



DELTA BREEZ IAQ SOLUTIONS
Perfectly Quiet. Perfectly Green.



BATHROOM VENTILATION FOR THE MODERN HOME





Award Winning Performance and Value

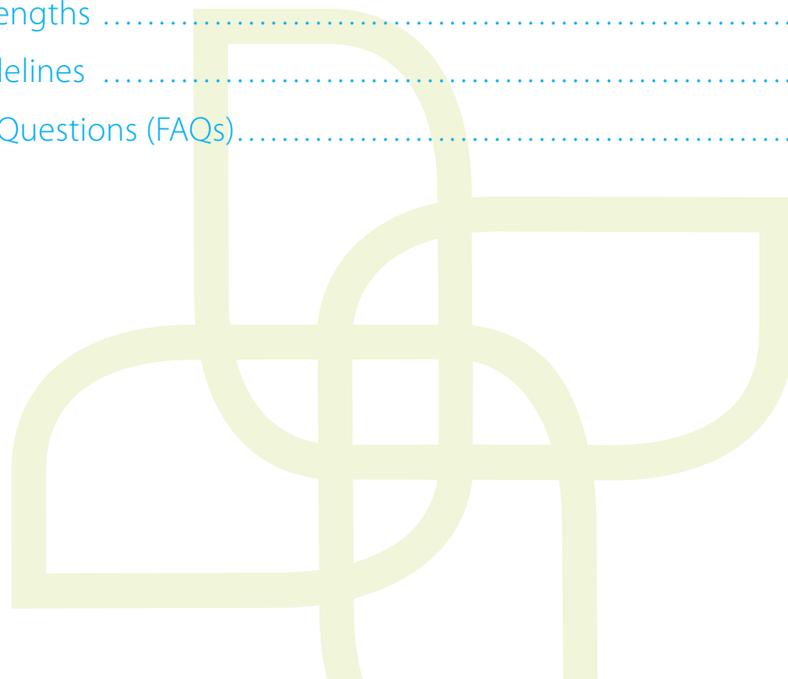
Delta Breez's Ventilation & Indoor Air Quality Solutions have been recognized with the **2019 ENERGY STAR® Partner of the Year for Sustained Excellence award**. This honor underscores our commitment to innovation, efficiency and performance.

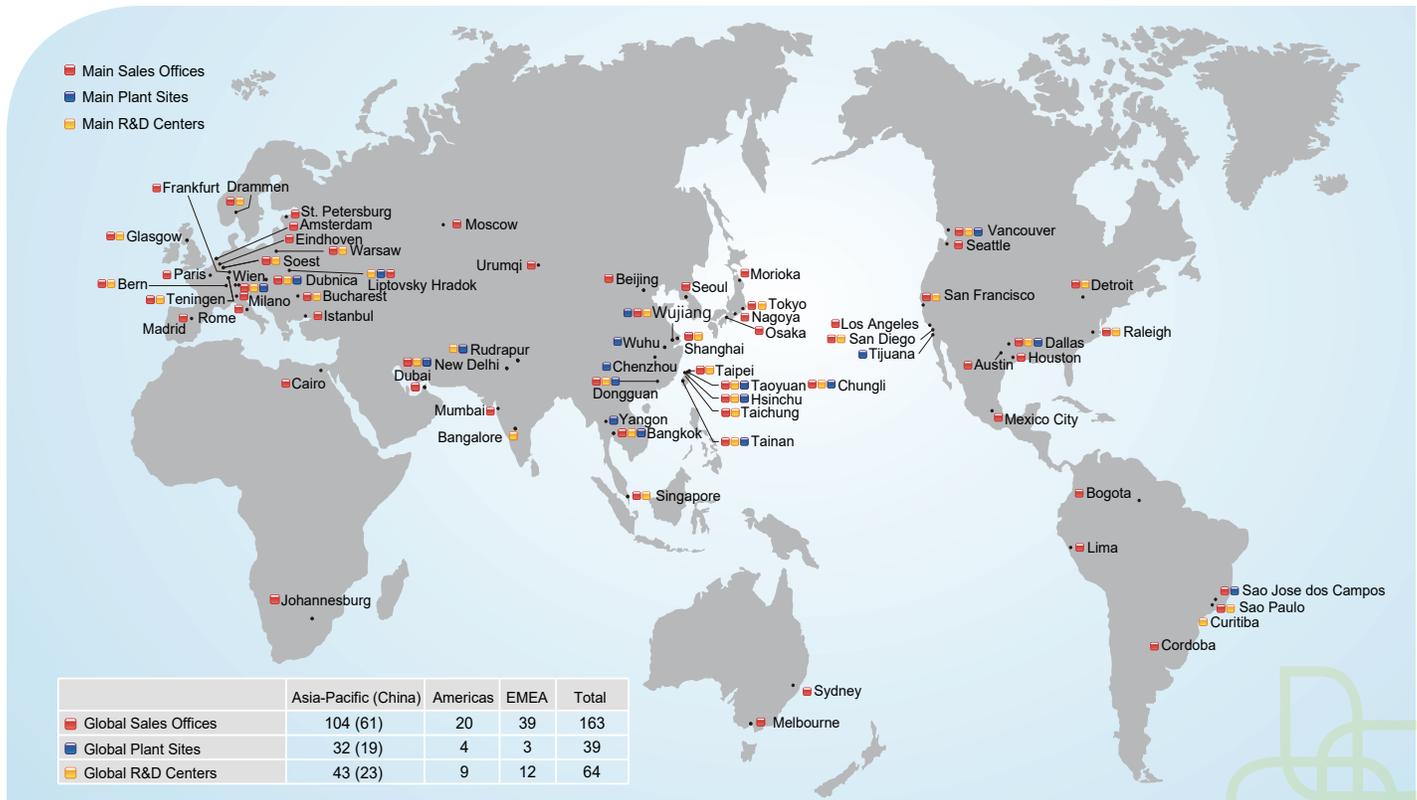
Delta Breez is the only manufacturer of residential bathroom fans using state-of-the-art brushless DC motors in every fan. Here's a sampling of our rich features:

- Breez's DC motor fans use up to 85% less to meet sustainability energy compared with AC motors fans to meet sustainability initiatives.
- Exceed ENERGY STAR® efficiency requirements by over 300%.
- Outlast fans with AC motors by 2-1/2 times for reliable, trouble-free operation.
- Maximize homeowner satisfaction with virtually silent operation as low as <0.3 sones.
- Optional speed, built-in motion and humidity-sensing controls plus LED lighting, designer fan grille and Bluetooth® speakers to satisfy consumer preferences and building codes.

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Introduction to Delta

Smarter. Greener. Together.

Delta's Mission Statement

Our mission is to provide innovative, clean and energy-efficient solutions for a better tomorrow. This is supported by a product portfolio that features a range of energy efficiency solutions including ventilation fans, industrial automation products, solar inverters, LED lighting, EV chargers, power supplies and LED display solutions. Delta's operations are ISO-9001, ISO-14001, ISO-14064, OHSAS-18001 and TS-16949 certified.

World's Leading Provider of Brushless DC Motor Fans

Delta Group is the world's largest manufacturer of brushless DC fans and a leading provider of switching power supplies – a \$8.47 billion global company with 39 manufacturing facilities, 70 R&D labs, 169 sales offices worldwide. Our U.S. and Americas headquarters is located in Fremont, CA.

Visit our global website www.deltaww.com for a comprehensive look at Delta operations, products and company profile.

Dedication to the Environment

From 2010 to 2018, Delta's high-efficiency products shipped worldwide enabled electricity consumption savings of 20.8 billion kWh and carbon emissions reduction of 11.07 million tons. Among its many energy-saving products, Delta has developed the world's first server power supply to achieve 80 Plus Titanium energy efficiency, which is greater than 96% efficiency.

Delta will continue to develop technologies and solutions to ensure a more sustainable future.

Precision is Paramount

Delta's brushless DC fans are used in applications where precision is paramount. This includes consumer electronics products such as laptops, desktops PC's, tablets and gaming consoles.

Important of Ventilation

Many of today's homes are airtight and highly insulated. While this is good for energy-efficient temperature control, it presents a challenge for indoor air quality. Without adequate exhausting of air to the outside, the concentration of indoor pollutants is often much greater than the outdoors.

Air Pollution Inside the House

Sources of indoor air pollutants are found throughout a home, including combustion sources, building materials, cleaning products and biological pollutants such as mold, mildew, bacteria and pollen. These pollutants cause and exacerbate health problems. High humidity and uncontrolled moisture in the home can result in higher pollutant concentrations and increased growth of biological contaminants, as well as deterioration of furniture and paint.

Improving Indoor Air Quality

To improve indoor air quality, pollutants need to be exhausted, and moisture should be controlled. This is best accomplished using ventilation systems appropriate for the homeowner's living spaces. High humidity conditions are commonly created through the use of bathroom fixtures, so proper bathroom ventilation is essential for improved indoor air quality.

Delta Breez Promise

Delta Breez offers high quality and top-performing bathroom ventilation fans of varying sizes, airflow levels and features to fit any application and budget. Delta Breez fans control and reduce the moisture in your home to improve indoor air quality and minimize the risk of health problems. All Delta Breez fans feature a brushless DC motor for exceptionally quiet operation and low power consumption. Most models are ENERGY STAR® qualified, which means that they have passed rigorous energy efficiency standards set by the EPA and reduce greenhouse gas emissions. Low energy consumption minimizes utility bills. Reduced emissions help to protect the environment, which in turn benefits you!

How Delta Breez Ventilation Fans stand out?

1. All Delta Breez ventilation fans are manufactured with brushless DC motor technology for extended reliability, reduced lower power consumption and lower noise
2. Most Delta Breez ventilation fans are ENERGY STAR qualified* and ENERGY STAR Most Efficient
3. All Delta Breez ventilation fans have soft start and lock protection functions
4. All Delta Breez ventilation fans are precision engineered to run continuously for a minimum of 70,000 hours
5. All Delta Breez ventilation fans come with a 3-year limited warranty

* Except for BreezRadiance series fan/LED light with Heater



Benefits of a brushless DC motor



Reliability

Delta's brushless DC motor fans are engineered to outlast competitor AC motor models by as much as 70% the lifecycle.

Less noise

Delta's brushless DC motor fans are precision engineered for quiet operation, down to less than 0.3 sones, the lowest sound rating of any exhaust fan.

Less power consumption

Delta's brushless DC motor fans use up to 74% less power than comparable AC motor exhaust fans.

Efficiency

Delta's brushless DC motor fans are among the most efficient ventilation fans, exceeding ENERGY STAR requirements for efficiency by as much as 339%.

All Delta Breez ventilation fans can run continuously for a minimum of 70,000 hours.

Product Certifications and Qualifications



About ENERGY STAR

ENERGY STAR® is a joint program of the U.S. Department of Energy and the U.S. Environmental Protection Agency that identifies products in over 60 categories which meet rigorous energy efficiency standards. Started in 1992, ENERGY STAR is now an internationally recognized label for U.S.-originated products that reduce greenhouse gas emissions without sacrificing performance or quality.

As an ENERGY STAR partner, Delta is committed to environmental protection and strives to create products meeting and surpassing current standards in energy efficiency. Delta Breez prides itself on delivering ENERGY STAR qualified products, some of which exceed the ENERGY STAR efficiency requirement by over 339%. With 90 ventilation fan models available in 2018 for evaluation, 82 (91%) models were recognized as ENERGY STAR qualified.

For more information, visit

www.energystar.gov

ENERGY STAR Most Efficient 2019



ENERGY STAR Most Efficient is a designation recognizing and advancing the most efficient products among those that qualify for the ENERGY STAR label. ENERGY STAR Most Efficient products reduce greenhouse gas emissions by meeting rigorous energy efficiency performance levels set by the U.S. Environmental Protection Agency.

Only 2.5% of all residential bathroom ventilation fans were recognized as ENERGY STAR Most Efficient 2019. However, an impressive 29 models (32%) of the Delta Breez product line are recognized as such.

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



HVI, the Home Ventilating Institute, is an organization that runs a standardized testing and certification program for a wide 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 manufacturing company. Testing procedures are designed by HVI members and based off internationally recognized guidelines. All Delta Breez ventilation fans are HVI lab tested and certified.



ASHRAE 62.2

ASHRAE 62.2 publishes a national standard that applies to single-family homes and multifamily dwellings to ensure proper ventilation and acceptable indoor air quality. The standards are commonly 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.

Ventilation Air Requirement, CFM

Floor Area (ft ²)	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

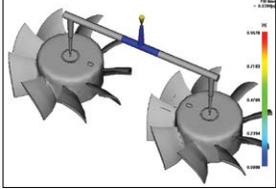
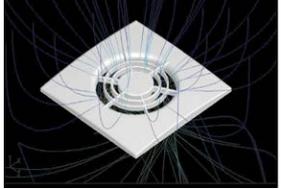
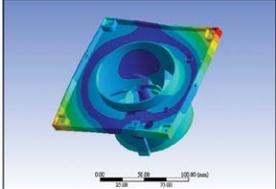
Most Delta Breez fan models are ASHRAE 62.2 compliant for both intermittent and continuous run applications. This means that Breez fans are operable according to 62.2 guidelines for airflow and meet the minimum noise level requirements.

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.

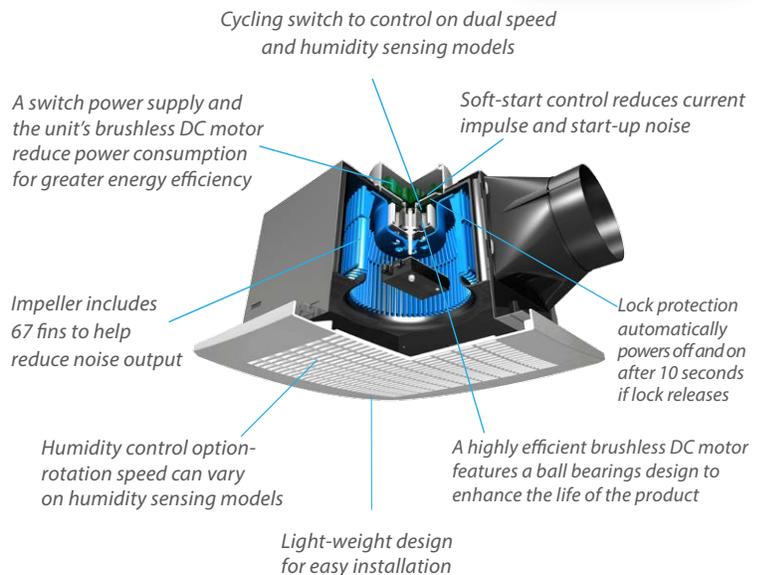
<p>Moldflow Analysis Software Plastic mold</p>		<p>Aerodynamic Simulation Software Fan blade curve design and air flow analysis</p>	
<p>Structure Simulation Software Structure analysis for stress and vibration</p>		<p>Semi-Anechoic Chamber Noise testing for sound pressure and sound quality</p>	

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

Cycling switch to control on dual speed and humidity sensing models

A switch power supply and the unit's brushless DC motor reduce power consumption for greater energy efficiency

Soft-start control reduces current impulse and start-up noise

Impeller includes 67 fins to help reduce noise output

Lock protection automatically powers off and on after 10 seconds if lock releases

Humidity control option-rotation speed can vary on humidity sensing models

A highly efficient brushless DC motor features a ball bearings design to enhance the life of the product

Light-weight design for easy installation



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-side 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 and designer grille available separately. 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 1.4 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. Fans 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. Fans only and fan with humidity sensor are UL listed for ceiling and wall mount; fans/LED light are UL listed for ceiling mount only.

Delta Breez Series Ventilation Fans

DeltaBreez is the only residential bathroom exhaust fan manufacturer that can deliver a powerful combination of ENERGY STAR®-qualification, performance, quietness, state-of-the-art brushless DC motor technology and affordability in every fan. Optional built-in speed, motion and/or humidity-sensing controls — plus decorative or edge-lit dimmable LED lighting, heater, designer fan grille and Bluetooth® speakers, to satisfy consumer preferences and building codes.

Choose from nine different series:



Virtually silent, feature-rich. One of our highest performing, most quiet series at less than 0.3 sones. High speed 80 or 110 CFM. For spaces 80-110 sq. ft. Options include adjustable high and/or low speeds, dimmable LED light or dimmable edge-lit LED light, motion and/or adjustable humidity sensor, Bluetooth® speaker. Ceiling Radiation Damper, designer grille, and metal grille available separately. UL listed for ceiling mount only.



