BROAN

BROAN VENTILATION SOLUTIONS.

# BETTER AIR. BETTER LIFE.



## VENTILATION FANS



# WHEN YOUR HOME BREATHES,







## WHY INDOOR AIR QUALITY IS IMPORTANT TO YOU.

Consider this, according to the EPA (epa.gov), indoor air quality is five times worse than outdoor air quality. Most homeowners know that indoor air quality is important, but not all recognize what contributes to poor indoor air quality, the potential effects and harm, and how to address these problems. Broan is here to help. For more than 80 years, Broan has led the industry with residential ventilation solutions that improve indoor air quality and provide healthier home environments.

*Moisture* *that is not properly ventilated can cause mildew and mold formation, which can potentially lead to structural problems and health problems. Exhaust ventilation solutions from Broan remove humidity at the source to help maintain the optimal humidity balance of 40 to 60 percent.*

*Off-gassing* *from construction materials, carpeting, adhesives and synthetic materials—as well as solvents from common household cleaners—can accumulate in tightly built homes. Look to Broan for continuous ventilation solutions that meet ASHRAE 62.2.*

*Particulates* *from dust, allergens, pet dander, and more can contribute to poor indoor air quality up to 100 times dirtier than outside air. With a properly ventilated home, you create a more enjoyable, comfortable and healthier environment.*

*Cooking effluents* *from food preparation can infiltrate the whole house in minutes. Grease, oils and aromas settle permanently into carpets, furniture, clothing and other surfaces. Kitchen ventilation solutions help eliminate cooking effluents for a cleaner, more comfortable and healthier environment.*

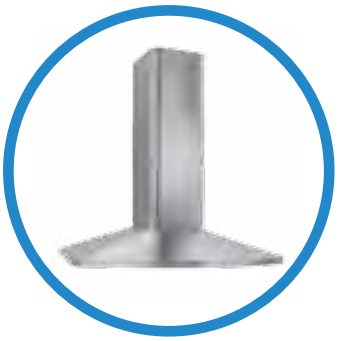
# YOU BREATHE EASIER TOO.

## BROAN CAN IMPROVE INDOOR AIR QUALITY IN EVERY ROOM OF THE HOME.

From clearing humidity in the bathroom to removing heat, steam and airborne effluents in the kitchen. From whole-house HEPA air filtration and balanced fresh air exchange solutions to attic ventilation. From the family room to the master bedroom and in every room in between, no company knows residential and light commercial ventilation like Broan-NuTone. After more than 80 years, countless innovations and a commitment to indoor air quality, trust Broan to clear up every concern.



**EXHAUST VENTILATION**
removes excess moisture and odor from any room in the home, and can also provide continuous, whole-house ventilation.



**KITCHEN VENTILATION**
expels cooking effluents from food preparation to eliminate airborne pollutants from spreading through the entire house.



**FRESH AIR SYSTEMS**
efficiently exchanges inside air with fresh outside air, and removes airborne particulate with HEPA filtration.

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### *DID YOU KNOW?**

#### Knowing the facts goes a long way toward a healthier indoor environment:

Just **46%** recognize not having a bathroom fan has a negative impact on indoor air quality—only 42% recognize that a lack of a range hood also has a negative impact.

**60%** have a fan in each bathroom but only one in five let it run for 10 minutes after showering.

#### Some homeowners don't recognize the causes of poor indoor air quality:

Only **42%** are concerned about moisture that causes mold or mildew.

Only **33%** know food aromas after preparation is an indicator of poor IAQ.

**81%** don't know that a foggy mirror means poor IAQ.

#### Most homeowners are tuned in to residential Indoor Air Quality concerns:

**60%** know that indoor air quality has a greater impact on their health than outdoor air quality.

**90%** realize poor indoor air quality contributes to certain health issues and that healthy air helps prevent illness.

* 2014 Kelton Broan-NuTone Air Quality Survey

# INDOOR AIR QUALITY IS IMPORTANT IN EVERY ROOM OF THE HOME, NOT JUST THE BATHROOM.


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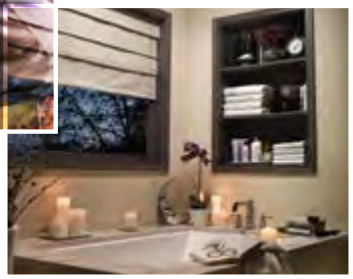


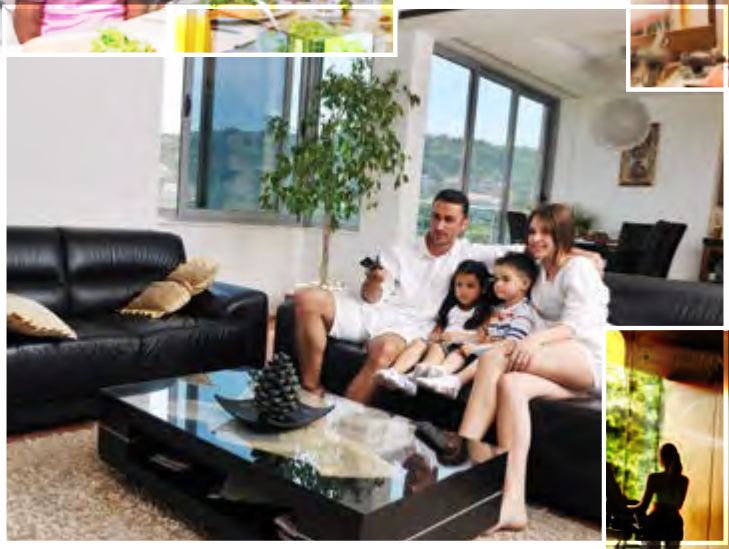


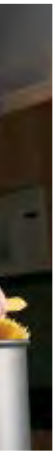


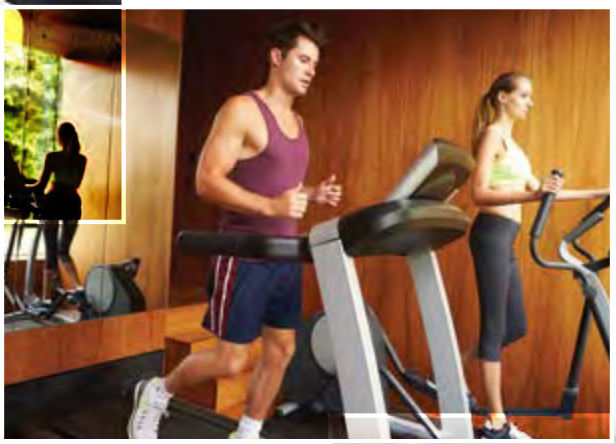


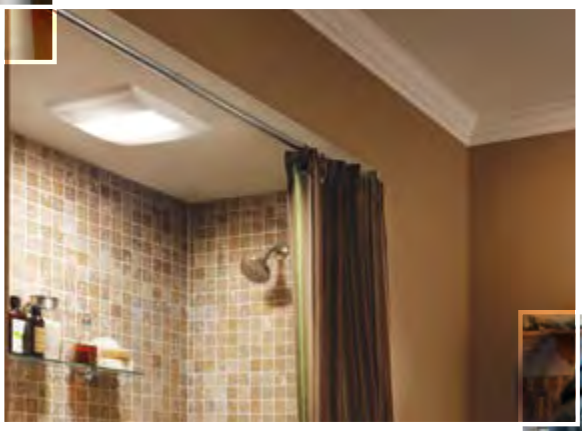
















The original
1932 Motordor

## THE UNDISPUTED LEADER IN INDOOR AIR QUALITY SINCE 1932.

# INDUSTRY LEADERSHIP ISN'T A CLAIM. IT'S EARNED THROUGH INNOVATION.

**In southeastern Wisconsin some eight decades ago,** an engineer named Henry Broan had a revelation: Wouldn't a built-in mechanical ventilation solution help to provide better indoor air quality in the kitchen? And so, Motordor was conceived—the first kitchen ventilator—and a company was born. Once Mr. Broan had invented a new category, other applications were the natural next step. The bath ventilation fan soon followed, as the passion for improving indoor air quality continued.

**Leadership is built on standards,** all to help ensure the professionalism of an industry. So in 1957, Broan was among five companies that founded the Home Ventilating Institute (HVI). To this day the HVI mark ensures what's stated on the package is tested and certified for your confidence. Because Mr. Broan believed that if you paid good money for something, you deserved to get what was promised.

Throughout the years, countless innovations followed, including some of the first certified ventilation fans and range hoods with efficient motors and lighting that reduced energy consumption by as much as 70%. And as homes were built tighter, Broan was on the leading edge of whole-house ventilation solutions with HEPA filtration and energy recovery capabilities. Today, Broan continues to lead the industry with efficient and quiet ventilation solutions that are easier than ever to install.

You see, leadership isn't about entering a market, offering a handful of products, and staking a claim. Leadership is earned and proven through a passion and commitment to finding novel solutions to real problems time and time again. This is exactly why Broan has taken the job of improving air quality in our homes very seriously for more than 80 years.

## **WE INVENTED** THE CATEGORY IN 1932. WE HAVE NO INTENTION OF STOPPING.

**1933:** Kitchen ventilator: Motordor is sold




**1955:** Founder of the Home Ventilating Institute

2100 HVI CERTIFIED



**1956:** The bath fan

**1959:** The fan/light

**1965:** Introduced the first heater fan light

Broan MANUFACTURING CO., INC.



**1993:** The first humidity sensing fan hits the shelves



# DID YOU KNOW?

*Professional* **contractors** *recognize the Broan ventilation brand above all others.*

*Broan-NuTone is the* **only** *company in North America with an HVI Certified on-site sound testing facility.*

***Twenty-four**** *of the top 25 builders specify the Broan brand. More builders use Broan ventilation products than any other brand.*

**2015 Hanley Wood Builder Brand Use Study*

*Broan is a* **three-time** *winner of the International Service Excellence award. The Customer Service Institute of America recognizes organizations for customer service professionalism.*

**ENERGY STAR** *A partner since 2005, Broan has one of the largest ENERGY STAR offerings in the industry, including many ENERGY STAR Most Efficient products.* ***energystar.gov***

*Broan was a* **founding member** *of the Home Ventilating Institute,® an independent organization that certifies airflow and sound performance of ventilation products.* ***hvi.org***

**About 80%** *of Broan products are manufactured in our state-of-the-art manufacturing facilities in Hartford, Wisconsin.*

**2004:** The quiet fan <0.3 sones



**2004:** The first recessed fan light



**2005:** The ENERGY STAR® certified fan

**2012:** The first fan enabling easy room-side installation



**2014:** The first fan with Soft Surround™ LED lighting technology



**2015:** The wireless speaker fan



# BROAN KNOWS TODAY'S STRINGENT VENTILATION CODES AND STANDARDS.

Because today's homes are built tighter than ever before, what gets in stays in, unless mechanically ventilated out. Premium ventilation solutions from Broan dramatically reduce moisture as well as airborne pollutants from off-gassing building materials, adhesives and household cleaners. They also help eliminate allergens, dust, pet dander and cooking effluents—everything that contributes to poor indoor air quality.

**Both spot and whole-house ventilation are important.**
Spot ventilation products remove pollutants at the source when they occur—think bathroom fans and kitchen range hoods—quickly eliminating humidity, odor and cooking effluents.

Whole-house ventilation, also known as continuous or dwelling unit ventilation (DUV), continually removes what's not captured by spot ventilation for a more healthy and comfortable home.

**Understanding today's ventilation requirements.**
The American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) set the industry standard for ventilation and acceptable indoor air quality for low-rise residential buildings with ASHRAE 62.2. It sets the minimum standard for spot or local ventilation of individual bathrooms of 50 Cubic Feet per Minute (CFM) delivered airflow at 3.0 sones or less. It also specifies the requirements for whole-house ventilation of an entire dwelling at the maximum sound rating of 1.0 sone for ventilation fans.

**Code adoption growing rapidly.**
California was a leader in this area with their Title 24 Code. Other state and city governments are quickly adopting similar codes such as the International Energy Conservation Code (IECC) to improve energy efficiency as well as indoor air quality.

Above-code green building programs such as ENERGY STAR® for Homes, ENERGY STAR® Indoor Air Plus, the Leadership in Energy and Environment Design (LEED) Certification Building Program and the National Association of Home Builders (NAHB) Green Building Standard are certified green building programs that promote human health and conserve natural resources. Let Broan help you meet the goals of these programs.

**You've come to the right place for product solutions.**
With Broan's extensive product line-up, including exhaust and balanced ventilation options such as Heat Recovery Ventilators (HRVs) and Energy Recovery Ventilators (ERVs), you're sure to find the ideal solution to meet your needs.

## SELECTING THE PROPER WHOLE HOUSE RESIDENTIAL VENTILATION SOLUTION.

Sizing your solution is a factor of square footage and the number of bedrooms in the dwelling to meet requirements. These charts are based on ASHRAE 62.2. Note that the 2010 and 2013 versions are different. Most states still operate under 62.2–2010 rates. Before specifying, check local building codes to ensure it meets requirements.

### ASHRAE 62.2—2010 Required Continuous Ventilation Rate (CFM)

| Floor Area Sq. Ft. | 0–1 BR | 2–3 BR | 4–5 BR | 6–7 BR | >7 BR |
|---|---|---|---|---|---|
| <1500 | 30 | 45 | 60 | 75 | 90 |
| 1501–3000 | 45 | 60 | 75 | 90 | 105 |
| 3001–4500 | 60 | 75 | 90 | 105 | 120 |
| 4501–6000 | 75 | 90 | 105 | 120 | 135 |
| 6001–7500 | 90 | 105 | 120 | 135 | 150 |
| >7500 | 105 | 120 | 135 | 150 | 165 |

### ASHRAE 62.2—2013 Required Continuous Ventilation Rate (CFM)

| Floor Area Sq. Ft. | 0–1 BR | 2–3 BR | 4–5 BR | 6–7 BR | >7 BR |
|---|---|---|---|---|---|
| <500 | 30 | 40 | 45 | 55 | 60 |
| 500–1000 | 45 | 55 | 60 | 70 | 75 |
| 1001–1500 | 60 | 70 | 70 | 85 | 90 |
| 1501–2000 | 75 | 85 | 90 | 100 | 105 |
| 2001–2500 | 90 | 100 | 105 | 115 | 120 |
| 2501–3000 | 105 | 115 | 120 | 130 | 135 |
| 3001–3500 | 120 | 130 | 135 | 145 | 150 |
| >3501 | 135 | 145 | 150 | 160 | 165 |

## AN ALTERNATIVE FORMULA APPROACH TO THE TABLES GIVEN ABOVE.

An alternative formula approach to the tables given above also exists and typically results in a lower, more precise CFM requirement. Under the more common 62.2-2010 version, continuous CFM requirements can be calculated using a formula as follows.
CFM = .01 x floor area (in square feet) plus 7.5 x (number of bedrooms + 1).

**Example:** A 3,500 square foot home with 4 bedrooms would require 73 CFM
.01 x 3,500 = 35
7.5 x (4+1) = 38
Add together for a total of 73 CFM
(as compared to the 90 from the above table).

The 62.2-2013 version increases the multiplier for floor area from .01 to .03. Note however that infiltration credits can be taken if blower door testing is conducted.

## Whole-house Ventilation Options

| Fan Series | Model | CFM | 0.25" CFM | Sones | Motor Type | Sensing | Duct Size | Page No. |
|---|---|---|---|---|---|---|---|---|
| ULTRA Green™ Multi Speed | **ZB80** | 80 | 80 | <0.3* | DC | — | 6" or 4" | 12–13 |
| | **ZB80M** | 80 | 80 | <0.3* | DC | Motion | 6" or 4" | 12–13 |
| | **ZB110** | 110 | 110 | <0.3 | DC | — | 6" | 12–13 |
| | **ZB110H** | 110 | 110 | <0.3 | DC | Humidity | 6" | 12–13 |
| | **ZB110M** | 110 | 110 | <0.3 | DC | Motion | 6" | 12–13 |
| ULTRA Green™ Single Speed | **XB50** | 50 | 50 | <0.3 | DC | — | 6" or 4" | 12–13 |
| | **XB80** | 80 | 80 | <0.3* | DC | — | 6" or 4" | 12–13 |
| | **XB110** | 110 | 110 | <0.3 | DC | — | 6" | 12–13 |
| | **XB110H** | 110 | 110 | <0.3 | DC | Humidity | 6" | 12–13 |
| ULTRA Pro | **RB80** | 80 | 60 | <0.3 | PSC | — | 4" | 15 |
| | **RB110** | 110 | 91 | 0.6 | PSC | — | 4" | 15 |
| QTXE SmartSense** | **QTXE080** | 80 | 56 | 0.3 | PSC | — | 6" | 18 |
| | **QTXE110** | 110 | 86 | 0.7 | PSC | — | 6" | 18 |
| | **SSQTXE080** | 80 | 56 | 0.7 | PSC | — | 6" | 22–23 |
| | **SSQTXE110** | 110 | 86 | 0.7 | PSC | — | 6" | 22–23 |
| LoProfile | **LP80** | 80 | 55 | 1.0 | PSC | — | 4" | 29 |
| InVent | **AE80** | 80 | 60 | 0.8 | PSC | — | 4" | 26 |
| | **AE50** | 50 | 92 | 0.5 | PSC | — | 4" | 26 |

ENERGY STAR® fans use 70% less energy, on average, than standard models and may qualify for local utility rebates

*With 6" duct (0.3 sones with 4" duct)
**SmartSense Models: SSQTXE080 and SSQTXE110 (see pages 22 and 23)

| Fan/Light Series | Model | CFM | 0.25" CFM | Sones | Motor Type | Sensing | Duct Size | Page No. |
|---|---|---|---|---|---|---|---|---|
| ULTRA Green™ Multi Speed | **ZB80L** | 80 | 80 | <0.3* | DC | — | 6" or 4" | 12–13 |
| | **ZB80ML** | 80 | 80 | <0.3* | DC | Motion | 6" or 4" | 12–13 |
| | **ZB110L** | 110 | 110 | <0.3 | DC | — | 6" | 12–13 |
| | **ZB110HL** | 110 | 110 | <0.3 | DC | Humidity | 6" | 12–13 |
| | **ZB110ML** | 110 | 110 | <0.3 | DC | Motion | 6" | 12–13 |
| ULTRA Green™ Single Speed | **XB50L** | 50 | 50 | <0.3 | DC | — | 6" or 4" | 12–13 |
| | **XB80L** | 80 | 80 | <0.3* | DC | — | 6" or 4" | 12–13 |
| | **XB110L** | 110 | 110 | <0.3 | DC | — | 6" | 12–13 |
| | **XB110HL** | 110 | 110 | <0.3 | DC | Humidity | 6" | 12–13 |
| ULTRA Pro | **RB80L** | 80 | 60 | <0.3 | PSC | — | 4" | 15 |
| | **RB110L** | 110 | 91 | 0.8 | PSC | — | 4" | 15 |
| QTXE | **QTXE080FLT** | 80 | 56 | 0.3 | PSC | — | 6" | 18 |
| | **QTXE110FLT** | 110 | 86 | 0.7 | PSC | — | 6" | 18 |
| InVent | **AE80L** | 80 | 60 | 0.8 | PSC | — | 4" | 26 |
| | **A80L** | 80 | 92 | 1.0 | PSC | — | 4" | 26 |

ENERGY STAR® fans use 70% less energy, on average, than standard models and may qualify for local utility rebates

Note that in addition to exhaust solutions to meet DUV requirements, we also offer a full line of balanced ventilation models (HRVs and ERVs).

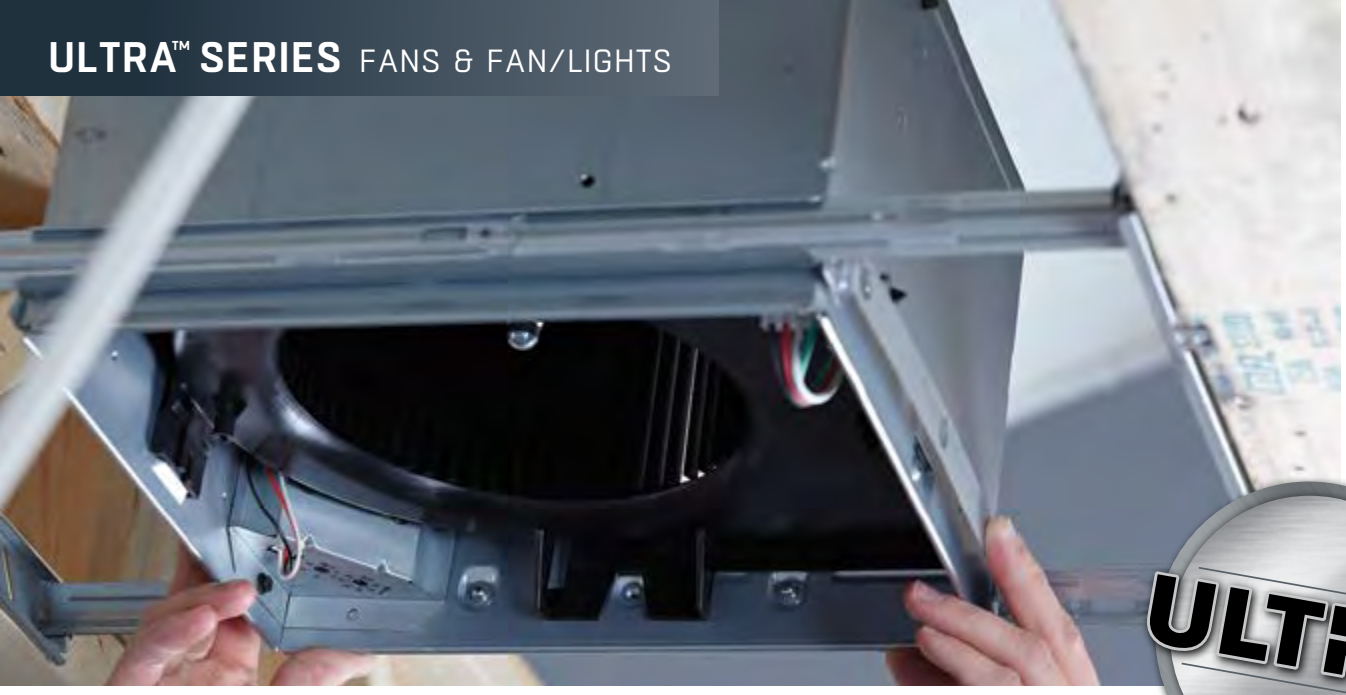



# BROAN CODE KEY

## The exclusive online tool that ensures compliant ventilation selection.

Specifying a dwelling unit ventilation (DUV) system for residences can be complicated. Code Key from Broan is the only online resource that helps you select the right product in minutes. Choose the dwelling's state, home size facts and user preferences to receive a list of recommended ventilation products. Change parameters to instantly see a range of options. Code Key requires no software and works on mobile devices. It's another way Broan—the pioneer in ventilation for more than 80 years—leads the ventilation industry with forward-thinking products and customer service.

