- ENERGY STAR qualified
- Brushless DC motor lasts 70,000 hours for extended reliability
- Quiet Operation at 1.5 sones

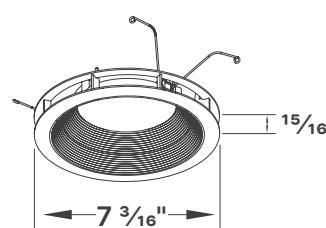
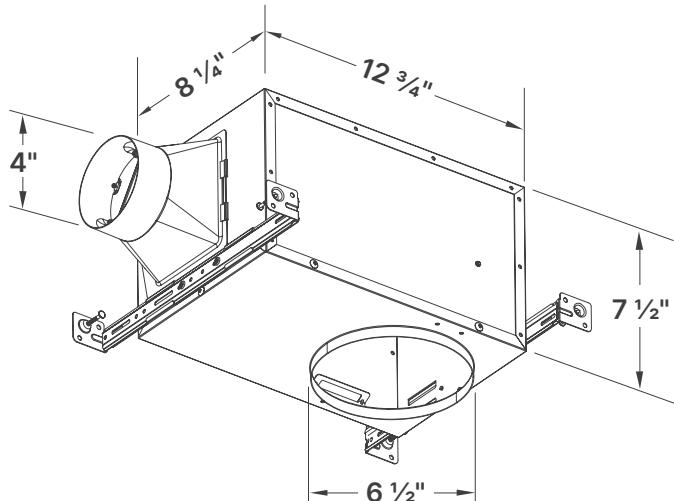
### Fan/Dimmable LED Light:

- 13-Watt Dimmable LED light included (dimmer switch not included)
- LED main light output 850 lumens, 3000K, and 90 CRI



	Delta Breez	Market AC Motor
Energy Use (Watts)	14.5	34.4
Noise Level (Sones)	1.5	1.5
Annual Energy Cost per Fan (24/7) <sup>1</sup>	\$15.25	\$35.91

<sup>1</sup> Calculations based upon U.S. average retail electricity. Actual results may vary



## Specifications

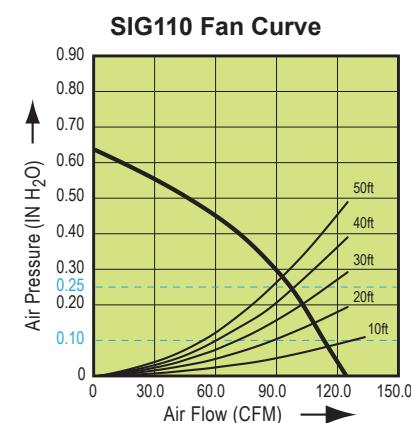
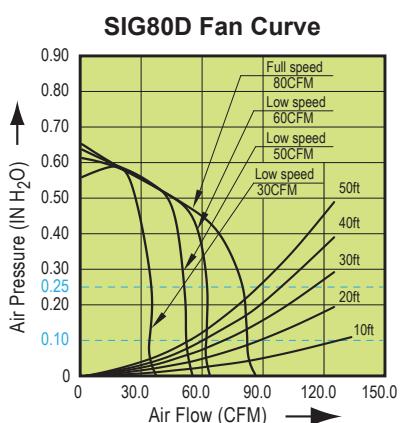
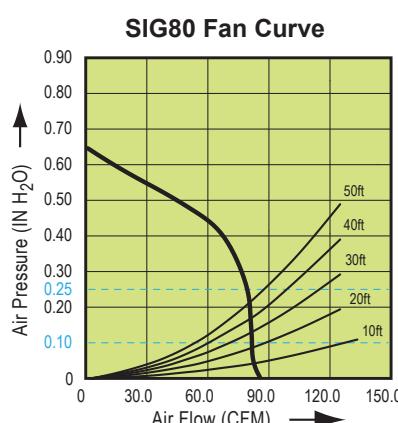
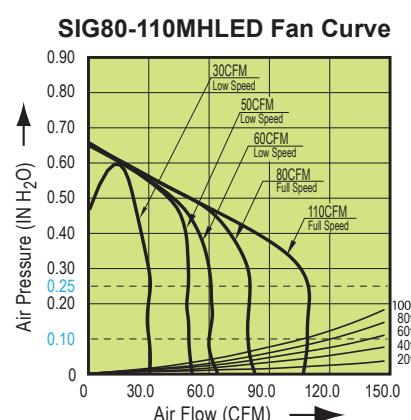
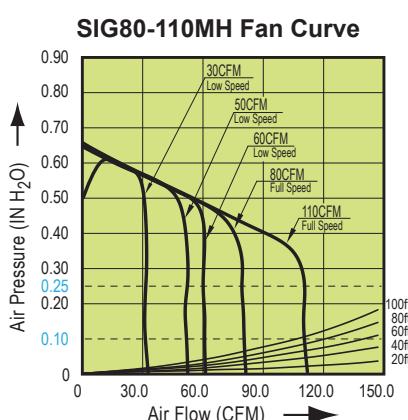
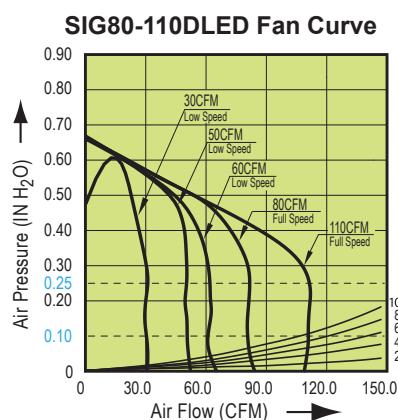
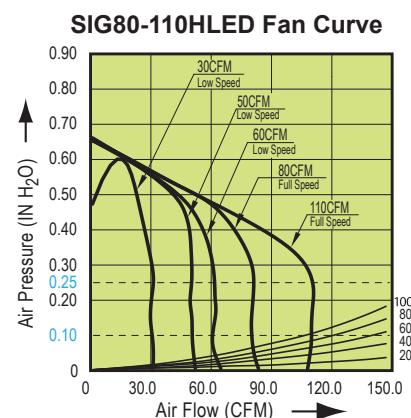
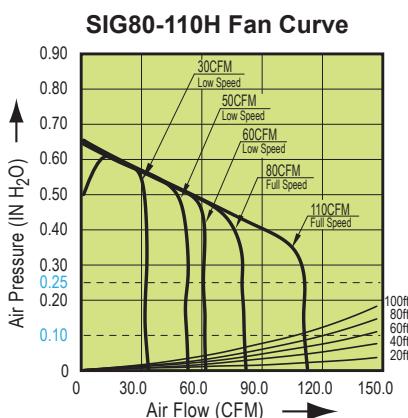
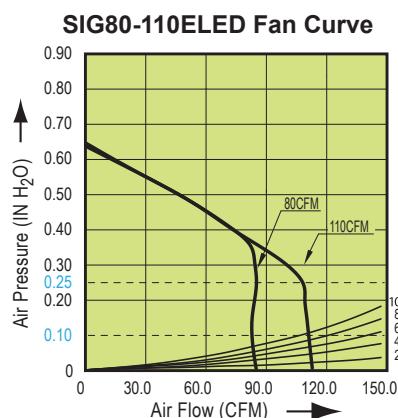
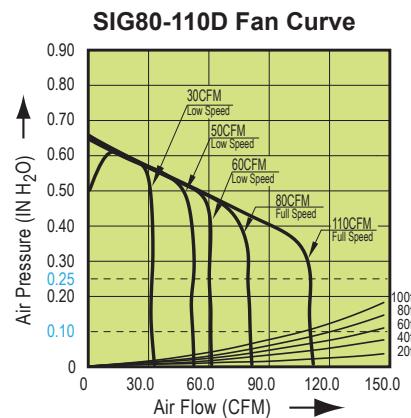
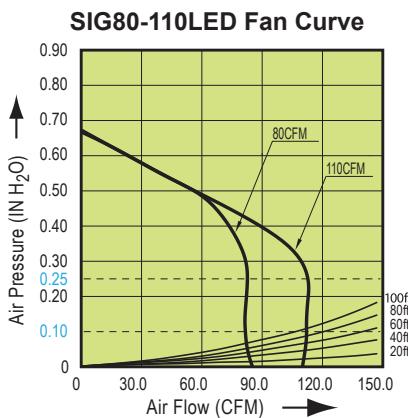
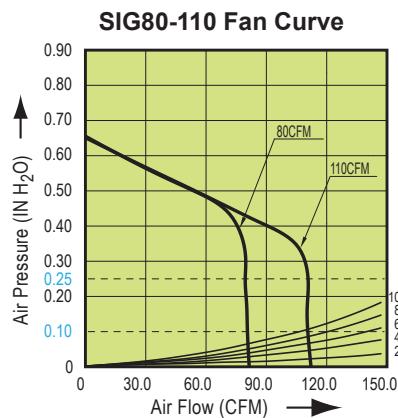
### REC80LED - 80 CFM Fan/Dimmable LED Light