Virtually silent, feature-rich. One of our highest performing, most quiet series at less than 0.3 sones. High speed 130 or 150 CFM. For spaces 130-150 sq. ft. Options include adjustable low speeds, LED light, motion or adjustable humidity sensor. Ceiling Radiation Damper and detail grille available separately. UL listed for ceiling mount only.



breez Slim

Ultimate multi-family solution. Single speed 50, 70, 80 and 100 CFM and dual speed 70 CFM. For spaces 50-100 sq. ft. Quiet operation from 0.6 to 2 sones. Options include dual speed or built-in humidity sensor. Low profile, with 4" depth to fit between ceiling joists and 2x4 sidewalls. Designer grille available separately for SLM50, SLM70, SLM70D and SLM70H. Ceiling Radiation Damper available separately for SLM80 and SLM100. UL listed for ceiling and wall mount.

breez Recessed

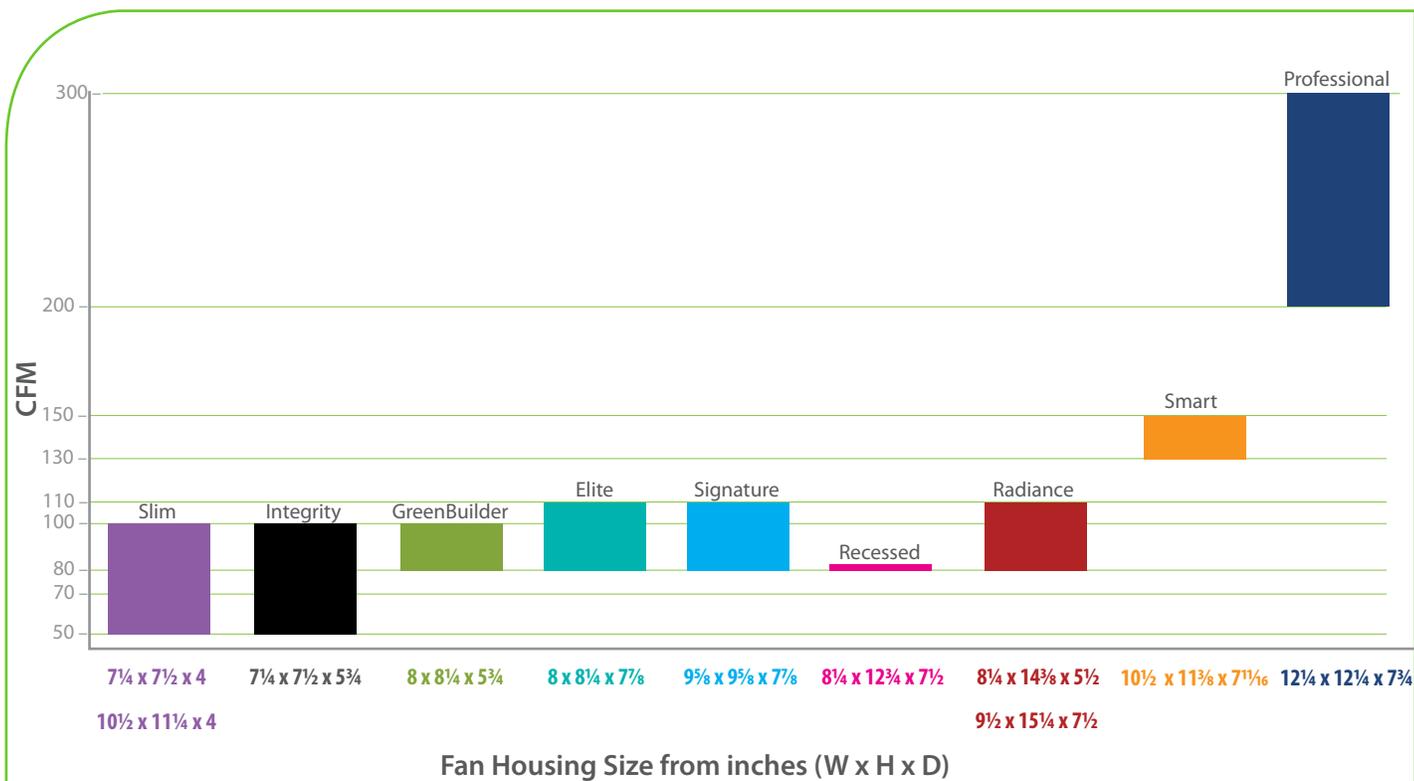
Fan design solution. 80 CFM fan disguised as a recessed light with LED main and night light. For 80 sq. ft. space. Quiet operation at 1.5 sones. UL approved for ceiling mount only.

breez Radiance

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 CFL or dimmable LED light, or fan/heater only. Built-in thermostat to regulate room temperature for maximum comfort. UL approved for ceiling mount only.

breez Pro

Large space solution. Single speed 200 or 300 CFM. Quiet operation from 1 to 2 sones. For spaces 200-300 sq. ft. Perfect for large bathrooms, laundry rooms, and conference rooms. UL approved for ceiling mount only.





Delta BreezSignature Series (6" duct)

Virtually silent, feature-rich. Our highest performing, most quiet series at less than 0.3 sones.

High speed 80 or 110 CFM. For spaces 80-110 sq. ft. Options include adjustable high and/or low speeds, dimmable LED light or dimmable edge-lit LED light, motion and/or adjustable humidity sensor, Bluetooth® speaker. Ceiling Radiation Damper, designer grille, and metal grille available separately. UL listed for ceiling mount only.

Features:

- Energy savings up to 127%¹ and 6" metal duct
- <0.3 sones - lowest noise level among competing fans
- Exceeds ENERGY STAR requirement by 450% in energy efficiency²
- Adjustable high speed of 80 or 110 CFM
- Dual speed, motion-sensing and humidity-sensing options with 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 of 850 lumens, 3000K and 90 CRI
- Dimmable LED light (dimmer switch not included)

Fan/Edge-Lit Dimmable LED Light with Adjustable Color Temperature 2700K, 4000K and 5000K

- 13-Watt LED main light output 1000 lumens



Fan only and Fan with Humidity Sensor or Dual Speed



Fan/Edge-lit LED Light

- 2700K
 - 4000K
 - 5000K
- CCT Switch



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



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

² Based upon SIG 80 CFM vs. ENERGY STAR v4.0 criteria for residential ventilating fans



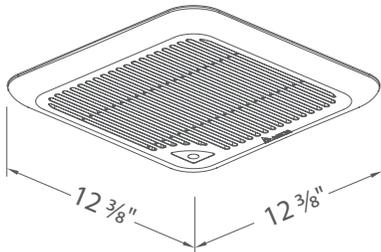
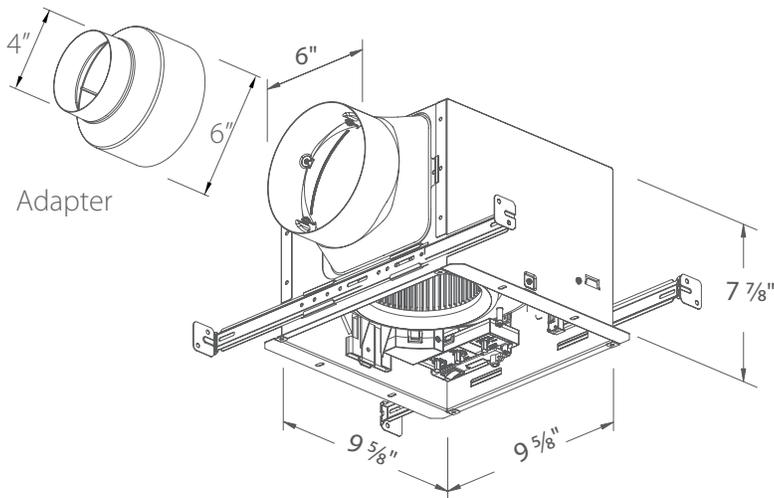
High Speed Switch



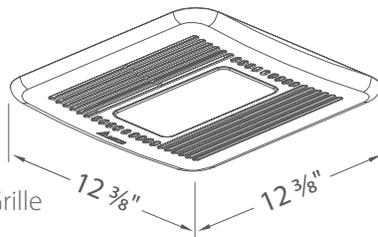
Adapter 4 inches



BreezSignature Series Dimensions

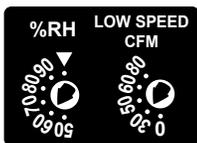


Fan Grille w/ motion sensor

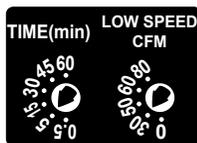


Fan/LED Light Grille

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



SIG80-110D
SIG80-110DLED
Controls



SIG80-110MHLED
Motion
Controls



LED Indicator Light:
SIG80-110,
SIG80-110LED

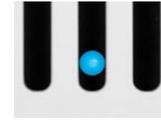


LED Indicator Light: SIG80-110D
Continuous
Low Speed Full Speed



LED Indicator Light: SIG80-110H, SIG80-110HLED,
SIG80-110MH

Humidity Sensing



Full Speed



LED Indicator Light: SIG80-110DLED

Low Speed



Full Speed



LED Indicator Light: SIG80-110MHLED

Low Speed



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) ²	\$6.50	\$33.03

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

Specifications

SIG80-110 - 80/110 CFM Fan



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			



Delta BreezSignature Series (6" duct) Specifications

SIG80-110ELED - 80/110 CFM



Fan/Edge-lit Dimmable LED Light w/ adjustable color temperature

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 Main Light (Watts)	13			

SIG80-110LED - 80/110 CFM

Fan/Dimmable LED Light/Night-Light



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			
LED Main Light (Watts)	13			
LED Night Light (Watts)	2			

SIG80-110D - 80/110 CFM Fan with Dual Speed



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	0.25
Air Flow (CFM)	30	30	50	50	60	60	80	80	80	80	110	110
Sones	<0.3	<0.3	<0.3	<0.3	<0.3	0.3	<0.3	0.5	<0.3	0.5	<0.3	0.8
Power (Watts)	4.4	6.3	4.8	7.3	5.5	8.6	6.2	9.9	6.2	9.9	8.2	14.1
Efficiency (CFM/Watts)	9.0	5.9	13.5	8.0	13.3	8.0	15.4	9.0	15.4	9.0	15.3	8.7
Current (Amps)	0.38 Max											
Power Rating (V/Hz)	120/60											

SIG80-110DLED - 80/110 CFM

Fan/Dimmable LED Light/Night-Light with Dual Speed



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	0.25
Air Flow (CFM)	30	30	50	50	60	60	80	80	80	80	110	110
Sones	<0.3	<0.3	<0.3	<0.3	<0.3	0.3	<0.3	0.5	<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	6.8	9.9	9.7	15.5
Efficiency (CFM/Watts)	9.5	5.8	12.3	7.1	13.2	8.0	13.8	8.4	13.8	8.4	12.7	8.0
Current (Amps)	0.48 Max											
Power Rating (V/Hz)	120/60											
LED Main Light (Watts)	13											
LED Night Light (Watts)	2											

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



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	0.25
Air Flow (CFM)	30	30	50	50	60	60	80	80	80	80	110	110
Sones	<0.3	<0.3	<0.3	<0.3	<0.3	0.3	<0.3	0.5	<0.3	0.5	<0.3	0.8
Power (Watts)	4.4	6.3	4.8	7.3	5.5	8.6	6.2	9.9	6.2	9.9	8.2	14.1
Efficiency (CFM/Watts)	9.0	5.9	13.5	8.0	13.3	8.0	15.4	9.0	15.4	9.0	15.3	8.7
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



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	0.25
Air Flow (CFM)	30	30	50	50	60	60	80	80	80	80	110	110
Sones	<0.3	<0.3	<0.3	<0.3	<0.3	0.3	<0.3	0.5	<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	6.8	9.9	9.7	15.5
Efficiency (CFM/Watts)	9.5	5.8	12.3	7.1	13.2	8.0	13.8	8.4	13.8	8.4	12.7	8.0
Current (Amps)	0.48 Max											
Power Rating (V/Hz)	120/60											
LED Main Light (Watts)	13											
LED Night Light (Watts)	2											

SIG80-110MH - 80/110 CFM

Fan with Motion and Humidity Sensor



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	0.25
Air Flow (CFM)	30	30	50	50	60	60	80	80	80	80	110	110
Sones	<0.3	<0.3	<0.3	<0.3	<0.3	0.3	<0.3	0.5	<0.3	0.5	<0.3	0.8
Power (Watts)	4.4	6.3	4.8	7.3	5.5	8.6	6.2	9.9	6.2	9.9	8.2	14.1
Efficiency (CFM/Watts)	9.0	5.9	13.5	8.0	13.3	8.0	15.4	9.0	15.4	9.0	15.3	8.7
Current (Amps)	0.38 Max											
Power Rating (V/Hz)	120/60											

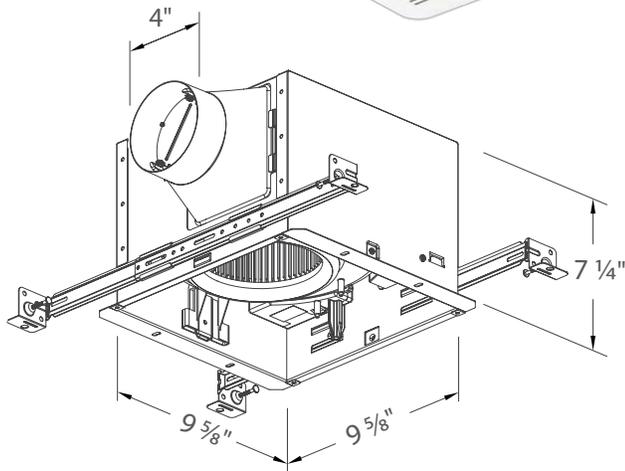
SIG80-110MHLED - 80/110 CFM

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

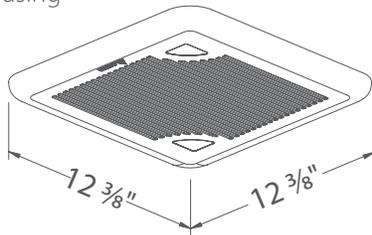


Fan Speed	Continuous Low Speed								Full Speed			
Static Pressure (in w.g.)	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Air Flow (CFM)	30	30	50	50	60	60	80	80	80	80	110	110
Sones	<0.3	<0.3	<0.3	<0.3	<0.3	0.3	<0.3	0.5	<0.3	0.5	<0.3	0.8
Power (Watts)	4.4	6.7	5.2	8.2	5.6	8.7	6.8	9.9	6.8	9.9	9.7	15.5
Efficiency (CFM/Watts)	9.5	5.8	12.3	7.1	13.2	8.0	13.8	8.4	13.8	8.4	12.7	8.0
Current (Amps)	0.48 Max											
Power Rating (V/Hz)	120/60											
LED Main Light (Watts)	13											
LED Night Light (Watts)	2											

Delta BreezSignature Series (4" duct)

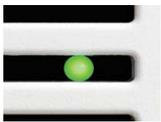


Fan Housing



Fan Grille

LED Indicator Light:
SIG80 and SIG110



LED Indicator Light:
SIG80D
Continuous Low Speed



Full Speed



SIG80D
Controls



Specifications

SIG80 - 80 CFM Single Speed Exhaust Fan

Static Pressure (Inches w.g.)	0.1	0.25
Air Flow (CFM)	80	79
Sones	<0.3	0.5
Power Consumption (Watts)	8.7	14.0
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 (Inches 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 Consumption (Watts)	4.8	8.9	6.6	9.8	6.7	11.8	8.7	14.0
Energy 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 (Inches w.g.)	0.1	0.25
Air Flow (CFM)	110	95
Sones	<0.3	0.6
Power Consumption (Watts)	13.6	16.0
Energy Efficiency (CFM/Watts)	9.0	6.4
Current (Amps)	0.38 Max	
Power Rating (V/Hz)	120/60	

	Delta Breez	Market AC Motor
Energy Use (Watts)	8.7	28.4
Noise Level (Sones)	<0.3	0.8
Annual Energy Cost per Fan (24/7) ¹	\$9.15	\$29.94

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



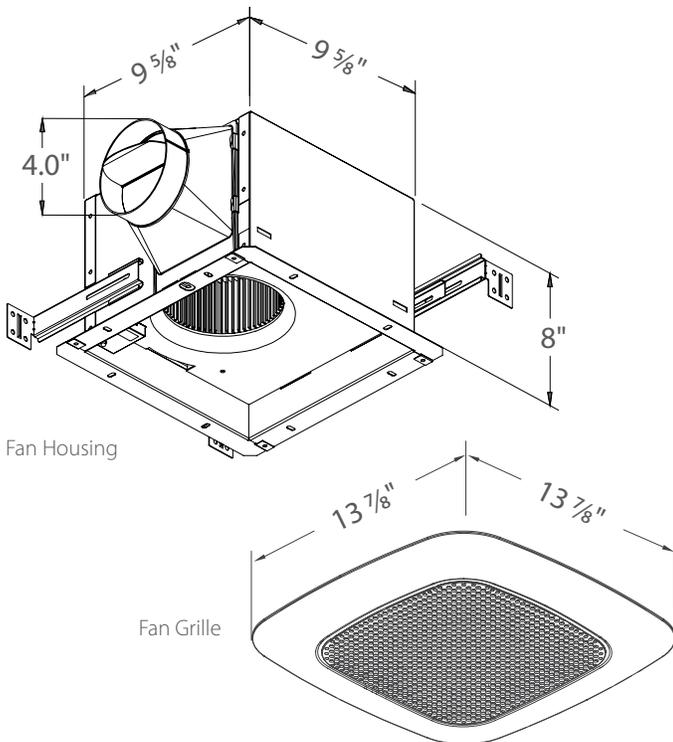
Delta BreezSignature (4" duct)

VFB25ADBT 110 CFM Fan with Bluetooth® stereo speaker enables you to enjoy your favorite music, or listen to news, weather, traffic or sports while the energy-efficient fan quietly ventilates your bathroom. Easily pairs with most Bluetooth wireless devices. Quiet operation at 1.0 sone, so you hear your entertainment, not the fan.

Features:

Long-lasting, brushless DC motor engineered to operate minimum 70,000 hours.

- Includes a built-in Bluetooth 2.1, Stereo Speaker 4 ohm 2W x 2
- Play audio through most Bluetooth wireless devices
- Attractive grille complements any décor



Specifications

VFB25ADBT - 110 CFM Fan with Bluetooth



Static Pressure (Inches w.g.)	0.1	0.25
Air Flow (CFM)	110	81
Sones	1.0	1.5
Power Consumption (Watts)	14.2	15.0
Energy Efficiency (CFM/Watts)	7.7	5.3
Current (Amps)	0.3 @ 110 Vac	
Power Rating (V/Hz)	110~220/50~60	

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.

	Delta Breez	Market AC Motor
Energy Use (Watts)	14.2	34
Noise Level (Sones)	1.0	1.5
Annual Energy Cost per Fan (24/7) ²	\$14.94	\$35.91

¹ Based upon ENERGY STAR criteria for residential ventilating fans.

² Based upon BreezSignature VFB25ACH vs. market AC motor fan.