**Broan.com/tools-landing-page/codekey**

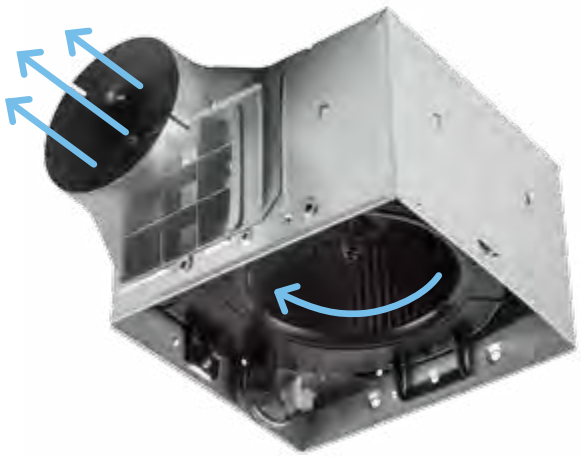


# A REVOLUTION IN VENTILATION FAN TECHNOLOGY

# *ENGINEERED TO SIMPLIFY INSTALLATION.*

**WE DIDN'T JUST CHANGE ONE THING TO MAKE INSTALLATIONS FASTER, WE CHANGED EVERYTHING.** From a unique telescoping mounting frame that installs room-side on retro-fits to an easy-to-insert housing and blower that snap into place, we designed the ULTRA™ Series to be the fastest, easiest, most universal installation in new construction or retro-fit. No matter what's behind the drywall on your next retro-fit job, you'll never have another difficult installation. And just as important, the ULTRA™ Series meets whole-house mechanical ventilation codes and green building program requirements. It's a revolutionary way to install and a revolutionary way to ventilate.



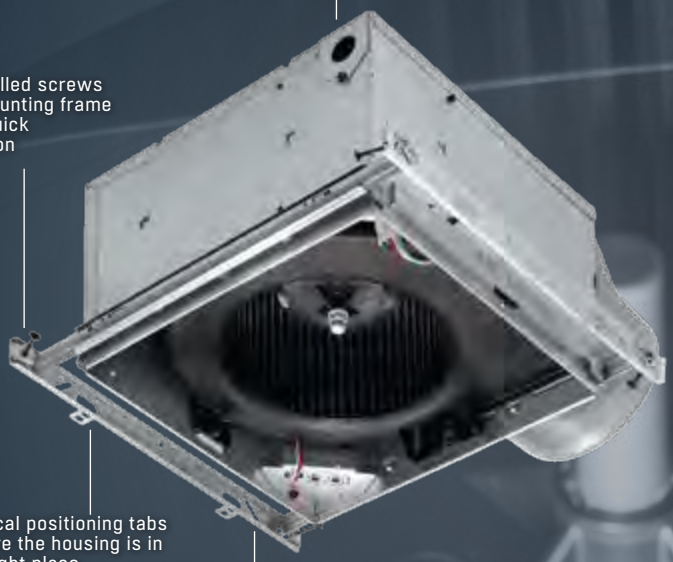


QSTREAM™

## SOUND TECHNOLOGY

Reduce sound levels and improve sound quality in real-world installations. The innovative, patent-pending QStream™ technology utilizes airflow-smoothing baffles that reduce turbulence which means the blower can turn more slowly and quietly—without airflow loss.*

*Not available on 110 CFM ULTRA Green™ Models




## ULTRAQUICK™

### INSTALLATION TECHNOLOGY

ULTRA™ Series Ventilation Fans are engineered to be the fastest, easiest, most universal installation in remodel, retrofit and new construction—in any type of joist or truss system. Exclusive features simplify room-side installation to save valuable time and money.

For energy saving options see ULTRA GREEN on page 12

## RDFU PREMIUM RADIATION DAMPER FOR ULTRA GREEN™ AND ULTRA PRO™ FANS.

When the air temperature passing through the damper exceeds 165°F the fusible link melts, triggering the thermal fabric to automatically close across the damper. Airflow is interrupted by a flame and heat barrier, preventing the rapid spread of fire to other areas.

- Motor serviceable without disturbing drywall
- Galvanized steel frame
- High temperature, non-asbestos, reinforced fiber thermal fabric
- Stainless steel closure springs
- 165°F fusible link
- Use the same grille provided with the ULTRA™ Series fan
- Use Model RDFU with RDJUMPU for ULTRA Green™ and ULTRA Pro™ models with lighting and/or sensing
- UL Standard 555C Classified



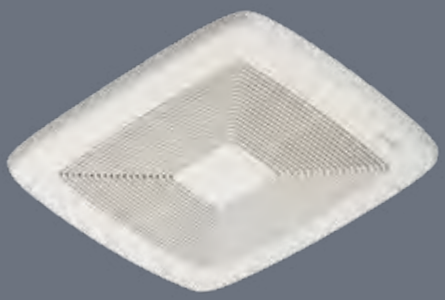
## THE PERFECT SOLUTION TO MEET TODAY'S CONTINUOUS VENTILATION REQUIREMENTS.

Built for easy installation in either new construction or retrofit applications, the ULTRA Green™ Series makes it simple to ventilate any room in the house. In today's tightly built homes, unhealthy pollutants and excess humidity stay trapped inside unless they are mechanically vented away. Exclusive ULTRA Smart™ DC Motor and Control Technology enables fans to maintain their powerful operation—even at high static pressures—and provide required air movement levels for whole-house ventilation, all while meeting spot ventilation needs on demand. Continuous CFM levels can be precisely adjusted to meet the specific needs of each home.

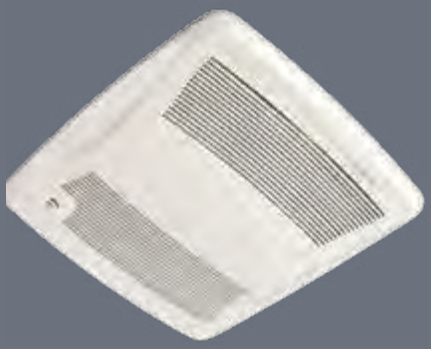
- HVI certified at <0.3 Sones, ULTRA Silent™ Sound Technology provides the quietest sound rating obtainable
- 50, 80 or 110 CFM
- Intermittent and continuous ventilation
- ULTRA Smart™ DC Motor and Control Technology monitors performance and adjusts motor speed to ensure rated air movement
- ENERGY STAR® certified
- ULTRA Quick™ Installation Technology saves time with the fastest, easiest, most universal installation
- XB and ZB models feature 6" ducting—50 and 80 CFM models include an optional 6" to 4" duct reducer
- Bright, energy efficient 36 watt fluorescent lighting
- UL Listed for use over bathtub or shower when connected to a GFCI protected branch circuit
- Type IC
- Fits 2" x 8" ceiling construction
- Optional RDFU Premium Radiation Damper Kit available for all XB and ZB models.
- Models XB50, XB80, ZB50 and ZB80 feature QStream Technology

Fastest, Easiest, Most Universal Installation ULTRA GREEN™

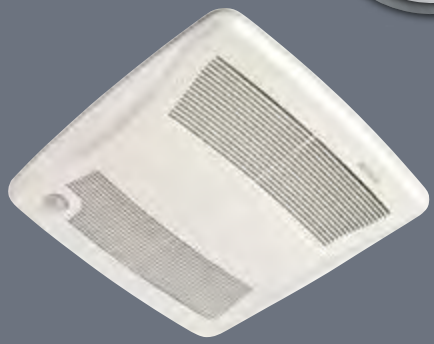
**XB50 | XB80 | XB110 | ZB80 | ZB110 FANS**



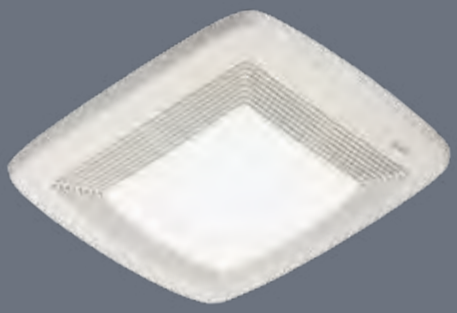
**XB110H | ZB110H HUMIDITY SENSING FANS**



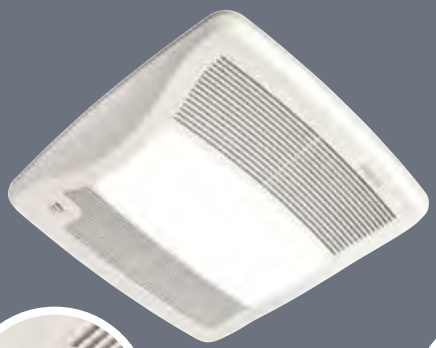
**ZB80M | ZB110M MOTION SENSING FANS**



**XB50L | XB80L | XB110L | ZB80L | ZB110L FAN/LIGHTS**



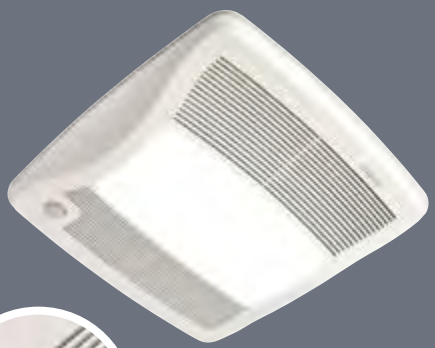
**XB110HL | ZB110HL HUMIDITY SENSING FAN/LIGHTS**





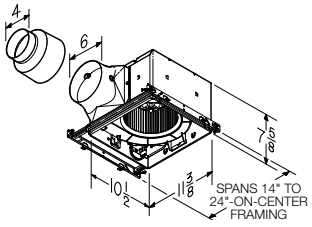
Humidity Sensing

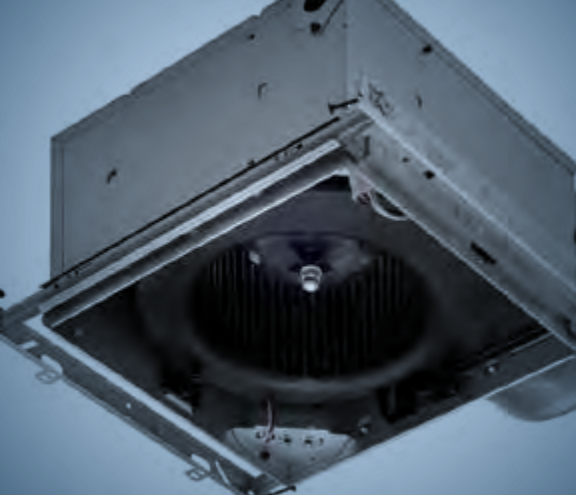
**ZB80ML | ZB110ML MOTION SENSING FAN/LIGHTS**





Motion Sensing





## ULTRASMART™
### DC MOTOR AND CONTROL TECHNOLOGY

To virtually ensure full-rated performance—regardless of the ducting situation—ULTRA Green™ Series fans automatically monitor and adjust CFM output. For continuous ventilation needs, multi-speed models may be precisely set as low as 30 CFM to avoid costly over-ventilating. A second dial controls runtime at maximum CFM. Our DC motor is the most efficient in our line—80 CFM models use only 5.8 watts.

## ULTRASILENT™
### SOUND TECHNOLOGY

ULTRA Green™ Series Ventilation Fans are HVI certified at a remarkable <0.3 Sones; the quietest sound rating obtainable. A dynamically balanced DC motor mounted behind the wheel, a state-of-the-art blower that reduces turbulence, and a free-flowing 6" duct outlet opening that won't inhibit airflow make it possible. There's no quieter fan available.

## POWERFUL
### MOTION & SENSING TECHNOLOGIES

ULTRA Fans with Sensaire humidity sensing technology detect the rapid rise in humidity at the ceiling level. This means that they will react to shower humidity much faster than competitive fans or wall controls. Multi-speed models turn the fan speed up from the lower continuous CFM level. Single-speed models turn the fan on automatically.

ULTRA Fans with motion sensing and multi-speed capability automatically turn the fan up to maximum speed from the lower continuous setting when motion is detected which is ideal for family members who forget to turn the fan on.

**ULTRA GREEN™ SERIES FANS SAVE UP TO 10 HERS POINTS AND UP TO $200 PER YEAR IN OPERATING COST.***

| Model | CFM | Sones | Light/Night Light | Humidity Sensing | Motion Sensing | Ducting | Grill Dimensions (in) L | Grill Dimensions (in) W | ENERGY STAR® |
|---|---|---|---|---|---|---|---|---|---|
| **Single-speed Fans** | | | | | | | | | |
| **XB50** | 50<br>50 | <0.3<br><0.3 | — | — | — | 6"<br>6" to 4" reducer | 13 | 13 3/4 | Yes |
| **XB80** | 80<br>80 | <0.3<br>0.3 | — | — | — | 6"<br>6" to 4" reducer | 13 | 13 3/4 | Yes |
| **XB110** | 110 | <0.3 | — | — | — | 6" | 13 | 13 3/4 | Yes |
| **XB110H** | 110 | <0.3 | — | Yes | | 6" | 13 1/8 | 14 | Yes |
| **Single-speed Fan/Lights** | | | | | | | | | |
| **XB50L** | 50<br>50 | <0.3<br><0.3 | 2- 18W GU24 / 4W | — | — | 6"<br>6" to 4" reducer | 13 | 13 3/4 | Yes |
| **XB80L** | 80<br>80 | <0.3<br>0.3 | 2- 18W GU24 / 4W | — | — | 6"<br>6" to 4" reducer | 13 | 13 3/4 | Yes |
| **XB110L** | 110 | <0.3 | 2- 18W GU24 / 4W | — | — | 6" | 13 | 13 3/4 | Yes |
| **XB110HL** | 110 | <0.3 | 2- 18W GU24 / 4W | Yes | — | 6" | 13 1/8 | 14 | Yes |
| **Multi-speed Fans** | | | | | | | | | |
| **ZB80** | 80<br>80 | <0.3<br>0.3 | — | — | — | 6"<br>6" to 4" reducer | 13 | 13 3/4 | Yes |
| **ZB80M** | 80<br>80 | <0.3<br>0.3 | — | — | Yes | 6"<br>6" to 4" reducer | 13 1/8 | 14 | Yes |
| **ZB110** | 110 | <0.3 | — | — | — | 6" | 13 | 13 3/4 | Yes |
| **ZB110H** | 110 | <0.3 | — | Yes | — | 6" | 13 1/8 | 14 | Yes |
| **ZB110M** | 110 | <0.3 | — | — | Yes | 6" | 13 1/8 | 14 | Yes |
| **Multi-speed Fan/Lights** | | | | | | | | | |
| **ZB80L** | 80<br>80 | <0.3<br>0.3 | 2- 18W GU24 / 4W | — | — | 6"<br>6" to 4" reducer | 13 | 13 3/4 | Yes |
| **ZB80ML** | 80<br>80 | <0.3<br>0.3 | 2- 18W GU24 / 4W | — | Yes | 6"<br>6" to 4" reducer | 13 1/8 | 14 | Yes |
| **ZB110L** | 110 | <0.3 | 2- 18W GU24 / 4W | — | — | 6" | 13 | 13 3/4 | Yes |
| **ZB110HL** | 110 | <0.3 | 2- 18W GU24 / 4W | Yes | — | 6" | 13 1/8 | 14 | Yes |
| **ZB110ML** | 110 | <0.3 | 2- 18W GU24 / 4W | — | Yes | 6" | 13 1/8 | 14 | Yes |

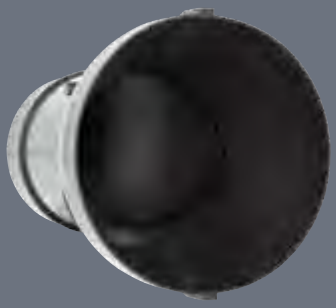
ENERGY STAR® fans use 70% less energy, on average, than standard models and may qualify for local utility rebates

* Compared to a central fan-integrated system when used for continuous ventilation; based on software calculations and analysis conducted by Broan-NuTone.

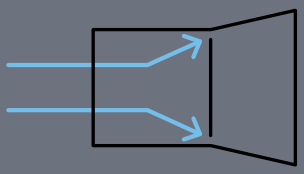
## QFLOW™ TECHNOLOGY MEANS SMOOTHER AIRFLOW
# AND OPTIMAL BACKDRAFT SEALING.

**QFlow™ Damper Technology.** Patent-pending QFlow technology helps achieve desired building airtightness scores when the fan is off. It also removes the duct damper flap from the airstream path, reducing static pressure and noise when the fan is on.

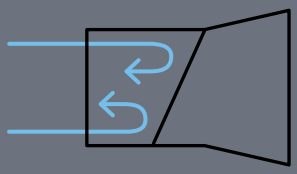
## FAN OFF



Without QFlow, outdoor air can intrude past the damper edges.

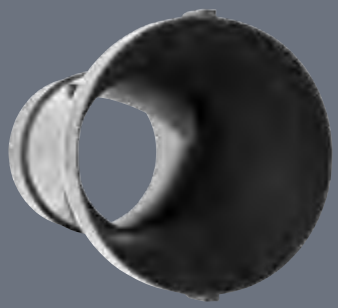


With QFlow, outdoor air intrusion is blocked with its edge-to-edge design.

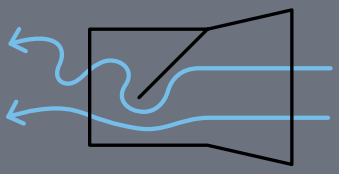


## FAN ON

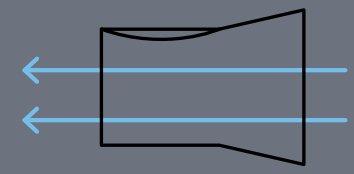
Pre-installed screws in the mounting frame enable quick installation



Without QFlow, the flap impedes airflow which increases static pressure, turbulence and noise.



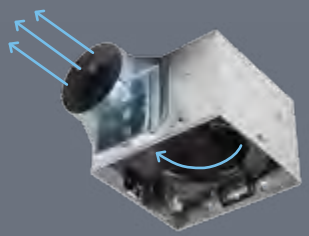
With QFlow, the flap lifts out of the way, minimizing turbulence for more quiet operation.



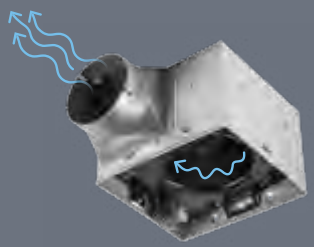
# REDUCE SOUND LEVELS AND IMPROVE
## SOUND QUALITY IN REAL-WORLD INSTALLATIONS.

QSTREAM™ SOUND TECHNOLOGY

The innovative, patent-pending QStream™ technology utilizes airflow-smoothing baffles that reduce turbulence which means the blower can turn more slowly and quietly—without airflow loss.*



With QStream™ Technology



Without QStream™ Technology

*Not available on 110 CFM ULTRA Green™ Models

# ULTRAQUICK™
## INSTALLATION TECHNOLOGY

ULTRA™ Series Ventilation Fans are engineered to be the fastest, easiest, most universal installation in remodel, retrofit or new construction—in any type of joist or truss system. Exclusive features simplify room-side installation to save valuable time and money.




## ULTRA PRO FEATURES

- Provide your customers extremely quiet operation with innovative sound reduction technologies.
- QStream™ technology features airflow-smoothing baffles to reduce turbulence.
- Optional RDFU Premium Radiation Damper Kit available for RB models.