Static Pressure (Inches w.g.)	0.1	0.25
Air Flow (CFM)	80	65
Sones	1.5	2.0
Power Consumption (Watts)	14.5	14.5
Energy Efficiency (CFM/Watts)	6.1	5.4
Current (Amps)	0.34 Max	
Power Rating (V/Hz)	120 / 60	
LED Light (Watts)	13	

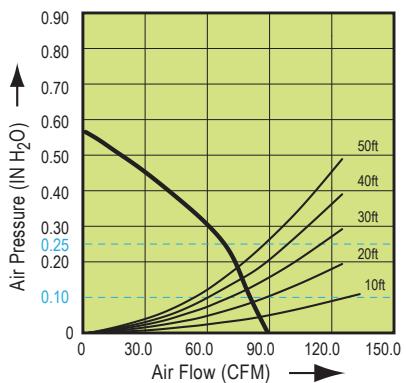
# Delta Breez Fan Curves

## BreezSignature Fan Curves (presented 6 inch Duct)

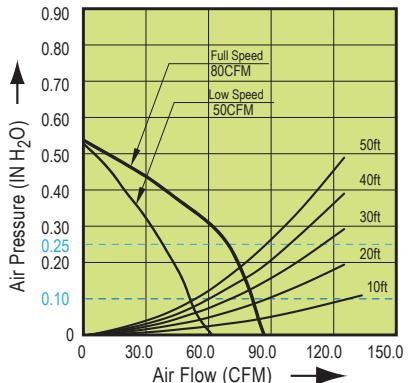


## BreezGreenBuilder Fan Curves

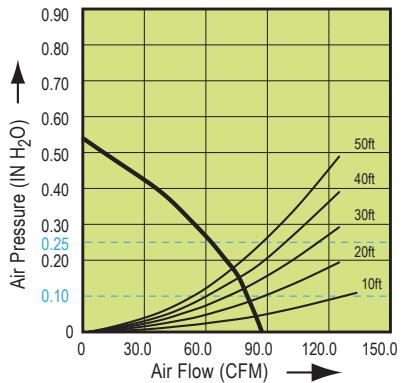
**GBR80 Fan Curve**



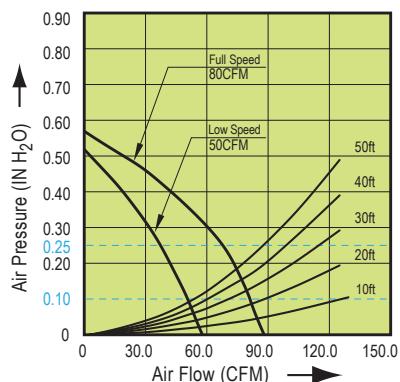
**GBR80H Fan Curve**



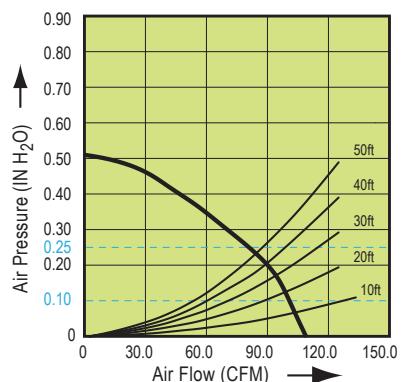
**GBR80LED Fan Curve**



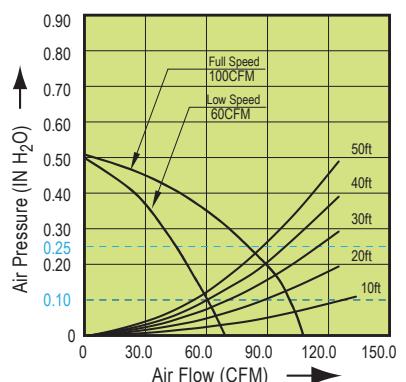
**GBR80HLED Fan Curve**



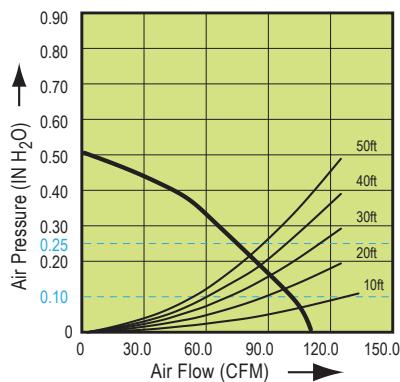
**GBR100 Fan Curve**



**GBR100H Fan Curve**

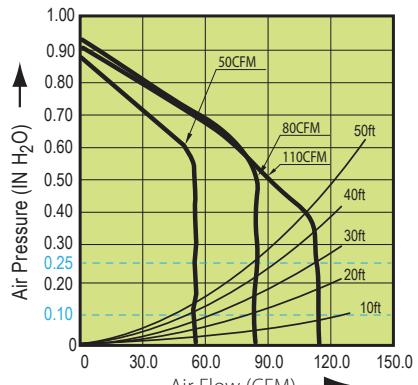


**GBR100LED Fan Curve**

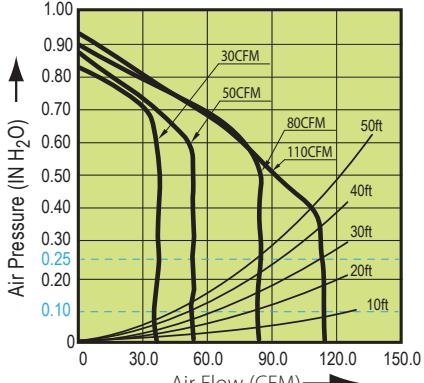


## BreezElite Fan Curves

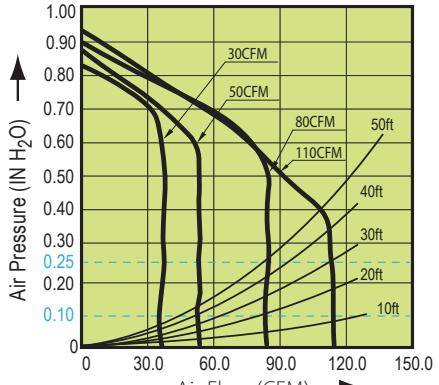
**ELT50-110 Fan Curve**

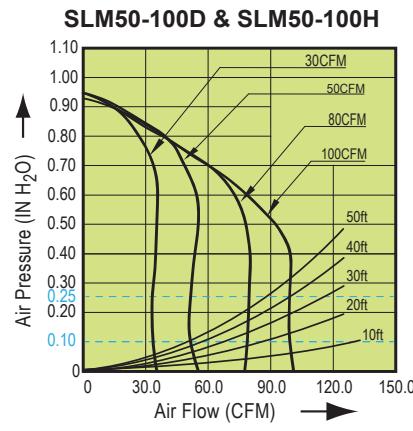
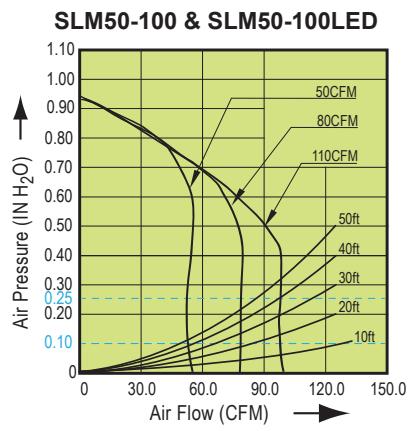
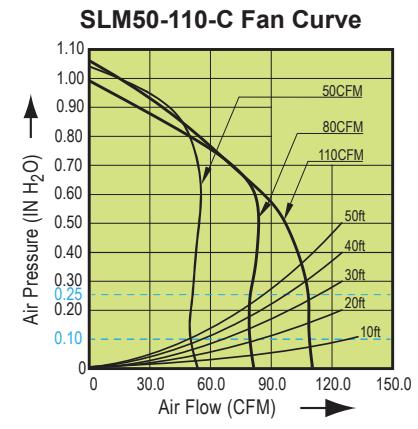
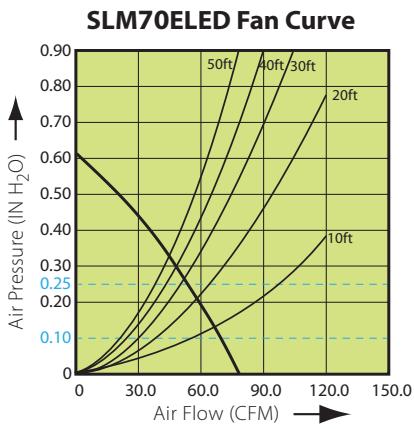
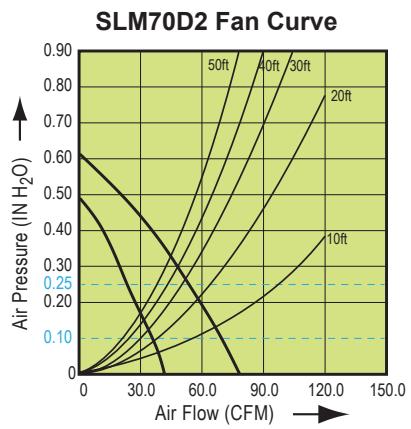
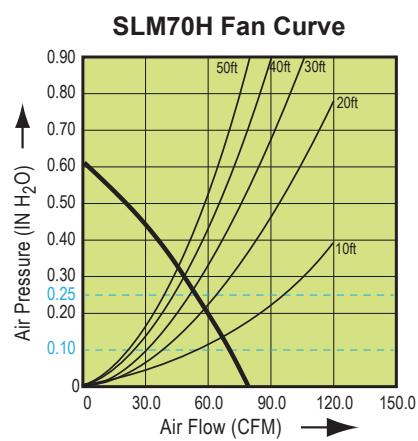
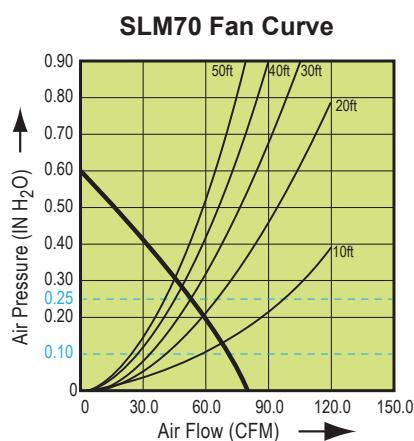
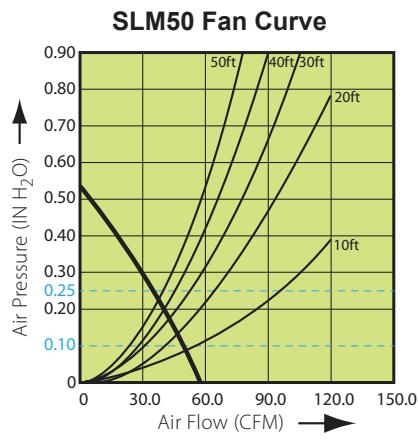