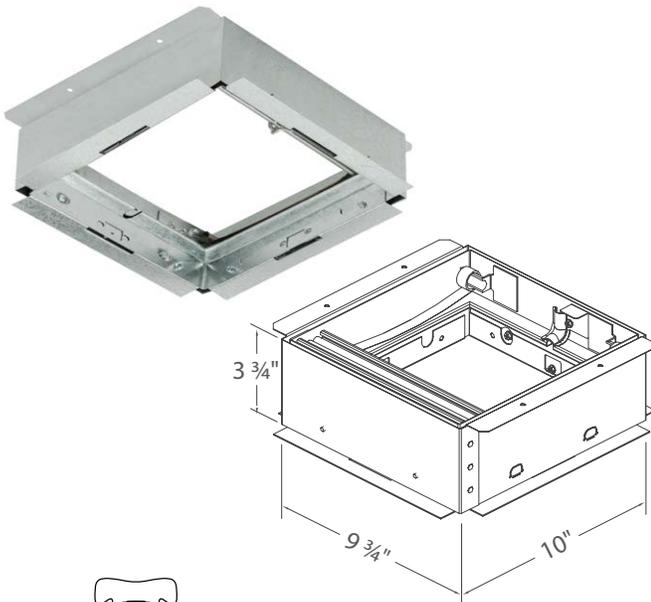


Delta BreezSignature SIG-CRD Ceiling Radiation Damper

The damper employs a folded curtain style blade for point-of-origin control of radiant heat in a ventilation system. SIG-CRD 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 listed as fan/damper assembly for the following Wood Frame Construction designs: L521, L546, L558, L562, L574, L576, L581, L583, L585, P522, P533, P538 and P545
- Meets both UL555C and UL263. 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. Warnock Hersey listing #: 102195501SAT-002
- CSFM listing: 3226-0368:104
- UL 555C listing: R27832
- Meets NFPA Standards: 90A and 101
- Meets Building Code Standards: IBC, NBC, NFPA, SBC, & UBC
- Available for use with Delta Breez SIG Series ventilation fans

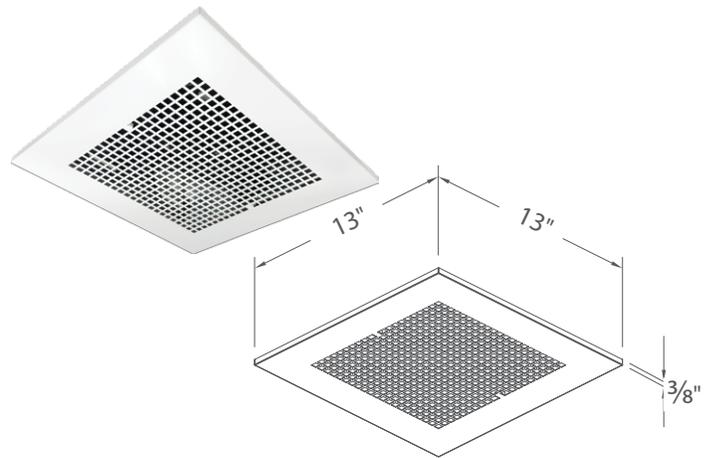


Delta BreezSignature SIG-MTL Metal Grille

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

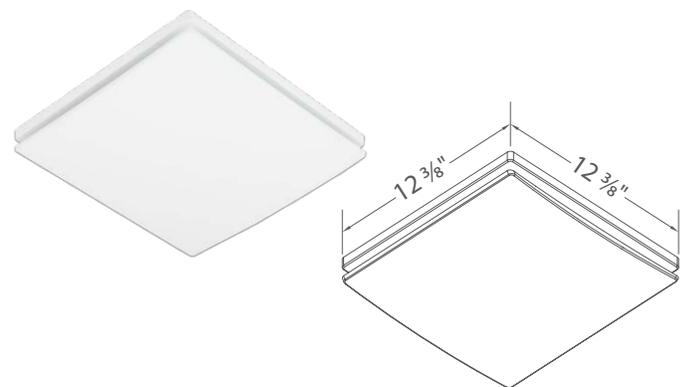


Delta BreezSignature SIG-DGL Designer Grille

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"





Delta BreezSmart Series (6" duct)

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. High speed 130 or 150 CFM. For spaces 130-150 sq. ft. Options include adjustable low speeds, LED light, motion or adjustable humidity sensor. Ceiling Radiation Damper and metal grille available separately. UL listed for ceiling mount only.

Features:

- Energy savings up to 67% ¹
- <0.3 sones - lowest noise level among competing fans
- Exceeds ENERGY STAR requirement by 220% in energy efficiency ²
- Motion-sensing, humidity-sensing, LED and dual-speed options available with user-adjustable continuous low speed

Fan/LED light:

- 13-Watt LED main light and 2-Watt LED night light
- Main light output of 850 Lumens, 3000K and 90 CRI

¹ Based upon BreezSmart SMT150 vs. market AC motor fan

² Based upon ENERGY STAR v4.0 criteria for residential ventilating fans

	Delta Breez	Market AC Motor
Energy Use (Watts)	16.9	51.3
Noise Level (Sones)	<0.3	1.4
Annual Energy Cost per Fan (24/7) ³	\$17.17	\$53.94

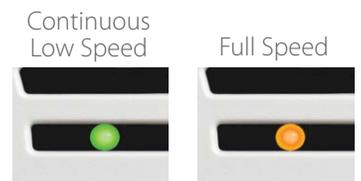
³ Calculations based upon U.S. average retail electricity. Actual results may vary



LED Indicator Light:
SMT130, SMT150
SMT150LED



LED Indicator Light:
SMT130M, SMT150D

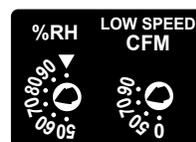


LED Indicator Light: SMT130H
Humidity Sensing Full Speed

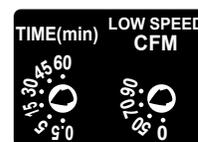


Built-in Controls

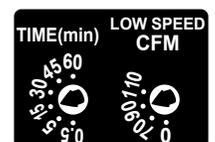
SMT130H Controls



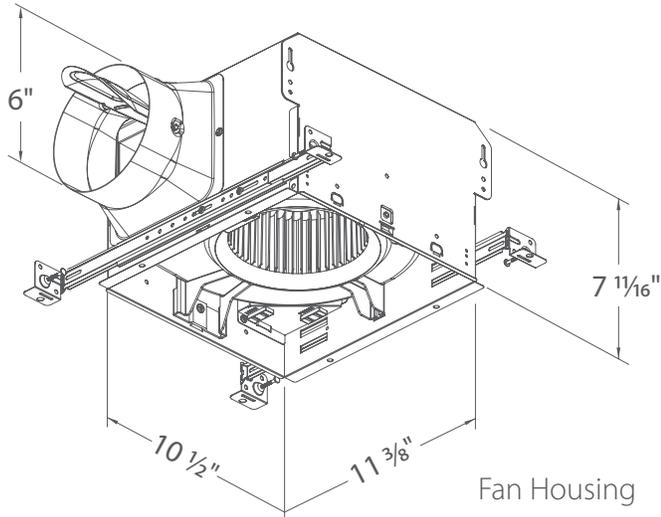
SMT130M Controls



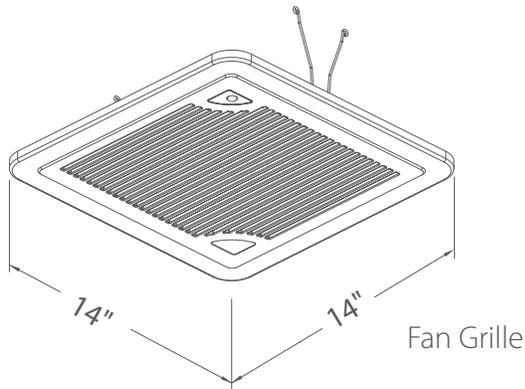
SMT150D Controls



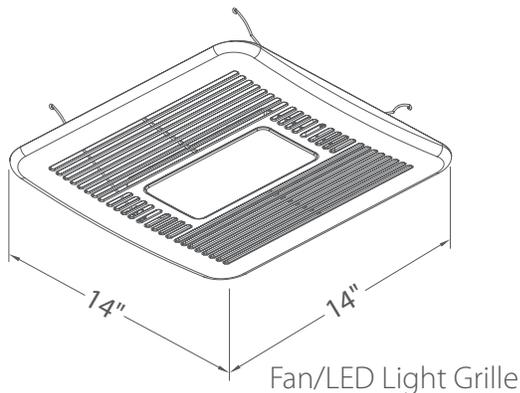
BreezSmart Series Dimensions



Fan Housing



Fan Grille



Fan/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	20.0
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	
	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Static Pressure (Inches w.g.)	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Air Flow (CFM)	50	49	70	68	90	88	130	124
Sones	<0.3	1.0	<0.3	1.0	<0.3	1.0	<0.3	1.0
Power Consumption (Watts)	5.6	12.2	6.9	13.5	8.0	15.5	11.6	20.0
Energy Efficiency (CFM/Watts)	8.9	4.0	10.1	5.0	11.2	5.6	11.2	6.2
Current (Amps)	0.44 Max							
Power Rating (V/Hz)	120/60							

SMT130M* - 130 CFM with Motion Sensor



Fan Speed	Continuous Low Speed						Full Speed	
	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Static Pressure (Inches w.g.)	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Air Flow (CFM)	50	49	70	68	90	88	130	124
Sones	<0.3	1.0	<0.3	1.0	<0.3	1.0	<0.3	1.0
Power Consumption (Watts)	5.6	12.2	6.9	13.5	8.0	15.5	11.6	20.0
Energy Efficiency (CFM/Watts)	8.9	4.0	10.1	5.0	11.2	5.6	11.2	6.2
Current (Amps)	0.44 Max							
Power Rating (V/Hz)	120/60							

SMT150 - 150 CFM Single Speed Exhaust Fan

Static Pressure (Inches w.g.)	0.1	0.25
Air Flow (CFM)	150	149
Sones	<0.3	1.3
Power Consumption (Watts)	16.9	23.7
Energy Efficiency (CFM/Watts)	8.8	6.2
Current (Amps)	0.47 Max	
Power Rating (V/Hz)	120/60	

* Product is ENERGY STAR Most Efficient 2019 distinction and ENERGY STAR qualified



Specifications

SMT150D* - Adjustable 0-110/150 CFM Dual Speed Fan

Fan Speed	Continuous Low Speed						Full Speed	
	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
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	8.0	15.5	9.8	18.4	16.9	23.7
Energy Efficiency (CFM/Watts)	10.1	5.0	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/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	6.0
Current (Amps)	0.62 Max	
Power Rating (V/Hz)	120/60	
LED Main Light (Watts)	13	
LED Night Light (Watts)	2	

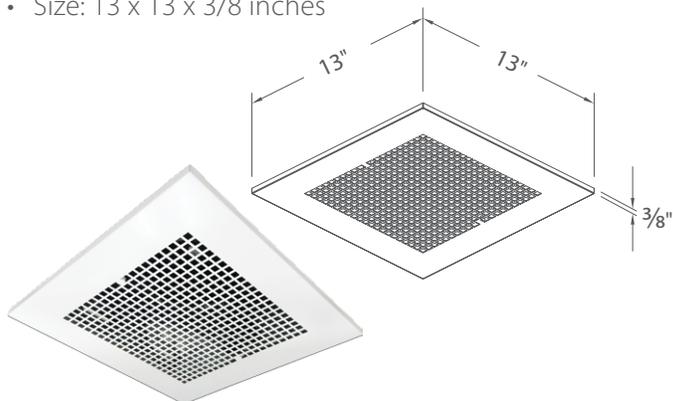
* Product is ENERGY STAR Most Efficient 2019 distinction and ENERGY STAR qualified

Delta BreezSmart SMT-MTL Metal Grille

The SMT-MTL metal grille is offered as an alternative to the standard grille on Delta Breez SMT130, SMT130H, SMT150, and SMT150D

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

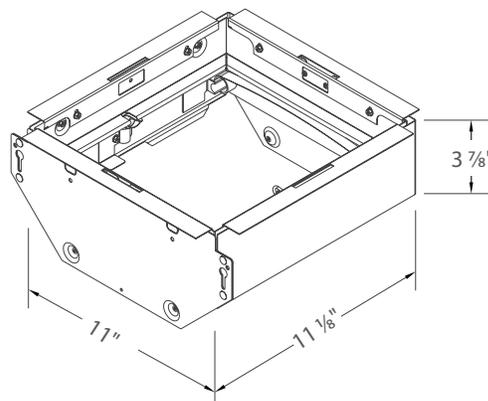
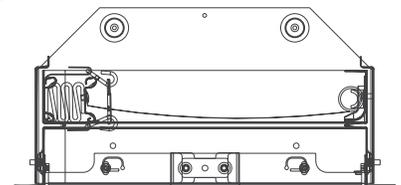


Delta BreezSmart SMT-CRD Ceiling Radiation Damper

The damper employs a folded curtain style blade for point-of-origin control of radiant heat in a ventilation system. SMT-CRD 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
- Available for use with Delta Breez SMT Series, SLM80 and SLM100 ventilation fans





Delta Breez Recessed (4" duct)

Fan design solution.

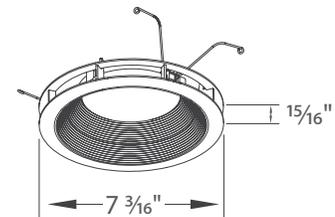
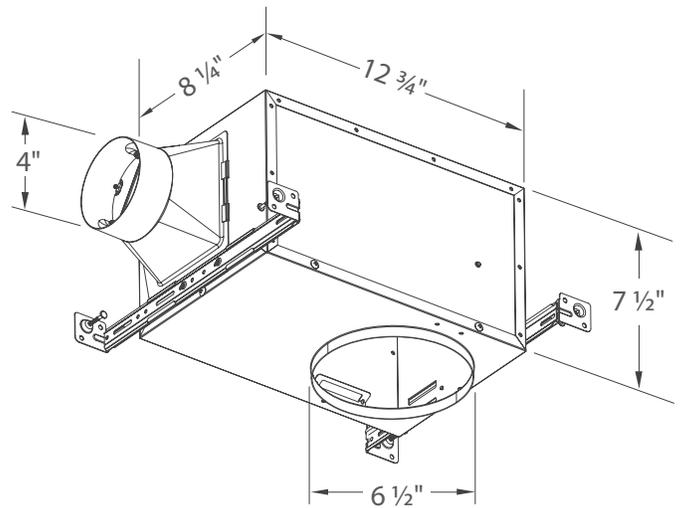
80 CFM fan disguised as a recessed light with Dimmable LED main and night light. For 80 sq. ft. space. Quiet operation at 1.5 sones. UL approved for ceiling mount only.

Features:

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

Fan/Dimmable LED Light:

- 11-Watt Dimmable LED main light and 2-Watt LED night light included (dimmer switch not included)
- Warm, white LED main light output 1000 lumens, 2700K, and 80 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) ¹	\$15.25	\$35.91

¹ 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 Main Light (Watts)	11	
LED Night Light (Watts)	2	



Delta BreezElite Series (6" duct)

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-side installation in remodeling projects and for time-saving installation in new construction projects. A perfect 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 and designer grille 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 67.1 %¹ and 6" duct (standard)
- Lowest sone level rated by HVI as low as 0.7 sones
- *Adjustable wings for easy installation*
- Power consumption down to 10.3 Watts
- Exceeds ENERGY STAR requirement by 202 % in energy efficiency²
- Adjustable high speed of 80 or 110 CFM
- Dual speed, motion-sensing, and humidity-sensing options with continuous adjustable low-speed
- Includes 6" to 4" duct reducer
- Ceiling Radiation Damper available (fits GBR-CRD)

Fan/Dimmable LED Light:

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

pocket mounting brackets stay hidden



pocket mounting brackets slide out



Adapter 4" duct



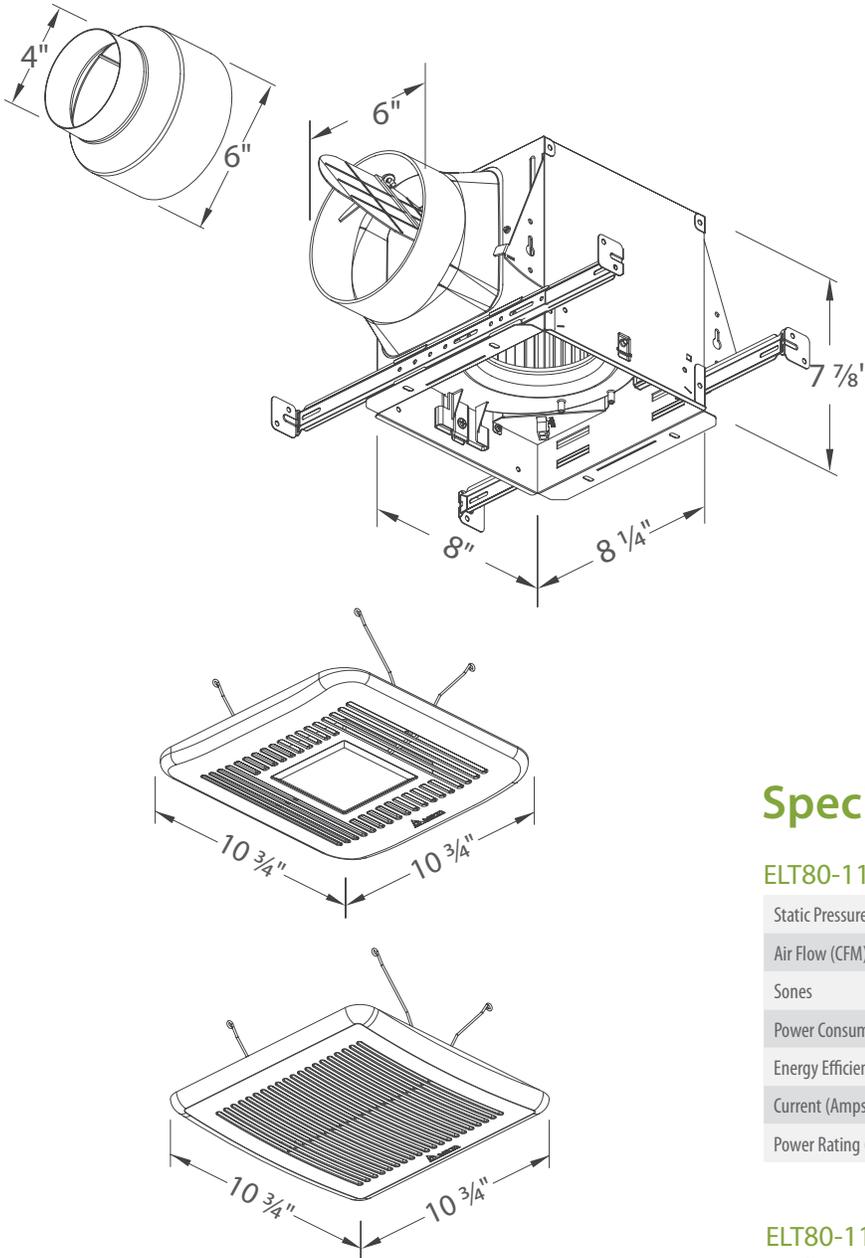
High Speed Switch

¹ Based upon ELT80-110 vs. market AC motor with 6" duct.

² Based upon ELT 110 CFM vs. ENERGY STAR v4.0 criteria for residential ventilating fans

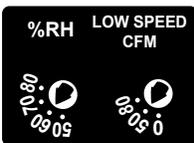


BreezElite Series Dimensions

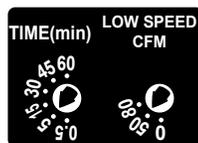


Built-in Controls

ELT80-110H, ELT80-110HLED
ELT80-110MH, ELT80-110MHLED



ELT80-110D
ELT80-110DLED



LED Indicator Light:

ELT80-110, ELT80-110LED



ELT80-110D, ELT80-110DLED

Low Speed



Full Speed



ELT80-110H, ELT80-110HLED,
ELT80-110MH and ELT80-110MHLED

Humidity Sensing



Full Speed



Specifications

ELT80-110 - 80/110 CFM Fan



Static Pressure (Inches w.g.)	0.1	0.25	0.1	0.25
Air Flow (CFM)	80	59	110	90
Sones	0.5	0.9	0.7	1
Power Consumption (Watts)	7	9	10.3	13
Energy Efficiency (CFM/Watts)	11.4	6.5	10.6	6.9
Current (Amps)	0.27 Max			
Power Rating (V/Hz)	120/60			

ELT80-110LED - 80/110 CFM Fan
Fan/Dimmable LED Light



Static Pressure (Inches w.g.)	0.1	0.25	0.1	0.25
Air Flow (CFM)	80	59	110	89
Sones	0.5	0.9	0.7	1
Power Consumption (Watts)	7	9	10.3	13
Energy Efficiency (CFM/Watts)	11.4	6.5	10.6	6.8
Current (Amps)	0.28 Max			
Power Rating (V/Hz)	120/60			
Dimmable LED Light (Watts)	13			



Specifications (cont.)