The preferred install choice for professionals to deliver quiet performance




## Ultra Pro Series

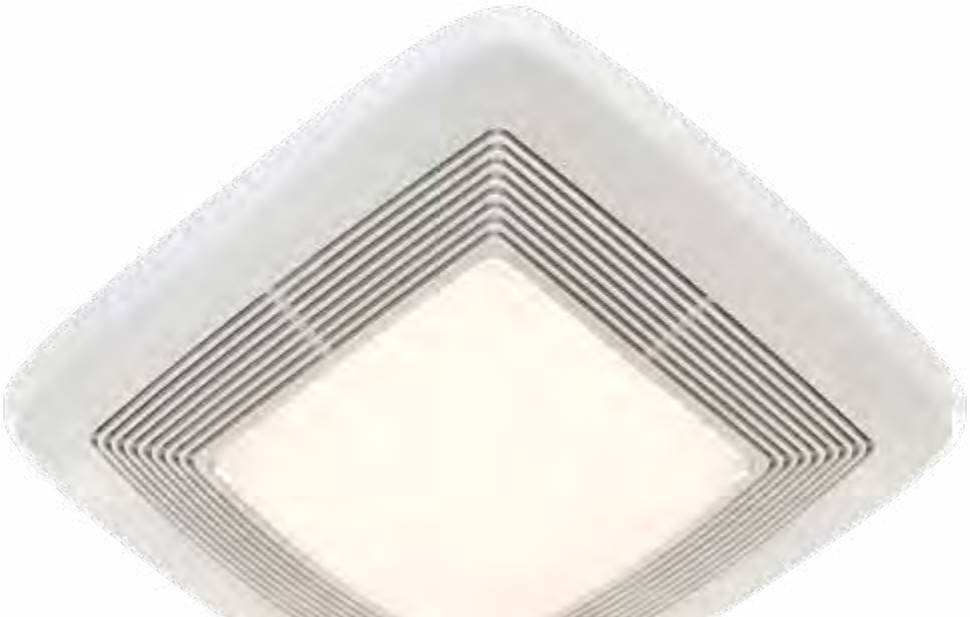
| Model | Duct Size | CFM | Sones | Light/Night Light | Housing Dims (in) W | Housing Dims (in) L | Housing Dims (in) H | Grille Dims (in) L | Grille Dims (in) W | Grille Finish | UL Listed for Tub/Shower Use | ENERGY STAR® |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Single-Speed Fans** | | | | | | | | | | | | |
| **RB80** | 4" | 80 | <0.3 | — | 11 3/8 | 10 1/2 | 7 5/8 | 13 | 14 | White Polymeric | Yes | Yes |
| **RB110** | 4" | 110 | 0.6 | — | 11 3/8 | 10 1/2 | 7 5/8 | 13 | 14 | White Polymeric | Yes | Yes |
| **Single-Speed Fan/Lights** | | | | | | | | | | | | |
| **RB80L** | 4" | 80 | <0.3 | 2- 18W GU24 / 4W | 11 3/8 | 10 1/2 | 7 5/8 | 13 | 13 3/4 | White Polymeric | Yes | Yes |
| **RB110L** | 4" | 110 | 0.8 | 2- 18W GU24 / 4W | 11 3/8 | 10 1/2 | 7 5/8 | 13 | 13 3/4 | White Polymeric | Yes | Yes |

ENERGY STAR® fans use 70% less energy, on average, than standard models and may qualify for local utility rebates



BROAN QT SERIES

# **SO QUIET,** YOU MIGHT EASILY FORGET





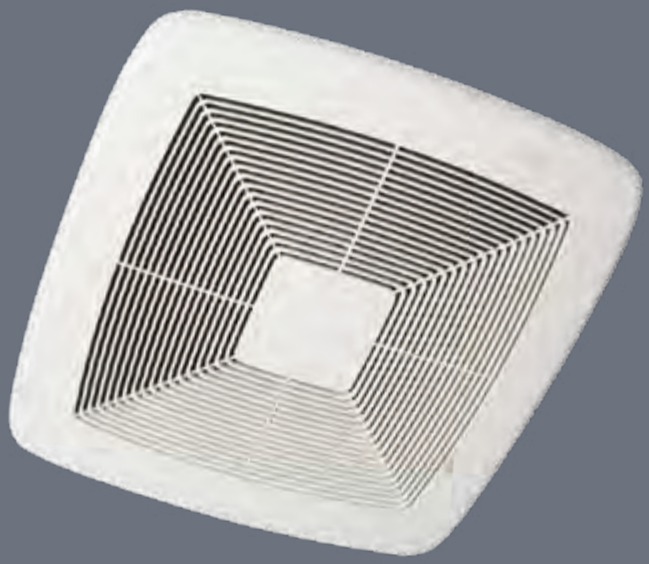



**PEACEFUL MOMENTS CAN BE ENJOYED EVEN MORE WITH VENTILATION FROM A QUIET, QT SERIES FAN.** The very quiet Broan QT Series is the ideal solution for any room that benefits from ventilation. Most QT models operate at less than one sone—the sound of a quiet running refrigerator. But quiet operation doesn't mean less power. Installed properly, the QT Series maintains full-rated airflow in real-world installations. So choose a QT Series bath fan, fan/light or heater/fan/light for your application. Broan has the perfect solution for every room.

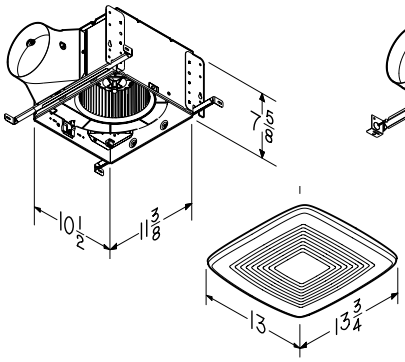
## QTXE FAN FEATURES

- Very quiet operation 0.3 to 1.4 sones
- 80 CFM to 150 CFM
- QTXE features 6" ducting for superior performance
- QTXE models are ENERGY STAR® certified
- HVI Certified
- QTXE includes hanger bar system for fast, flexible installation for all types of construction
- Motor engineered for continuous operation
- UL Listed for use over bathtub or shower when connected to a GFCI protected branch circuit
- Fits 2" x 8" ceiling construction
- Radiation damper available separately, see page 19

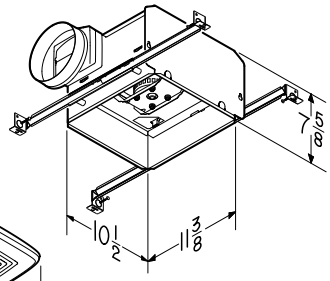
**QTXE**



**QTXE150**




**QTXE080, QTXE110**



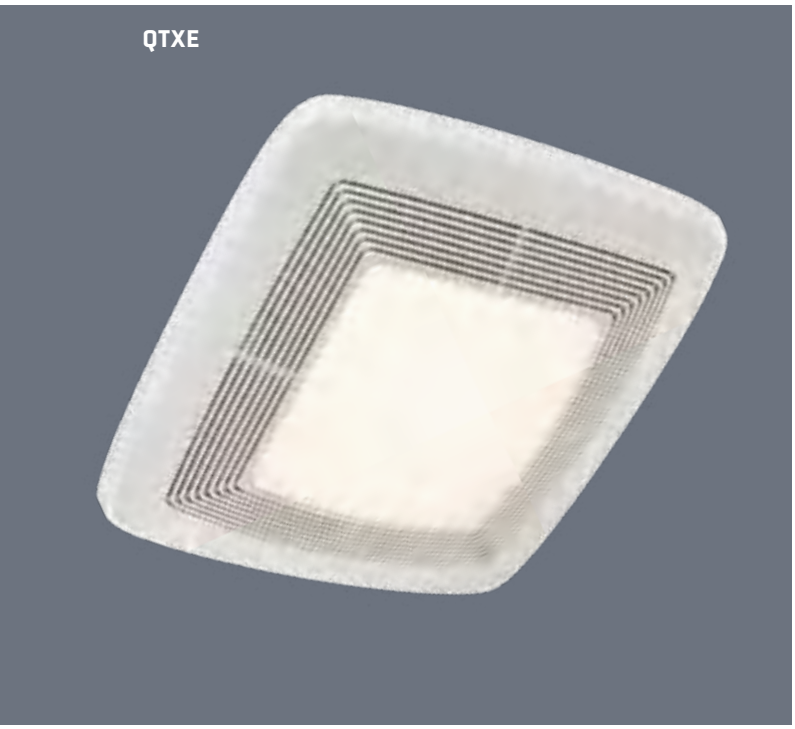

**Broan QT Series™ Bath Fans.** A bath fan needn't call attention to itself, especially when you don't want it to overpower the design of your bath or powder room. More important, it shouldn't call attention to itself when it's working. So we developed the QT Series™ to provide very relaxing ventilation. With an energy efficient option, it simply does its job quietly, in every sense of the word.

| Model | CFM | Sones | Lighting | Bath Sq. Ft. | Ducting | ENERGY STAR® |
|---|---|---|---|---|---|---|
| **QTXE080** | 80 | 0.3 | | 75 | 6"▲ | Yes |
| **QTXE110** | 110 | 0.7 | | 100 | 6"▲ | Yes |
| **QTXE150** | 150 | 1.4 | | 140 | 6"▲ | Yes |
| **QTXE080FLT** | 80 | 0.3 | 36W◆ / 4W* | 75 | 6"▲ | Yes |
| **QTXE110FLT** | 110 | 0.7 | 36W◆ / 4W* | 100 | 6"▲ | Yes |
| **QTXE150FLT** | 150 | 1.4 | 36W◆ / 4W* | 135 | 6"▲ | Yes |

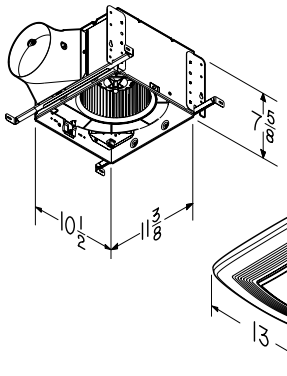
ENERGY STAR® fans use 70% less energy, on average, than standard models and may qualify for local utility rebates
▲ See page 54 for 6" ducting (DT6W) product specifications
◆ 2, 18 watt GU24 based fluorescent bulbs included
* Night-light bulbs not included

## QTXE FAN/LIGHT FEATURES

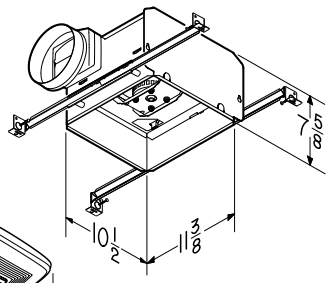
- Very quiet operation 0.3 to 1.4 sones
- 80 CFM to 150 CFM
- QTXE models feature 6" ducting for superior performance
- QTXE models are ENERGY STAR® certified
- Bright, energy efficient 36 watt fluorescent lighting (2, 18 watt GU24 based bulbs) included with non-sensing QTXE and QTRE models
- QTXE includes hanger bar system for fast and flexible installation for all types of construction
- 4 watt night light on all models (bulb not included)
- Motor engineered for continuous operation
- UL Listed for use over bathtub or shower when connected to a GFCI protected branch circuit
- HVI Certified
- Type IC
- Fits 2" x 8" ceiling construction
- Radiation damper available separately, see below




QTXE150FLT




QTXE080FLT, QTXE110FLT




**Broan QT Series™ Fan/Lights.** The QT Series™ is the ultimate bath fan solution for today's homes. Select a QT Series™ fan/light to bring simple elegance to any bath or powder room. By sight or by sound, you'll barely notice a QT Series™ fan. Except, of course, when you need just the right amount of ventilation and light at the touch of a switch.

## PREMIUM RADIATION DAMPERS FEATURES

- Motor serviceable without disturbing drywall
- Galvanized steel frame
- High temperature, non-asbestos, reinforced fiber thermal fabric
- UL Standard 555C Classified
- Stainless steel closure springs
- 165°F fusible link
- Use the same grille provided with the QT Series™ fan

**Premium Radiation Dampers.** When the air temperature passing through the damper exceeds 165°F the fusible link melts, triggering the thermal fabric to automatically close across the damper. Airflow is interrupted by a flame and heat barrier, preventing the rapid spread of fire to other areas.




| Radiation Dampers | Description |
|---|---|
| **RDFQF** | For QTXE080 & QTXE110 |
| **RDFQL** | For QTXE080FLT & QTXE110FLT |
| **RDFQL plus RDJUMPQ** | For QTXE110S |

# SENSING FANS FOR QT AND INVENT

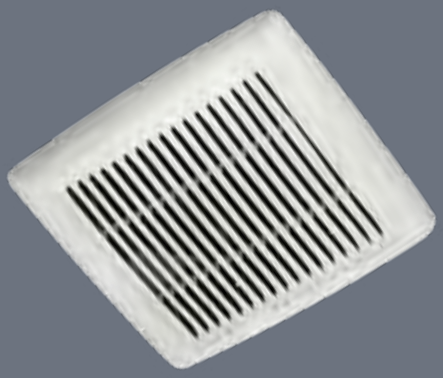
**Humidity Sensing Fans with Sensaire® Technology.** Broan Sensaire® technology is a hands-free solution to fighting excess humidity and possible mold problems. It detects rapid increases in moisture levels at the ceiling, where steam and humidity naturally rise, and automatically turns the fan on.

With fans this quiet, we included automatic shutoff to save worry, and money. Broan Sensaire® technology is a perfect solution for high traffic bathrooms, the kids' bathroom, or for anyone who leaves the house before humidity is properly vented.

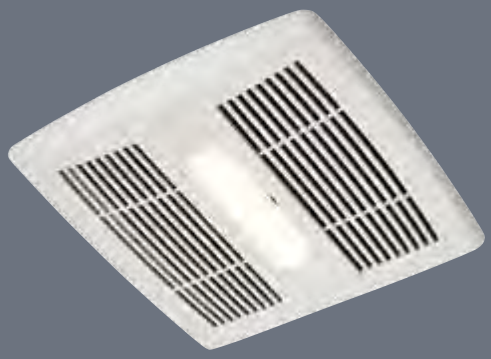
**QTXE110S**



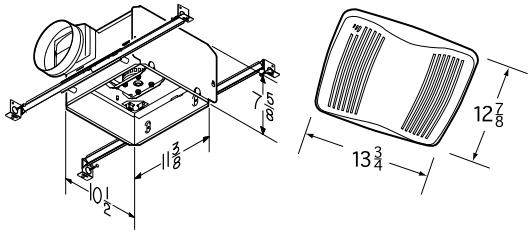
**INVENT AE80S | AE110S**



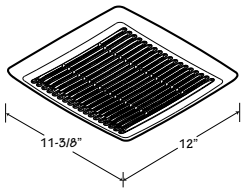
**INVENT AE80SL | AE110SL**



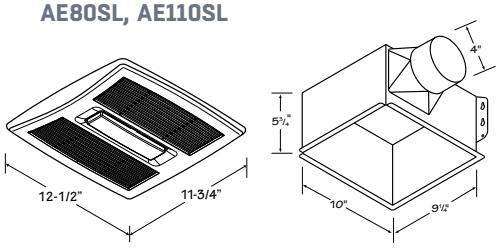
**QTXE11S**




**AE80S, AE110S**




**AE80SL, AE110SL**




## SENSAIRE® HUMIDITY SENSING FEATURES

- Detects a rapid rise in humidity
- User adjustable sensitivity control
- Easy to set shut off timer ranges from 5–60 minutes
- UL listed for use over bathtub and shower when connected to a GFCI protected branch circuit
- Energy Star Certified
- HVI CertifiedRDM1 radiation damper accessory for InVent Series

## QTXE HUMIDITY SENSING FAN FEATURES

- Grille mounted humidity sensor for faster reaction time
- Fits 2" X 8" ceiling contruction
- RDFQF radiation damper with RDJUMP accessory
- Includes hanger bar system for fast and flexible installation for all types of construction

## INVENT HUMIDITY SENSING FAN AND FAN/LIGHT FEATURES

- FoldAway™ mounting ears for a 100% room side installation
- Efficient LED Lighting
- Fits 2" X 6" construction

| Model | CFM | Sones | Bath Sq. Ft. | Lighting | Ducting | ENERGY STAR® |
|---|---|---|---|---|---|---|
| **QTXE110S** | 110 | 0.7 | 100 | — | 6"▲ | Yes |
| **AE80S** | 80 | 0.8 | 75 | — | 4" | Yes |
| **AE110S** | 110 | 1.0 | 100 | — | 4" | Yes |
| **AE80SL** | 80 | 0.8 | 75 | 11 watt LED | 4" | Yes |
| **AE110SL** | 110 | 1.0 | 100 | 11 watt LED | 4" | Yes |

ENERGY STAR® fans use 70% less energy, on average, than standard models and may qualify for local utility rebates

▲ See page 54 for 6" ducting (DT6W) product specifications

## INVENT SENSING FAN PROJECT PACKS

**A000HFS PROJECT PACK**

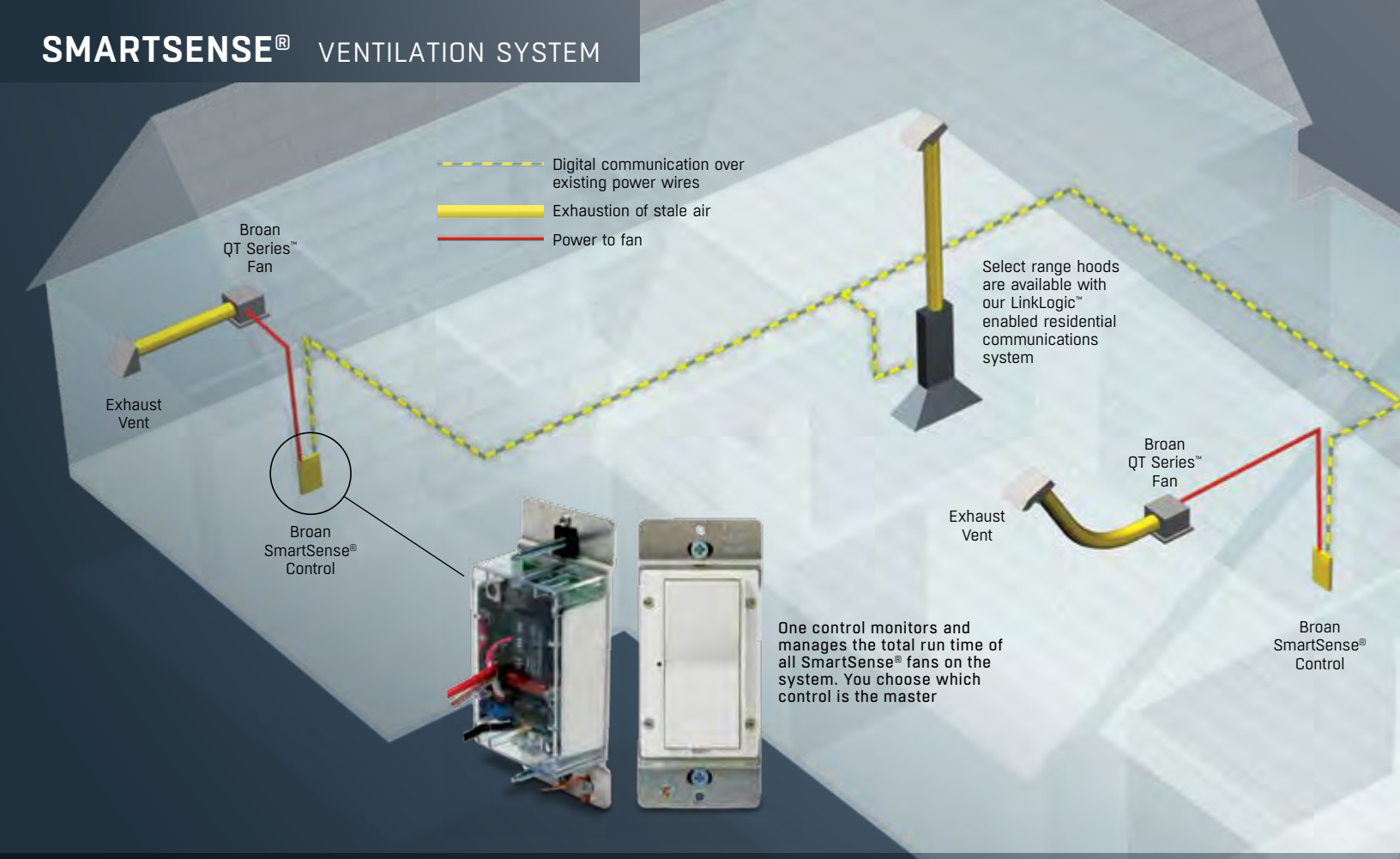


**Simplify Installation with Project Packs.**
Project Packs are available with four fan housings. When drywall work and painting is finished, the fan components needed to complete the job are available in a finish pack kit under a separate model number which includes the motor plate, motor, wheel and grille. See the matrix below for Project Pack order information.

| Project Pack | Kit number | For model |
|---|---|---|
| **Four-pack of FAN housings only:** | A000HFS | |
| **Four-pack finish kits for FAN models:** | AE80F<br>AE110F | AE80S<br>AE110S |

**AE80F | AE110F FINISH KITS**






# BROAN SMARTSENSE®

## AUTOMATICALLY COORDINATE YOUR BATH FANS

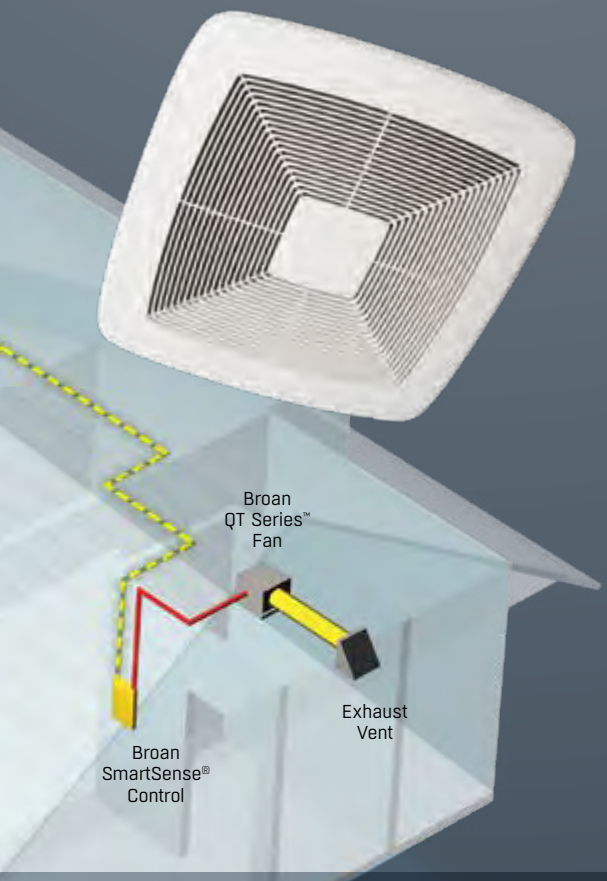
**RDFQF**



### RDFQF PREMIUM RADIATION DAMPER FEATURES.

When the air temperature passing through the damper exceeds 165°F the fusible link melts, triggering the thermal fabric to automatically close across the damper. Airflow is interrupted by a flame and heat barrier, preventing the rapid spread of fire to other areas.