**ELT50-110D / ELT50-110H  
ELT50-110MH Fan Curve**



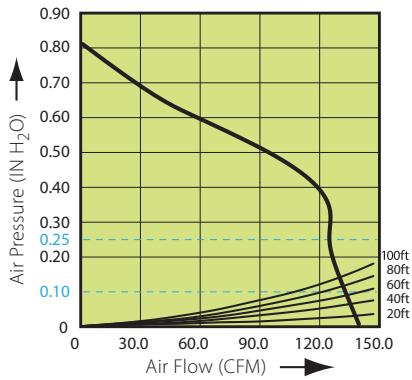
**ELT50-110DLED / ELT50-110HLED  
ELT50-110MHLED Fan Curve**



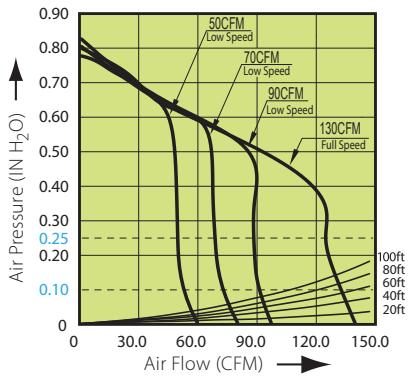


## BreezSmart Fan Curves

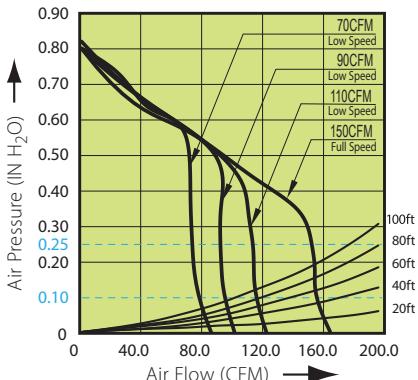
### SMT130 Fan Curve



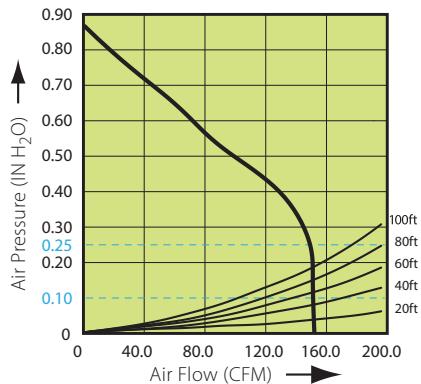
### SMT130H & SMT130M Fan Curve



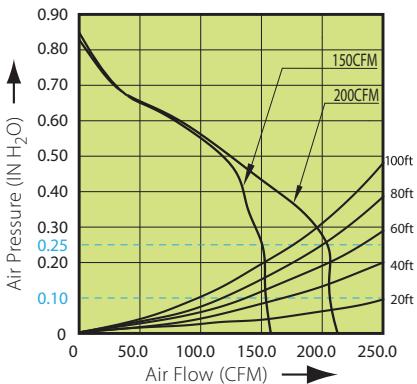
### SMT150D Fan Curve



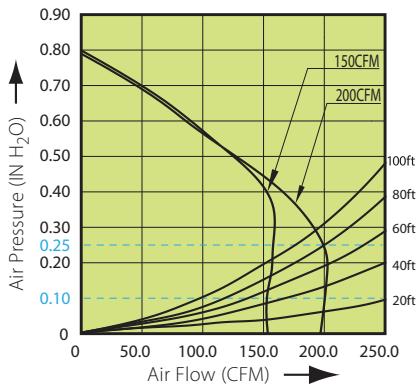
### SMT150LED Fan Curve



### SMT150-200 Fan Curve

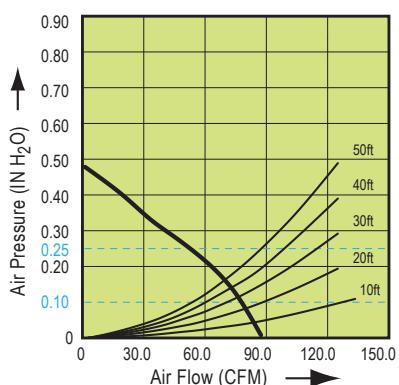


### SMT150-200LED Fan Curve

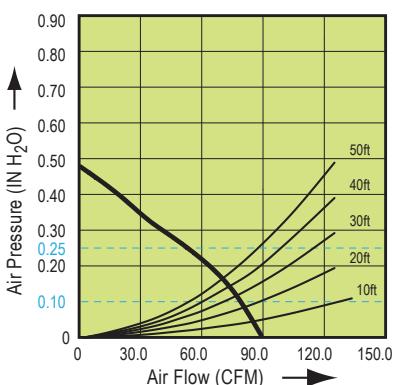


## BreezRadiance Fan Curve

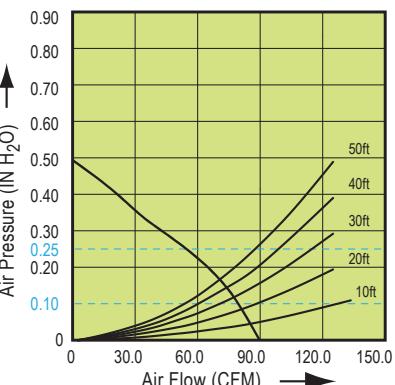
### RAD80 Fan Curve



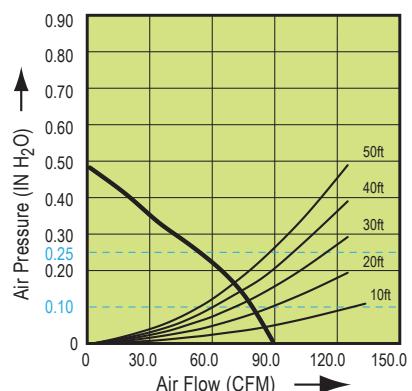
### RAD80L Fan Curve



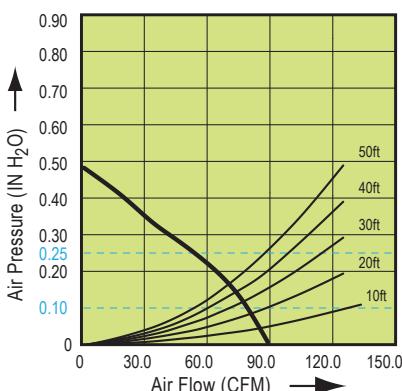
### RAD80-DGL Fan Curve



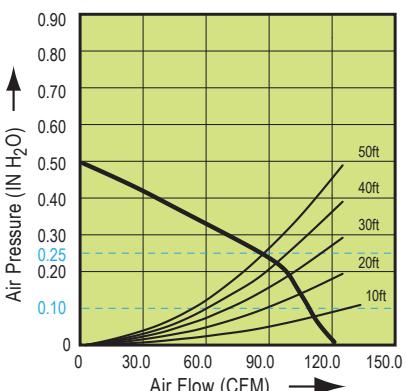
### RAD80ELED Fan Curve



### RAD80LED Fan Curve

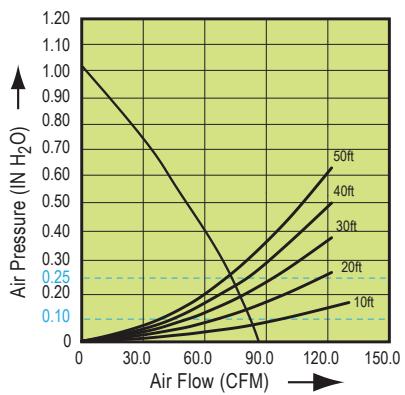


### RAD110LED Fan Curve



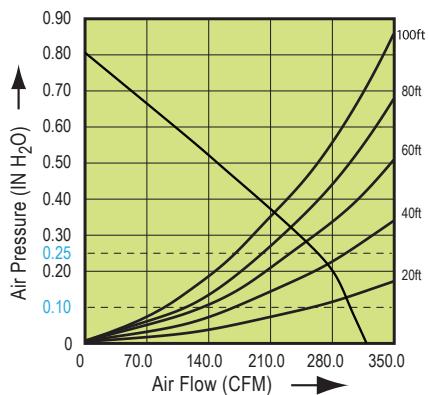
### BreezRecessed Fan Curves

#### REC80LED Fan Curve



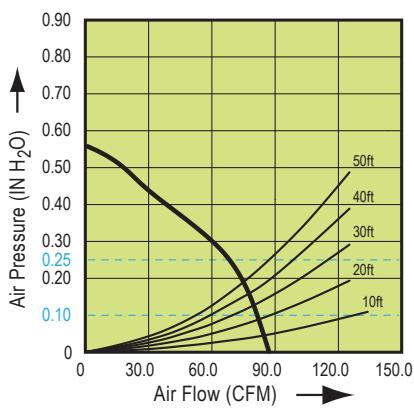
### BreezPro Fan Curve

#### Pro300 Fan Curve

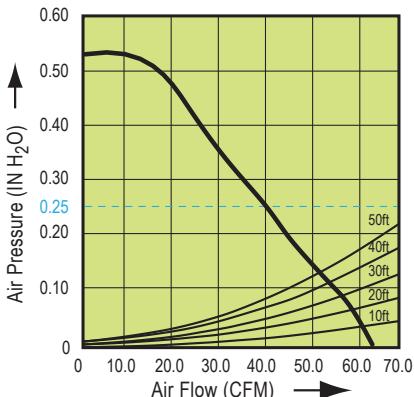


### BreezIntegrity Fan Curves

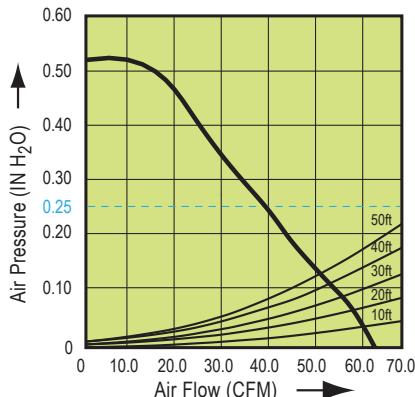
#### VFB080B4A1-LVDC Fan Curve



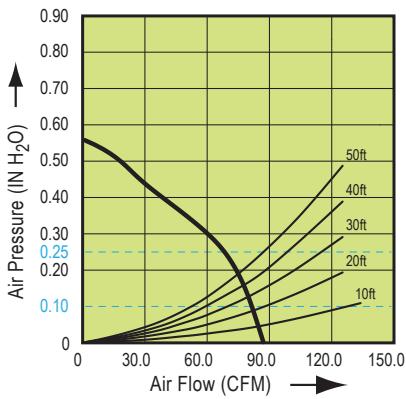
#### ITG50 Fan Curve



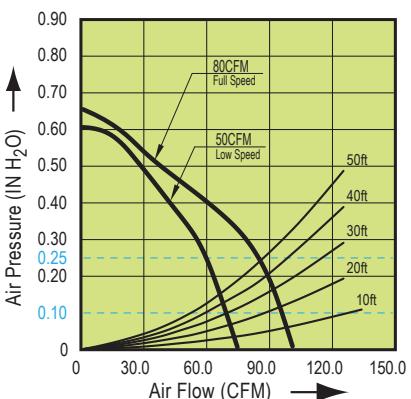
#### ITG50LED Fan Curve



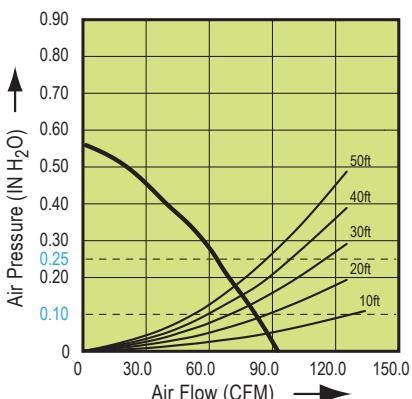
#### ITG80 Fan Curve



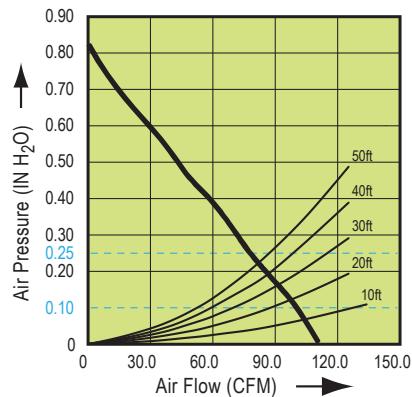