ELT80-110D - 80/110 CFM Fan w/ Dual Speed



Fan Speed	Continuous Low Speed				Full Speed			
	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Static Pressure (in w.g.)	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Air Flow (CFM)	50	32	80	59	80	59	110	90
Sones	<0.3	0.8	0.5	0.9	0.5	0.9	0.7	1
Power (Watts)	5	6	7	9	7	9	10.3	13
Efficiency (CFM/Watts)	10	5.3	11.4	6.5	11.4	6.5	10.6	6.9
Current (Amps)	0.27 Max							
Power Rating (V/Hz)	120/60							

ELT80-110DLED - 80/110 CFM Fan/Dimmable LED light w/ Dual Speed



Fan Speed	Continuous Low Speed				Full Speed			
	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Static Pressure (in w.g.)	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Air Flow (CFM)	50	35	80	59	80	59	110	89
Sones	0.3	0.8	0.5	0.9	0.5	0.9	0.7	1.0
Power (Watts)	5	6	7	9	7	9	10.3	13
Efficiency (CFM/Watts)	10.0	5.8	11.4	6.5	11.4	6.5	10.6	6.8
Current (Amps)	0.28 Max							
Power Rating (V/Hz)	120/60							
Dimmable LED Light (Watts)	13							

ELT80-110H - 80/110 CFM Fan w/ Humidity Sensor



Fan Speed	Continuous Low Speed				Full Speed			
	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Static Pressure (in w.g.)	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Air Flow (CFM)	50	32	80	59	80	59	110	90
Sones	<0.3	0.8	0.5	0.9	0.5	0.9	0.7	1
Power (Watts)	5	6	7	9	7	9	10.3	13
Efficiency (CFM/Watts)	10	5.3	11.4	6.5	11.4	6.5	10.6	6.9
Current (Amps)	0.27 Max							
Power Rating (V/Hz)	120/60							

ELT80-110HLED - 80/110 CFM Fan/Dimmable LED Light with Humidity Sensor



Fan Speed	Continuous Low Speed				Full Speed			
	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Static Pressure (in w.g.)	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Air Flow (CFM)	50	35	80	59	80	59	110	89
Sones	0.3	0.8	0.5	0.9	0.5	0.9	0.7	1
Power (Watts)	5	6	7	9	7	9	10.3	13
Efficiency (CFM/Watts)	10	5.8	11.4	6.5	11.4	6.5	10.6	6.8
Current (Amps)	0.28 Max							
Power Rating (V/Hz)	120/60							
Dimmable LED Light (Watts)	13							

ELT80-110MH - 80/110 CFM

Fan w/ Motion and Humidity Sensor

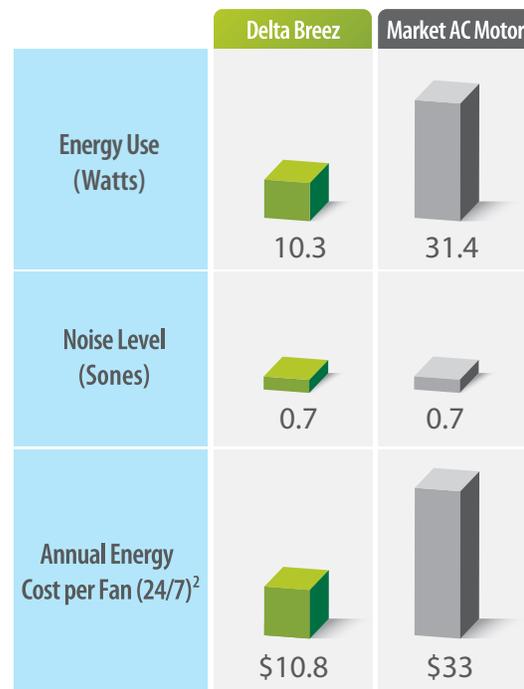


Fan Speed	Continuous Low Speed				Full Speed			
	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Static Pressure (in w.g.)	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Air Flow (CFM)	50	32	80	59	80	59	110	90
Sones	<0.3	0.8	0.5	0.9	0.5	0.9	0.7	1
Power (Watts)	5	6	7	9	7	9	10.3	13
Efficiency (CFM/Watts)	10	5.3	11.4	6.5	11.4	6.5	10.6	6.9
Current (Amps)	0.27 Max							
Power Rating (V/Hz)	120/60							

ELT80-110MHLED - 80/110 CFM Fan/Dimmable LED Light w/ Motion and Humidity Sensor



Fan Speed	Continuous Low Speed				Full Speed			
	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Static Pressure (in w.g.)	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Air Flow (CFM)	50	35	80	59	80	59	110	89
Sones	0.3	0.8	0.5	0.9	0.5	0.9	0.7	1
Power (Watts)	5	6	7	9	7	9	10.3	13
Efficiency (CFM/Watts)	10	5.8	11.4	6.5	11.4	6.5	10.6	6.9
Current (Amps)	0.28 Max							
Power Rating (V/Hz)	120/60							
Dimmable LED Light (Watts)	13							



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



Delta BreezSlim Series (4" oval duct)

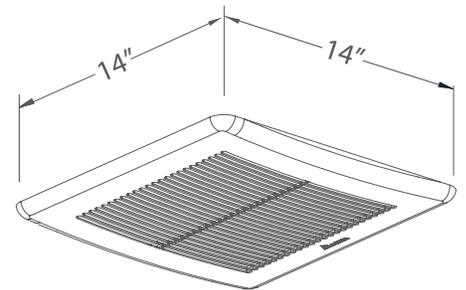
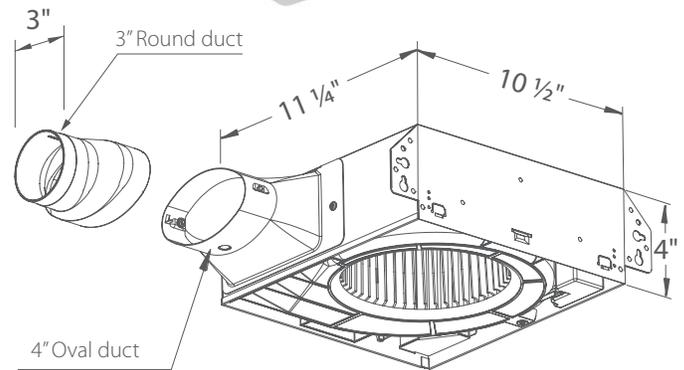
The BreezSlim series of fans are suitable for ceiling or sidewall installation.

All BreezSlim fans are ENERGY STAR qualified. Delta Breez SLM80 and SLM100 models offer a 4" metal oval duct adapter with a 4-3" plastic round duct adapter. As with all Delta Breez fans, BreezSlim series fans also feature an LED indicator light underneath the grille to show the user that this quiet fan is running. Available in contractor packs.

Features:

Slim design with innovative brushless DC motor design for long life, low noise, and low power consumption

- 4" Oval Duct:
 - Noise level at down to 0.6 sones
 - Annual energy cost for 24/7 operation is approximately \$8.94¹
 - Ultra low power consumption down to 8.5 Watts
- UL approved for ceiling and wall mount installation
- LED indicator light green when power is on
- Ceiling Radiation Damper available (fits SMT-CRD)



Fan Grille

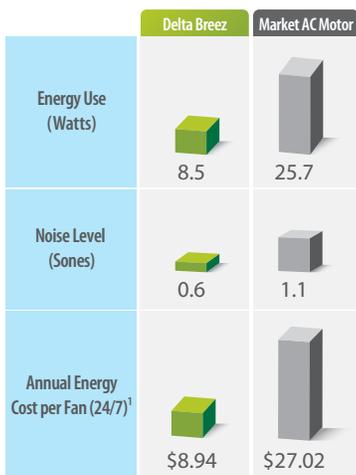
Specifications

SLM80 - 80 CFM Single Speed Exhaust Fan

	4" Oval duct	
Static Pressure (Inches w.g.)	0.1	0.25
Air Flow (CFM)	80	62
Sones	0.6	1.1
Power Consumption (Watts)	8.5	10.9
Energy Efficiency (CFM/Watts)	9.4	5.6
Current (Amps)	0.26 Max	
Power Rating (V/Hz)	120/60	
Project Pack Components Available SLM-A2 (housing) and SLM80-B (motor and grille)		

SLM100 - 100 CFM Single Speed Exhaust Fan

	4" Oval duct	
Static Pressure (Inches w.g.)	0.1	0.25
Air Flow (CFM)	100	84
Sones	1.0	1.5
Power Consumption (Watts)	14.5	17.7
Energy Efficiency (CFM/Watts)	6.8	4.7
Current (Amps)	0.3 Max	
Power Rating (V/Hz)	120/60	
Project Pack Components Available SLM-A2 (housing) and SLM100-B (motor and grille)		



LED Indicator Light:
SLM80, SLM100



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





Delta BreezSlim Series (3" 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% ¹ 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 ²
- UL listed for both ceiling-mount and wall-mount installation

¹ Based upon SLM50 vs. market AC motor

² Based upon ENERGY STAR v4.0 criteria for residential ventilating fans

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

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



Available with Project Pack Components



Available with metal duct adapter

LED Indicator Light: SLM50, SLM70

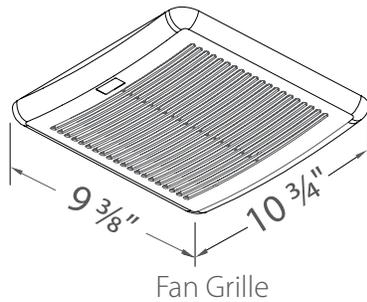
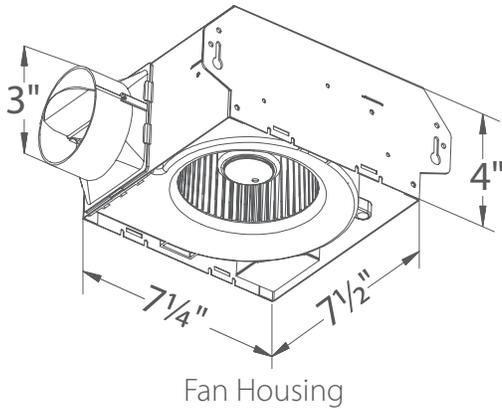


LED Indicator Light: SLM70D



LED Indicator Light: SLM70H





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	5.0
Current (Amps)	0.29 Max	
Power Rating (V/Hz)	120/60	
Project Pack Components Available SLM-A (housing) and SLM70-B (motor grille)		

* Product is ENERGY STAR Most Efficient 2019 distinction and ENERGY STAR qualified

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	5.0
Current (Amps)	0.29 Max	
Power Rating (V/Hz)	120/60	
Project Pack Components Available SLM-A (housing) and SLM70H-B (motor grille)		

SLM70D - 70 CFM Fan with Dual Speed

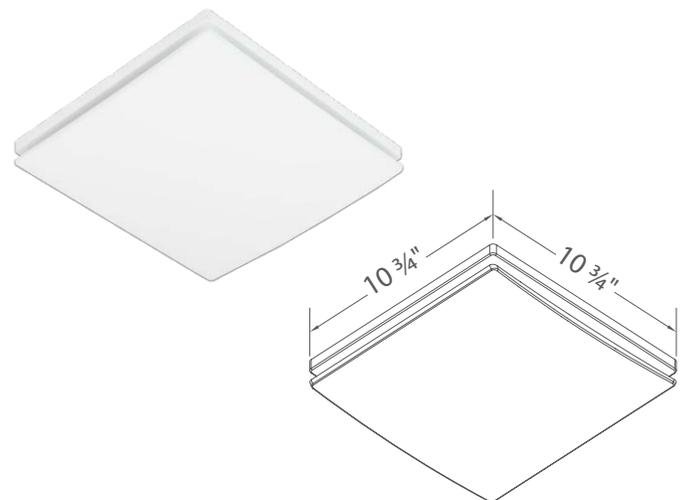
	Continuous low speed		Full Speed	
	Static Pressure (Inches w.g.)	0.1	0.25	0.1
Air Flow (CFM)	40	25	70	50
Sones	0.8	1.0	2.0	1.5
Power Consumption (Watts)	5.0	6.0	13.2	11.6
Energy Efficiency (CFM/Watts)	12.9	6.3	7.1	6.2
Current (Amps)	0.29 Max			
Power Rating (V/Hz)	120/60			

Delta BreezSignature SLM-DGL Designer Grille

The SLM-DGL designer fan grille is offered as an alternative to the standard grille on Delta Breez SLM50, SLM70, SLM70H, and SLM70D.

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"





Delta BreezGreenBuilder Series (4" duct)

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, and decorative LED light, motion and/or 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 only.

Features:

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

- Energy savings up to 61%¹ and 4" duct (standard)
- Lowest sone level rated by HVI as low as 0.8 sones
- Power consumption down to 10.5 Watts
- Exceeds ENERGY STAR requirements by 192% in energy efficiency²
- Fan and Fan/dimmable LED Light combination project pack available
- Fan only models are UL listed for both ceiling-mount and wall-mount installation

Fan/Dimmable LED Light:

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

Fan/Dimmable LED Light DECOR:

- 13-Watt Dimmable LED light included (dimmer switch not included)
- Main light output of 950 Lumens, 3000K and 80 CRI
- Beautifully designed ventilation fan with frosted glass globe and LED light allows for quiet ventilation
- 4-decorative fans in one; includes chrome, brushed nickel, brushed bronze, and polished white finials to match any décor

¹ Based on GreenBuilder GBR80 vs. market AC motor fan

² Based upon ENERGY STAR v4.0 criteria for residential ventilating fans



Fan Only



Fan/Dimmable LED Light



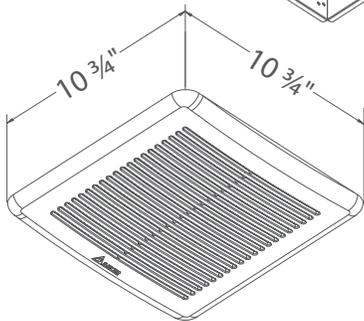
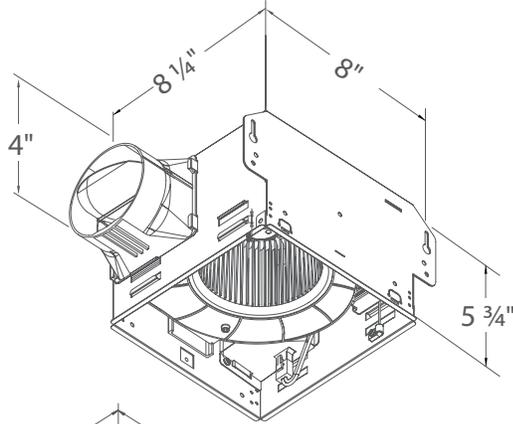
GBR100LED-DECOR



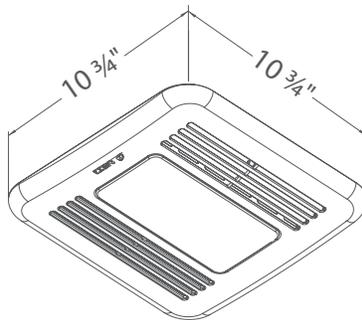
Project Pack Components Available



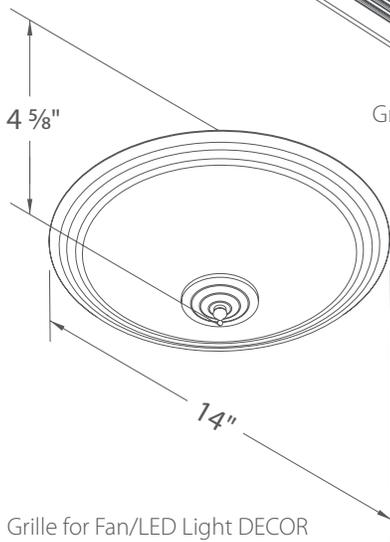
BreezGreenBuilder Series Dimensions



Grille for Fan Only



Grille for Fan/LED Light



Grille for Fan/LED Light DECOR

LED Indicator Light:

GBR80, GBR80LED
GBR100, GBR100LED
Fan is running



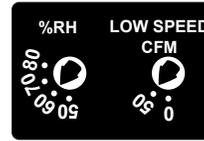
LED Indicator Light:

GBR80HLED, GBR80MHLED, GBR80H
GBR100H, GBR100HLED
Humidity Sensing Full Speed



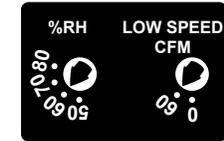
Built-in Controls

GBR80H, GBR80HLED,
GBR80MHLED



Built-in Controls

GBR100H,
GBR100HLED



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	64
Sones	<0.3	1.0	0.8	1.5
Power Consumption (Watts)	4.0	6.0	9.7	11.8
Energy Efficiency (CFM/Watts)	12.5	5.8	8.2	5.4
Current (Amps)	0.22 Max			
Power Rating (V/Hz)	120/60			

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	0.1
Air Flow (CFM)	50	33	80	63
Sones	<0.3	0.8	0.8	1.5
Power Consumption (Watts)	4.4	6.0	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			
Dimmable LED Light (Watts)	13			

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	
Dimmable LED Light (Watts)	13	



Delta BreezGreenBuilder Series (4" duct)

Specifications

GBR80MHLED - 80 CFM

Fan/Dimmable LED Light w/Humidity & Motion Sensor



Fan Speed	Continuous Low Speed		Full Speed	
	0.1	0.25	0.1	0.25
Static Pressure (Inches w.g.)	0.1	0.25	0.1	0.25
Air Flow (CFM)	50	33	80	63
Sones	<0.3	0.8	0.8	1.5
Power Consumption (Watts)	4.4	6.0	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			
Dimmable LED Light (Watts)	13			

GBR100HLED - 100 CFM

Fan/Dimmable LED Light with Humidity Sensor



Fan Speed	Continuous Low Speed		Full Speed	
	0.1	0.25	0.1	0.25
Static Pressure (Inches w.g.)	0.1	0.25	0.1	0.25
Air Flow (CFM)	60	42	100	72
Sones	0.6	1.0	1.5	1.5
Power Consumption (Watts)	4.8	6.2	13.6	11.6
Energy Efficiency (CFM/Watts)	12.5	6.7	7.3	6.2
Current (Amps)	0.35 Max			
Power Rating (V/Hz)	120/60			
Dimmable LED Light (Watts)	13			

GBR100LED - 100 CFM Fan/Dimmable LED Light



Fan Speed	Continuous Low Speed		Full Speed	
	0.1	0.25	0.1	0.25
Static Pressure (Inches w.g.)	0.1	0.25	0.1	0.25
Air Flow (CFM)	100	72	100	72
Sones	1.5	1.5	1.5	1.5
Power Consumption (Watts)	13.6	11.6	13.6	11.6
Energy Efficiency (CFM/Watts)	7.3	6.2	7.3	6.2
Current (Amps)	0.35 Max			
Power Rating (V/Hz)	120/60			
Dimmable LED Light (Watts)	13			