**SSQTXE080 | SSQTXE110**




## A SMART, ECONOMICAL OPTION TO MEET ASHRAE STANDARD 62.2.

Since most homes have several ventilation fans, Broan SmartSense® automatically operates your fans to ventilate your home around the clock. It's one solution for continuous and spot ventilation requirements.

A SmartSense® system coordinates ventilation fans in various locations to introduce fresher, healthier air. It may be programmed to ventilate based on the home's size, automatically cycling different fans based in the dwelling based on square footage and the number of bedrooms. LinkLogic control is at the heart of the system and requires no separate control wiring. SmartSense® is cost effective as it does require integration with the home's air handler, and with only one fan running at a time, it uses less than 40 watts during ventilation cycles.

| Model | CFM | Dimension |
|---|---|---|
| **SSQTXE080** | 80 | $11\frac{3}{8}$ x $10\frac{1}{2}$ x $7\frac{5}{8}$ |
| **SSQTXE110** | 110 | $11\frac{3}{8}$ x $10\frac{1}{2}$ x $7\frac{5}{8}$ |

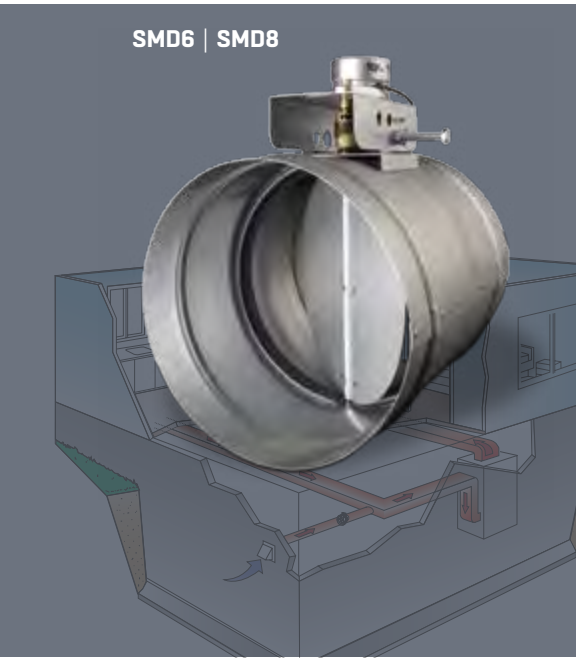
LinkLogic™

**Wireless home control technology powered by INSTEON™.**

- New timed-off and delayed-off features with new firmware
- Automatically operates the SMD series Make-Up Air Damper for installations requiring make-up air
- Interfaces with other LinkLogic® enabled products by Broan® or BEST®

# AND RANGE HOOD TO VENTILATE YOUR HOME.

**SMD6 | SMD8**



## A BROAN AUTOMATIC MAKE-UP AIR DAMPER INTELLIGENTLY BRINGS FRESH AIR INSIDE.

The damper communicates with SSQTXE080 and SSQTXE110 fans as well as select BEST® and Broan range hoods to form a complete balanced ventilation system that ensures fresh air is available while ventilation is in process. This ensures balanced indoor air pressure while preventing unwanted air infiltration and wasted energy. SmartSense™ automatically operates the Make-Up Air Damper for installations requiring make-up air.

### Easy Installation

- Located in a 6-inch or 8-inch duct running between an exterior wall fresh air inlet (641FA or 643FA) to an interior location such as a cold-air return or supply duct
- Locally powered by a 24 VAC transformer
- Communicates over existing home electrical wiring

### Broan Make-Up Air Damper features:

- Heavy-duty galvanized steel construction
- 24 VAC transformer
- 6-inch round (SMD6), 8-inch round (SMD8)
- Use with any single fan or combination of SSQTXE080 or SSQTXE110 fans

® 2100 HVI CERTIFIED

# FLEXIBILITY FOR NEW CONSTRUCTION AND



## INVENT SERIES FANS WITH TRUESEAL™ DAMPER TECHNOLOGY CAN SAVE UP TO 1 HERS POINT AND UP TO $9 PER YEAR IN OPERATING COSTS*.

FoldAway™ Mounting Ears are precisely positioned for new construction and fold flat for room-side retrofits. Every installation can be handled more efficiently.



With our TrueSeal™ Damper Technology, InVent fans reduce air leakage by up to 50% compared to competitive models[1] resulting in better home performance via blower door tests.



EzDuct™ Connector enables room-side installation without attic access. Attach the housing, pull the duct through, attach the EzDuct™ Connector and reset it with one screw.



*Compared to competitive fans; based on software calculations and analysis conducted by Broan-NuTone. Testing reflects total fan housing air tightness.

[1]See Broan.com/InVent for details.

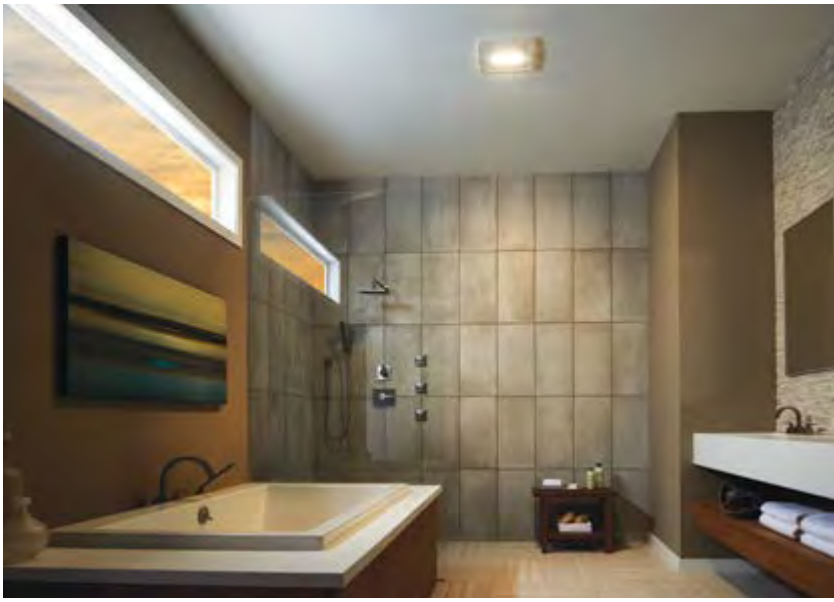


# ROOM-SIDE RETROFIT FROM ONE FAN.

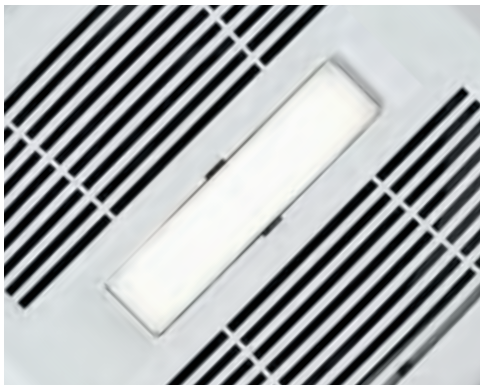
## VERSATILE INSTALLATION. AIRTIGHT PERFORMANCE. LED LIGHTING.

InVent Series gives professionals smart options for new construction or room-side retrofits in one, hard-working product line. InVent is about innovations such as FoldAway™ mounting ears and TrueSeal™ Damper Technology that improves building airtightness like never before. With fresh grille designs and a full range of operating points, there's an InVent Series solution for every installation.

InVent™ SERIES



LED Lighting offers greater energy efficiency and longevity, and adds a unique design detail to this hard-working fan. 11 watt, 800 Lumens integrated LED module lasts up to 25,000 hours.



InVent™ SERIES

## INVENT FAN & FAN/LIGHT FEATURES

**AE50, AE80, AE110, AE80B, A80, A80HD, A110**

- FoldAway™ mounting ears allow for easy installation in both new construction and room-side replacement
- New TrueSeal™ damper technology forms a tighter seal to reduce backdrafts
- EzDuct™ Connector allows room-side installation with no attic access required
- Effective ventilation clears humidity and odors
- Attractive grille styling

**AE80L, AE80BL, AE110L**

- LED Fan/Light with 11 watt, 800 Lumens, 3000K, 80 CRI integrated module
- LED lasts up to 25,000 hours for maintenance-free convenience

**A50L, A70L, A80L, A110L**

- Incandescent Fan/Light with A19 Base (bulb not included)

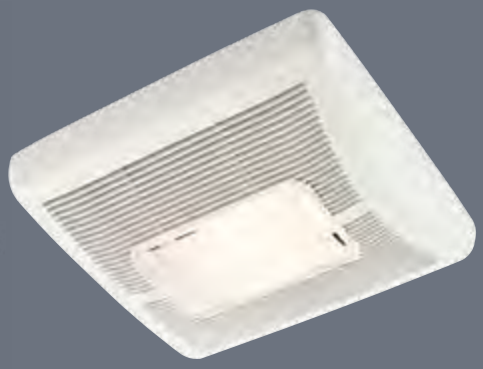
**AE50 | A80 | AE80 | AE80B | A110 | AE110**



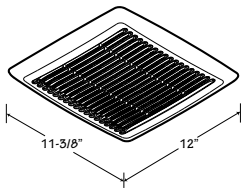
**AE80L | AE80BL | AE110L**



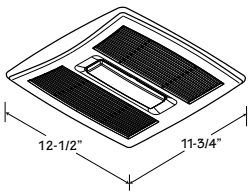
**A50L | A70L | A80L | A110L**



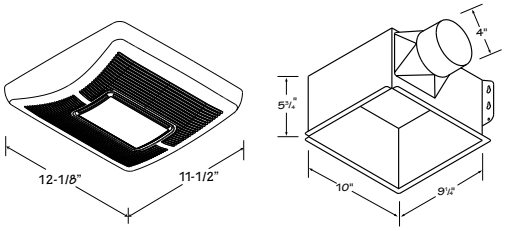
**AE50, A80, AE80, AE80B, A110, AE110**




**AE80L, AE80BL, AE110L**




**A50L, A70L, A80L, A110L**




## INVENT Fan Models

| Model | CFM | Sones | ENERGY STAR® |
|---|---|---|---|
| **A80** | 80 | 2.0 | No |
| **A80HD*** | 80 | 2.0 | No |
| **A110** | 110 | 3.0 | No |
| **AE50** | 50 | 0.5 | Yes |
| **AE80** | 80 | 0.8 | Yes |
| **AE80B** | 80 | 1.5 | Yes |
| **AE110** | 110 | 1.3 | Yes |

ENERGY STAR® fans use 70% less energy, on average, than standard models and may qualify for local utility rebates

*Metal Grille

## INVENT Fan/Light Models

| Model | CFM | Sones | Lighting | ENERGY STAR® |
|---|---|---|---|---|
| **A50L** | 50 | 1.5 | A19 Base** | No |
| **A70L** | 70 | 2.0 | A19 Base** | No |
| **A80L** | 80 | 1.0 | A19 Base** | No |
| **A110L** | 110 | 1.3 | A19 Base** | No |
| **AE80BL** | 80 | 1.5 | LED | Yes |
| **AE80L** | 80 | 0.8 | LED | Yes |
| **AE110L** | 110 | 1.3 | LED | Yes |

ENERGY STAR® fans use 70% less energy, on average, than standard models and may qualify for local utility rebates

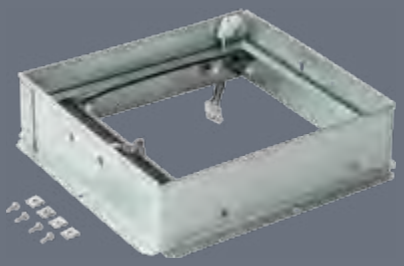
**Bulb Not Included

## INVENT™ SERIES ACCESSORIES

A range of accessories ensures a custom fit in any application. Choose optional duct connectors, a radiation damper and a metal grille for commercial installations, and hanger bars for exact positioning.

With our QFlow™ Duct Connector (MODEL MQF4), InVent fans reduce air leakage by up to 65% compared to competitive models[1], offering an extremely tight seal when closed and completely open airflow when open.

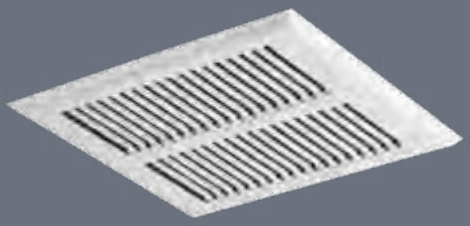
**RDM1 RADIATION DAMPER for fans and ENERGY STAR fan/lights only**



**MQF4 DUCT CONNECTOR**



**MMG METAL GRILL**



**MHB4 HANGER BARS**



**MMDC4 METAL DUCT CONNECTOR**



**Broan InVent™ Series Project Packs.** Keep your job on schedule and your inventory safe. Even if the final fan or fan/light product has not been selected, a project pack enables you to install a fan or fan/light housing now and choose the right-sized finish pack later. You won't have an open box on the job site with a motor and grille that could be lost or damaged.

### INVENT Fan Finish Packs

| Model | CFM | Sones | ENERGY STAR® |
|---|---|---|---|
| **A80F** | 80 | 2.0 | No |
| **A80HDF*** | 80 | 2.0 | No |
| **A110F** | 110 | 3.0 | No |
| **AE50F** | 50 | 0.5 | Yes |
| **AE80BF** | 80 | 1.5 | Yes |
| **AE80F** | 80 | 0.8 | Yes |
| **AE110F** | 110 | 1.3 | Yes |

ENERGY STAR® fans use 70% less energy, on average, than standard models and may qualify for local utility rebates

*Metal Grille

### INVENT Fan/Light Finish Packs

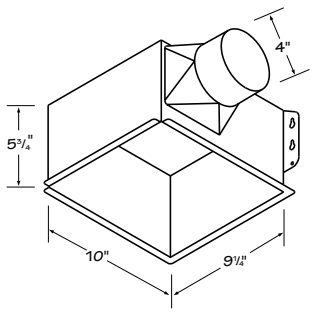
| Model | CFM | Sones | Lighting | ENERGY STAR® |
|---|---|---|---|---|
| **A70LF** | 70 | 2.0 | A19 Base** | No |
| **AE80BLF** | 80 | 1.5 | LED | Yes |
| **AE80LF** | 80 | 0.8 | LED | Yes |
| **AE110LF** | 100 | 1.3 | LED | Yes |

ENERGY STAR® fans use 70% less energy, on average, than standard models and may qualify for local utility rebates

**Bulb Not Included

### INVENT Housing Packs

| Model | Description |
|---|---|
| **A000HF** | Fan Housing |
| **A000HL** | Fan/Light Housing |




[1]Testing reflects total fan housing air tightness. See Broan.com/InVent for details.



# A WELL VENTILATED ROOM IS A HEALTHIER



## LOOK TO BROAN, THE VENTILATION EXPERTS, TO KEEP EVERY ROOM OF YOUR HOUSE FRESH.

Broan engineers the right product to fit every application, room size and need. Select from a variety of features that best meet your spot ventilation needs. Begin by assessing how powerful the fan should be or whether you could use additional lighting in your space. Think about what product style, finish or shape would look best. Rest assured, if you're concerned about saving money and energy, Broan bath fans that feature ENERGY STAR® can reduce energy consumption by as much as 70%. Broan has the perfect product designed around your needs.





# ROOM.

**Wall or ceiling mount, LoProfile is the right fan for a tight fit.** The new Broan LoProfile™ Fan is our latest solution for installations where conventional ventilation simply won't fit. Where multi-family applications require it, the LoProfile™ fan is narrow enough to be installed in a wall between 2x4 studs. When plumbing or electrical obstructions are found behind the drywall in ceiling remodel applications our LoProfile™ fan can still fit without having to move anything. And that means most any room with space constraints can have powerful, quiet, efficient ventilation.

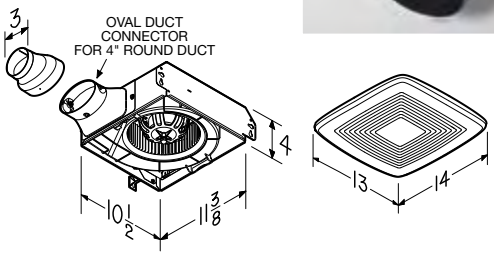



The oval connector accepts standard 4" duct, or 3" duct with the supplied adapter



Electrical connections can be made through the top or the side of the housing



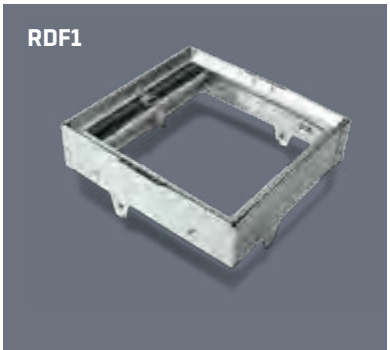



| Model | CFM | Sones | ENERGY STAR® |
|---|---|---|---|
| **LP80** | 80 | 1.0 | Yes |

ENERGY STAR® fans use 70% less energy, on average, than standard models and may qualify for local utility rebates

## FEATURES

- Fits in 2x4 ceiling or wall construction
- 80 CFM with 4" duct ensures ample air movement; 70 CFM with 3" duct reducer
- >50 CFM at 0.25" static pressure meets ASHRAE 62.2 local ventilation requirements (with 4" oval duct or 3" round duct)
- Only 1.0 sones for quiet operation (4" duct)
- 4" oval or 3" round duct connection for installation flexibility
- Efficient operation lowers utility bills
- Ideal for multi-family applications
- Compatible with RDF1 Premium Radiation Damper
- Project Packs available



## FAN/LIGHT FEATURES

**657, 696**

- Powerful centrifugal blower
- White polymeric grille complements virtually any decor
- A19 base lighting (bulb not included)
- Ceiling mount

**750, 751**

- Powerful centrifugal blower
- Round design eliminates squaring with walls
- Model 751 is the same as Model 750, but without a night light
- A19 base lighting (bulb not included)
- Ceiling mount

**678, HD80L**

- White polymeric grille complements virtually any décor
- Ceiling mount
- Project Packs available
- HD80L designed for continuous operation

## CEILING & WALL MOUNT FEATURES

**670, 671, 688, 689**

- Compact housing fits between ceiling joists or wall studs
- Metal grille kits (available separately)
- Project Packs available for most models

**657 | 696**



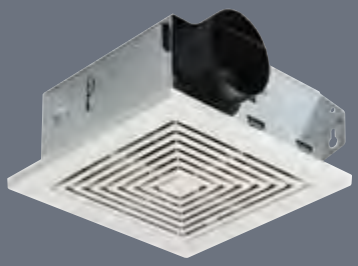
**750 | 751**



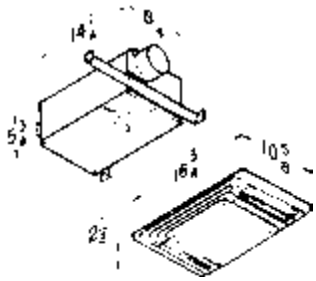
**678 | HD80L**



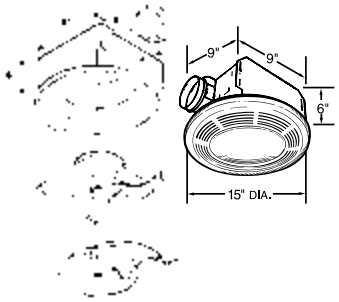
**670 | 671 | 688 | 689**



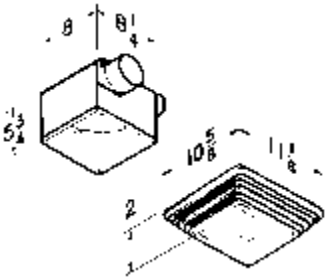
**657, 696**



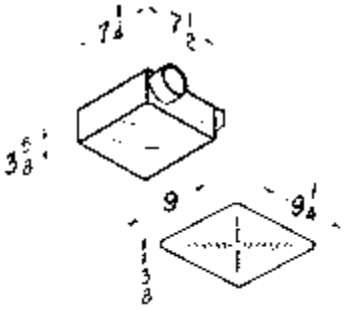
**750, 751**




**678, HD80L**



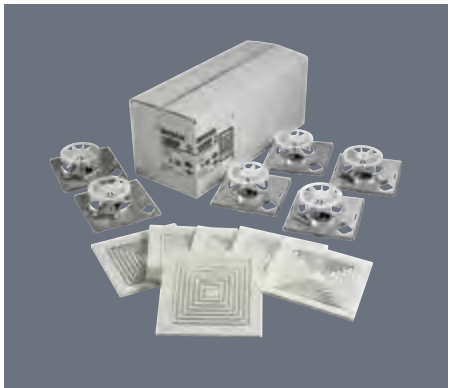
**670, 671, 688, 689**



| Model | CFM | Sones | Light/Night Light | Ducting |
|---|---|---|---|---|
| **657** | 70 | 4.0 | A19 Base | 4" |
| **696** | 100 | 4.5 | A19 Base | 4" |
| **750** | 100 | 3.5 | A19 Base / 7W | 4" |
| **751** | 100 | 3.5 | A19 Base | 4" |
| **678** | 50 | 2.5 | A19 Base | 4" |
| **HD80L** | 80 | 2.5 | A19 Base | 4" |

| Model | CFM | Sones | Ducting | Mounts |
|---|---|---|---|---|
| **670** | 50 | 3.5 | 3" | Wall / Ceiling |
| **671** | 70 | 6.0 | 3" | Wall / Ceiling |
| **688** | 50 | 4.0 | 3" | Wall / Ceiling |
| **689** | 60 | 5.5 | 3" | Wall / Ceiling |

HVI® 2100 CERTIFIED



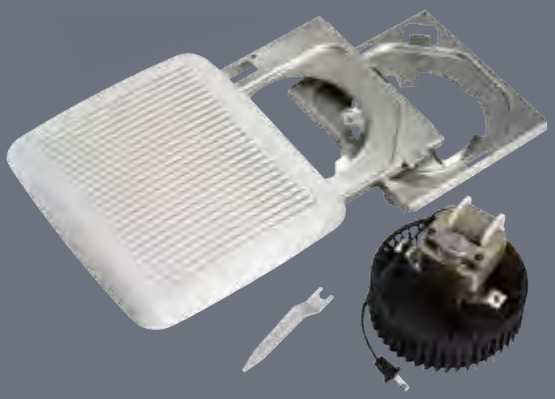
**Project Packs.** Convenient options for today's contractor. Broan "H" Packs include rough-in housings only, making multi-unit installation more convenient. "F" Packs allow motor/blower and grille assemblies to be ordered separately, nearer project completion, to help avoid losing, damaging or having to store components.