#### ITG80H Fan Curve



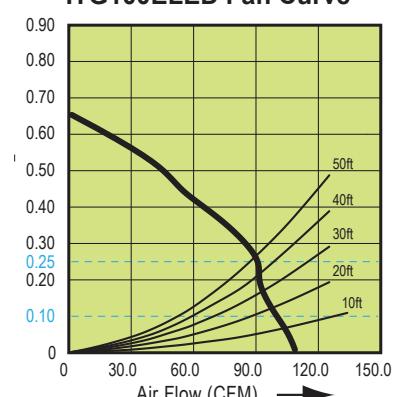
#### ITG80LED Fan Curve



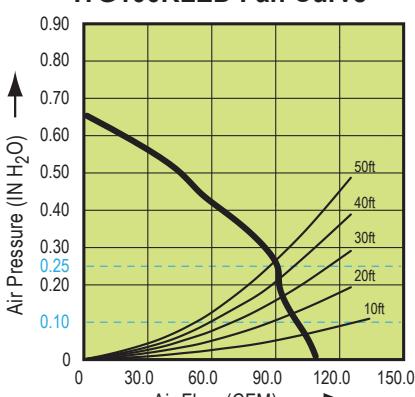
#### ITG100 Fan Curve



#### ITG100ELED Fan Curve



#### ITG100RLED Fan Curve



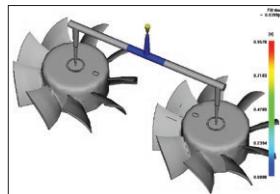
# COMPREHENSIVE TESTING ENSURES RELIABILITY

Testing procedures for ventilation fan reliability verification are conducted before, during and after production. Customers can rest easy, knowing the product's durability and long lifespan.

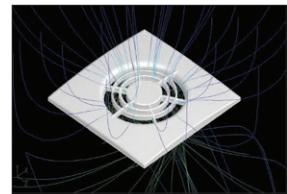
## Design and Analysis Technology

Delta's design and analysis technology utilizes 3D and 2D tools to conduct thorough examinations during the design and production phases. Software simulations help enable the highest standards of performance.

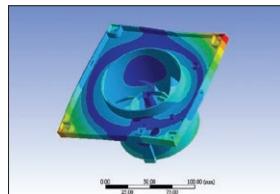
**Moldflow Analysis Software**  
Plastic mold



**Aerodynamic Simulation Software**  
Fan blade curve design and air flow analysis



**Structure Simulation Software**  
Structural analysis for stress and vibration



**Semi-Anechoic Chamber**  
Noise testing for sound pressure and sound quality

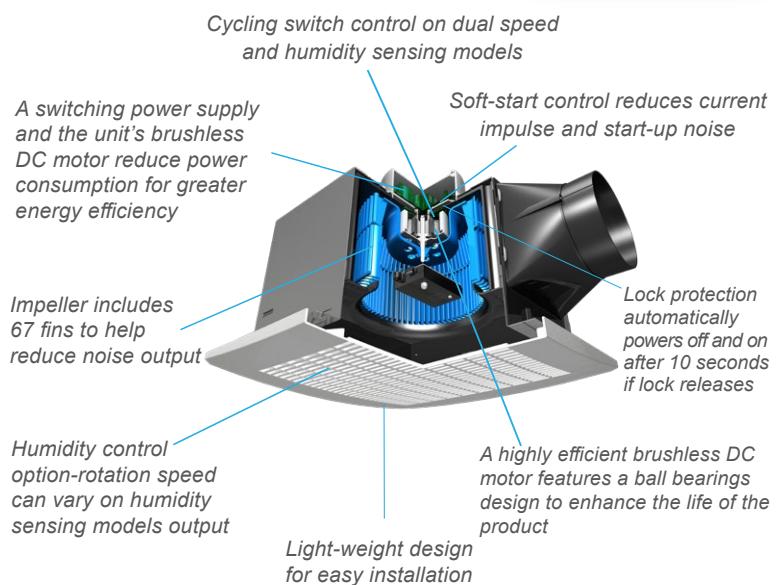


## Physical Testing for Ventilation Fan Reliability

Laboratory testing of Delta Breez products analyzes functionality and durability under harsh conditions, as well as construction for long life. The Basic Function Test checks current, speed and noise. The Safety Test includes leakage current, Hipot (high potential), ground bond and insulation testing. Comprehensive reliability testing continues with:

- Low Temperature and High Temp/Rating Voltage on/off Test
- Temperature Cycling and Power Switching
- Impeller Locked Test
- Thermal Shock
- Humidity Exposure
- Water Spray
- Random Vibration and Drop (packing)
- Operational and Non-operational Vibration
- Mechanical Shock
- Life Test

## Brushless DC Motor Fan Highlights



# PRODUCT SELECTION GUIDE: FIND THE MOST SUITABLE FAN

	Model #	Air Flow (CFM)	Duct Size	Description	
Signature	SIG80-110	80-110	6 inches	High Speed Options Fan	
	SIG80-110LED	80-110	6 inches	Fan/Dimmable LED Light/Night-Light	
	SIG80-110ELED	80-110	6 inches	Fan/Edge-lit Dimmable LED Light w/ adjustable color temperature	
	SIG80-110D	80-110	6 inches	Fan with Dual Speed	
	SIG80-110DLED	80-110	6 inches	Fan/Dimmable LED Light/Night-Light w/Dual Speed	 
	SIG80-110H	80-110	6 inches	Fan with Humidity Sensor	
	SIG80-110HLED	80-110	6 inches	Fan/Dimmable LED Light/Night-Light w/ Humidity Sensor	 
	SIG80-110MH	80-110	6 inches	Fan with Motion & Humidity Sensor	 
	SIG80-110MHLED	80-110	6 inches	Fan/ Dimmable LED Light/Night-Light with Motion & Humidity Sensor	  
	SIG80	80	4 inches	Single Speed	
Smart	SIG80D	80	4 inches	Fan with Dual Speed	
	SIG110	110	4 inches	Single Speed	
	SMT130	130	6 inches	Single Speed	
	SMT130M	130	6 inches	Fan with Motion Sensor	
	SMT130H	130	6 inches	Fan with Humidity Sensor	
	SMT150D	150	6 inches	Fan with Dual Speed	
	SMT150LED	150	6 inches	Fan/ Dimmable LED Light / Night-Light	
Recessed	SMT150-200	150-200	6 inches	High Speed Options Fan	
	SMT150-200LED	150-200	6 inches	Fan/Dimmable LED Light w/ adjustable color temperature	
Recessed	REC80LED	80	4 inches	Fan/Dimmable LED Light	
Elite	ELT50-110	50-110	4 inches	High Speed Options Fan	
	ELT50-110LED	50-110	4 inches	Fan/Dimmable LED Light	
	ELT50-110D	50-110	4 inches	Fan with Dual Speed	
	ELT50-110DLED	50-110	4 inches	Fan/Dimmable LED Light with Dual Speed	 
	ELT50-110H	50-110	4 inches	Fan with Humidity Sensor	
	ELT50-110HLED	50-110	4 inches	Fan/Dimmable LED Light with Humidity Sensor	 
	ELT50-110MH	50-110	4 inches	Fan with Motion and Humidity Sensor	 
	ELT50-110MHLED	50-110	4 inches	Fan/Dimmable LED Light w/ Motion and Humidity Sensor	  
Professional	Pro300	300	6 inches	Single Speed	

 LED LED Light

 Dimmable LED Light

 Adjustable motion sensor

 Adjustable humidity sensor

 Adjustable dual speed

Motor	Noise (Sones)	Energy Use (Watts)	Energy Efficiency (CFM/Watts)	Electric Bill <sup>1</sup>	ENERGY STAR	ENERGY STAR	Most Efficient 2025		MEETS & EXCEEDS ASHRAE 62.2 REQUIREMENTS	MEETS & EXCEEDS ASHRAE 62.2 REQUIREMENTS
							Intermittent	Continuous		
DC	<0.3	6.2	15.4	\$6.52	Y	Y	Y	Y		
DC	<0.3	6.8 (Fan Only)	13.8	\$7.15	Y			Y		
DC	<0.3	7.5 (Fan Only)	11.7	\$7.89	Y			Y		
DC	<0.3	6.2	15.4	\$6.50	Y	Y	Y	Y		
DC	<0.3	6.8 (Fan Only)	13.8	\$7.20	Y			Y		
DC	<0.3	6.2	15.4	\$6.50	Y	Y	Y	Y		
DC	<0.3	6.8 (Fan Only)	13.8	\$7.20	Y			Y		
DC	<0.3	6.2	15.4	\$6.50	Y	Y	Y	Y		
DC	<0.3	6.8 (Fan Only)	13.8	\$7.20	Y			Y		
DC	<0.3	8.7	9.7	\$9.15	Y			Y		
DC	<0.3	8.7	9.7	\$9.15	Y			Y		
DC	<0.3	13.6	9.0	\$14.31	Y			Y		
DC	<0.3	11.6	11.2	\$12.10	Y			Y		
DC	<0.3	11.6	11.2	\$12.10	Y			Y		
DC	<0.3	11.6	11.2	\$12.10	Y			Y		
DC	<0.3	16.9	8.8	\$17.63	Y			Y		
DC	0.5	17.6 (Fan Only)	8.5	\$18.51	Y			Y		
DC	0.4	14.0	10.7	\$14.71	Y			Y		
DC	0.5	15.0 (Fan Only)	10.0	\$15.77	Y			Y		
DC	1.5	14.5 (Fan only)	6.1	\$15.25	Y			Y		
DC	0.5	7.0	11.4	\$7.36	Y			Y		
DC	0.5	7.0 (Fan Only)	11.4	\$7.36	Y			Y		
DC	0.5	7.0	11.4	\$7.36	Y			Y		
DC	0.5	7.0 (Fan Only)	11.4	\$7.36	Y			Y		
DC	0.5	7.0	11.4	\$7.36	Y			Y		
DC	0.5	7.0 (Fan Only)	11.4	\$7.36	Y			Y		
DC	0.5	7.0	11.4	\$7.36	Y			Y		
DC	0.5	7.0 (Fan Only)	11.4	\$7.36	Y			Y		
DC	2.0	41	7.3	\$43.09	Y			Y		



<sup>1</sup> Annual Energy Cost per Fan (24/7). Calculations based upon U.S. average retail electricity and HVI testing labs. Actual results may vary.

# PRODUCT SELECTION GUIDE: FIND THE MOST SUITABLE FAN

	Model #	Air Flow (CFM)	Duct Size	Description	
GreenBuilder	GBR80	80	4 inches	Single Speed	
	GBR80H	80	4 inches	Fan with Humidity Sensor	
	GBR80HLED	80	4 inches	Fan/Dimmable LED Light with Humidity Sensor	 
	GBR80LED	80	4 inches	Fan/Dimmable LED Light	
	GBR100	100	4 inches	Single Speed	
	GBR100H	100	4 inches	Fan with Humidity Sensor	
	GBR100LED	100	4 inches	Fan/Dimmable LED Light	
Slim	SLM50	50	3 inches	Single Speed	
	SLM70	70	3 inches	Single Speed	
	SLM70ELED	70	3 inches	Fan with Edge-Lit Dimmable LED Light	
	SLM70H	70	3 inches	Fan with Humidity Sensor	
	SLM70D2	70	3 inches	Fan with Dual Speed	
	SLM50-110-C	50-110	4 inches Oval	High Speed Options Fan	
	SLM50-100	50-100	4 inches Oval	High Speed Options Fan	
	SLM50-100H	50-100	4 inches Oval	Fan with Humidity Sensor	
	SLM50-100D	50-100	4 inches Oval	Fan with Dual Speed	
Integrity	ITG50	50	4 inches	Single Speed	
	ITG50LED	50	4 inches	Fan/Dimmable LED Light	
	ITG80	80	4 inches	Single Speed	
	ITG80H	80	4 inches	Fan with humidity Sensor	
	ITG80LED	80	4 inches	Fan/Dimmable LED Light	
	ITG80RLED-ADJ	80	4 inches	Fan/Dimmable LED Light, Round, Adjustable Color Temperature	
	ITG100	100	4 inches	Single Speed	
	ITG100ELED	100	4 inches	Fan/Edge-lit Dimmable LED Light	
	ITG100RLED	100	4 inches	Fan/Edge-Lit Dimmable LED Light, Flat Round Panel	
Radiance	RAD80	80	4 inches	Fan with Heater	
	RAD80L	80	4 inches	Fan/Light Combo with heater	 
	RAD80-DGL	80	4 inches	Fan/Designer Grille with heater	
	RAD80ELED	80	4 inches	Fan/Edge-Lit Dimmable LED Light with heater	 
	RAD80LED	80	4 inches	Fan/Dimmable LED Light with Heater	 
	RAD110LED	110	4 inches	Fan/Dimmable LED Light with Heater	 
Fresh	FRS200	30-200	6 inches	High Speed Supply Fan	
	FRS200HT	30-200	6 inches	Smart Sensing Supply Fan – Humidity and Temperature Control	
	VEB120S	30-120	6 inches	Delta Energy Recovery Ventilator	
	VEB165S	30-165	6 inches	Delta Energy Recovery Ventilator	