GBR100LED-DECOR - 100 CFM

Fan/Dimmable LED Light Decor



Fan Speed	Continuous Low Speed		Full Speed	
	0.1	0.25	0.1	0.25
Static Pressure (Inches w.g.)	0.1	0.25	0.1	0.25
Air Flow (CFM)	100	72	100	72
Sones	1.5	2.0	1.5	2.0
Power Consumption (Watts)	13	12.5	13	12.5
Energy Efficiency (CFM/Watts)	7.6	5.7	7.6	5.7
Current (Amps)	0.32 Max			
Power Rating (V/Hz)	120/60			
Dimmable LED Light (Watts)	13			

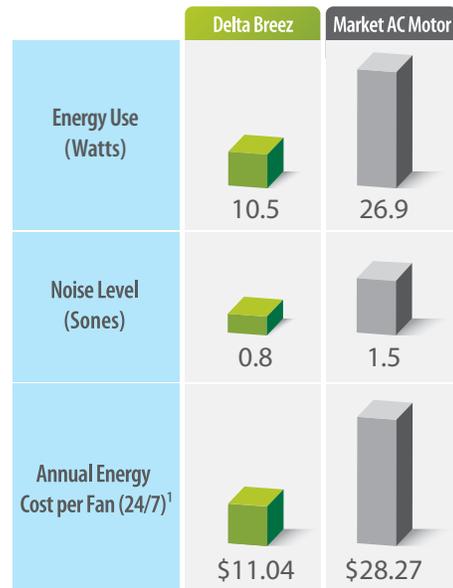
GBR100 - 100 CFM Single Speed Exhaust Fan

Fan Speed	Continuous Low Speed		Full Speed	
	0.1	0.25	0.1	0.25
Static Pressure (Inches w.g.)	0.1	0.25	0.1	0.25
Air Flow (CFM)	100	77	100	77
Sones	1.4	1.5	1.4	1.5
Power Consumption (Watts)	12.6	13.5	12.6	13.5
Energy Efficiency (CFM/Watts)	7.9	5.7	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	
	0.1	0.25	0.1	0.25
Static Pressure (Inches w.g.)	0.1	0.25	0.1	0.25
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			



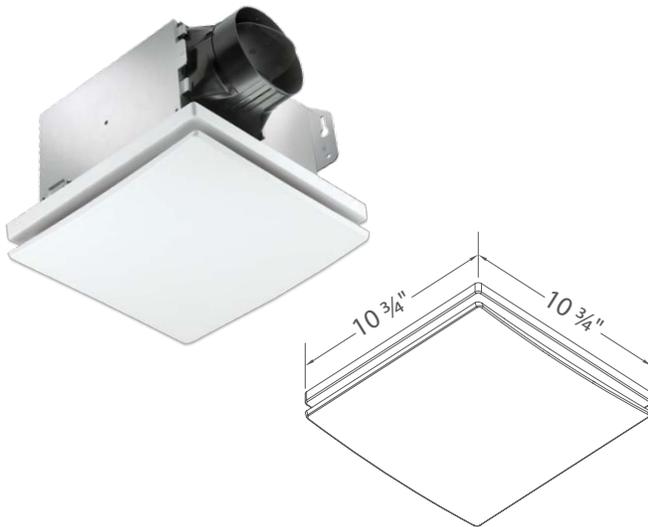
¹ Calculations based upon U.S. average retail electricity. Actual results may vary

Delta BreezGreenBuilder GBR-DGL Designer Grille

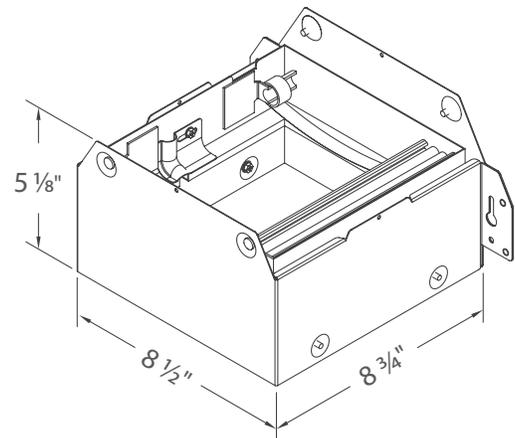
The GBR-DGL designer fan grille is offered as an alternative to the standard grille on GBR80, GBR80H, GBR100, and GBR100H.

Features:

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



- Meets Building Code Standards: IBC, NBC, NFPA, SBC and UBC
- Available for use with Delta Breez GBR Series ventilation fans

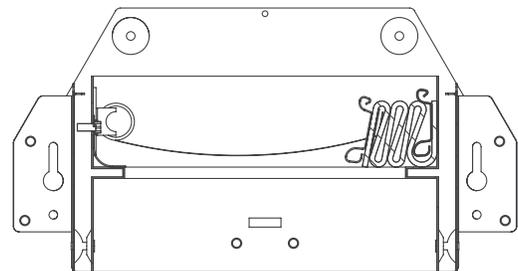


Delta BreezGreenBuilder GBR-CRD Ceiling Radiation Damper

The damper employs a folded curtain style blade for point-of-origin control of radiant heat in a ventilation system. GBR-CRD 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





Delta BreezIntegrity Series (4" duct)

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 dimmable edge-lit LED light, adjustable humidity sensor, 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/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 to increase bearings' 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 w/ Bluetooth® speaker



Fan/LED Light



Fan/Edge-lit LED Light



Fan Only

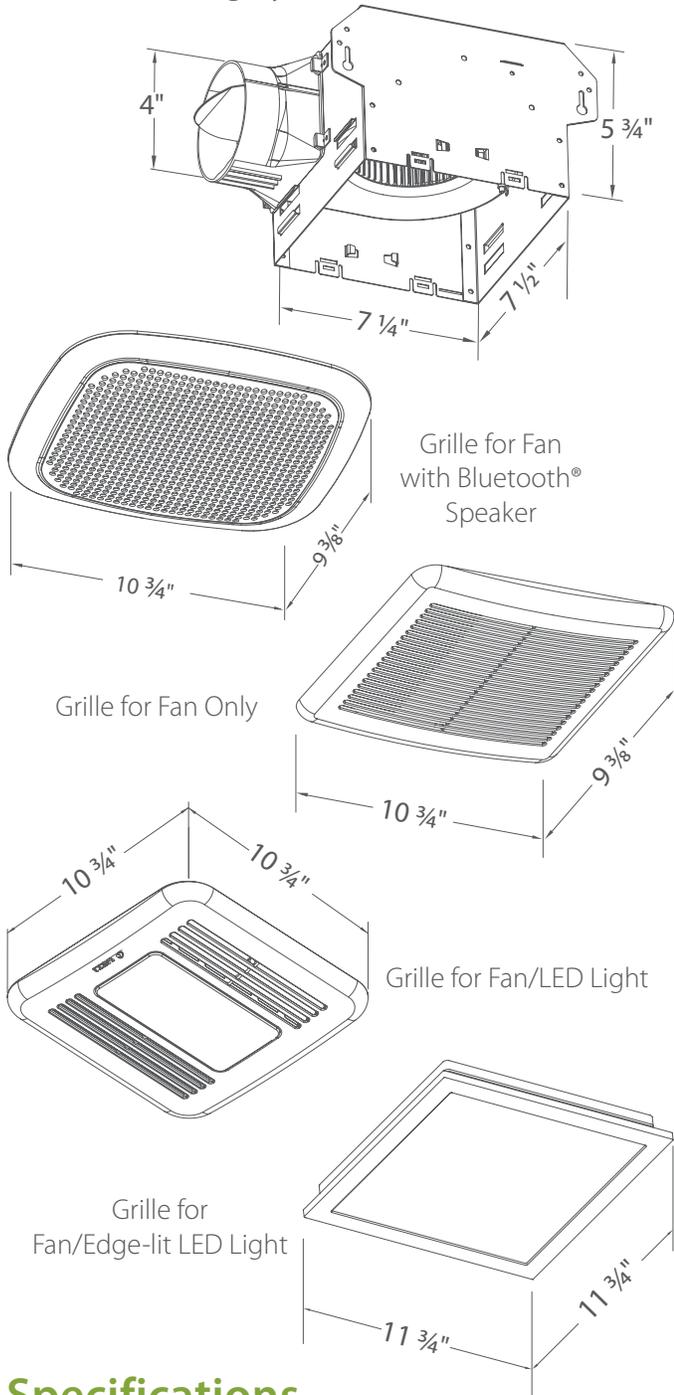


Project Pack

Built-in Controls



BreezIntegrity Series Dimensions



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)	5.0	7.0
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)	5.0	7.0
Energy Efficiency (CFM/Watts)	11	6.5
Current (Amps)	0.22 Max	
Power Rating (V/Hz)	120/60	
LED Light (Watts)	13	
Project Pack Components Available ITGLEDA(housing) and ITG50LED-B(motor grille)		

ITG50HLED* - 50 CFM

Fan/Dimmable LED Light w/ Humidity Sensor



Static Pressure (Inches w.g.)	0.1	0.25
Air Flow (CFM)	50	38
Sones	0.7	1.3
Power Consumption (Watts)	5.0	7.0
Energy Efficiency (CFM/Watts)	11	6.5
Current (Amps)	0.22 Max	
Power Rating (V/Hz)	120/60	
LED Light (Watts)	13	

ITG70BT* - 70 CFM Fan w/ Bluetooth® Speaker



Static Pressure (Inches w.g.)	0.1	0.25
Air Flow (CFM)	70	59
Sones	1.0	1.5
Power Consumption (Watts)	8.4	10.0
Energy Efficiency (CFM/Watts)	10.6	5.9
Current (Amps)	0.22 Max	
Power Rating (V/Hz)	120/60	

ITG80 - 80 CFM Fan

Static Pressure (Inches w.g.)	0.1	0.25
Air Flow (CFM)	80	60
Sones	1.3	1.4
Power Consumption (Watts)	10.0	12.0
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	
Static Pressure (Inches w.g.)	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)	5.0	7.0	10.0	11.0
Energy Efficiency (CFM/Watts)	12.0	6.9	9.0	6.2
Current (Amps)	0.20 Max			
Power Rating (V/Hz)	120/60			
Project Pack Components Available ITGH-A(housing) and ITG80H-B(motor grille)				

* Product is ENERGY STAR Most Efficient 2019 distinction and ENERGY STAR qualified



Specifications (cont.)

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)	0.28 Max	
Power Rating (V/Hz)	120/60	
LED Light (Watt)	13	
Project Pack Components Available ITGLEDA-A(housing) and ITG80LED-B(motor grille)		

ITG100 - 100 CFM Fan

Static Pressure (Inches w.g.)	0.1	0.25
Air Flow (CFM)	100	85
Sones	1.5	2.0
Power Consumption (Watts)	17.0	21.0
Energy Efficiency (CFM/Watts)	7.6	5.3
Current (Amps)	0.33 Max	
Power Rating (V/Hz)	120/60	

ITG100ELED - 100 CFM Fan/Edge-lit Dimmable LED Light



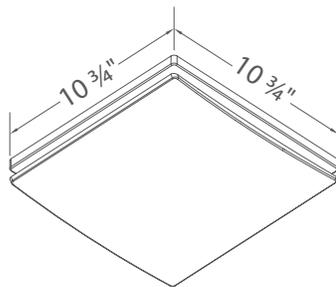
Static Pressure (Inches w.g.)	0.1	0.25
Air Flow (CFM)	100	85
Sones	1.5	2.0
Power Consumption (Watts)	17.0	21.0
Energy Efficiency (CFM/Watts)	7.5	5.9
Current (Amps)	0.47 Max	
Power Rating (V/Hz)	120/60	
LED Light (Watt)	13	

Delta ITG-DGL Designer Grille

The ITG-DGL designer fan grille is offered as an alternative to the standard grille on Delta Breez ITG50, ITG70BT, 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"

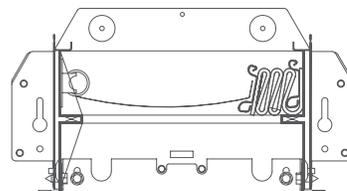
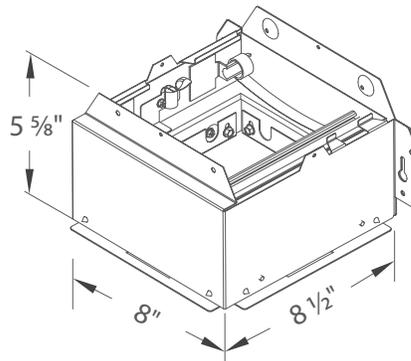


Delta Breez Integrity ITG-CRD Ceiling Radiation Damper

The damper employs a folded curtain style blade for Point-of-origin control of radiant heat in a ventilation system. ITG-CRD 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
- Available for use with Delta Breez ventilation fans ITG100, ITG80, ITG50, ITG80H, ITG80LED, ITG70LED, ITG50LED, SLM70H, SLM70, and SLM50.





Delta BreezProfessional (6" duct)

Large space solution.

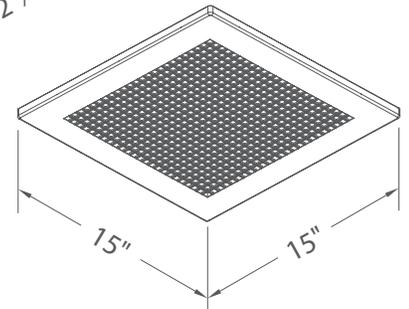
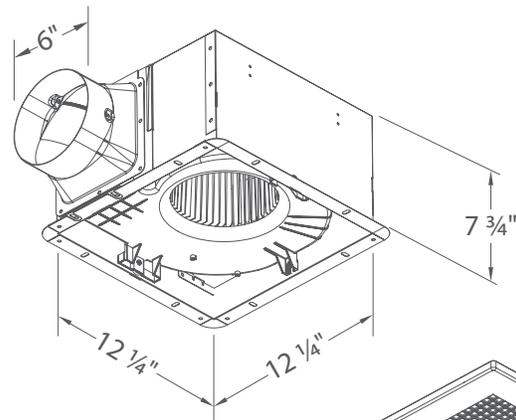
Single speed 200 or 300 CFM. Quiet operation from 1 to 2 sones. For spaces 200-300 sq. ft. Perfect for large bathrooms, laundry rooms, conference rooms. UL approved for ceiling mount only.

Features:

- DC motor technology, energy saving up to 60%¹
- 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)	17.5	43.7
Noise Level (Sones)	1.0 (200CFM)	0.8 (190CFM)
Annual Energy Cost per Fan (24/7) ²	\$18.40	\$45.62

¹ Based upon Breez Pro200 vs. Market AC motor

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

Specifications

Pro200* - 200 CFM Fan



Static Pressure (Inches w.g.)	0.1	0.25
Air Flow (CFM)	200	163
Sones	1.0	1.3
Power Consumption (Watts)	17.5	21.5
Energy Efficiency (CFM/Watts)	11.4	7.5
Current (Amps)	0.52 Max	
Power Rating (V/Hz)	120/60	

Pro300 - 300 CFM Fan

Static Pressure (Inches w.g.)	0.1	0.25
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	

* Product is ENERGY STAR Most Efficient 2019 distinction and ENERGY STAR qualified



Delta BreezRadiance (4" duct)

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:

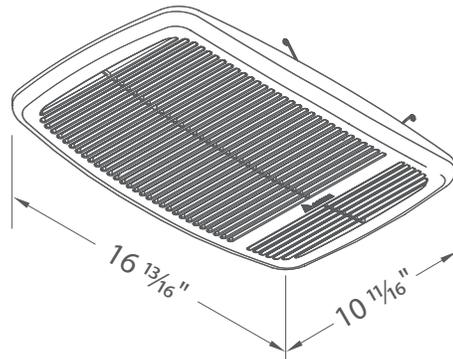
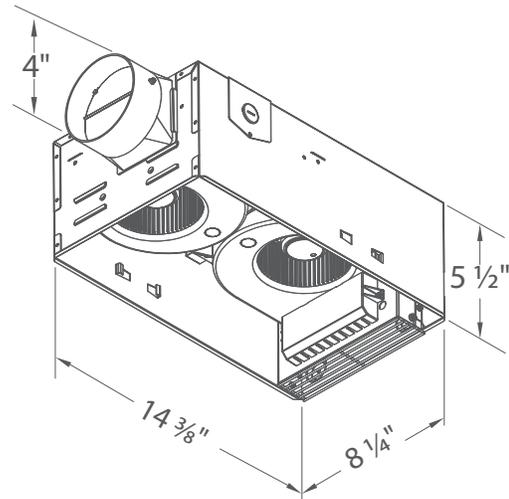
- Energy saving DC motor technology
- Built-in thermostat for consistent temperature
- Metal guard to prevent user contact with heating element
- Heater module equipped with thermal cut off fuse
- Duct diameter of 4"
- 1300/1600 Watts heating element evaluated by cUL for safety standards

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)



RAD80 Fan with Heater



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) ¹	\$12.31	\$60.54

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

Specifications

RAD80 - 80 CFM Fan with Heater

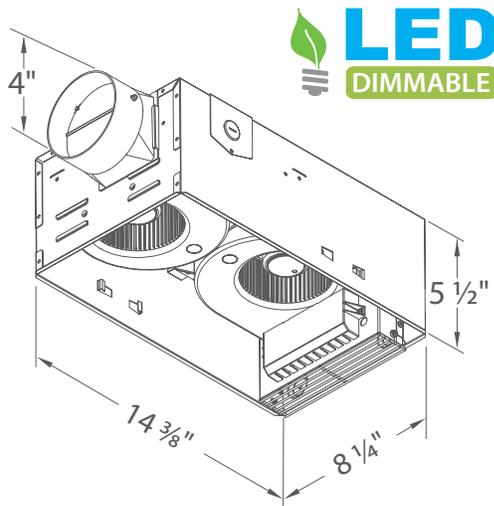
Static Pressure (Inches w.g.)	0.1	0.25
Air Flow (CFM)	80	54
Sones	1.5	NA
Power Consumption (Watts)	11.7	8.2
Energy Efficiency (CFM/Watts)	7.0	6.6
Current (Amps)	11	
Power Rating (V/Hz)	120/60	
Heating element (Watts)	1300	
Total power (Watts)	1314	