## 690 BATH FAN UPGRADE KIT

The Broan bath fan upgrade kit lets you convert your old bath fan to a brand new unit in just 10 minutes. Improve performance, reduce the sound level, and upgrade the appearance of your economy fan in minutes.

- Cut sound levels up to 50%
- Boost air movement up to 20%
- 10 minute installation
- 60 CFM, 3.0 Sones
- Modern white grille
- No special tools needed

690



Included: Grille; two motor plates, depending on your fan model; wrench; quieter plug-in fan motor



1. Remove old grille



3. Attach new fan and new motor plate. Install into existing housing



2. Remove old fan assembly



4. Install new grille

### Measure your existing fan housing to ensure proper fit

| For use only with these bath fan models.* | | Measurements | Yes | No |
|---|---|---|---|---|
|  | NuTone 693, 695, 696N | 7½" x 7¼" | • | |
| | | 8" x 7¼" | • | |
|  | Broan 670, 671, 688, 689 | 7½" x 7¼" | • | |
| | | 8" x 8¼" | | • |
|  | Nautilus N671, N688 | 7½" x 7¼" | • | |
| | | 8" x 8¼" | | • |

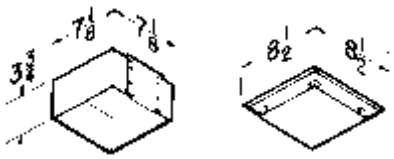
*No other usage has been tested or authorized by Broan-NuTone LLC.

### Broan 690 Upgrade Kit replaces the models below

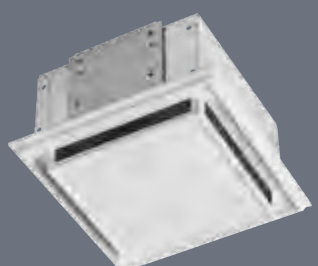
| If your grille looks like this: | The fan is very likely one of these models: | Housing dimensions: |
|---|---|---|
|  | NuTone 693, 695, 696N | 7½" x 7¼" or 8" x 7¼" |
|  | Broan 670, 671, 688, 689<br>Nautilus N671, N688 | 7½" x 7¼"<br>Not compatible with 8" x 8¼" |

## 682 DUCT FREE FAN

- Patented, fast snap-in metal housing installation
- Fan circulates air past replaceable activated charcoal filter
- Fits 2" x 4" ceiling or wall construction



682



| Model | CFM | Sones | Lighting | Notes |
|---|---|---|---|---|
| **682** | — | — | — | Duct-free Circulation |
| **S97009563** | — | — | — | Replacement filter |

**Duct-free.** This easy-to-install solution is ideal where air circulation is needed but ducting is impossible or impractical. Use it as a solution for half baths or rooms where humidity isn't a concern.

## QUALITY VENTILATION THAT COMPLEMENTS YOUR DÉCOR.

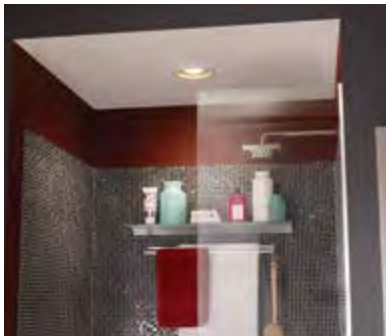
Every room needs ventilation, from closets to bedrooms to baths. But adding a fan/light combination that complements or enhances the room décor has been challenging. That's why the Broan Architectural products are perfect. Imagine a fan/light combination fixture that unobtrusively blends into the ceiling. Or a statement fan/light with a stunning LED perimeter glow that showcases your unique décor. The Architectural series helps you meet your decorating challenges without compromising your style.

# VENTILATION THAT MOVES IN RATHER



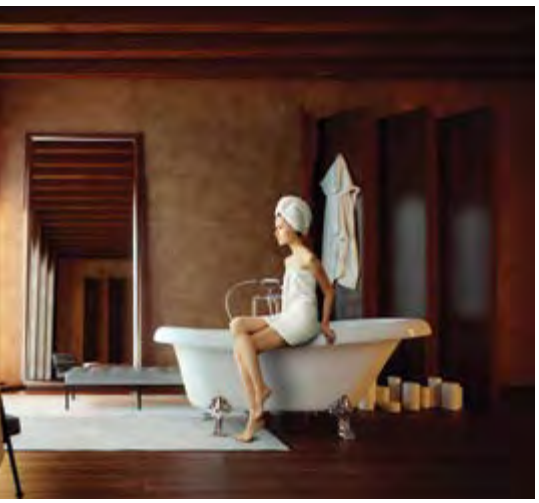


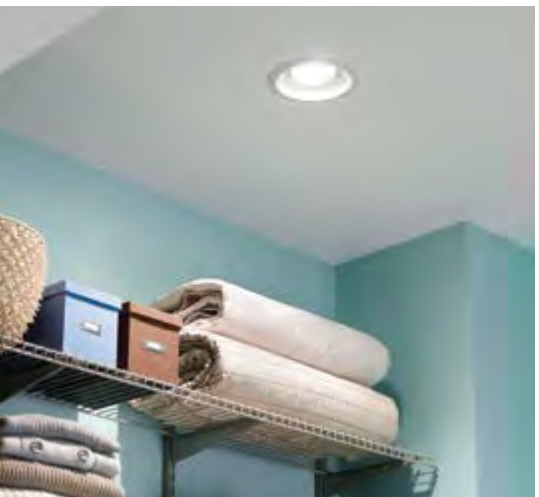






# THE AIR,
# MOVING WAYS.











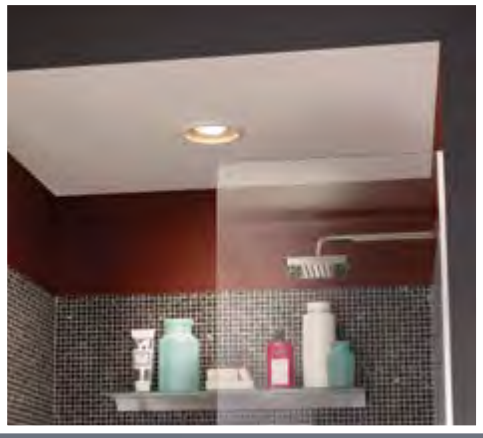
## 744 SERIES RECESSED FAN/LIGHT FEATURES

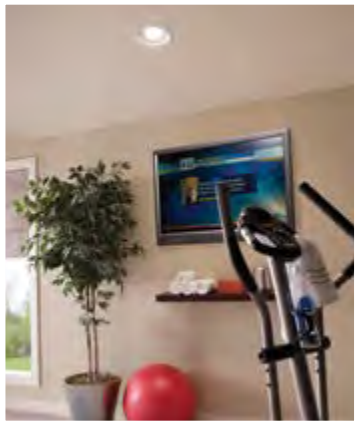
- High efficiency centrifugal fan
- 70 CFM at 1.5 sones
- Trim matched to designs of major recessed light manufacturers
- Put multiple units in larger rooms
- Model 744 uses a standard A19 base, 75 watt maximum (R30 or BR30 for standard applications)
- Models 744FL and 744SFL include a 16 watt, GU24 based, R30 shaped CFL bulb (included)
- Model 744LED includes a 10 watt, GU24 based LED bulb (included)
- All models UL Listed for use over bathtub or shower when connected to a GFCI protected branch circuit. Model 744 requires a PAR30L or PAR30LN type bulb (not included)
- 6 7/8" high housing appropriate for new construction and 2" x 8" ceiling joists
- 4" round duct connector
- Optional wall control switches available
- Type IC, sealed housing
- Not for use over cooking surfaces

**Humidity Sensing Model 744SFL Features**

- SensAire® technology detects the rapid rise in humidity and automatically turns the fan on and off
- Humidity is sensed at the ceiling level
- Easily accessible sensitivity adjustment
- Easy-to-set 5–60 minute shut-off timer

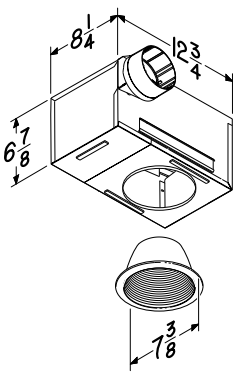




SensAire® technology behind the trim detects changes in humidity and automatically turns the fan on and off

*YOU'D NEVER KNOW*
*IT'S A FAN, AND THAT'S THE POINT*




| Model | CFM | Sones | Lighting | Humidity Sensing | Ducting | ENERGY STAR® |
|---|---|---|---|---|---|---|
| **744** | 70 | 1.5 | 75W MAX | — | 4" | — |
| **744FL** | 70 | 1.5 | 16W Fluor. | — | 4" | Yes |
| **744LED** | 70 | 1.5 | 10W LED | — | 4" | Yes |
| **744SFL** | 70 | 1.5 | 16W Fluor. | Yes | 4" | Yes |

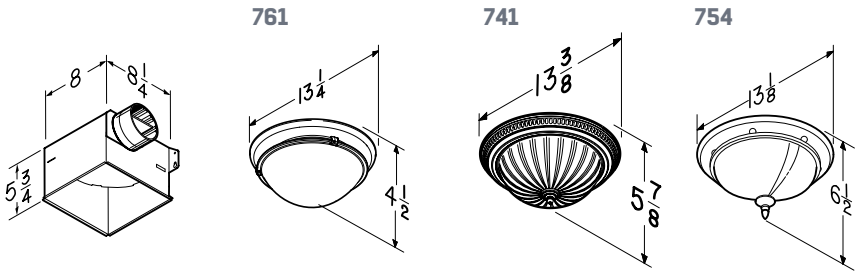
ENERGY STAR® fans use 70% less energy, on average, than standard models and may qualify for local utility rebates

**Broan took recessed lighting a step further by incorporating powerful, quiet ventilation in the same design.** These fan/lights disappear into the ceiling and match perfectly with other recessed lights. Models 744, 744FL and 744LED are practical ventilation solutions for any room in the house, such as the utility room, kitchen or high-traffic family room—any space you wish to keep fresh and comfortable. In the bath, Model 744SFL starts automatically when a rapid rise in humidity is detected. You'll never forget to turn the fan on again.

## DECORATIVE FAN/LIGHT FIXTURE FEATURES

- 70 or 80 CFM at 2.5 or 3.5 Sones
- Corrosion-resistant finishes
- Beautifully styled glass globes
- Use two 60-watt incandescent candelabra bulbs (not included)
- Plug-in lighting fixture and permanently lubricated motor
- Polymeric blower wheel
- Not UL approved for use over bathtubs or showers
- Sturdy, keyholed mounting brackets for quick, accurate installation
- Fits 2" x 6" ceiling construction
- Tapered, polymeric 4" round duct fitting for easy, positive duct connection and no metallic clatter
- Type IC



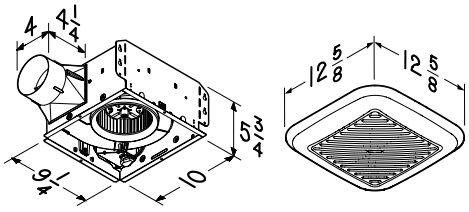

| Model | CFM | Sones | Lighting | Bulb Type | Finish | Glass |
|---|---|---|---|---|---|---|
| **761BN** | 80 | 2.5 | 2-60W | Candelabra | Brushed Nickel | White Opal |
| **761RB** | 80 | 2.5 | 2-60W | Candelabra | Oil-Rubbed Bronze | Ivory Alabaster |
| **761WHA** | 80 | 2.5 | 2-60W | Candelabra | White | White Alabaster |
| **741SN** | 70 | 3.5 | 2-60W | Standard | Satin Nickel | Frosted |
| **754RB** | 70 | 3.5 | 2-60W | Candelabra | Oil-Rubbed Bronze | White Alabaster |

**A beautiful balance of elegance and performance.**
Now you can ventilate while adding quiet elegance and exceptional design to any room in your home with beautifully styled glass globe lighting. These fan/lights are available in corrosion-resistant decorator finishes.

## FAN WITH SOFT SURROUND™ TECHNOLOGY FEATURES

- LED lasts up to 25,000 hours, nearly eliminating the hassle of bulb replacement
- 9 watt lighting for extreme energy efficiency
- Bright 800 lumen integrated LED light engine for energy efficiency
- 3000K color temperature provides bright, soft light ideal for bathrooms
- Minimum 80 Color Rendering Index (CRI) which meets ENERGY STAR® requirements
- Fits in 2" x 6" ceiling construction
- 110 CFM for strong air movement
- 1.5 sones for quiet operation
- ENERGY STAR® certified
- 4" duct connector balances powerful, quiet operation with easy installation
- UL listed for use over bathtubs and showers when connected to a GFCI protected branch circuit
- Type IC for use in direct contact with thermal insulation




| Model | CFM | Sones | Lighting | HVI | Ducting | ENERGY STAR® |
|---|---|---|---|---|---|---|
| **791LEDM** | 110 | 1.5 | 9W LED | Yes | 4" | Yes |

ENERGY STAR® fans use 70% less energy, on average, than standard models and may qualify for local utility rebates

*Patent pending





EVERY ROOM CAN BE MORE



COMFORTABLE WITH A LITTLE VEN

**THERE'S A BROAN VENTILATION SOLUTION FOR EVERY ROOM IN YOUR HOME.** Without doubt, every room needs ventilation. That's why our specialty lines deliver clean, fresh air where you need it most–including your bathrooms, laundry room, recreation room, workshop or nursery. Look to our room-to-room, wall/ceiling mount, through-wall or vertical discharge utility fans for powerful spot ventilation. Or, install our remote mounted in-line ventilation system for a quiet whole-house solution. Our recessed fan/lights perfectly match other recessed fixtures, including humidity sensing options that start automatically when a rapid rise in humidity is detected. Elegant, simple, practical and powerful. Exactly what you've come to expect from Broan.

SENSONIC™
YOUR MUSIC OUT OF SIGHT

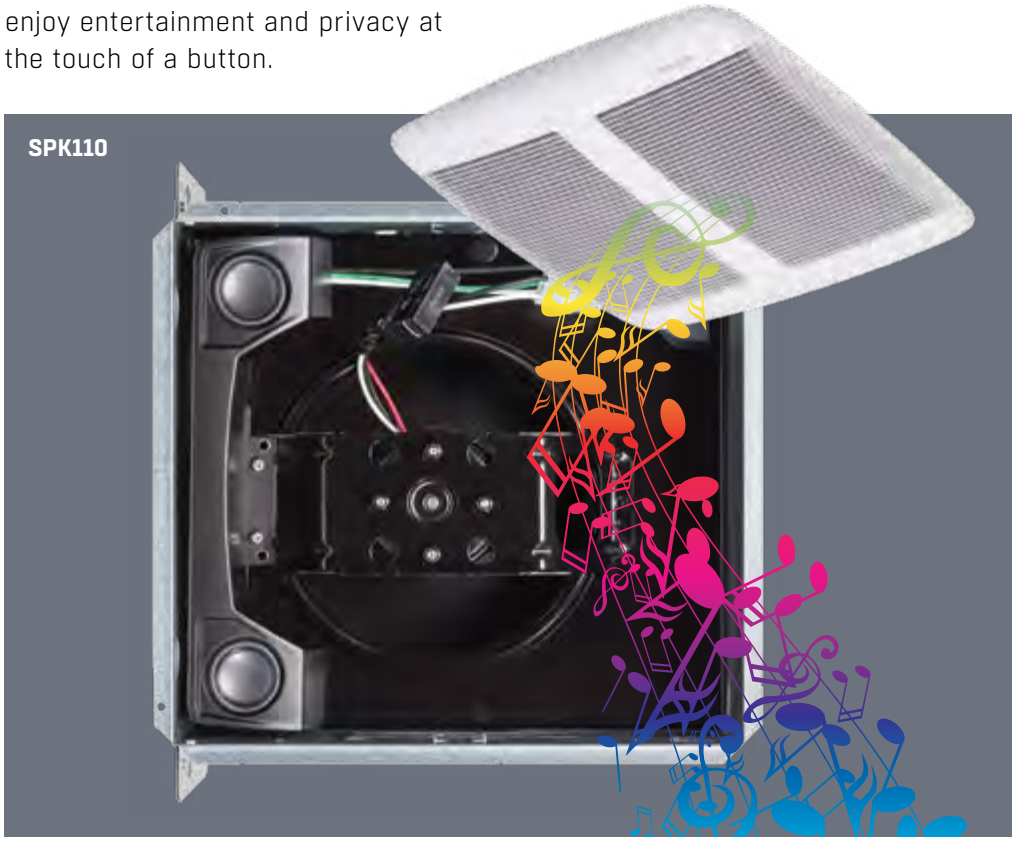
# VENTILATION FOR THE MUSIC FAN

**Quiet Ventilation Fan with Quality Wireless Speakers.**

It's your music—out of sight. Unlike wireless speakers that require counter space, Sensonic™ speakers with *Bluetooth*® wireless technology fill your room with rich sound from above. From hard rock to news talk, play any audio through the dual high-fidelity speakers and enjoy entertainment and privacy at the touch of a button.

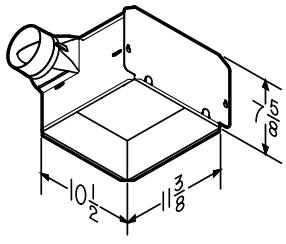


TILATION.




## SENSONIC FEATURES

- Dual High-Fidelity Sensonic™ Speakers
- Brilliant audio performance concealed behind your fan grille
- Play any audio through most *Bluetooth*®-enabled devices
- Effective, extremely quiet ventilation clears humidity and odors quickly
- ENERGY STAR® certified
- UL Listed for use over bathtub or shower when installed with a GFCI protected branch circuit
- Type IC for use in direct contact with thermal insulation
- Fits 2"x 8" ceiling construction
- Includes unique spacer for easy I-joist mounting
- Mounts between joists with optional QTHB1 Hanger Bar Kit (sold separately)




**SPKACC**



Speaker also available as an accessory. Quickly and easily add a high-fidelity Sensonic™ speaker to most Broan or NuTone QT Series Ventilation Fans

| Model | Description | CFM | Sones | Ducting |
|---|---|---|---|---|
| **SPK110** | Fan with Speaker | 110 | 1.0 | 4" |
| **SPKACC** | Speaker Accessory | — | — | — |

Bluetooth®

The *Bluetooth*® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Broan-NuTone LLC is under license.