 LED LED Light

 Dimmable LED Light

 Adjustable motion sensor

 Adjustable humidity sensor

 Adjustable dual speed

Motor	Noise (Sones)	Energy Use (Watts)	Energy Efficiency (CFM/Watts)	Electric Bill <sup>1</sup>					Intermittent	Continuous
DC	0.8	10.5	7.6	\$10.95	Y				Y	Y
DC	0.8	9.7	8.2	\$10.20	Y				Y	Y
DC	0.8	11.0 (Fan only)	7.2	\$11.57	Y				Y	Y
DC	0.8	11.0 (Fan only)	7.2	\$11.57	Y				Y	Y
DC	1.4	12.6	7.9	\$13.15	Y				Y	
DC	1.4	12.6	7.9	\$13.15	Y				Y	
DC	1.5	13.6 (Fan only)	7.3	\$14.31	Y				Y	
DC	1.0	6.4	11.6	\$6.73	Y	Y				Y
DC	2.0	13.2	5.8	\$13.88	Y				Y	
DC	2.0	13.2 (Fan Only)	6.0	\$13.88	Y				Y	Y
DC	2.0	13.2	5.8	\$13.88	Y				Y	
DC	1.1	11.3	6.1	\$11.88	Y				Y	Y
DC	0.4	6.0	8.3	\$6.31	Y				Y	Y
DC	0.4	5.2	9.6	\$5.47	Y				Y	Y
DC	0.4	5.2	9.6	\$5.47	Y				Y	Y
DC	0.4	5.2 (Fan Only)	9.6	\$5.47	Y				Y	Y
DC	0.7	5.0	12.5	\$5.26	Y	Y				Y
DC	0.7	5.0 (Fan Only)	12.5	\$5.26	Y	Y				Y
DC	1.3	10.0	8.4	\$9.98	Y				Y	
DC	1.5	10.0	9.0	\$10.51	Y				Y	Y
DC	1.3	11.3 (Fan Only)	7.2	\$11.88	Y				Y	
DC	1.5	11.5	7.2	\$11.88	Y				Y	
DC	1.5	17.0	7.6	\$17.88	Y				Y	
DC	1.5	17.0 (Fan Only)	7.5	\$17.88	Y				Y	
DC	1.5	17.0 (Fan Only)	7.5	\$17.88	Y				Y	
DC	1.5	11.7	7.0	\$12.31					Y	
DC	1.5	11.7	7.0	\$12.31					Y	
DC	1.5	11.7	7.0	\$12.31					Y	
DC	1.5	11.7	7.0	\$12.31					Y	
DC	1.5	11.7 (Fan Only)	7.0	\$12.31					Y	
DC	0.7	12.0 (Fan Only)	11	\$12.62					Y	Y
DC	N/A	33.0	6.0	\$34.71	Y	Y			Y	Y
DC	N/A	42.6	4.6	\$44.77	Y	Y			Y	Y
DC	N/A	75	1.4	\$78.88					Y	Y
DC	N/A	65	1.9	\$68.37	Y				Y	Y



<sup>1</sup> Annual Energy Cost per Fan (24/7). Calculations based upon U.S. average retail electricity and HVI testing labs. Actual results may vary.

# EQUIVALENT DUCT LENGTHS

This chart shows Equivalent Duct Lengths (EDL) for BreezSignature, BreezSmart, BreezRecessed, BreezElite, BreezGreenBuilder, BreezSlim, BreezIntegrity, BreezRadiance, BreezProfessional, and BreezFresh models by CFM (airflow) output for duct lengths from 50ft to 300ft.

	<b>Breez Models</b>	<b>Description</b>	<b>Duct Size</b>	<b>40ft</b>	<b>60ft</b>	<b>80ft</b>	<b>100ft</b>
<b>Signature</b>	<b>SIG80-110</b> (80-110 CFM)	High Speed Options Fan	6 inches	110 CFM	110 CFM	110 CFM	110 CFM
	<b>SIG80-110LED</b> (80-110 CFM)	Fan/ Dimmable LED Light/Night-Light	6 inches	110 CFM	110 CFM	110 CFM	110 CFM
	<b>SIG80-110ELED</b> (80-110 CFM)	Fan/Edge-lit Dimmable LED Light w/ adjustable color temperature	6 inches	110 CFM	110 CFM	110 CFM	110 CFM
	<b>SIG80-110D</b> (80-110 CFM)	Dual Speed	6 inches	110 CFM	110 CFM	110 CFM	110 CFM
	<b>SIG80-110DLED</b> (80-110 CFM)	Fan/ Dimmable LED Light/Night-Light with Dual Speed Options Fan	6 inches	110 CFM	110 CFM	110 CFM	110 CFM
	<b>SIG80-110H</b> (80-110 CFM)	Fan with Humidity Sensor	6 inches	110 CFM	110 CFM	110 CFM	110 CFM
	<b>SIG80-110HLED</b> (80-110 CFM)	Fan/Dimmable LED Light/Night-Light w/ Humidity Sensor	6 inches	110 CFM	110 CFM	110 CFM	110 CFM
	<b>SIG80-110MH</b> (80-110 CFM)	Fan with Motion & Humidity Sensor	6 inches	110 CFM	110 CFM	110 CFM	110 CFM
	<b>SIG80-110MHLED</b> (80-110 CFM)	Fan/ Dimmable LED Light/Night-Light w/ Motion and Humidity Sensor	6 inches	110 CFM	110 CFM	110 CFM	110 CFM
	<b>SIG80</b> (80 CFM)	Single Speed	4 inches	70 CFM	70 CFM	60 CFM	60 CFM
	<b>SIG80D</b> (80 CFM)	Dual Speed	4 inches	70 CFM	70 CFM	60 CFM	60 CFM
	<b>SIG110</b> (110 CFM)	Single Speed	4 inches	90 CFM	90 CFM	80 CFM	80 CFM
<b>Smart</b>	<b>SMT130</b> (130 CFM)	Single Speed	6 inches	130 CFM	130 CFM	120 CFM	120 CFM
	<b>SMT130H</b> (130 CFM)	Multi-Speed with Humidity Sensor	6 inches	130 CFM	130 CFM	120 CFM	120 CFM
	<b>SMT130M</b> (130 CFM)	Multi-Speed with Motion Sensor	6 inches	130 CFM	130 CFM	120 CFM	120 CFM
	<b>SMT150</b> (150 CFM)	Single Speed	6 inches	150 CFM	150 CFM	140 CFM	140 CFM
	<b>SMT150D</b> (150 CFM)	Dual Speed	6 inches	150 CFM	150 CFM	140 CFM	140 CFM
	<b>SMT150LED</b> (150 CFM)	Fan/Dimmable LED Light / Night-Light	6 inches	150 CFM	150 CFM	150 CFM	150 CFM
	<b>SMT150-200</b> (200 CFM)	Single Speed	6 inches	200 CFM	200 CFM	200 CFM	190 CFM
	<b>SMT150-200LED</b> (200 CFM)	Fan/Dimmable LED Light w/ adjustable color temperature	6 inches	200 CFM	200 CFM	200 CFM	190 CFM
<b>Recessed</b>	<b>REC80LED</b> (80 CFM)	Fan/Dimmable LED Light	4 inches	70 CFM	70 CFM	60 CFM	60 CFM
<b>Elite</b>	<b>ELT50-110</b> (50-110 CFM)	High Speed Options Fan	4 inches	110 CFM	105 CFM	95 CFM	90 CFM
	<b>ELT50-110LED</b> (50-110 CFM)	Fan/Dimmable LED Light	4 inches	110 CFM	105 CFM	95 CFM	90 CFM
	<b>ELT50-110D</b> (50-110 CFM)	Dual Speed	4 inches	110 CFM	105 CFM	95 CFM	90 CFM
	<b>ELT50-110DLED</b> (50-110 CFM)	Fan/Dimmable LED Light with Dual Speed	4 inches	110 CFM	105 CFM	95 CFM	90 CFM
	<b>ELT50-110H</b> (50-110 CFM)	Fan with Humidity Sensor	4 inches	110 CFM	105 CFM	95 CFM	90 CFM
	<b>ELT50-110HLED</b> (50-110 CFM)	Fan/Dimmable LED Light w/ Humidity Sensor	4 inches	110 CFM	105 CFM	95 CFM	90 CFM
	<b>ELT50-110MH</b> (50-110 CFM)	Fan with Motion and Humidity Sensor	4 inches	110 CFM	105 CFM	95 CFM	90 CFM
	<b>ELT50-110MHLED</b> (50-110 CFM)	Fan/Dimmable LED Light w/ Motion and Humidity Sensor	4 inches	110 CFM	105 CFM	95 CFM	90 CFM
<b>GreenBuilder</b>	<b>GBR80</b> (80 CFM)	Single Speed	4 inches	70 CFM	70 CFM	60 CFM	60 CFM
	<b>GBR80H</b> (80 CFM)	Fan with Humidity Sensor	4 inches	70 CFM	70 CFM	60 CFM	60 CFM
	<b>GBR80HLED</b> (80 CFM)	Fan/Dimmable LED Light w/ Humidity Sensor	4 inches	70 CFM	70 CFM	60 CFM	60 CFM
	<b>GBR80LED</b> (80 CFM)	Fan/Dimmable LED Light	4 inches	70 CFM	70 CFM	60 CFM	60 CFM
	<b>GBR100</b> (100 CFM)	Single Speed	4 inches	80 CFM	70 CFM	70 CFM	60 CFM
	<b>GBR100H</b> (100 CFM)	Fan with Humidity Sensor	4 inches	80 CFM	70 CFM	70 CFM	60 CFM
	<b>GBR100LED</b> (100 CFM)	Fan/ Dimmable LED Light	4 inches	80 CFM	70 CFM	70 CFM	60 CFM