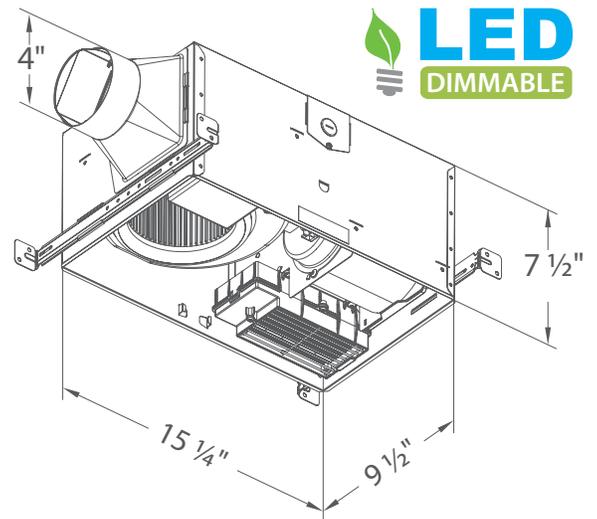
RAD80LED Fan/LED Light/Heater



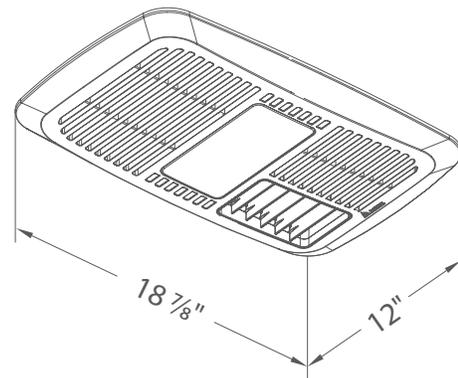
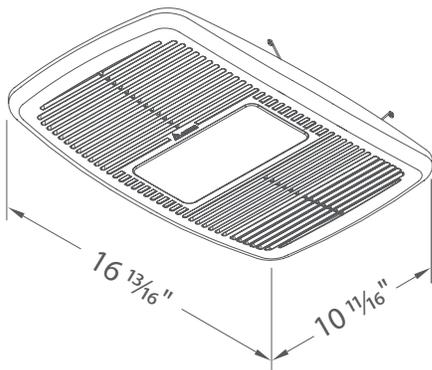
RAD110LED Fan/LED Light/Heater



LED
DIMMABLE



LED
DIMMABLE



RAD80LED - 80 CFM Fan/LED Light with Heater



Static Pressure (Inches w.g.)	0.1	0.25
Air Flow (CFM)	80	54
Sones	1.5	N/A
Power Consumption (Watts)	11.7	8.2
Energy Efficiency (CFM/Watts)	7.0	6.6
Current (Amps)	11	
Power Rating (V/Hz)	120/60	
Heating element (Watts)	1300	
Lamp (Watts)	13	
Total power (Watts)	1327	

RAD110LED - 110 CFM Fan/LED Light with Heater



Static Pressure (Inches w.g.)	0.1	0.25
Air Flow (CFM)	110	85
Sones	0.7	1.0
Power Consumption (Watts)	12.0	13.0
Energy Efficiency (CFM/Watts)	11	7.8
Current (Amps)	14	
Power Rating (V/Hz)	120/60	
Heating element (Watts)	1600	
Lamp (Watts)	13	
Total power (Watts)	1650	



Delta Breez is powerful, durable, quiet and efficient

Backed by nearly 30 years of innovation and consistent quality, the DC brushless motor technology inside every Delta Breez product is why Breez ventilation fans is the new industry standard for energy efficient performance.

All Delta Breez fans are:

- + Rigorously tested to reduce noise
- + Equipped with soft start and lock protection functions
- + Engineered to run continuously for a minimum of 70,000 hours

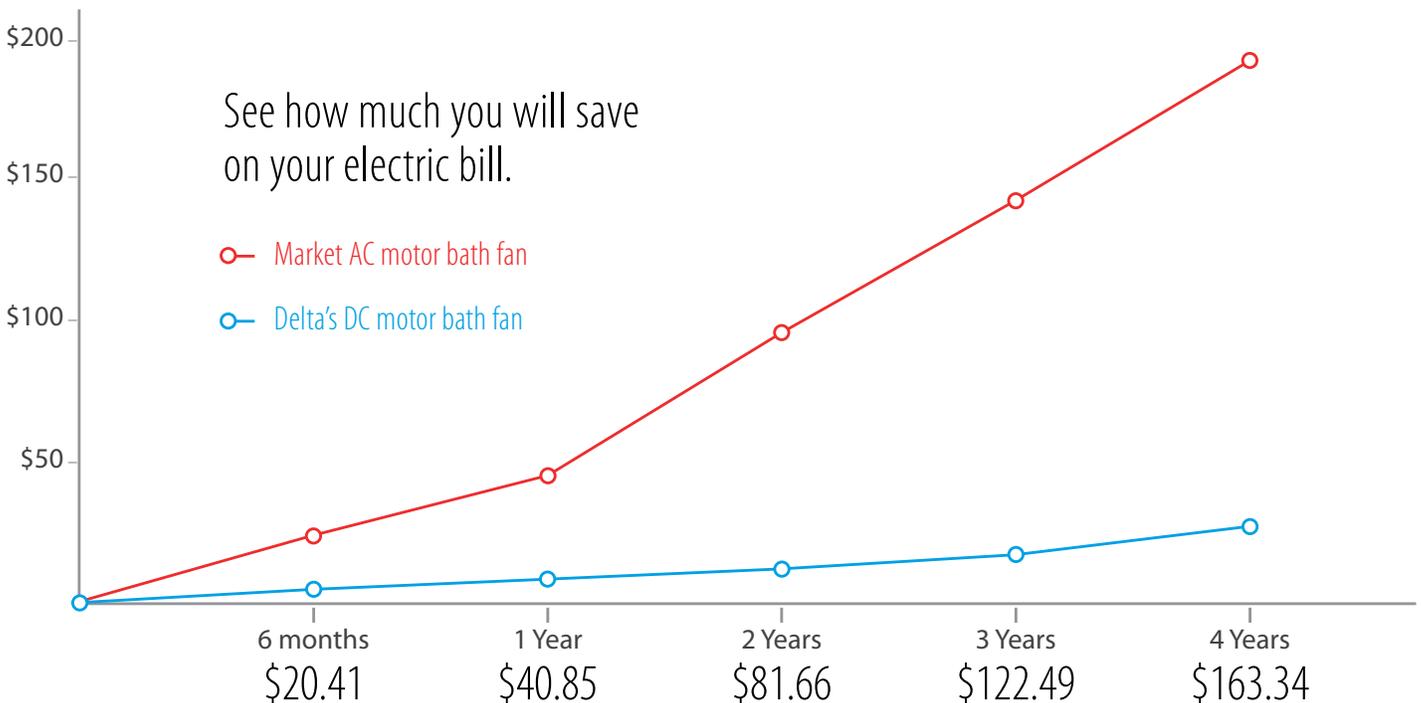
Energy Saving Bathroom Solution

The introduction of the Breez ventilation fan ushered a new era in green construction for bathroom ventilation. The Breez ventilation fan delivers an aesthetically pleasing ventilation solution that consumes less power with advanced functionality, operating more quietly than most AC motor products on the market.

Features and benefits that blow you away

- + Quiet – measured at the lowest noise level (less than 0.3 sones) a bath fan can be tested for HVI certification.
- + Low Energy Costs – consumes up to 85% less energy than other leading fans, with as little as 4 Watts versus 45 Watts
- + Years of worry-free operation – features precision engineered Delta DC brushless fan motors for superior performance and reliability. Made to outlast AC fan motors by as much as 70%, reducing the frequency of motor replacement
- + Easy Installation – Breez retrofit models can fit into most existing bath ceiling cut-outs
- + Certification – exceeds ENERGY STAR requirements by up to 367%¹. UL and cUL listed for tub/shower enclosure when used with GFCI branch circuit wiring

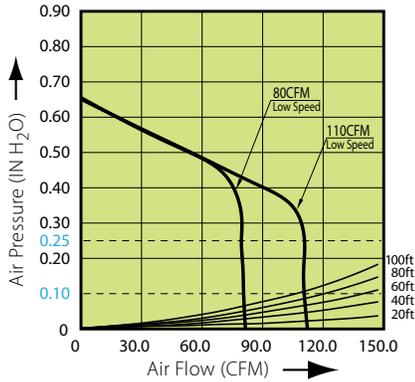
¹ Based upon ENERGY STAR V4.0 Criteria for residential ventilating fans
² Calculations based upon U.S. average retail electricity. Actual results may vary