HVI® 2100 CERTIFIED

## THROUGH-WALL FANS

- Housing adjusts to fit walls from 4½"–9½" thick
- Specially designed polymeric fan blade
- Built-in damper minimizes backdrafts for energy efficiency
- Paintable polymeric grilles
- Accessorize with wall switch or variable speed wall control

**508** (10"), **509/509S** (8")
- 509S: features an integral ON/OFF rotary switch–no wall switch to wire

**512M**
- 6" Through-Wall

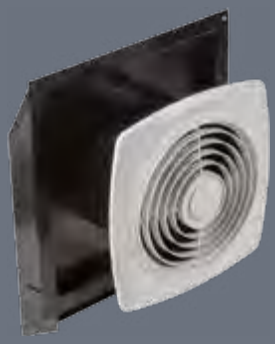
- Louvered exterior wall cap with built-in bird screen
- 6" diameter flexible aluminum duct included

**12C MOTORDOR®**
- 10" Through-Wall
- Separate motor opens and closes the vent door automatically

## WALL/CEILING-MOUNT, SIDE DISCHARGE FANS

**502, 503**
- Installs easily between ceiling joists or wall studs
- Built-in damper prevents backdrafts
- Fits 3¼" x 10" duct

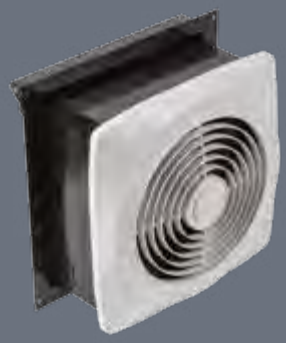
**508 | 509 | 509S**



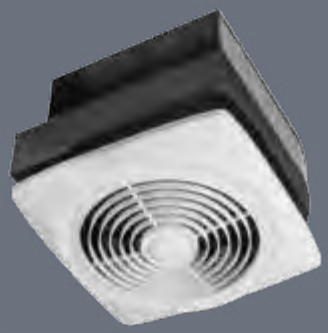
**512M**



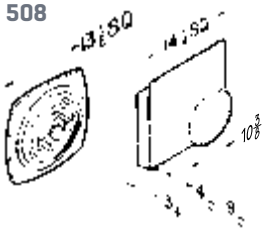
**12C MOTORDOR®**



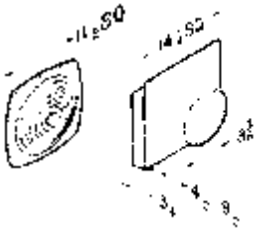
**502 | 503**



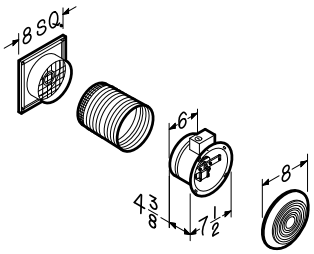
**508**



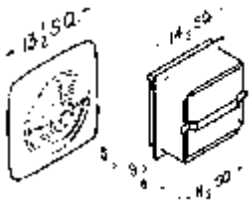
**509/509S**



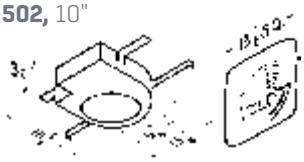
**512M**



**12C Motordor®**



**502,** 10"



**503,** 8"



| Model | CFM | Sones | Diameter | Sizing Specifications |
|---|---|---|---|---|
| **506** | 470 | 8.0 | 10" | Fits 4½"–9½" thick walls |
| **507** | 250 | 7.0 | 8" | Fits 4½"–9½" thick walls |
| **510** | 380 | 6.5 | 10" | Fits 3"–5½" thick walls |
| **511** | 180 | 4.5 | 8" | Fits 3"–5½" thick walls |
| **502** | 270 | 8.0 | 10" | Fits 3¼" x 10" duct |
| **503** | 160 | 5.0 | 8" | Fits 3¼" x 10" duct |
| **508** | 270 | 6.0 | 10" | Fits 4½"–9½" thick walls |
| **509/509S** | 180 | 6.5 | 8" | Fits 4½"–9½" thick walls<br>509S Integral ON/OFF Rotary Switch |
| **512** | 90 | 3.5 | 6" | Fits up to 5⅛" thick walls |
| **512M** | 70 | 3.5 | 6" | Fits up to 5¼"–10" thick walls |
| **12C Motordor®** | 360 | 8.0 | 10" | Fits 5½"–9⅞" thick walls |
| **504** | 350 | 6.5 | 10" | Fits 10" round duct |
| **505** | 180 | 6.5 | 8" | Fits 8" round duct |
| **673** | 60 | 4.5 | 6" | Fits 6" round duct |

## VERTICAL DISCHARGE

- Galvanized steel housing installs easily between ceiling joists
- Steel mounting brackets with keyhole slots for fast installation

**504**
- 10" vertical discharge
- Fits 10" round duct–use Model 472 transition/ damper (available separately) for 8" round duct (performance will be reduced)

**505**
- 8" vertical discharge with built-in damper
- 8" fan, 8¼" diameter housing

**673**
- 6" vertical discharge with built-in damper
- 6" paintable fan, spin-on, white polymeric grille

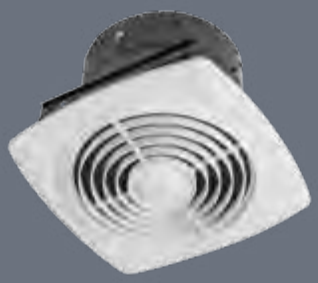
## CHAIN-OPERATED UTILITY FANS

- Pull-chain opens the door and starts fan
- Housing adjusts to fit walls from 4½"–9½" thick
- Specially designed polymeric fan blade
- Housing features foam-insulated door for energy efficiency

**506**
- 10" fan (10 3/8" diameter sleeve)

**507**
- 8" fan (8 3/8" diameter sleeve)

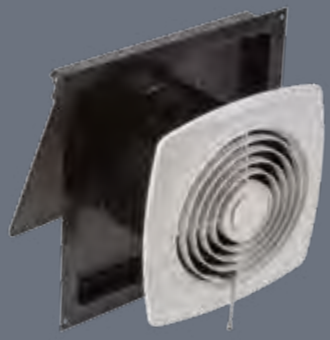
**504 | 505**



**673**



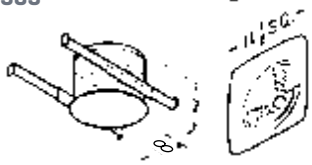
**506 | 507**



**504**



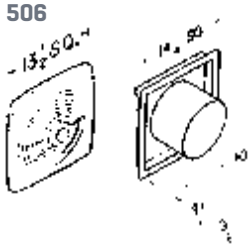
**505**



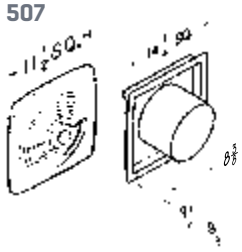
**673**



**506**



**507**



## ROOM-TO-ROOM FANS

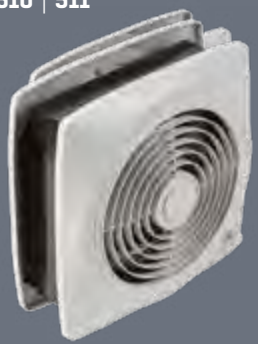
Room-to-Room ventilators provide quick solutions where more ventilation is needed—without installing new ductwork.

- Built-in variable speed control
- Easy installation through wall 3"–5½" thick
- Permanently lubricated motor
- Paintable white polymeric grilles
- Not for use in kitchens

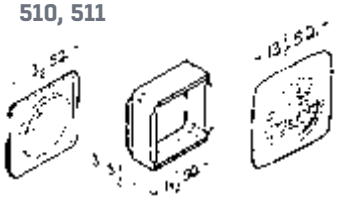
**510,** 10"; **511,** 8"

**512**
- 6" Room-to-Room
- Use 57W or 57V variable speed control separately

**510 | 511**



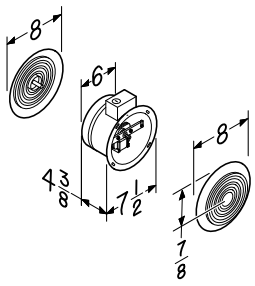
**510, 511**



**512**



**512**



## MULTI- AND SINGLE-PORT IN-LINE VENTILATORS FEATURES

- Energy-efficient, permanently lubricated motors
- High pressure centrifugal blowers easily accommodate long duct runs
- Designed for quick, easy installation
- HVI certified and AMCA licensed
- Suitable for intermittent or continuous ventilation applications
- Removable panels offer easy access to the motor without disturbing ductwork
- Plug-in blower simplifies wiring

**Multi-Port In-Line Ventilators**

- Ventilate multiple bathrooms or other rooms simultaneously
- Great solution for large, open spaces
- Install in virtually any orientation
- 6" round outlet; 4" round inlets (two inlet duct covers included)
- Use 2, 3 or all 4 inlet ports

**Single-Port In-Line Ventilators**

- Ventilate any room in virtual silence
- 6" round outlet and inlet for easy duct connections

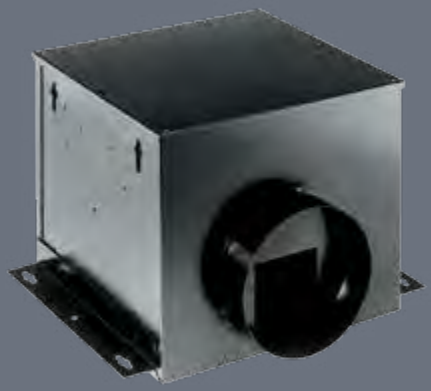
**MP100 | MP140 | MP200**



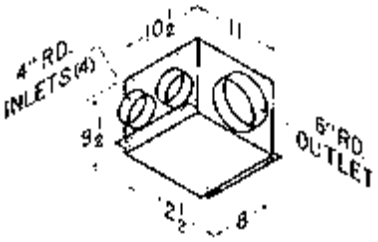
**MP280**



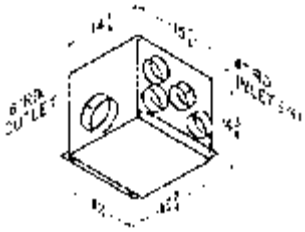
**SP100 | SP140 | SP200**



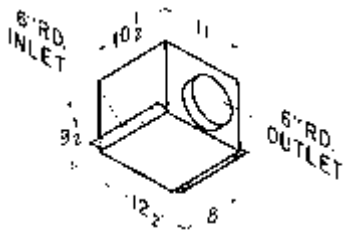
**MP100, MP140, MP200**




**MP280**



**SP100, SP140, SP200**



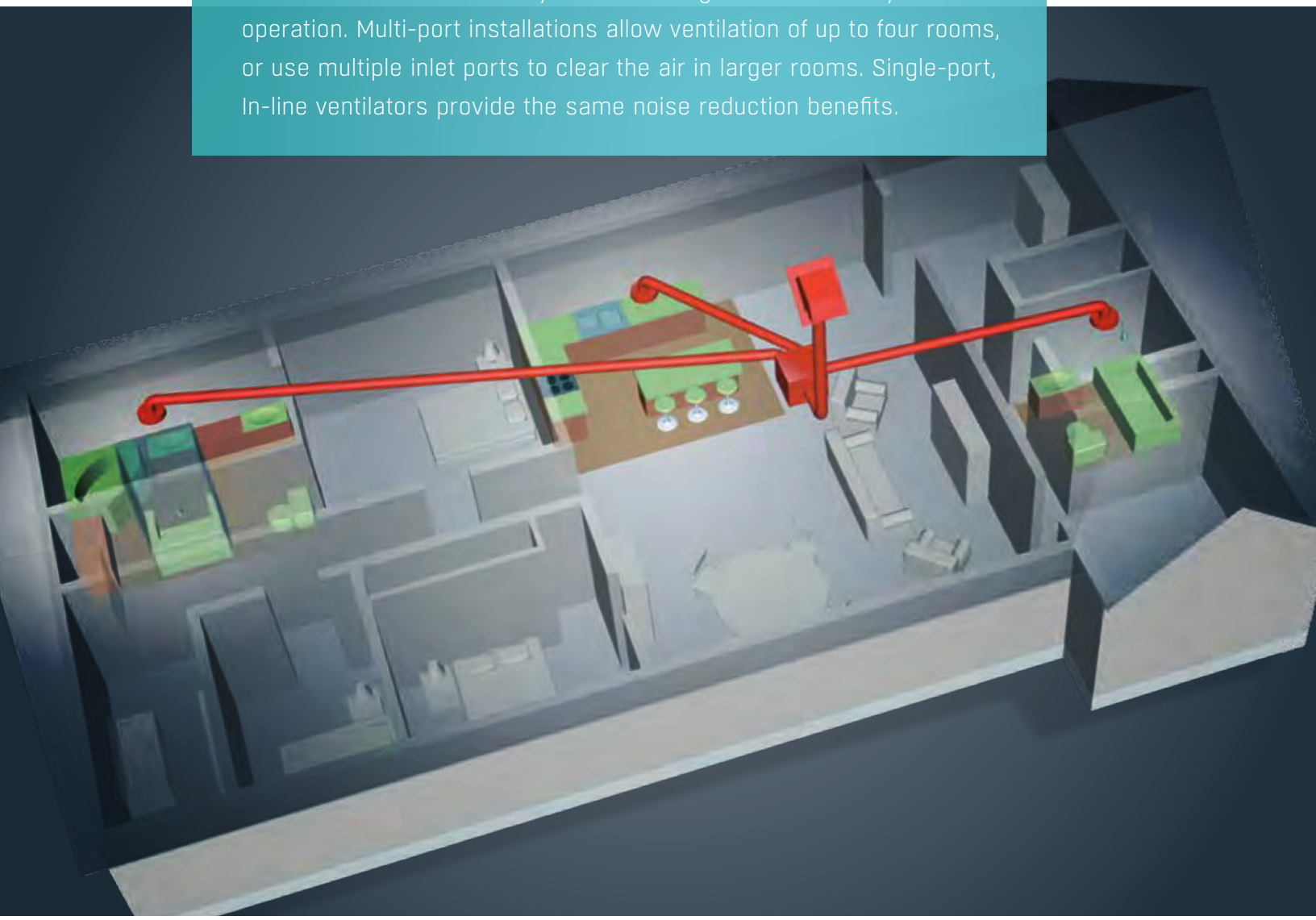

| Multi-Port | CFM | Sones | Notes |
|---|---|---|---|
| **MP100** | 110 | 1.0 | Four inlets |
| **MP140** | 150 | 1.5 | Four inlets |
| **MP200** | 210 | 2.0 | Four inlets |
| **MP280** | 290 | 3.0 | Four inlets |
| **SP100** | 110 | 1.0 | One inlet only |
| **SP140** | 150 | 1.5 | One inlet only |
| **SP200** | 210 | 2.0 | One inlet only |

HVI rated air flow at 0.2" static pressure. Sound test procedures are similar to HVI tests for other exhaust fans.

**Remote Mounted In-Line Ventilation Fans.**
Quiet and efficient residential solutions. The concept is simple: mount a high-performance ventilator in an out-of-the-way spot and you get the power with virtually no sound. Install the housing in the attic or the basement, wherever it's most convenient and discrete.

## WITH A MULTI-PORT, IN-LINE VENTILATION SOLUTION

the blower is mounted away from the living area for virtually silent operation. Multi-port installations allow ventilation of up to four rooms, or use multiple inlet ports to clear the air in larger rooms. Single-port, In-line ventilators provide the same noise reduction benefits.



**CVG4 | CVG6**



**Room Inlets**

- Models available for 6" (CVG6) or 4" (CVG4) round duct
- Install in ceiling or wall
- Paint to match room décor
- Available in six packs only

## Accessories

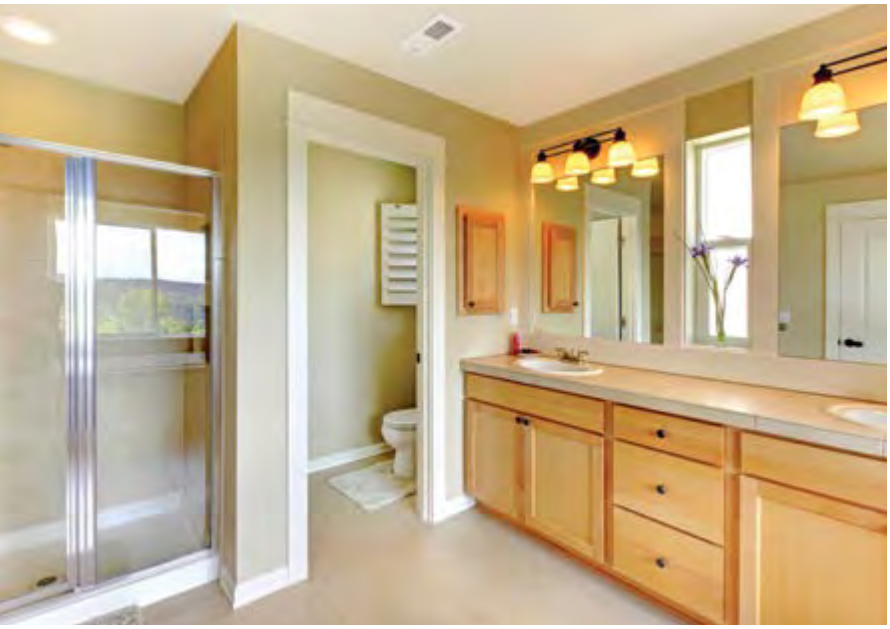
| Model | Description | Ducting/Size | Notes |
|---|---|---|---|
| **CVG4** | Grille Intake | 4" | Round Grille |
| **CVG6** | Grille Intake | 6" | Round Grille |
| **CVLD4** | Sleeve | 4" | Sleeve with damper |
| **CVLD6** | Sleeve | 6" | Sleeve with damper |
| **CVL4** | Sleeve | 4" | Sleeve without damper |
| **CVL6** | Sleeve | 6" | Sleeve without damper |
| **FY6** | Y Adapter Only | 6" x 6" x 6" | |



# INSTANT HEAT, RIGHT WHEN YOU NE
# AND ONLY WHERE YOU

## POWERFUL HEATING, LIGHT AND VENTILATION AT THE TOUCH OF A SWITCH.

No matter where you live your house can become chilled. Maybe it's early fall before the furnace is on, or maybe the cool desert nights mean colder rooms. And there's certainly one room you never want to be chilly—the bathroom. Whether it's taking a morning shower, or relaxing in a whirlpool at the end of a long day, your family appreciates a warm, comfortable bathroom. Broan heater/fan/lights are the perfect solution. You have instant heat to quickly warm up the room, a quiet ventilation fan to remove excess humidity and a convenient light–all in one fixture. Each one can be operated separately, or they can be used simultaneously when needed, no furnace required.





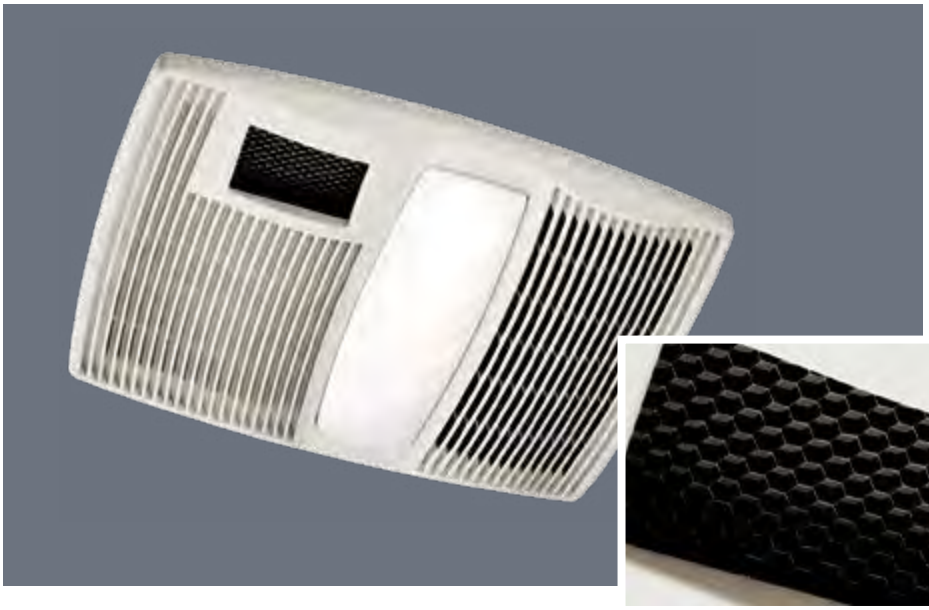


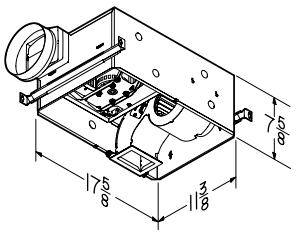


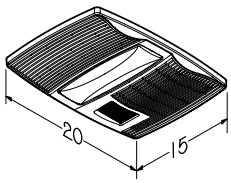
ED IT.
WANT IT.

## QT SERIES FEATURES

- Efficient PowerHeat™ heater design
- Choice of standard A19 base (2, 60 watt) lighting (bulbs not included) or energy-efficient 36 watt GU24 fluorescent (bulbs included)
- Fan motor is engineered for continuous operation
- HVI Certified
- Type IC
- Requires a dedicated 20 amp circuit
- Switches sold separately
- 7 watt night-light bulb not included






PowerHeat™ is a Broan design that maximizes heat output per watt. With the heater element close to the forced air exit grille, the internal components are not heated. Heat is delivered into the room and does not escape into the ceiling or attic space.



## Heater/Fan/Light

| Model | CFM | Sones | Bath Sq Ft. | Lighting/ Night Light | Heater Watts | Ducting |
|---|---|---|---|---|---|---|
| **QTX110HL** | 110 | 0.9 | 100 | Std. A19 Base (2- 60W)** / 7W** | 1500 | 6" |
| **QTX110HFLT** | 110 | 0.9 | 100 | 36W Fluorescent (2- 18W)* / 7W** | 1500 | 6" |

*Bulbs included
**Bulbs not included

HVI CERTIFIED

## DIRECTIONALLY ADJUSTABLE HEATER/FAN LIGHT FEATURES

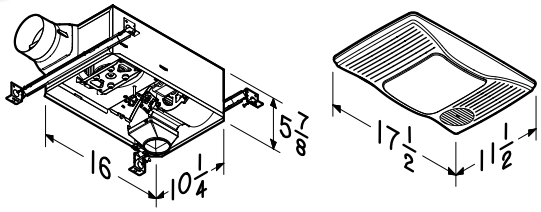
- Heater/Fan/Light brings convenient, comforting warmth to your bathroom
- Quiet, high-output heater with exclusive directionally adjustable design (see below)
- 4" ducting for new construction or retrofit
- Multi-function wall switches sold separately
- Choice of Standard A19 base or energy-efficient 27 watt GU24 (bulb included) fluorescent lighting
- Fan motor is engineered for continuous operation
- HVI Certified
- Type IC
- Requires a dedicated 20 amp circuit
- Fits 2" x 6" ceiling construction

**100HL | 100HFL**






**100HL, 100HFL**




## Heater/Fan/Lights

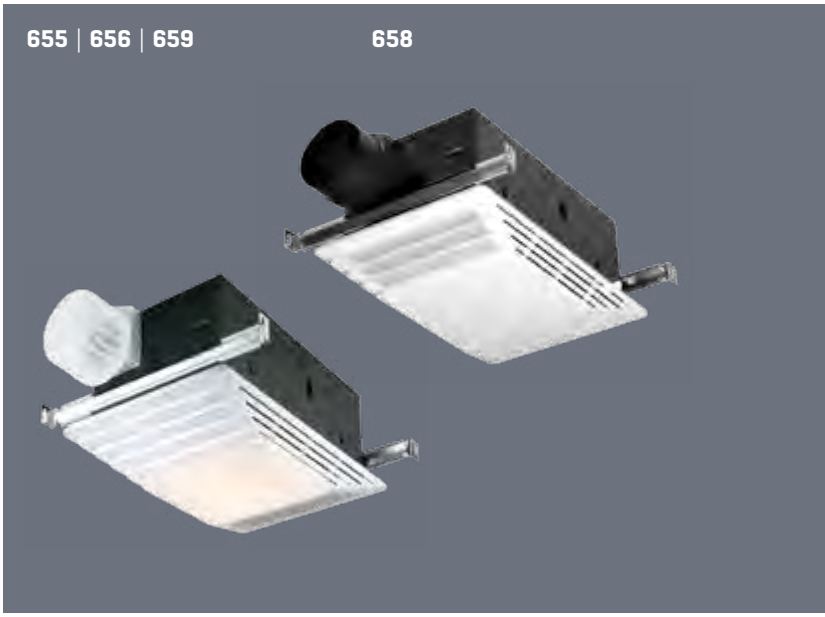
| Model | CFM | Sones | Bath Sq Ft. | Lighting | Heater Watts | Ducting |
|---|---|---|---|---|---|---|
| **100HL** | 100 | 2.0 | 90 | Std A19 Base | 1500 | 4" |
| **100HFL** | 100 | 2.0 | 90 | 27W GU24 Fluorescent | 1500 | 4" |

**Broan Directionally-adjustable Heater/Fan/Lights.**
With our 360° directionally-adjustable heat outlet, you're assured the heat will end up exactly where you need it.