## EQUIVALENT DUCT LENGTHS (cont.)

	Breez Models	Description	Duct Size	40ft	60ft	80ft	100ft
Slim	SLM50 (50 CFM)	Single Speed	3 inches	40 CFM	30 CFM	30 CFM	30 CFM
	SLM70 (70 CFM)	Single Speed	3 inches	50 CFM	40 CFM	30 CFM	30 CFM
	SLM70H (70 CFM)	Fan with Humidity Sensor	3 inches	50 CFM	40 CFM	30 CFM	30 CFM
	SLM70D2 (70 CFM)	Dual Speed	3 inches	50 CFM	40 CFM	30 CFM	30 CFM
	SLM50-110-C (50-110 CFM)	High Speed Options Fan	4 inches Oval	110 CFM	100 CFM	100 CFM	90 CFM
	SLM50-100 (50-100 CFM)	High Speed Options Fan	100 CFM	100 CFM	100 CFM	100 CFM	90 CFM
	SLM50-100H (50-100 CFM)	Fan with Humidity Sensor	100 CFM	100 CFM	100 CFM	100 CFM	90 CFM
	SLM50-100D (50-100 CFM)	Dual Speed	100 CFM	100 CFM	100 CFM	100 CFM	90 CFM
	SLM50-100LED (50-100 CFM)	Fan/Dimmable LED Light	100 CFM	100 CFM	100 CFM	100 CFM	90 CFM
Integrity	ITG50 (50 CFM)	Single Speed	4 inches	50 CFM	40 CFM	40 CFM	40 CFM
	ITG50LED (50 CFM)	Fan/ Dimmable LED Light	4 inches	50 CFM	40 CFM	40 CFM	40 CFM
	ITG80 (80 CFM)	Single Speed	4 inches	70 CFM	70 CFM	60 CFM	60 CFM
	ITG80H (80 CFM)	Fan with Humidity Sensor	4 inches	70 CFM	70 CFM	60 CFM	60 CFM
	ITG80LED (80 CFM)	Fan/ Dimmable LED Light	4 inches	70 CFM	70 CFM	60 CFM	60 CFM
	ITG80RLED-ADJ (80 CFM)	Fan/Dimmable LED Light, Round, Adjustable Color Temperature	4 inches	70 CFM	70 CFM	60 CFM	60 CFM
	ITG100 (100 CFM)	Single Speed	4 inches	80 CFM	80 CFM	70 CFM	70 CFM
	ITG100ELED (100 CFM)	Fan/Edge-lit Dimmable LED Light	4 inches	80 CFM	80 CFM	70 CFM	70 CFM
	ITG100RLED (100 CFM)	Fan/LED Edge-Lit Dimmable, Flat Round Panel	4 inches	80 CFM	80 CFM	70 CFM	70 CFM
Radiance	RAD80 (80 CFM)	Fan with Heater	4 inches	70 CFM	60 CFM	60 CFM	50 CFM
	RAD80L (80 CFM)	Fan/Light Combo with heater	4 inches	70 CFM	60 CFM	60 CFM	50 CFM
	RAD80-DGL (80 CFM)	Fan with Heater	4 inches	70 CFM	60 CFM	60 CFM	50 CFM
	RAD80ELED (80 CFM)	Fan/Edge-lit Dimmable LED Light w/ Heater	4 inches	70 CFM	60 CFM	60 CFM	50 CFM
	RAD80LED (80 CFM)	Fan/Dimmable LED Light with Heater	4 inches	70 CFM	60 CFM	60 CFM	50 CFM
	RAD110LED (110 CFM)	Fan/Dimmable LED Light with Heater	4 inches	90 CFM	80 CFM	70 CFM	70 CFM
Professional	Pro300 (300 CFM)	Single Speed	6 inches	270 CFM	220 CFM	230 CFM	210 CFM
Fresh	FRS200 (200 CFM)	High Speed Inline Fan	6 inches	200 CFM	200 CFM	200 CFM	190 CFM
	FRS200HT (200 CFM)	Smart Sensing Supply Fan with Humidity and Temperature Control	6 inches	200 CFM	200 CFM	200 CFM	190 CFM
	VEB120S (30-120 CFM)	Delta Energy Recovery Ventilator	6 inches	136 CFM	135 CFM	133 CFM	132 CFM
	VEB165S (30-165 CFM)	Delta Energy Recovery Ventilator	6 inches	190 CFM	185 CFM	181 CFM	178 CFM

## The Right Fan for Any Ventilation Need

This quick guideline chart will help you match the correct bath fan size for your room size and type. HVI recommends the following intermittent ventilation rates for bathrooms:

Bathroom Size	Calculation Formula	Ventilation Rate Required
Less than 100 sq ft	1 CFM per sq ft of floor area	A minimum of 50 CFM
More than 100 sq ft	Add the CFM requirement for each fixture	Toilet 50 CFM Shower 50 CFM Bathtub 50 CFM Jetted Tub 100 CFM

Reference: <https://www.hvi.org/resources/publications/bathroom-ventilation/>



## Frequently Asked Questions (FAQs)

### Who is the Delta Group?

The Delta Group is the world's largest manufacturer of brushless DC motor fans and a leading provider of switching power supplies – a \$9 billion global company with 39 manufacturing facilities, 70 R&D labs and 169 sales offices worldwide and U.S. headquarters in Fremont, CA. Our company mission is "To provide innovative, clean and energy-efficient solutions for a better tomorrow" supported by a product portfolio that features a range of energy efficiency solutions including ventilation fans, small wind energy systems, solar panels, LED lighting, EV chargers, Industrial Automation products and Display Solution products. Delta's operations are ISO-9001, ISO-14001, ISO-14064, OHSAS-18001 and TS-16949 certified. Delta brushless DC motor fans are used in applications where precision is paramount. This includes consumer electronics products such as laptops, desktops, tablets and gaming systems from leading manufacturers.

Please visit our global website [www.deltaww.com](http://www.deltaww.com) for a more comprehensive look at Delta operations, products and capabilities.

### Why is a brushless DC motor better than an AC motor?

#### Does it require any special installation or wiring?

Delta's brushless DC motor exhaust fans are engineered to run 70% longer and consume 74% less power than AC motor exhaust fans, which reduces replacement costs and saves on utility bills. No mechanical brushing means quieter operation and less wear on motor components. Delta Breez fans have been tested to run continuously for a minimum of 70,000 hours.

No special wiring is needed. There is a transformer built into the fan that automatically switches the power supply from AC to DC.

Delta's DC Breez ventilation fans are installed just like any AC motor fans.

### What is the "Soft Start" Function?

In the first 10 seconds the fan is powered on, the motor will softly and quickly ramp up to full speed. This is unlike an AC Motor, which simply jump-starts the fan. This quiet 'soft start' process helps reduce the wear on motor bearings to prolong fan life.

### What is the "Lock Protection" Function?

This unique function allows all Delta Breez ventilation fans to automatically power off when the impeller is abnormally locked. For example: when buildup of dirt and dust accumulates in the fan, the fan will attempt to restart itself in 5-10 seconds. If the impeller is still blocked, the fan will remain off -- this helps avoid the issue of over-heating or motor burnout, reducing the risk of fire.

### What is the purpose of the LED indicator light underneath the fan grille?

The light shows the user that the fan is in operation. If the fan has different functions available (i.e. humidity sensing, low speed, motion sensing), the light will change color indicating what mode the fan is in. The light will blink if the impeller gets obstructed, telling the user that the fan is not operating properly.

### What are CFM and sones?

CFM and sones are how bath fans are generally compared. CFM (cubic feet per minute) measures the amount or volume of 'air flow' – the amount of air extracted per minute when the fan is running. The amount of CFM needed is generally related to the size of the area ventilated. Please see the sizing guidelines.