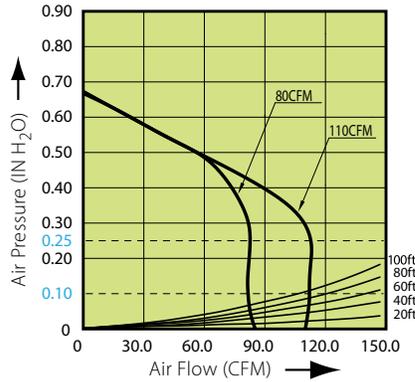
Delta Breez Fan Curves

BreezSignature Fan Curves

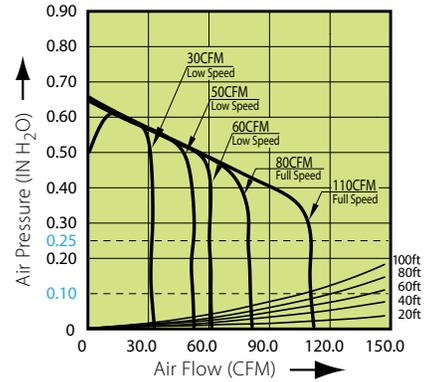
SIG80-110 Fan Curve



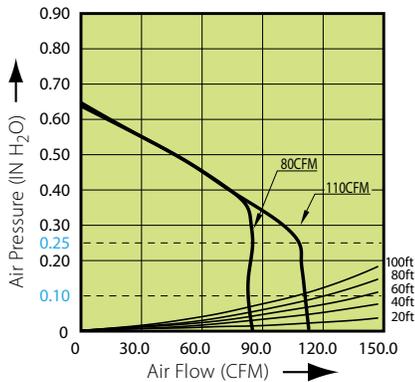
SIG80-110LED Fan Curve



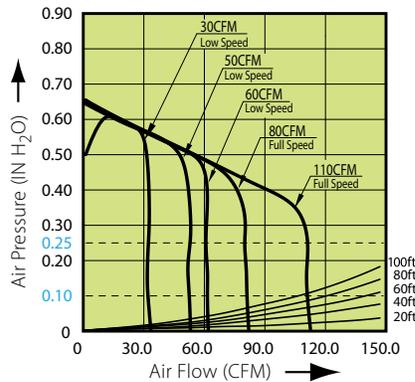
SIG80-110D Fan Curve



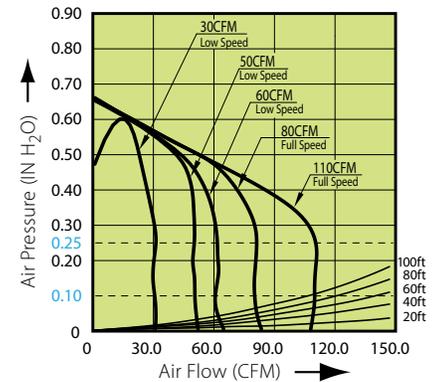
SIG80-110ELED Fan Curve



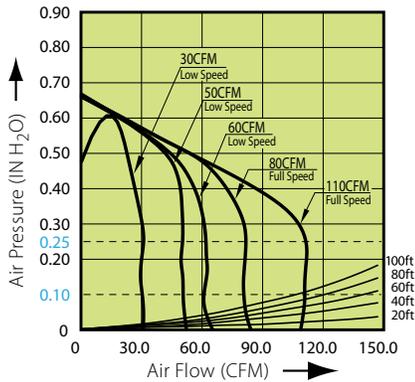
SIG80-110H Fan Curve



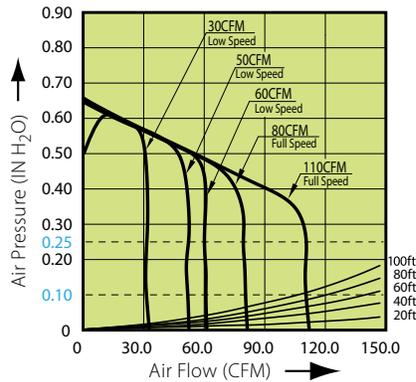
SIG80-110HLED Fan Curve



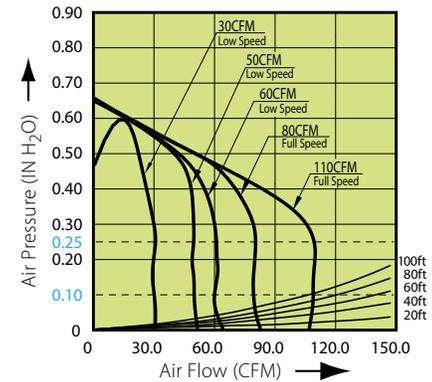
SIG80-110DLED Fan Curve



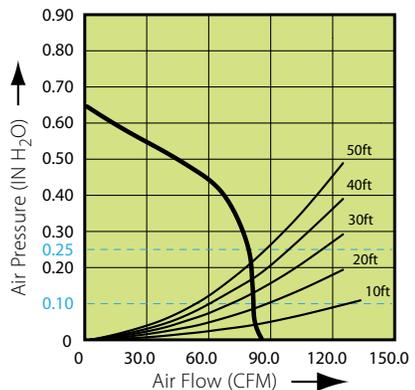
SIG80-110MH Fan Curve



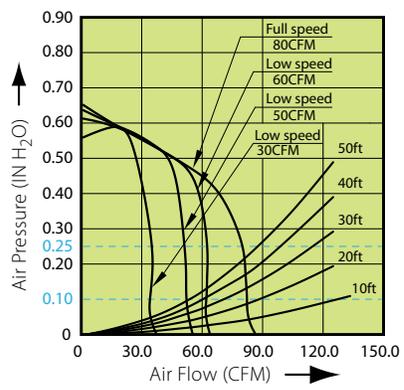
SIG80-110MHLED Fan Curve



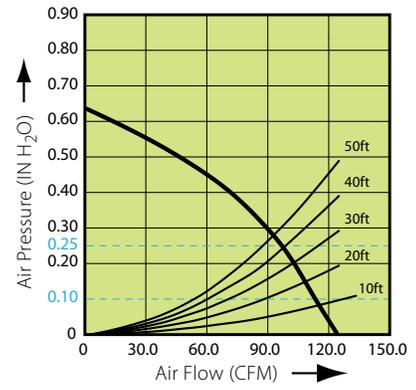
SIG80 Fan Curve



SIG80D Fan Curve

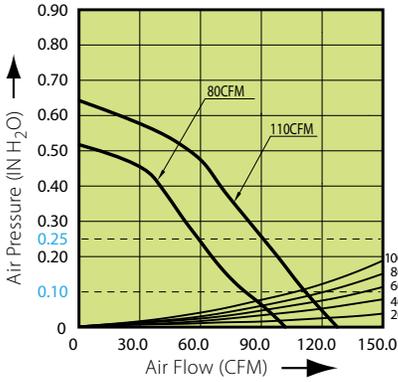


SIG110 Fan Curve

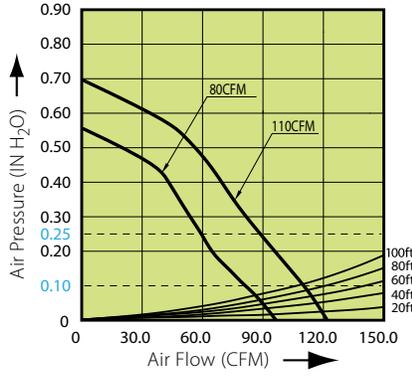


BreezElite Fan Curves

ELT80-110 Fan Curve

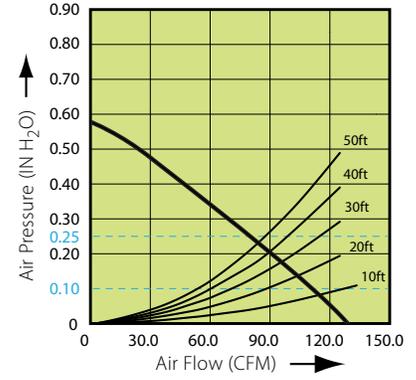


ELT80-110LED Fan Curve

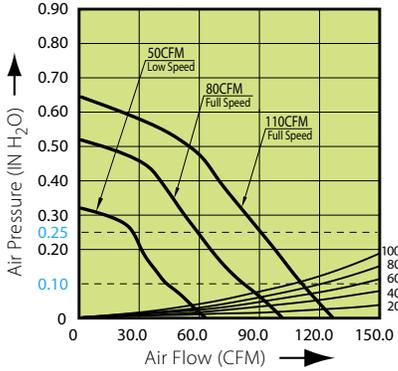


BreezSignature Fan Curves

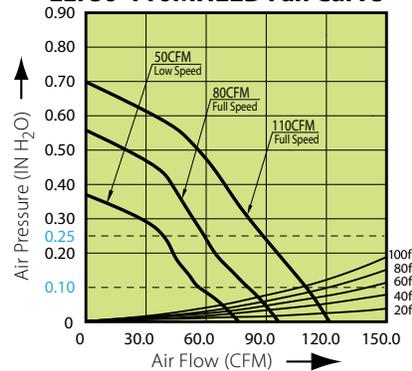
VFB25ADBT Fan Curve



**ELT80-110D / ELT80-110H
ELT80-110MH Fan Curve**

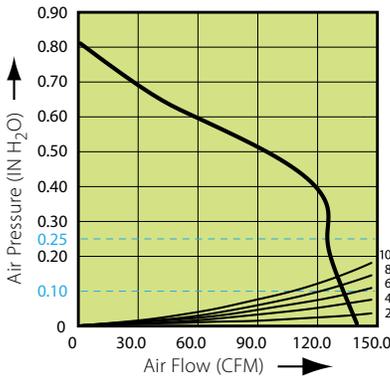


**ELT80-110DLED / ELT80-110HLED
ELT80-110MHLED Fan Curve**

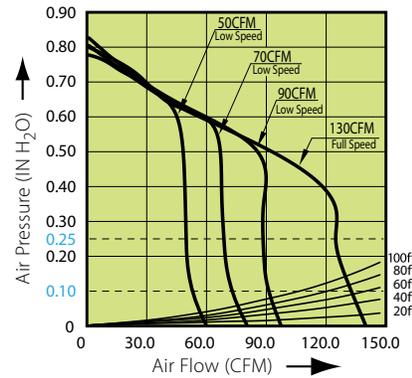


BreezSmart Fan Curves

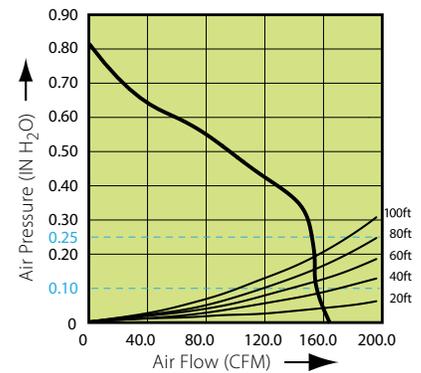
SMT130 Fan Curve



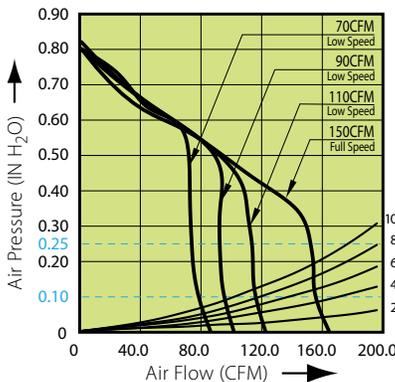
SMT130H & SMT130M Fan Curve



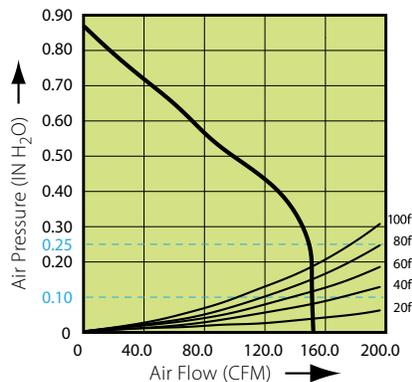
SMT150 Fan Curve



SMT150D Fan Curve

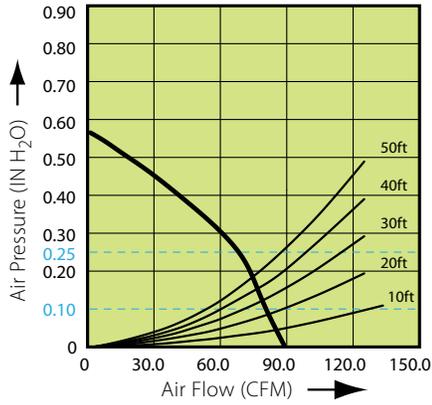


SMT150LED Fan Curve

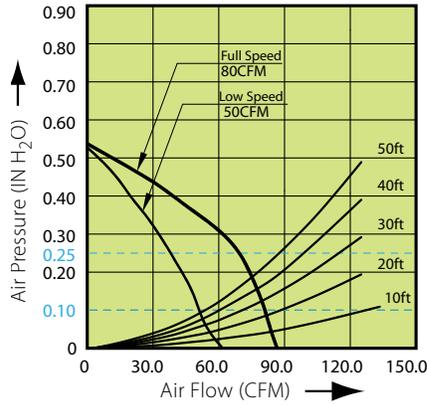


BreezGreenBuilder Fan Curves

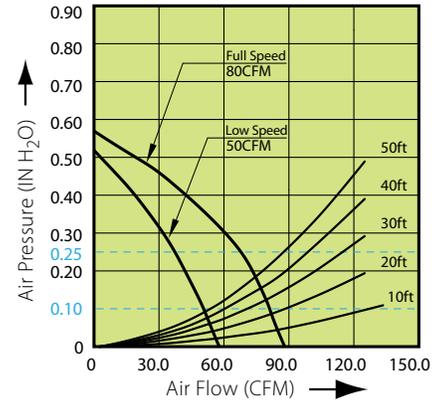
GBR80 Fan Curve



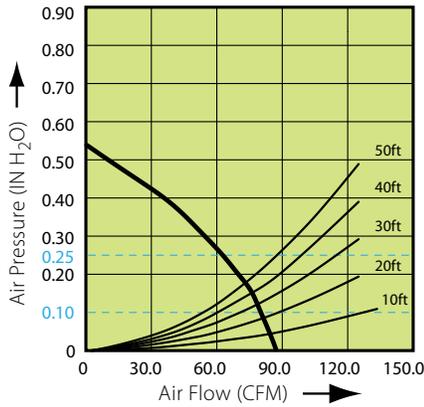
GBR80H Fan Curve



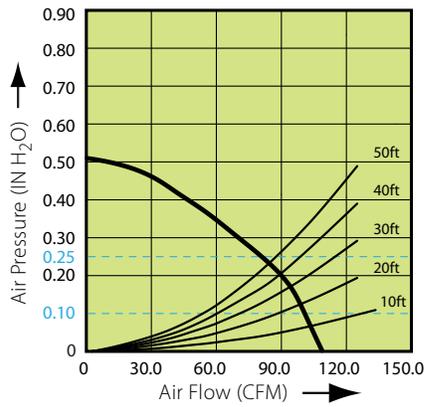
GBR80HLED & GBR80MHLED Fan Curve



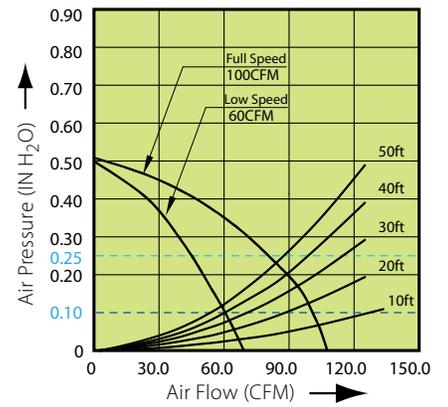
GBR80LED Fan Curve



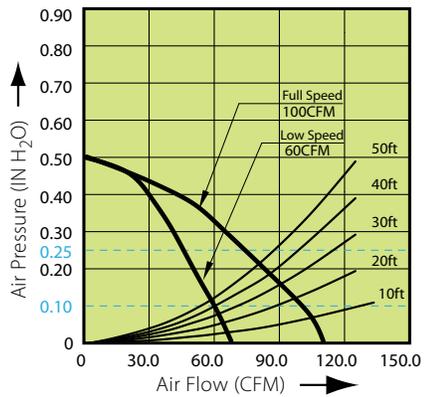
GBR100 Fan Curve



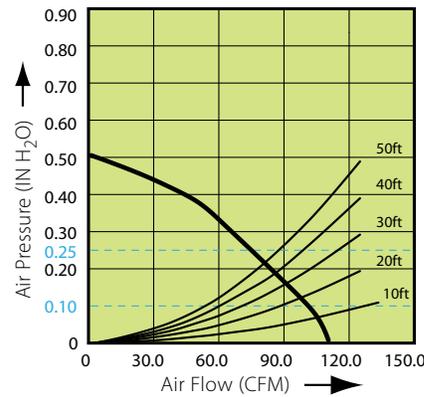
GBR100H Fan Curve



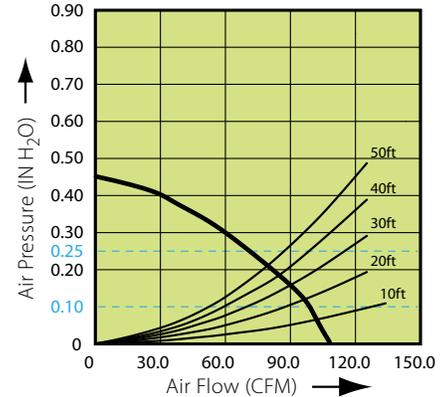
GBR100HLED Fan Curve



GBR100LED Fan Curve



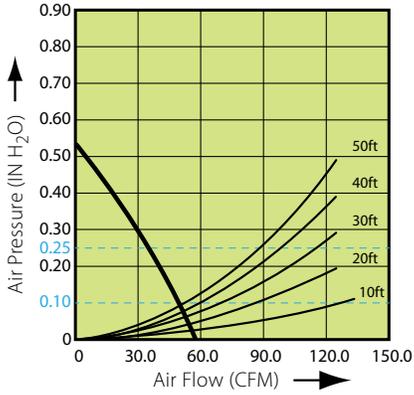
GBR100LED-DECOR Fan Curve



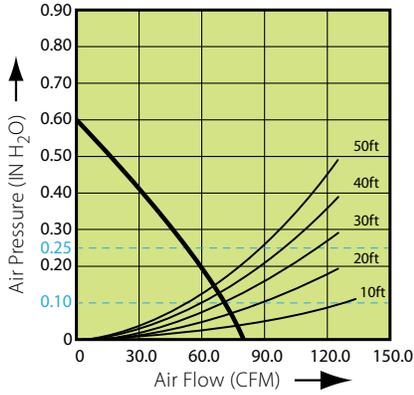
Delta Breez Fan Curves

BreezSlim Fan Curves

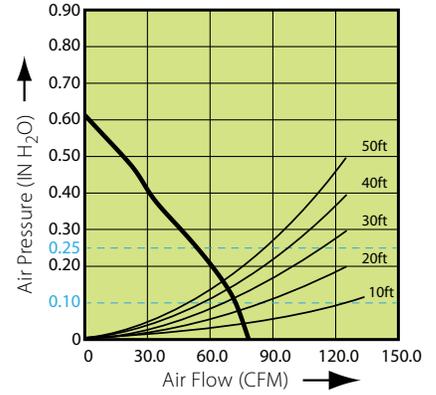
SLM50 Fan Curve



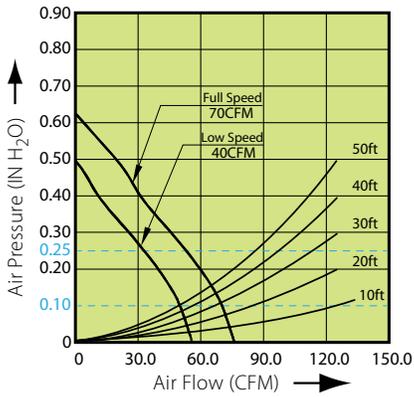
SLM70 Fan Curve



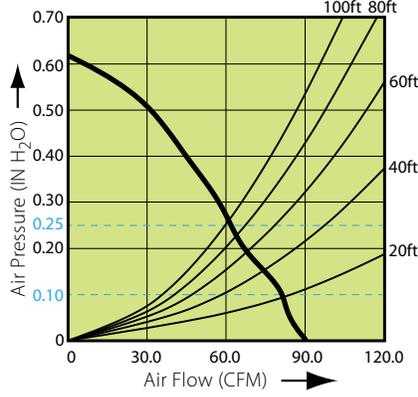
SLM70H Fan Curve



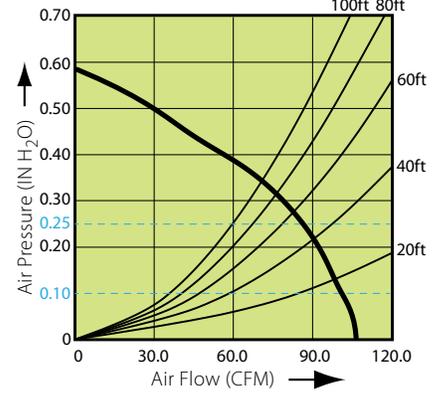
SLM70D Fan Curve



SLM80 Fan Curve

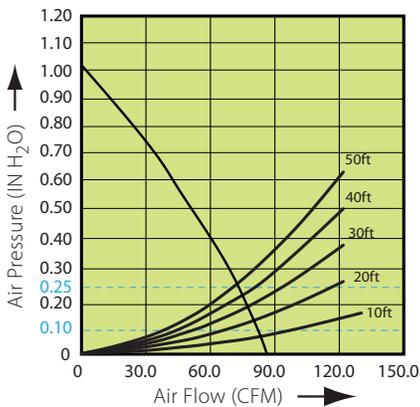


SLM100 Fan Curve



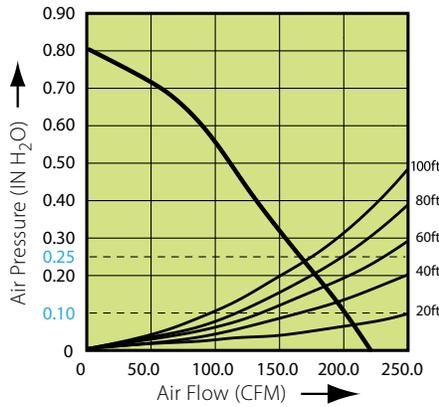
BreezRecessed Fan Curves

REC80LED Fan Curve

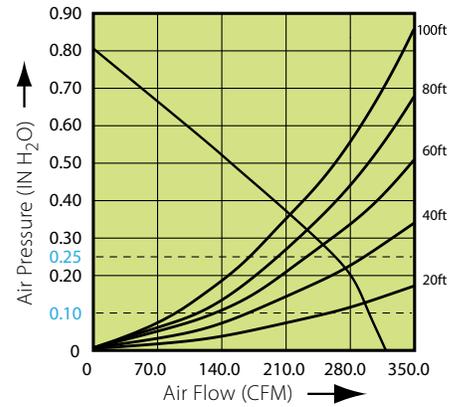


BreezPro Fan Curve

Pro200 Fan Curve

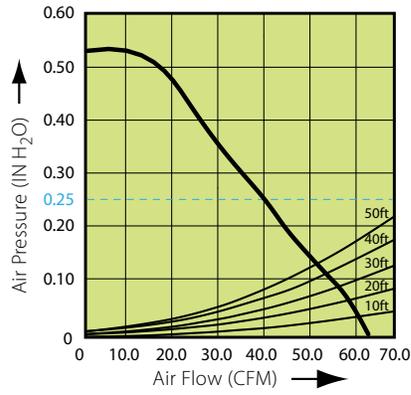


Pro300 Fan Curve

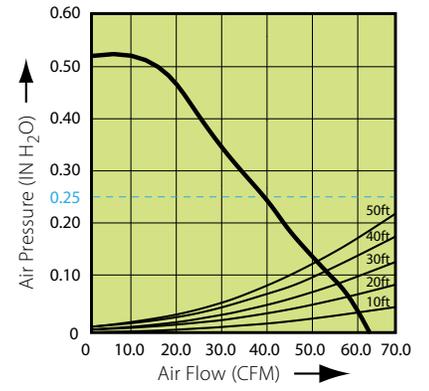


BreezIntegrity Fan Curves

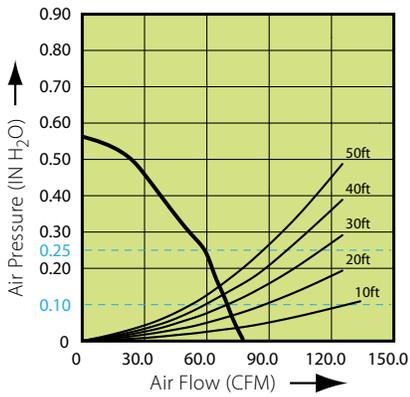
ITG50 Fan Curve



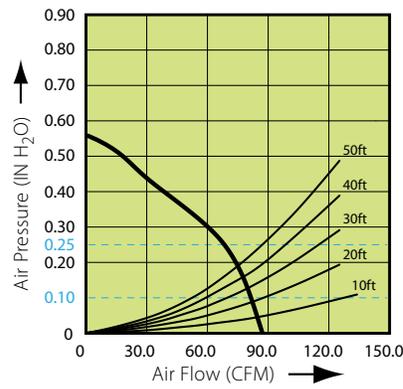
ITG50LED/ ITG50HLED Fan Curve



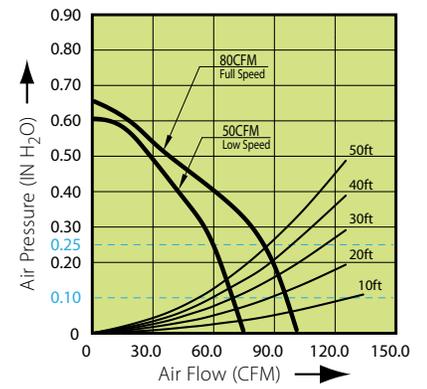
ITG70BT Fan Curve



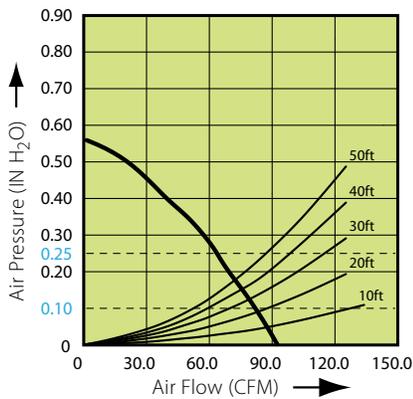
ITG80 Fan Curve



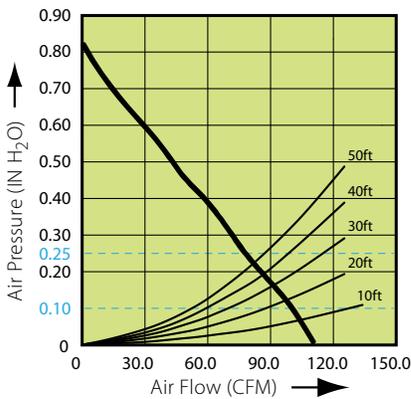
ITG80H Fan Curve



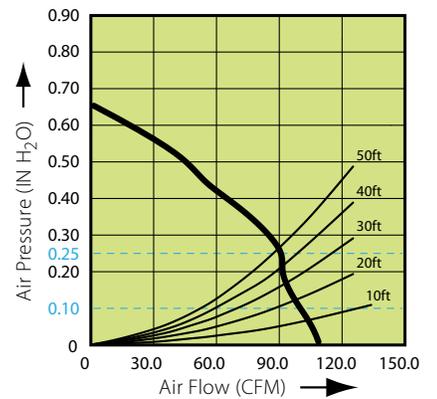
ITG80LED Fan Curve



ITG100 Fan Curve

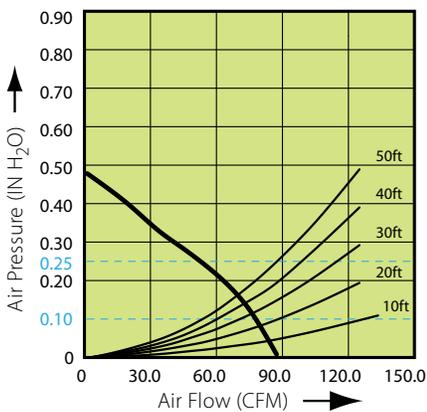


ITG100LED Fan Curve

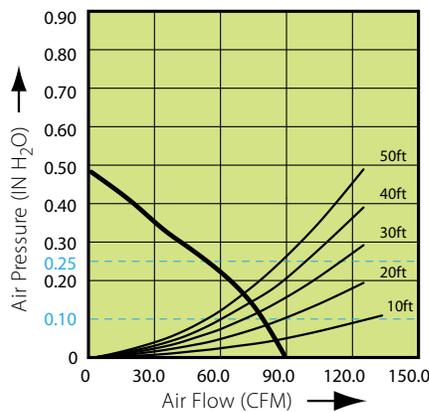


BreezRadiance Fan Curve

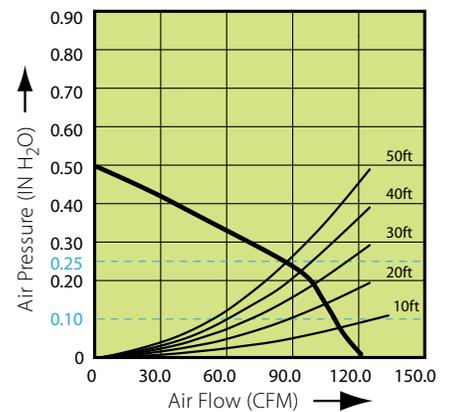
RAD80 Fan Curve



RAD80LED Fan Curve



RAD110LED Fan Curve



Which Fan is Most Suitable for Your Needs? The proof of Delta's commitment to green