## HEATER/FAN & HEATER/FAN/LIGHT FEATURES

- Designer white polymeric grilles complement virtually any décor
- 1300 watt heaters
- Fan, light and heater function independently or together
- Type IC
- Fits 2" x 6" ceiling construction
- Two- or three-function wall controls are available separately
- **655:** 20-amp circuit required
- **659:** 15-amp circuit required
- **656:** Heater/Light Only, 15-amp circuit required
- **658:** Heater/Fan, 15-amp circuit acceptable

**655 | 656 | 659** **658**



**655, 656, 659 Grille** **658 Grille**




## Heaters & Heater Fans

| Model | CFM | Sones | Lighting | Ducting | Heater |
|---|---|---|---|---|---|
| **655** | 70 | 4.0 | Std A19 Base | 4" | 1300W |
| **656** | — | — | Std A19 Base | — | 1300W |
| **658** | 70 | 4.0 | No Light | 4" | 1300W |
| **659** | 50 | 2.5 | Std A19 Base | 4" | 1300W |

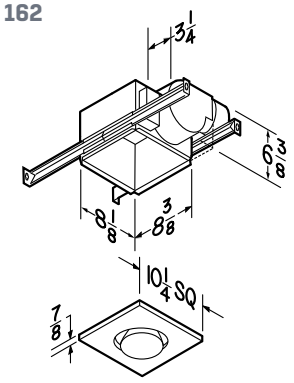
## BULB HEATER/FAN FEATURES

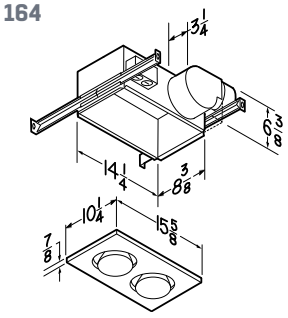
- Quiet, highly efficient polymeric blower wheels
- Polymeric dampers prevent backdrafts and eliminate mechanical noise
- Polymeric 4" round duct connectors with tapered sleeves simplify ducting
- Operate fan and heater independently or together
- Attractive white polymeric grilles
- Compact steel housings with adjustable mounting brackets with keyhole slots that span up to 24"
- 250 watt R40 or BR40 size infrared bulbs (not included)
- Type IC, UL Listed for 60°C wiring (retrofits)
- **162:** One-Bulb Heater/Fan
- **164:** Two-Bulb Heater/ Fan, Two-function control (available separately)

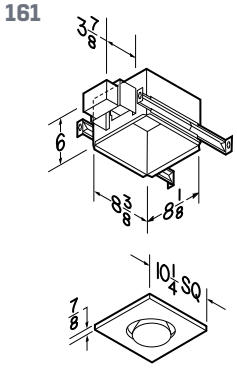
## ONE OR TWO-BULB HEATERS—NO FAN

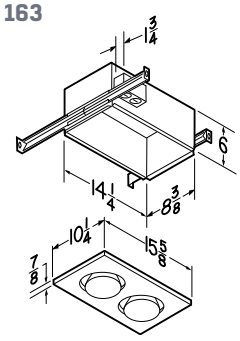
- Infrared bulbs deliver energy-saving warmth
- Get instant comfort in the bathroom without turning up the central thermostat
- 250 watt R40/BR40 size infrared bulbs (not included)
- Attractive, white polymeric grilles
- Compact steel housings
- Adjustable mounting brackets with keyhole slots span up to 24"
- **161:** One-Bulb Heater, UL Listed for 75°C wiring
- **163:** Two-Bulb Heater, Type IC




**Bulb Heater Fans.** Silent warmth and superior ventilation. Trust Broan Bulb Heater/Fans and Bulb Heaters for energy-saving warmth and instant comfort without ever having to touch your central thermostat. These units deliver superior performance and excellent ventilation in a compact package.

### Bulb Heater/Fan & Bulb Heaters

| Model | CFM | Sones | Bulb Watts |
|---|---|---|---|
| **162**[1] | 70 | 4.0 | 250 |
| **164**[1] | 70 | 4.0 | 500 |
| **161*** | — | — | 250 |
| **163** | — | — | 500 |

*NOT IC RATED
[1] HVI certified



# PULL THE HEAT OUT OF YOUR ATTIC.
# PUT MONEY BACK IN YOUR WALLET.



**Prevent heat and moisture build-up.** In summer, attics can reach 150°F or more, warming your living area, increasing the air-conditioning load, and adding to your energy bill. In winter, ice dams can result, and moist air can condense causing mildew, rotting wood and wet insulation. Year-round attic ventilation ensures a cooler, drier attic that can extend roof life by preventing rot, premature aging and shingle distortion. A cooler attic extends the life of your air conditioner and lowers air conditioning expense.

**How Much Ventilation Do You Need?** Effective ventilation requires air to exit at or near the peak of the roof with replacement air drawn through soffit venting and louvers. The Home Ventilating Institute (HVI) recommends at least 10 air changes hourly to equalize temperature. Determine your attic ventilation needs below, or try the **Attic Ventilation Calculator at broan.com.**

## DETERMINE YOUR VENTILATION NEEDS

**1.** Calculate the volume of your attic, in cubic feet, depending on the style of your home's roof.

**Attic Volume for Gable Roof:** Volume = Length x Width x Height x ½

**Attic Volume for Hip Roof:** Volume = Length x Width x Height x ⅓

**2.** Attic Volume x 10 Air Changes per Hour = Total Cubic Feet per Hour of ventilation recommended.

**3.** Total Cubic Feet per Hour 60 Minutes/ Hour = Cubic Feet Per Minute (CFM) of Ventilation Recommended.

**Example:** Average Gable Attic Volume = 58¾' x 29' x 7¼' x ½ = 6,176 Cubic Feet 6,176 Cubic Feet x 10 Air Changes/Hour = 61,760 Cubic Feet/Hour ÷ 60 Min./Hour = 1,029 CFM

**4.** Replacement air is drawn through vents in your soffit. To determine the minimum soffit vent area required (in square inches) multiply the total CFM of your powered ventilator(s) by 0.48. This number is the total square inches of soffit venting required by your powered ventilator(s).

**Example:** 1,029 CFM x 0.48 = 494 Square Inches of soffit vent area recommended

## ACCESSORIES

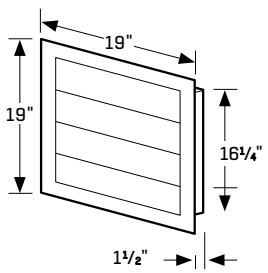
**433**



For use with Broan Models 353, 35316, 345GOBK or 345GOWW.

### 433 Automatic Shutter for Gable Mount Attic Ventilators

- Feature counter-balanced aluminum vanes that automatically open and close when the ventilator turns on and off
- Better air flow than stationary attic louvers
- Extruded aluminum frame fits flush with outside wall
- Weather-tight closure
- Easy to install




### DH100W Humidistat



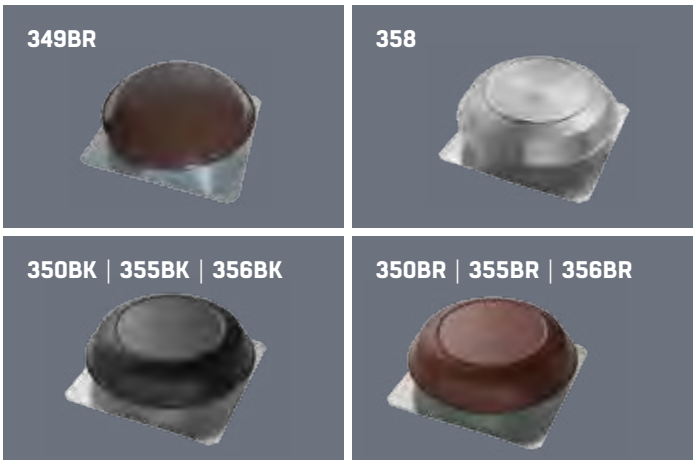
- Sold separately for use with all Broan powered attic ventilators. Humidistats automatically turn on the fan when moisture in the attic is detected

### Model 73

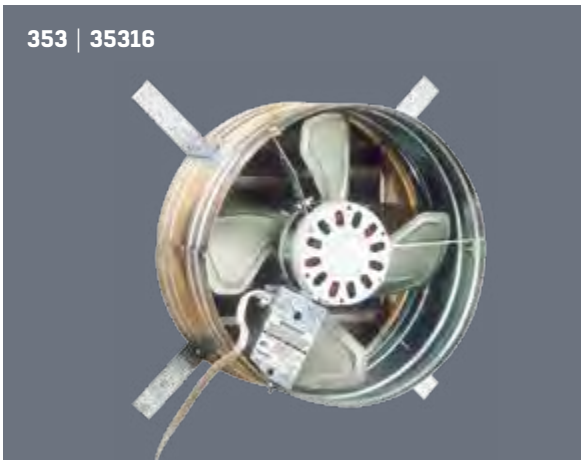


- High Temperature Cut-off sold separately for use with all Broan powered attic ventilators. High temperature controls automatically turn off the ventilator at 204°F
- For additional switches see page 52–53

**ROOF MOUNT, POWERED ATTIC VENTILATION**




**GABLE MOUNT, POWERED ATTIC VENTILATION**




## Powered Attic Ventilation Specifications

| Model | Attic Sq Ft | AMPs | CFM* | RPM | Height | Diameter | Dome Material | Color |
|---|---|---|---|---|---|---|---|---|
| **Roof Mount** | | | | | | | | |
| **349BR** | Up to 1400 | 4 | 1000 | 1050 | 9" | 24½" | Painted Steel | Dark Brown |
| **350BR \| 350BK** | Up to 1500 | 3.6 | 1050 | 1000 | 8" | 23¼" | PVC | Brown/Black |
| **355BR \| 355BK** | Up to 1715 | 4.3 | 1200 | 1050 | 8" | 23¼" | PVC | Brown/Black |
| **356BR \| 356BK** | Up to 2285 | 8.0 | 1600 | 1500 | 8" | 23¼" | PVC | Brown/Black |
| **358** | Up to 1715 | 4.3 | 1200 | 1050 | 8" | 23¼" | Aluminum | Silver |
| **Gable Mount** | | | | | | | | |
| **353†** | Up to 1460 | 3.4 | 1020 / 760** | 1030 | — | — | — | — |
| **35316†** | Up to 2285 | 3.9 | 1600 / 1160** | 1420 | — | — | — | — |

# DETERMINING THE CFM* REQUIREMENTS FOR YOUR ATTIC

## Gable Mount Ventilators

| Roof Pitch | 8/12 or Less | | 9/12 | | 12/12 | | 15/12 | |
|---|---|---|---|---|---|---|---|---|
| | Standard Louver | 433 Louver | Standard Louver | 433 Louver | Standard Louver | 433 Louver | Standard Louver | 433 Louver |
| **Light Colored Roof Square Footage** | | | | | | | | |
| **353** | 1085 | 1460 | 1015 | 1360 | 570 | 765 | 355 | 385 |
| **35316** | 1658 | 2285 | 1549 | 2135 | 870 | 200 | 559 | 770 |
| **Dark Colored Roof Square Footage** | | | | | | | | |
| **353** | 950 | 1275 | 880 | 1185 | 500 | 670 | 315 | 425 |
| **35316** | 1442 | 1985 | 1347 | 1855 | 757 | 1055 | 486 | 670 |

Numbers in charts are attic square footage that fan can ventilate.

## Roof Mount Ventilators

| Roof Pitch | CFM | 8/12 or Less | 9/12 | 12/12 | 15/12 |
|---|---|---|---|---|---|
| **Light Colored Roof Square Footage** | | | | | |
| **349BR** | 1000 | 1490 | 1180 | 782 | 501 |
| **350BR, 350BK** | 1050 | 1500 | 1399 | 790 | 508 |
| **355BR, 355BK** | 1200 | 1715 | 1600 | 900 | 575 |
| **356BR, 356BK** | 1600 | 2285 | 2135 | 1200 | 770 |
| **358** | 1200 | 1715 | 1600 | 900 | 575 |
| **Dark Colored Roof Square Footage** | | | | | |
| **349BR** | 1000 | 1290 | 1200 | 684 | 427 |
| **350BR, 350BK** | 1050 | 1304 | 1219 | 694 | 430 |
| **355BR, 355BK** | 1200 | 1495 | 1390 | 790 | 505 |
| **356BR, 356BK** | 1600 | 1985 | 1855 | 1055 | 670 |
| **358** | 1200 | 1495 | 1390 | 790 | 505 |

† Model 433 Automatic Shutter Accessory sold separately. See page 46.
*Exhaust capacity HVI certified @ .03" static pressure.
**Higher CFM with Model 433 shutter. Lower CFM with standard wood louvre.
The Home Ventilating Institute (HVI) recommends 1 sq. ft. of open air inlet per 300 CFM of fan capacity. The best location for these air intake vents is under the eaves with direct access to the attic. Vents for gable installations should be placed at the end of the house opposite the installed ventilator. Failure to provide these intakes could cause natural-draft gas appliances to backdraft.

# VENTILATE YOUR ATTIC WITH THE POWER OF THE SUN.



**Surface Mount—345SOBK and 345SOWW**
For most roofs, our one piece SPAV is the perfect solution. Because our solar cells are highly efficient at capturing the sun's energy, there is no need for unsightly raised panels or tracking systems. Instead, what you see is a low profile ventilator in a contoured design that integrates well with the roof.

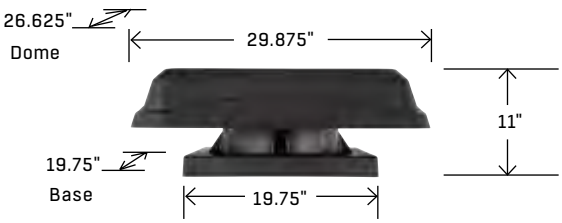
**Curb Mount—345CSOBK and 345CSOWW**
Identical in design to the Surface Mount unit but with an added lip for flat, tiled, or unusually steep roof installations. A Curb Mount installation requires the fabrication of a simple curb box frame made from treated 2x4s to create a solid platform and better manage water runoff.









**Solar Panel** Integrated, low profile, 28 watt Solar Panel efficiently captures sunlight from dawn to dusk without the unsightly props or pivoting stands used by some manufacturers. Rugged, tempered glass withstands large hail and resists delaminating.

**Housing** Attractive, low profile, molded design, of UV-stabilized, color-dyed, rugged ABS plastic withstands impact from hail and resists fading. May also be painted to match roof color for installation flexibility.

**Motor** Direct-current, variable speed 17 volt motor is dynamically balanced for superior performance and silent operation.

**Fan** 12" Diameter, one-piece aluminum 5-blade, fan pitched for maximum air flow.

**Hardware** Stainless steel fasteners secure galvanized steel brackets and aluminum, heavy gauge screen for durability and corrosion resistance. Screen keeps out insects, animals, and birds without impeding airflow.

**Optional Thermostat—Model CWT45** Easy to install, this optional accessory disables the motor below 50° for climates where cold-weather condensation isn't a concern and to extend motor life. The thermostat activates the motor at temperatures above 61° to vent air from dawn through dusk.



30% Federal Tax Credit

Visit broan.com for more information.

## Remote Mount, 345RSOBK and 345RSOWW

In some cases, installing the ventilator in a location that is either less visible, more convenient to reach from the roof-side, or more accessible from the attic-side, is desirable. Remote mount enables the ventilator to be installed independent of the solar panel, up to 50' away (15' of wire included). Locate the remote, flat panel to receive the best sunlight exposure and hide the ventilator from view.

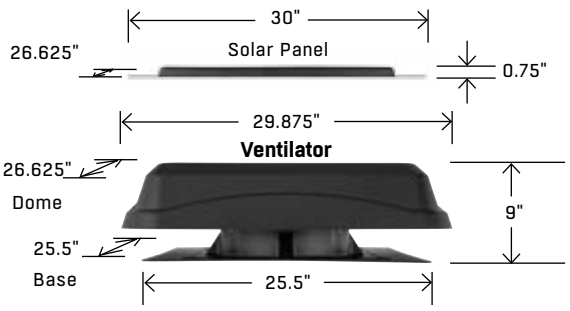
## Gable Mount, 345GOBK & 345GOWW

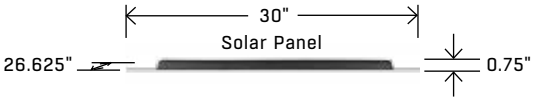
If roof mounting is not possible or desired, gable installation provides the benefits of the SPAV with a remote-mounted, flat solar panel positioned to best capture the sun's energy, up to 50' away (15' of wire included). Finish the outside with a Broan model 433 gable shutter.









# THE PERFECT CONTROL SOLUTION FOR EVERY ROOM AND NEED.



INDICATOR LIGHT CONTROL FOR CONVENIENCE

## INDICATOR LIGHT CONTROLS

### Model 69W*



- Single-Function Controls
- Ideal for use with quiet models, or Remote In-Line Ventilators
- 120V, 15 amps

### Model 269WL, 269VL



- Two-Function Controls
- For use especially with quiet models and an auxiliary light source
- Lighted fan control 120V, 20 amps; unlighted 120/240/277V, 15 amps
- Fits two-gang box
- Controls available in White (W) or Ivory (V)

### Model 685WL, 685VL



- Three-Function Controls
- For use especially with quiet models
- Lighted fan control 120V, 20 amps; two additional on/off rocker switches 120V, 15 amps each (20 amps total)
- Fits two-gang box
- Blister packs (P685WL, P685VL)
- Controls available in White (W) or Ivory (V)

## THERMOSTAT AND HUMIDITY CONTROLS

### Model 82W



- SensAire® technology responds to humidity up to 70% faster than competitive models; setpoint mode satisfies CA requirements
- Continuous ventilation mode helps to meet ASHRAE 62.2
- Compatible with any existing fan within electrical ratings
- Available in white; faceplate not included
- 120V, 4 amp

### Model 70TW



- Thermostat for any fan
- 120, 250, 277 VAC,
- 22 amp capacity
- Fits single-gang box only

### Model DH100W*



- Dehumidistat
- Dual voltage (24V/120V)
- Variable setting from 20–80% relative humidity
- Usage guide included
- Fits single-gang box only

## MULTI-FUNCTION CONTROLS

### Model 66W, 66V, 67W





- Three-Function Controls
- Three independent, 120V, 15 amp rocker switches (20 amps total)
- Fits single-gang opening
- Blister packs available (P66W, P66V, P67W)
- Controls available in White (W) or Ivory (V)
- Wall plates available in: White (66W) or Ivory (66V); Polished chrome finish (67W)

### Model 68W, 68V



- Two-Function Controls
- Two independent, 120V, 15 amp rocker switches(20 amps total)
- Fits single-gang box
- Blister packs available (P68W, P68V)
- Controls available in White (W) or Ivory (V)

### Model 77DW, 77DV



- Four-Function Controls
- Single switch provides three settings for fan sensor (On-Auto-Off) on Sensing models
- Remaining switches for light/night light
- Works with QTX110HL heater/fan/light/night light
- Controls available in White (W) or Ivory (V)
- Fits single-gang opening
- Blister packs available (P77DW)

*Also for use with Powered Attic Ventilators—see pages 46–47



MULTI-FUNCTION CONTROL
TO SUIT EVERY NEED



SPEED CONTROL FOR QUIETER
OPERATION OR FULL POWER



HUMIDITY SENSING TO HELP
PREVENT FOGGY MIRRORS

## SPEED CONTROLS

### Model 57W, 57V (3-amp)



- 120V, 3 amps
- Fits single-gang box
- Positive on/off action—dial for variable selection of air speeds and sound levels
- Built-in radio noise suppressor
- Controls available in White (W) or Ivory (V)
- Blister packs available (P57W)

### Model 72W, 72V (6-amp)



- 120V, 6 amps—Models 72W, 72V
- Fits single-gang box only
- Positive on/off action—dial for variable selection of air speeds and sound levels
- Built-in radio noise suppressor
- Controls available in White (W) or Ivory (V)

### Model 78W, 78V



- 4-speed "no-hum" ceiling fan speed control
- Decorator wall plate
- Screws included
- 120V AC 1.5 amp
- Controls available in White (W) or Ivory (V)

## TIMER AND OFF-DELAY CONTROLS

### Model 59W, 59V, 71V*





- Model 59W, 59V—up to 60 minutes
- Model 71V—up to 12 hours
- Fits single-gang box
- 120V, 20 amps; 240V, 10 amps
- Operate continuously or for any set period
- Controls available in White (W) or Ivory (V)
- Blister packs available (P59W, P59V)