Sone level represents how loud the fan is to the human ear. Doubling the sone value means double the noise. The average 80 CFM bath fan runs at 0.8~2.5 sones. Delta Breez 80 CFM fans run as low as <0.3 sones. At less than 0.3 sones, the fan is virtually silent. This is the lowest noise rating of any exhaust fan on the market. For reference, 1.0 sone is about as loud as a new computer or refrigerator. For more information, visit

<https://www.hvi.org/resources/videos/>

### How do I determine which bath fan I need – features and size?

#### Bathroom Ventilation

The following are Home Ventilating Institute (HVI) guidelines for ventilating both large and smaller bathrooms using intermittent or continuous ventilation.

#### Small rooms:

For bathrooms up to 100 square feet in area, HVI recommends that an exhaust fan provide 1 CFM per square foot (approximately eight air changes per hour) to properly ventilate the bathroom.

**Example:**

- Bathroom is 8' x 5' (with 8' ceilings)  
Multiply  $8 \times 5 = 40$  sq. ft.
- Bathroom area is 40 sq. ft.
- At 1 CFM per square foot the minimum recommendation is a fan rated at 40 CFM

**Larger rooms:**

For bathrooms above 100 square feet in area, HVI recommends a ventilation rate based on the number and type of fixtures present, according to the following table:

Toilet	50 CFM
Shower	50 CFM
Bath Tub	50 CFM
Jetted Tub	100 CFM

*Note: Enclosed toilet rooms must have an operable window or a fan for ventilation*

**Example:**

The bathroom is 20' x 12'. There is a tub (without jets), a shower enclosure and an enclosed toilet.

Each fixture requires 50 CFM:

Tub	50 CFM
Shower	50 CFM
Toilet	50 CFM
Total	150 CFM

*Data source: <https://www.hvi.org/resources/publications/bathroom-ventilation/>  
Or you can visit <https://www.hvi.org/resources/videos/>*

**How does the "Humidity Sensor" function operate?**

The fan runs at full speed until the user-adjustable humidity set-point is achieved, then automatically switches to the user set low speed for continuous run or off. The amber or blue color of the LED indicator light underneath the grille shows the humidity sensing mode or continuous low speed mode. Please consult the Installation & Operating Instruction manual for your particular fan model for more specific information.

**How does the "Motion Sensor" function operate?**

When motion is detected, the fan comes on at full speed. When the user leaves the room, the fan will continue running at full speed until user-preset delay time has passed. Then, the fan will automatically drop down to the pre-set low speed for continuous run or off. The green or amber color of LED indicator

light underneath the grille indicates continuous low speed or full speed mode. Please consult the Installation and Operating Instruction manual for your particular fan model for more specific information.

**Can I keep the housing of my old fan (non Delta fan) and just replace the fan motor with Breez?**

No. For proper performance, it is recommended that Delta Breez fan motors be used only with Delta Breez fan housing.

**Can I use a timer with the Delta Breez fan?**

Many Delta Breez models have built-in adjustable delay timers, so no external timer is needed. External timers can be used in conjunction with single-speed models only. Because Breez fans run on much lower wattage than other market ventilation fans, please contact Delta Breez customer service for a list of single-speed models and consult with a licensed electrician for compatibility.

**Do you sell switches or timers?**

No. Delta does not manufacture switches or timers, but these components are readily available in most major home improvement retailers or through your local contractor or supplier.

**Can the Delta Breez Fan/Light be installed with insulation around it?**

Yes, all Delta Breez fans are UL approved. Here is UL's testing protocol:

For Fan/lights, UL requires 8.5 inches of insulation on all sides (including top) of the product. Insulation shall be of the loose fill type and should have a thermal resistance per inch between 3.75-3.85 R (declared by the manufacturer) when conditioned to a density of 32.04 - 40.05 kg/m<sup>3</sup>. This scenario is equivalent to an approximate R value of R32. R40 is the max for Canadian installations.

For a fan only, there is no insulation limitation for fan without lighting except in Canada where the max value is R40.

**Can Delta fans be controlled by a voltage switch (RPM control)?**

No.

## **Is LED light replaceable or are replacements available?**

Delta Electronics designs our own LED modules. This is a customized LED module that cannot be replaced with an off-the-shelf, screw-in LED bulb from another manufacturer. The LED modules are designed to last a minimum of 30,000 hours, so the necessity for future replacement is unlikely. Delta Electronics has a 3-year limited warranty on every Delta designed LED module. If the LED module needs replacement outside of the warranty period, a replacement LED module can be purchased through our distributor partners or from Delta Customer Sales Support.

## **What are the built-in control functions and how do they work?**

### **Motion Sensing**

Green and amber LED indicator lights will show continuous low speed and full speed modes. The fan will run continuously at a user-preset lower level of CFM. When motion is detected, the fan will automatically change to full speed. When the user leaves the room, the fan will remain running at full speed until user-preset delay time has passed. The delay timer has adjustable preset positions of 0, 0.5, 5, 15, 30, 45 and 60 minutes. The fan will automatically drop down to a low speed after the pre-set time has elapse.

### **Humidity Sensing**

Blue and amber LED indicator lights show humidity control and full speed modes. The fan will operate in full speed mode or humidity control mode through the manual on and off switch. The adjustable humidity set points are from 50% to 90%. When in humidity control mode and the humidity is above the user-adjustable set-point, the fan will run at full speed. When the humidity is below the set-point, the fan runs continuously at a user-preset lower level of CFM.

## **Can Delta fans be installed in a slanted ceiling?**

No, installation of any Delta fan in a slanted ceiling is not recommended.

## **Is it OK to exhaust into the attic?**

No, the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) recommends exhausting only to the exterior of the home.

## **Can Delta fans be installed in a side wall?**

Yes, all Delta BreezSlim models, BreezGreenBuilder fan

only/fan with humidity sensor models, and BreezIntegrity fan only/fan with humidity sensor models are UL listed for both ceiling and wall-mount installation.

## **Can I install the Exhaust Fan / Light in the shower or tub enclosure?**

Yes, with Delta Breez Ventilation Fans, except BreezRadiance due to the heating element, are UL listed for use over the bathtub or shower when installed in a GFCI protected branch circuit.

## **How long do LEDs last?**

LEDs have a rated life of up to 30,000 hours. Used for 12 hours a day, a 30,000 bulb will last more than 6 years. Used 8 hours a day, it will last more than 10 years!

## **What is the primary use for the FRS200?**

The FRS200 is a fresh air supply fan that delivers outdoor air into the home at a rate of 30 to 200 CFM. When combined with the optional MERV13 filter, The FRS200 delivers Fresh “purified” air as the filter removes outdoor pollutants such as pollen, dust and other particles as small as PM2.5.

## **Is the FRS200 a balanced ventilation system?**

No, but when combined with a Delta Breez exhaust fans, the FRS200 can create a “balanced ventilation system”. Setting the exhaust fan(s) to remove the same volume of air as the FRS200 delivers, balances the positive pressure created by the FRS200 with the negative pressure created by the exhaust fan(s). A balanced ventilation system is thought to be the best ventilation system for home by most building scientists.

## **Can MERV13 filter and FRS200 purify the air in my home?**

Yes. When combined with the optional MERV13 filter, the FRS200 can remove indoor pollutants from air drawn in from one location in your home and deliver fresh filtered air back to a different location in the home.

## **How often will I need to change the FRS200 filter?**

Filter change frequency will depend on the amount of pollutants in the air being filtered. Areas with higher dust and in spring when pollen levels are higher, the filter will need to be changed more often. We recommend a minimum of 2 filter change

each year and as many as is necessary to maintain the flow rate the FRS200 is set to.

#### **Are Delta Breez fans ENERGY STAR qualified?**

Yes, Delta Breez fans are ENERGY STAR qualified. The only exception is BreezRadiance series with heater element for warmth and comfort.

#### **Are Delta Breez fans ASHRAE 62.2-2010 compliant?**

Yes, all Delta Breez fans are 62.2-2010 compliant for intermittent running. Most of the Delta Breez fan models are compliant for continuous running. Please see [www.deltabreez.com](http://www.deltabreez.com), Learning Center for a complete listing.

#### **Are Delta Breez fans UL listed and HVI certified?**

Yes, all Delta Breez fans are UL listed and are HVI certified.

#### **Do Delta Breez fans meet Title 24 requirements?**

Yes, all Delta Breez fans meet current Title 24 requirements.

#### **What is the Delta Breez Ventilation Fan Warranty?**

All Delta Breez Ventilation Fans have a 3-year limited warranty.

#### **How do I reach technical support and customer service?**

Technical support: (888) 979-9889

Email: [BreezTechSupport@deltaww.com](mailto:BreezTechSupport@deltaww.com)

Customer sales support: (877) 685-4384

Email: [BreezSalesSupport@deltaww.com](mailto:BreezSalesSupport@deltaww.com)

Fax: (510) 226-5098



Dealer Address:



Learn more about Delta Breez Ventilation Fans, the best indoor air quality solution for green construction.

**[www.deltabreez.com](http://www.deltabreez.com)**

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