	Model #	Air Flow (CFM)	Duct Size	Description	
Signature	SIG80-110	80-110	6"	Single Speed	
	SIG80-110LED	80-110	6"	Fan/Dimmable LED Light/Night-Light	
	SIG80-110ELED	80-110	6"	Fan/Edge-lit Dimmable LED Light w/ adjustable color temperature	
	SIG80-110D	80-110	6"	Fan with Dual Speed	
	SIG80-110DLED	80-110	6"	Fan/Dimmable LED Light/Night-Light w/Dual Speed	
	SIG80-110H	80-110	6"	Fan with Humidity Sensor	
	SIG80-110HLED	80-110	6"	Fan/Dimmable LED Light/Night-Light w/ Humidity Sensor	
	SIG80-110MH	80-110	6"	Fan with Motion & Humidity Sensor	
	SIG80-110MHLED	80-110	6"	Fan/ Dimmable LED Light/Night-Light with Motion & Humidity Sensor	
	SIG80	80	4"	Single Speed	
	SIG80D	80	4"	Fan with Dual Speed	
	SIG110	110	4"	Single Speed	
	VFB25ADBT	110	4"	Fan with Bluetooth®	
	Smart	SMT130	130	6"	Single Speed
SMT130M		130	6"	Fan with Motion Sensor	
SMT130H		130	6"	Fan with Humidity Sensor	
SMT150		150	6"	Single Speed	
SMT150D		150	6"	Fan with Dual Speed	
SMT150LED		150	6"	Fan/LED Light	
Recessed	REC80LED	80	4"	Fan/Dimmable LED Light	
Elite	ELT80-110	80-110	6"	Single Speed	
	ELT80-110LED	80-110	6"	Fan/Dimmable LED Light	
	ELT80-110D	80-110	6"	Fan with Dual Speed	
	ELT80-110DLED	80-110	6"	Fan/Dimmable LED Light with Dual Speed	
	ELT80-110H	80-110	6"	Fan with Humidity Sensor	
	ELT80-110HLED	80-110	6"	Fan/Dimmable LED Light with Humidity Sensor	
	ELT80-110MH	80-110	6"	Fan with Motion and Humidity Sensor	
	ELT80-110MHLED	80-110	6"	Fan/Dimmable LED Light w/ Motion and Humidity Sensor	

LED Light
 Dimmable LED Light
 Adjustable motion sensor
 Adjustable humidity sensor
 Adjustable dual speed

is in the energy-saving, cost efficient operation of the entire Breez product line.

Motor	Noise (Sones)	Energy Use (Watts)	Energy Efficiency (CFM/Watts)	Electric Bill ¹		 Most Efficient 2019 www.energystar.gov	 Meets & Exceeds Requirements Intermittent	 Meets & Exceeds Requirements Continuous
DC	<0.3	6.2	15.4	\$6.50	Y	Y	Y	Y
DC	<0.3	6.8	13.8	\$7.20	Y	Y	Y	Y
DC	<0.3	7.5	11.7	\$7.89	Y	Y	Y	Y
DC	<0.3	6.2	15.4	\$6.50	Y	Y	Y	Y
DC	<0.3	6.8	13.8	\$7.20	Y	Y	Y	Y
DC	<0.3	6.2	15.4	\$6.50	Y	Y	Y	Y
DC	<0.3	6.8	13.8	\$7.20	Y	Y	Y	Y
DC	<0.3	6.2	15.4	\$6.50	Y	Y	Y	Y
DC	<0.3	6.8	13.8	\$7.20	Y	Y	Y	Y
DC	<0.3	8.7	9.7	\$9.15	Y		Y	Y
DC	<0.3	8.7	9.7	\$9.15	Y		Y	Y
DC	<0.3	13.6	9.0	\$14.31	Y		Y	Y
DC	1.0	14.2	7.7	\$14.94	Y		Y	Y
DC	<0.3	11.6	11.2	\$12.10	Y	Y	Y	Y
DC	<0.3	11.6	11.2	\$12.10	Y	Y	Y	Y
DC	<0.3	11.6	11.2	\$12.10	Y	Y	Y	Y
DC	<0.3	16.9	8.8	\$17.63	Y		Y	Y
DC	<0.3	16.9	8.8	\$17.63	Y		Y	Y
DC	0.5	17.6 (Fan Only)	8.5	\$18.51	Y		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	Y	Y
DC	0.5	7.0	11.4	\$7.36	Y	Y	Y	Y
DC	0.5	7.0	11.4	\$7.36	Y	Y	Y	Y
DC	0.5	7.0	11.4	\$7.36	Y	Y	Y	Y
DC	0.5	7.0	11.4	\$7.36	Y	Y	Y	Y
DC	0.5	7.0	11.4	\$7.36	Y	Y	Y	Y
DC	0.5	7.0	11.4	\$7.36	Y	Y	Y	Y
DC	0.5	7.0	11.4	\$7.36	Y	Y	Y	Y
DC	0.5	7.0	11.4	\$7.36	Y	Y	Y	Y



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

Which Fan is Most Suitable for Your Needs? The proof of Delta's commitment to green

	Model #	Air Flow (CFM)	Duct Size	Description	
GreenBuilder	GBR80	80	4"	Single Speed	
	GBR80H	80	4"	Fan with Humidity Sensor	
	GBR80HLED	80	4"	Fan/Dimmable LED Light with Humidity Sensor	
	GBR80LED	80	4"	Fan/Dimmable LED Light	
	GBR80MHLED	80	4"	Fan/ Dimmable LED Light w/Humidity & Motion Sensor	
	GBR100	100	4"	Single Speed	
	GBR100H	100	4"	Fan with Humidity Sensor	
	GBR100HLED	100	4"	Fan/Dimmable LED Light with Humidity Sensor	
	GBR100LED	100	4"	Fan/Dimmable LED Light	
	GBR100LED-DECOR	100	4"	Fan/Dimmable LED Light Decor	
Slim	SLM50	50	3"	Single Speed	
	SLM70	70	3"	Single Speed	
	SLM70H	70	3"	Fan with Humidity Sensor	
	SLM70D	70	3"	Fan with Dual Speed	
	SLM80	80	4" Oval	Single Speed	
	SLM100	100	4" Oval	Single Speed	
Integrity	ITG50	50	4"	Single Speed	
	ITG50LED	50	4"	Fan/Dimmable LED Light	
	ITG50HLED	50	4"	Fan/Dimmable LED Light with Humidity Sensor	
	ITG70BT	70	4"	Fan with Bluetooth®	
	ITG80	80	4"	Single Speed	
	ITG80H	80	4"	Fan with humidity Sensor	
	ITG80LED	80	4"	Fan/Dimmable LED Light	
	ITG100	100	4"	Single Speed	
	ITG100ELED	100	4"	Fan/Edge-lit Dimmable LED Light	
Radiance	RAD80	80	4"	Fan with Heater	
	RAD80LED	80	4"	Fan/LED Light with Heater	
	RAD110LED	110	4"	Fan/LED Light with Heater	
Professional	Pro200	200	6"	Single Speed	
	Pro300	300	6"	Single Speed	

 LED Light
  Dimmable LED Light
  Adjustable motion sensor
  Adjustable humidity sensor
  Adjustable dual speed

is in the energy-saving, cost efficient operation of the entire Breez product line.

Motor	Noise (Sones)	Energy Use (Watts)	Energy Efficiency (CFM/Watts)	Electric Bill ¹	 ENERGY STAR	 ENERGY STAR	Most Efficient 2019 www.energystar.gov	 MEETS & EXCEEDS REQUIREMENTS Intermittent	 MEETS & EXCEEDS REQUIREMENTS 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 (Fan only)	7.2	\$11.57	Y			Y	Y
DC	0.8	11 (Fan only)	7.2	\$11.57	Y			Y	Y
DC	0.8	11 (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	1.5	13.6 (Fan only)	7.3	\$14.31	Y			Y	
DC	1.5	13 (Fan only)	7.6	\$13.68	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	5.8	\$13.88	Y			Y	
DC	2.0	13.2	7.1	\$13.88	Y			Y	Y
DC	0.6	8.5	9.4	\$8.94	Y			Y	Y
DC	1.0	14.5	6.8	\$15.25	Y			Y	Y
DC	0.7	5.0	12.5	\$5.26	Y	Y			Y
DC	0.7	5.0	12.5	\$5.26	Y	Y			Y
DC	0.7	5.0	12.5	\$5.26	Y	Y			Y
DC	1.0	8.4	10.6	\$8.83	Y	Y		Y	Y
DC	1.3	9.5	8.4	\$9.98	Y			Y	
DC	1.5	10.0	9.0	\$10.51	Y			Y	Y
DC	1.3	11.3	7.2	\$11.88	Y			Y	
DC	1.5	17.0	7.6	\$17.88	Y			Y	
DC	1.5	17.0	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	0.7	12.0	11	\$12.62				Y	Y
DC	1.0	17.5	11.4	\$18.39	Y	Y		Y	Y
DC	2.0	41	7.3	\$43.09	Y			Y	



¹ 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, BreezSlim, BreezGreenBuilder, BreezSmart, BreezRadiance, BreezProfessional, BreezIntegrity and BreezRecessed models by CFM (airflow) output for duct lengths from 40ft to 100ft.

	Breez Models	Mode(s)	Duct Size	40ft	60ft	80ft	100ft
Signature	SIG80-110 (80-110 CFM)	Single Speed	6"	110 CFM	110 CFM	110 CFM	110 CFM
	SIG80-110LED (80-110 CFM)	Fan/ Dimmable LED Light/Night-Light	6"	110 CFM	110 CFM	110 CFM	110 CFM
	SIG80-110ELED (80-110 CFM)	Fan/Edge-lit Dimmable LED Light w/ adjustable color temperature	6"	110 CFM	110 CFM	110 CFM	110 CFM
	SIG80-110D (80-110 CFM)	Fan with Dual Speed	6"	110 CFM	110 CFM	110 CFM	110 CFM
	SIG80-110DLED (80-110 CFM)	Fan/ Dimmable LED Light/Night-Light with Dual Speed	6"	110 CFM	110 CFM	110 CFM	110 CFM
	SIG80-110H (80-110 CFM)	Fan with Humidity Sensor	6"	110 CFM	110 CFM	110 CFM	110 CFM
	SIG80-110HLED (80-110 CFM)	Fan/LED Light/Night-Light w/ Humidity Sensor	6"	110 CFM	110 CFM	110 CFM	110 CFM
	SIG80-110MH (80-110 CFM)	Fan with Motion & Humidity Sensor	6"	110 CFM	110 CFM	110 CFM	110 CFM
	SIG80-110MHLED (80-110 CFM)	Fan/LED Light/Night-Light w/ Motion and Humidity Sensor	6"	110 CFM	110 CFM	110 CFM	110 CFM
	SIG80 (80 CFM)	Single Speed	4"	70 CFM	70 CFM	60 CFM	60 CFM
	SIG80D (80 CFM)	Fan with Dual Speed	4"	70 CFM	70 CFM	60 CFM	60 CFM
	SIG110 (110 CFM)	Single Speed	4"	90 CFM	90 CFM	80 CFM	80 CFM
	VFB25ADBT (110 CFM)	Fan with Bluetooth®	4"	90 CFM	80 CFM	70 CFM	70 CFM
	Smart	SMT130 (130 CFM)	Single Speed	6"	130 CFM	130 CFM	120 CFM
SMT130H (130 CFM)		Multi-Speed with Humidity Sensor	6"	130 CFM	130 CFM	120 CFM	120 CFM
SMT130M (130 CFM)		Multi-Speed with Motion Sensor	6"	130 CFM	130 CFM	120 CFM	120 CFM
SMT150 (150 CFM)		Single Speed	6"	150 CFM	150 CFM	140 CFM	140 CFM
SMT150D (150 CFM)		Dual Speed	6"	150 CFM	150 CFM	140 CFM	140 CFM
SMT150LED (150 CFM)		Fan/LED Light	6"	150 CFM	150 CFM	150 CFM	150 CFM
Recessed	REC80LED (80 CFM)	Fan/LED Light	4"	70 CFM	70 CFM	60 CFM	60 CFM
Elite	ELT80-110 (80-110 CFM)	Single Speed	6"	110 CFM	110 CFM	110 CFM	100 CFM
	ELT80-110LED (80-110 CFM)	Fan/Dimmable LED Light	6"	110 CFM	110 CFM	110 CFM	100 CFM
	ELT80-110D (80-110 CFM)	Fan with Dual Speed	6"	110 CFM	110 CFM	110 CFM	100 CFM
	ELT80-110DLED (80-110 CFM)	Fan/Dimmable LED Light with Dual Speed	6"	110 CFM	110 CFM	110 CFM	100 CFM
	ELT80-110H (80-110 CFM)	Fan with Humidity Sensor	6"	110 CFM	110 CFM	110 CFM	100 CFM
	ELT80-110HLED (80-110 CFM)	Fan/Dimmable LED Light with Humidity Sensor	6"	110 CFM	110 CFM	110 CFM	100 CFM
	ELT80-110MH (80-110 CFM)	Fan with Motion and Humidity Sensor	6"	110 CFM	110 CFM	110 CFM	100 CFM
	ELT80-110MHLED (80-110 CFM)	Fan/Dimmable LED Light w/ Motion and Humidity Sensor	6"	110 CFM	110 CFM	110 CFM	100 CFM
GreenBuilder	GBR80 (80 CFM)	Single Speed	4"	70 CFM	70 CFM	60 CFM	60 CFM
	GBR80H (80 CFM)	Fan with Humidity Sensor	4"	70 CFM	70 CFM	60 CFM	60 CFM
	GBR80HLED (80 CFM)	Fan/Dimmable LED Light w/ Humidity Sensor	4"	70 CFM	70 CFM	60 CFM	60 CFM
	GBR80LED (80 CFM)	Fan/Dimmable LED Light	4"	70 CFM	70 CFM	60 CFM	60 CFM
	GBR80MHLED (80 CFM)	Fan/Dimmable LED Light with Humidity & Motion Sensor	4"	70 CFM	70 CFM	60 CFM	60 CFM
	GBR100 (100 CFM)	Single Speed	4"	80 CFM	70 CFM	70 CFM	60 CFM
	GBR100H (100 CFM)	Fan with Humidity Sensor	4"	80 CFM	70 CFM	70 CFM	60 CFM
	GBR100HLED (100 CFM)	Fan/Dimmable LED Light w/Humidity Sensor	4"	80 CFM	70 CFM	70 CFM	60 CFM
	GBR100LED (100 CFM)	Fan/ Dimmable LED Light	4"	80 CFM	70 CFM	70 CFM	60 CFM
	GBR100LED-DECOR (100 CFM)	Fan/ Dimmable LED Light Decor	4"	80 CFM	70 CFM	60 CFM	60 CFM

Equivalent Duct Lengths (cont.)

	Breez Models	Mode(s)	Duct Size	40ft	60ft	80ft	100ft
Slim	SLM50 (50 CFM)	Single Speed	3"	40 CFM	30 CFM	30 CFM	30 CFM
	SLM70 (70 CFM)	Single Speed	3"	50 CFM	40 CFM	30 CFM	30 CFM
	SLM70H (70 CFM)	Fan with Humidity Sensor	3"	50 CFM	40 CFM	30 CFM	30 CFM
	SLM70D (70 CFM)	Fan with Dual Speed	3"	50 CFM	40 CFM	30 CFM	30 CFM
	SLM80 (80 CFM)	Single Speed	4" Oval	70 CFM	60 CFM	60 CFM	60 CFM
	SLM100 (100 CFM)	Single Speed	4" Oval	90 CFM	80 CFM	70 CFM	70 CFM
Integrity	ITG50 (50 CFM)	Single Speed	4"	50 CFM	40 CFM	40 CFM	40 CFM
	ITG50LED (50 CFM)	Fan/ Dimmable LED Light	4"	50 CFM	40 CFM	40 CFM	40 CFM
	ITG50HLED (50 CFM)	Fan/Dimmable LED Light with Humidity Sensor	4"	50 CFM	40 CFM	40 CFM	40 CFM
	ITG70BT (70 CFM)	Fan with Bluetooth®	4"	60 CFM	60 CFM	50 CFM	50 CFM
	ITG80 (80 CFM)	Single Speed	4"	70 CFM	70 CFM	60 CFM	60 CFM
	ITG80H (80 CFM)	Fan with Humidity Sensor	4"	70 CFM	70 CFM	60 CFM	60 CFM
	ITG80LED (80 CFM)	Fan/ Dimmable LED Light	4"	70 CFM	70 CFM	60 CFM	60 CFM
	ITG100 (100 CFM)	Single Speed	4"	80 CFM	80 CFM	70 CFM	70 CFM
	ITG100ELED (100 CFM)	Fan/Edge-lit Dimmable LED Light	4"	80 CFM	80 CFM	70 CFM	70 CFM
Radiance	RAD80 (80 CFM)	Fan with Heater	4"	70 CFM	60 CFM	60 CFM	50 CFM
	RAD80LED (80 CFM)	Fan/LED Light with Heater	4"	70 CFM	60 CFM	60 CFM	50 CFM
	RAD110LED (110 CFM)	Fan/LED Light with Heater	4"	90 CFM	80 CFM	70 CFM	70 CFM
Professional	Pro200 (200 CFM)	Single Speed	6"	190 CFM	180 CFM	170 CFM	170 CFM
	Pro300 (300 CFM)	Single Speed	6"	270 CFM	250 CFM	230 CFM	210 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 sqft	1 CFM per sq ft of floor area	A minimum of 50 CFM
More than 100 sqft	Add the CFM requirement for each fixture	Toilet 50 CFM Shower 50 CFM Bathtub 50 CFM Jetted Tub 100 CFM

Reference: www.hvi.org/publications/HowMuchVent.cfm



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 \$8.47 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 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 more quiet 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 a 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 speed 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 <http://www.hvi.org/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 $8 \times 5 = 40$ ft.
- Bathroom area is 40 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: http://www.hvi.org/publications/bathroom_ventilation.cfm

Or you can visit <http://www.hvi.org/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/m³. 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.

Is LED light replaceable or if replacement is 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.

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

No.

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, all 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!

Are Delta Breez fans ENERGY STAR qualified?

Yes, most 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, 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

Customer sales support: (877) 685-4384

Email: BreezSalesSupport@deltaww.com

Fax: (510) 226-5098



Dealer Address:



Learn more about Breez Ventilation Fans, the best bathroom solution for green construction.

www.deltabreez.com

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