### Model 61W, 61V



- Operate for any set period up to 15 minutes (no "continuous on" position)
- Fits single-gang box
- 120V, 20 amps; 240V, 10 amps
- Controls available in White (W) or Ivory (V)

### Model 62W



- 60 Minute
- Two separate 120V, 15 amp on/off rocker switches (20 amps total)
- 120V, 20 amps or 240V, 10 amp timer
- Timer operates continuously or for any set period up to 60 minutes
- Fits two-gang box
- Controls available in White (W)

### Model 63W, 63V



- 60 Minute
- Separate 120V, 15 amp on/off rocker switch
- Timer operates continuously or for any set period up to 60 minutes
- Fits two-gang box only
- Controls available in White (W) or Ivory (V)

### Model 64W, 64V



- Fan/Light Control with Off-Delay
- Fan and light operate together when control is turned on
- Fan continues to operate for a user adjustable time period 5–60 minutes after light is turned off
- Center position bypasses timer and turns fan and light off immediately
- Fits single-gang box only
- 120V, 4 amps (fan), 4 amps (light)
- Requires hot and neutral wires in the switch box
- Controls available in White (W) or Ivory (V)

*Also for use with Powered Attic Ventilators—see pages 46–47

## SELECTION GUIDE

| | | 57W 57V | 59W | 61W 61V | 62W | 63W 63V | 64W 64V | 66W 66V | 67W | 68W 68V | 69WL 69VL | 70TW | 71V | 72W 72V | 73 | 77DW 77DV | 78W 78V | 269WL 269VL | 685WL | 82W, DH100W |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Utility Fans | 12C | | • | • | | | • | | | | • | • | • | • | | | • | | | • |
| | 502 | • | • | • | | | • | | | | • | • | • | • | | | • | | | • |
| | 503 | • | • | • | | | • | | | | • | • | • | • | | | • | | | • |
| | 504 | • | • | • | | | • | | | | • | • | • | • | | | • | | | • |
| | 505 | • | • | • | | | • | | | | • | • | • | • | | | • | | | • |
| | 506 & 507 | | | | | | | | | | | | | | | | | | | |
| | 508 | • | • | • | | | • | | | | • | • | • | • | | | • | | | • |
| | 509 | • | • | • | | | | | | | • | • | | • | | | • | | | • |
| | 509S[1] | | • | • | | | • | | | | | • | • | | | | • | | | • |
| | 510[2] | | • | • | | | • | | | | | • | • | | | | • | | | • |
| | 511[2] | | | | | | | | | | | • | | | | | • | | | |
| | 512 & 512M | • | • | • | | | | | | | • | • | • | • | | | • | | | • |
| | 673 | | • | • | | | • | | | | • | • | • | | | | • | | | • |
| Ventilation Fans | 670 | • | • | • | | | • | | | | • | • | • | • | | | • | | | • |
| | 671 | • | • | • | | | • | | | | • | • | • | • | | | • | | | • |
| | 682 | • | • | • | | | • | | | | • | • | • | • | | | • | | | • |
| | 688 | • | • | • | | | • | | | | • | • | • | • | | | • | | | • |
| | 689 | • | • | • | | | • | | | | • | • | • | • | | | • | | | • |
| | 690 | • | • | • | | | • | | | | • | • | • | • | | | • | | | • |
| | LP80 | • | • | • | | | • | | | | • | • | • | • | | | • | | | • |
| | QTXE080 QTXE110, QTXE150 | | • | • | | • | • | | | • | • | • | • | | | | • | • | | • |
| | QTXE110S | | | | | | | | | • | • | | | | | | | | | |
| | XB50 | | | | | | | | | | • | | | | | | | • | | • |
| | XB80 | | | | | | | | | | • | | | | | | | • | | • |
| | XB110 | | | | | | | | | | • | | | | | | | • | | • |
| | XB110H | | | | | | | | | • | • | | | | | | | • | | • |
| | ZB80 | | | | | | | | | • | | | | | | | | • | • | • |
| | ZB80M | | | | | | | | | • | • | | | | | | | • | | • |
| | ZB110 | | | | | | | | | • | | | | | | | | • | • | • |
| | ZB110H | | | | | | | | | • | • | | | | | | | • | | • |
| | ZB110M | | | | | | | | | • | • | | | | | | | • | | • |
| | RB80, RB110 | | • | • | | | | | | | • | | | | | | | | | • |
| | A80HD | • | • | • | | | | | | | • | | | | | | | | | • |
| | AE50, A80, AE80, AE80B, AE80S, A110, AE110, AE110S | • | • | • | | | | | | | • | | | | | | | | | • |
| Ventilation Fan/Lights | 657 | • | • | • | | • | • | | | • | | • | • | • | | | | | | • |
| | 678 | • | • | • | | • | • | | | • | | • | • | • | | | | | | • |
| | 696 | • | • | • | | • | • | | | • | | • | • | • | | | | | | • |
| | 741SN | • | • | • | | • | • | | | • | | • | • | • | | | | | | • |
| | 744 | | | | | • | | | | • | | • | | | | | | | | • |
| | 744FL | | | | | • | | | | • | | • | | | | | | | | • |
| | 744LED | | | | | • | | | | • | | • | | | | | | | | • |
| | 744SFL | | | | | • | | • | • | • | | • | | | | | | | | • |
| | 750 | • | • | • | • | | • | • | • | • | | • | • | • | | | | • | • | • |
| | 751 | • | • | • | | • | • | | | • | | • | • | • | | | | • | | • |
| | 754SN | • | • | • | | • | • | | | • | | • | • | • | | | | • | | • |
| | 761BN, 761RB, 761WHA | • | • | • | | • | • | | | • | | • | • | • | | | | | | • |
| | 791LEDM | • | • | | | | • | | | • | | • | | | | | | • | | |
| | RB80L, RB110L | | | | | • | • | | | • | | | | | | | | • | | • |
| | AE80L, AE80BL, AE80SL, AE110L, AE110SL | • | | | | • | • | | | • | | | | | | | | • | | • |
| | A50L, A70L, A80L A110L | • | | | | • | • | | | • | | | | | | | | • | | • |

[1]Built-in on/off switch. [2]Built-in on/off variable switch

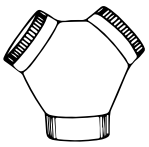
| | | 57W 57V | 59W | 61W 61V | 62W | 63W 63V | 64W 64V | 66W 66V | 67W | 68W 68V | 69WL 69VL | 70TW | 71V | 72W 72V | 73 | 77DW 77DV | 78W 78V | 269WL 269VL | 685WL | 82W, DH100W |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ventilation Fan/Lights Continued | HD80L | • | • | • | | • | • | | | • | | • | • | • | | | | • | | • |
| | QTXE080FLT, QTXE110FLT, QTXE150FLT | | • | • | • | • | • | • | | | | • | • | | | | | | • | • |
| | XB50L | | | | | | | • | • | | | | | | | | | | • | • |
| | XB80L | | | | | | | • | • | | | | | | | | | | • | • |
| | XB110L | | | | | | | • | • | | | | | | | | | | • | • |
| | XB110HL | | | | | | | • | • | | | | | | | • | | | | • |
| | ZB80L | | | | | | | | | | | | | | | • | | | | • |
| | ZB80ML | | | | | | | | | | | | | | | • | | | | • |
| | ZB110L | | | | | | | | | | | | | | | • | | | | • |
| | ZB110HL | | | | | | | • | • | | | | | | | • | | | | • |
| | ZB110ML | | | | | | | | | | | | | | | • | | | | • |
| Heater/Fan/ Lights | 100HL | • | • | • | • | | | • | • | | | • | • | • | | | | | | • |
| | 100HFL | • | • | • | • | | | • | • | | | • | • | • | | | | | | • |
| | 161 | | • | • | | | • | | | | • | | | | | | | | | • |
| | 162 | • | • | • | | • | • | | | • | | • | • | • | | | | • | | • |
| | 163 | | • | • | | • | | | | | • | | | | | | | | | • |
| | 164 | • | • | • | • | • | | • | • | • | | • | • | • | | | | • | • | • |
| | 655 | • | • | • | • | | | • | • | | | • | • | • | | | | • | • | • |
| | 656 | | • | • | | • | | | | | | • | • | | | | | | | • |
| | 658 | • | • | • | | • | | | | • | | • | • | • | | | | • | | • |
| | 659 | • | • | • | • | | | • | • | | | • | • | • | | | | • | • | • |
| | QTX110HL | | • | • | • | | | • | • | | | • | • | | | • | | | | • |
| | QTX110HFL | | • | • | • | | | • | • | | | • | • | | | • | | | | • |
| In-Line | MP100, MP140 MP200 | • | • | • | | | | | | | • | • | • | • | | | | | | • |
| | MP280 | • | • | • | | | | | | | • | • | • | • | | | | | | • |
| | SP100, SP140, SP200 | • | • | • | | | | | | | • | • | • | • | | | | | | • |
| Attic Ventilation | 349BR | | • | • | | | | | | | • | • | • | • | • | | | | | • |
| | 350BK | | • | • | | | | | | | • | • | • | • | • | | | | | • |
| | 350BR | | • | • | | | | | | | • | • | • | • | • | | | | | • |
| | 353 | | • | • | | | | | | | • | • | • | • | • | | | | | • |
| | 35316 | | • | • | | | | | | | • | • | • | • | • | | | | | • |
| | 355BK | | • | • | | | | | | | • | • | • | • | • | | | | | • |
| | 355BR | | • | • | | | | | | | • | • | • | • | • | | | | | • |
| | 356BK | | • | • | | | | | | | • | • | • | | • | | | | | • |
| | 356BR | | • | • | | | | | | | • | • | • | | • | | | | | • |
| | 358 | | • | • | | | | | | | • | • | • | • | • | | | | | • |

[1]Built-in on/off switch. [2]Built-in on/off variable switch

# DUCTING ACCESSORIES

## ADAPTERS

### Model FY6
- 6" x 6" x 6" Y adapter



### Model FY86
- 8" x 6" x 6" Y adapter

## DAMPERS

### Model 97 Damper
- 7" spring-loaded, in-line damper

### Model BP87 Damper
- 7" vertical discharge damper

## DUCTING

### Model 406 Round Duct
- 6" round duct
- 2' galvanized section



### Model 407 Round Duct
- 7" round duct
- 2' galvanized section

### Model 410 Round Duct
- 10" round duct
- 2' galvanized section

### Model 889 Duct
- 3¼" x 10" duct
- 2' galvanized sections



### Models DT4C & DT6C Non-Insulated Flexible Duct
- 4" (DT4C) or 6" (DT6C) round
- DT4C is a 4-pack
- 25' standard length



### Models DT4W, DT6W & 804DU Insulated Flexible Duct
- 4" (DT4W & 804DU) or 6" (DT6W) round
- 25' standard length

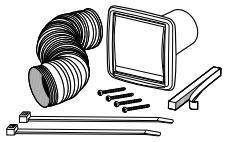


## DUCTING KITS

### Model RVK1A* Flexible Roof Ducting Kit
- Includes Model 636 Roof Cap
- 4" diameter metal duct connector
- 2 duct clamps
- 4" to 3" reducer
- 8' of 4" flexible aluminum ducting



### Model WVK2A* Flexible Wall Ducting Kit
- Includes white polymeric wall cap
- 4" diameter metal duct connector
- 2 duct clamps
- 4" to 3" reducer
- 5' of 4" flexible aluminum ducting



## ELBOWS

### Model 415 Adjustable Elbow
- Fits 7" round duct



### Model 418 Adjustable Elbow
- Fits 10" round duct

### Model 419 Adjustable Elbow
- Fits 6" round duct

### Model 428 Vertical Elbow
- Fits 3¼" x 10" duct



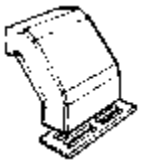
### Model 429 Horizontal Elbow
- Fits 3¼" x 10" duct



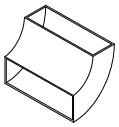
### Model 430 Short Eave Elbow
- For 3¼" x 10" duct
- Includes backdraft damper and grille (black)
- Only recommended for fans with more than 160 CFM



### Model 431 Long Eave Elbow
- For 3¼" x 10" duct
- Includes backdraft damper and grille (black)
- Only recommended for fans with more than 160 CFM



### Model 839 Elbow
- 90° turn
- For use with 3¼" x 10" duct



## FILTERS

### Model 834 Filter
- For 8" fans

### Model 854 Filter
- Aluminum mesh grease filter
- For 10" fans

### Model 99010042 Aluminum Filter
- Fits Utility Ventilator Models 503, 503MG, 505, 505MG, 509, 509MG, 509S and 509SMG



### Model 99010271 Aluminum Filter
- Fits Utility Ventilator Models 12C, 12CMG, 502, 502MG, 504, 504MG, 508, 508MG, 510, 510MG, 511 and 511MG

## METAL GRILLE KIT

### Model 97011308
- Steel baked white enamel finish
- Fits fan Models 670, 671, 676, 684, 688 and 689
- Grille size is 10¼" square

## ROOF CAPS

### Model 437* 10" Round
- High-capacity design up to 1200 CFM
- Backdraft damper and built-in bird screen
- Steel housing, black electrically bonded epoxy finish



### Model 611 Roof Cap*
- For flat roof installation
- Aluminum natural finish
- For up to 8" round duct



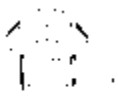
### Model 611CM Roof Cap*
- For curb mount installation
- Other features same as Model 611



### Model 612 Roof Cap*
- For flat roof installation
- Aluminum natural finish
- For up to 12" round duct



### Model 612CM Roof Cap*
- For curb mount installation
- Other features same as Model 612



### Model 634 Roof Cap*
- For 3¼" x 10" or up to 8" round duct
- Black
- Backdraft damper and birdscreen



*Not for use with dryers.

## ROOF CAPS CONTINUED

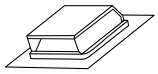
### Model 634M Roof Cap*
- Same as Model 634 except for 6" round duct

### Model 636 Roof Cap*
- For 3" or 4" round duct
- Built-in backdraft damper and bird screen
- Steel baked black enamel finish



### Model 636AL Roof Cap*
- Same as Model 636, except aluminum natural finish

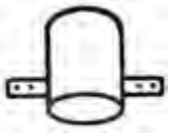
### Model 644 Roof Cap*
- Same as Model 634, except for aluminum natural finish



## SLEEVES

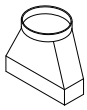
### Model CVLD4
- 4" sleeve with damper

### Model CVLD6
- 6" sleeve with damper

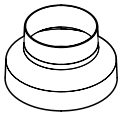


## TRANSITIONS

### Model 886 Transition
- Converts 7" round to 3¼" x 10" duct



### Model 475 Transition
- Converts 6" round duct to 4" round duct reducer
- Available in 6 Pack (475B)

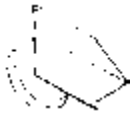


### Model 413 Transition
- Converts 3¼" x 10" duct to 8" round duct



## WALL CAPS

### Model 613 Wall Cap*
- For 12" round duct
- Built-in backdraft damper and bird screen
- Aluminum natural finish



### Model 639 Wall Cap*
- For 3¼" x 10" duct
- Spring-loaded backdraft damper
- Built-in bird screen
- Steel baked black enamel finish



### Model 649 Wall Cap*
- Same as Model 639, except aluminum natural finish

### Model 641 Wall Cap*
- For 6" round duct
- Built-in backdraft damper and bird screen
- Aluminum natural finish
- Model 647 for 7" Round duct



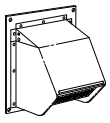
### Model 647 Wall Cap*
- For 7" round duct
- Other features same as Model 641



### Model 649 Wall Cap*
- Same as Model 639, except aluminum natural finish

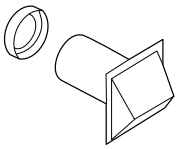


### Model 843BL Wall Cap*
- For 6" round duct
- Built-in backdraft damper and bird screen
- Black finish



## WALL CAPS CONTINUED

### Models 885AL and 885BL Wall Cap*
- For 3" or 4" round duct
- 4" to 3" transition included
- Aluminum natural finish (885AL) and steel black enamel finish (885BL)
- Standard package—6 to a carton
- Built-in bird screen and damper



### Model 642
- For 4" round duct
- Aluminum natural finish
- 4 to a carton

### Model 643 Wall Cap*
- For 8" round duct
- Aluminum natural finish
- Backdraft damper, no birdscreen



### Model 646 Louvered Wall* Cap for 6" Round Duct
- Single pack
- White polymeric



### Model WC650 Wall Cap*
- For 4" round duct
- White polymeric
- 4 to a carton



*Not for use with dryers.

## TECHNICAL

**What is a sone, and how is it measured?** A sone is a measurement of sound of how sound is sensed. The lower the sone value, the quieter the listening environment. One sone is the equivalent of a quiet refrigerator. Broan fans feature the quietest rating possible at <0.3 sones as tested for HVI certification.

**What does "HVI certified" mean?** The Home Ventilating Institute (HVI) is an independent organization that certifies the airflow and sound performance of Broan products. For more information visit **www.hvi.org**.

**What is ENERGY STAR®?** Refer to the product matrix for specific Broan fans that meet ENERGY STAR® requirements. Many of these Broan products use high efficiency motors and lighting to reduce energy consumption by as much as 70%. Learn more about ENERGY STAR® at **www.energystar.gov**.

**What does CFM mean?** Cubic Feet per Minute (CFM) is the measure of air volume moved by the fan blower. Choose a fan with a CFM rating appropriate for your room size to ensure adequate ventilation.

**What does "static pressure" mean?** Static pressure is the measurement of airflow resistance as it is pushed through ductwork which reduces the effectiveness of the fan. Learn more on the Home Ventilating Institute website **www.hvi.org.**

**What is whole-house ventilation?** Whole-house ventilation provides today's airtight homes with a relatively constant and controlled lower level of ventilation. Broan offers many virtually silent continuous ventilation solutions for ASHRAE 62.2 and programs such as LEED, ENERGY STAR® for Homes and CA Title 24.

## OPERATION

**How do I size a fan properly for my room size and the duct run?** See the sizing guidelines on page 59 for details on proper sizing. This section provides an explanation and examples to help you make the right decision.

**How long should a bath fan run after a shower is used?** The Home Ventilating Institute recommends that a fan should be left on for 20 minutes more to clear humidity adequately and to ensure moisture and condensation is minimized.

**How does Sensing Technology operate?** Broan has unique sensing technology that detects humidity or motion. Multi-speed models automatically turn the fan speed up when someone enters the room or there is a rapid rise in the humidity level from the lower continuous CFM level. Single-speed models turn the fan on automatically.

**How does the delay-off timer operate?** Delay-off timers automatically shut the fan off after a time interval set by the user.

**Why do the windows and mirrors fog even when the fan is running?** If windows and mirrors are very cold, condensation can still form on these surfaces. And if your bathroom is sealed tightly, replacement air may not be entering the room fast enough to displace the moist air. Fan placement can also be a factor. Your fan should be located far from the replacement air source to ensure the moist air is drawn out first. Finally, make sure your ductwork is as short and straight as it can be in order to ensure proper air outflow.

**Why is water dripping from the grille of the fan?** Dripping water is either condensation (usually due to cold ductwork or improper duct installation), or a problem with the seal on a wall or roof vent. Insulated ductwork can help solve condensation problems, and running the fan longer will ensure moisture is completely removed from the duct.

**Will Broan fans work in wall-mount applications?** Refer to the product matrix for specific Broan bath and utility fans that may be wall mounted.

**What type of exhaust fan is best for a sauna or hot tub area?** High CFM-rated devices are normally recommended for this type of application.

**Can I use a fan in a steam shower?** No. Since these are normally sealed chambers, a vacuum will be created.

## INSTALLATION

**Can I mount Broan fans above my tub and shower?** Most Broan fans are rated for use over a shower or bathtub with a GFCI (Ground Fault Circuit Interrupter).

**Can my bath fan be surrounded by insulation?** Yes. Broan bath fans are designed to provide adequate cooling for motors and lighting, as well as products with integral heaters.

**Can I vent more than one bath fan out of a roof or wall cap?** No. Always follow the manufacturer's recommended ventilation requirements.

**What is the Broan Ventilation fan warranty?** Go to **http://www.broan.com/warranty** for this information.

**Do I need attic access to install a fan in a retrofit situation?** Refer to the product matrix for specific Broan fans that may be installed without access from above with features such as telescoping mounting frames, snap-in housings, bendable mounting ears, drywall-mounting tabs and inside-out mounting duct connectors. Room-side retrofit installations are now a reality.

**Can I install a heater over the bathtub or in a shower?** No. Heaters are not UL Listed (Underwriter's Laboratory) for installation over a bathtub or in a shower.

**Can I use an inline or multi-port fan in one large bathroom?** Yes, this works the best for large rooms because you can install the ports over the areas where the ventilation is needed the most (source control). The size of the multi-port would be determined by the size of the room.

**Can larger diameter ducting be used with my bath fan?** Yes, larger diameters will result in improved performance.

**Can I use a smaller diameter duct than what the fan is designed for?** This is not recommended. It will cause the fan to run harder, greatly reducing the CFM performance of the fan and create excess noise.

**What type of duct is recommended, rigid or flexible?** It is recommended, where possible, to use rigid duct. It has less resistance to air flow and allows the fan to operate much more efficiently. If flexible duct is used, be sure the duct is as straight as possible.

**Can I exhaust my fan into my attic instead of out the roof or wall?** Never exhaust air into spaces within walls, ceilings, attics, crawl spaces or garages. Humidity may damage the structure and insulation.

**Where should the exhaust fan be located?** Exhaust fans should be located in or near the shower or tub, and in an enclosed water closet. Keep exhaust points opposite the supply air source to ensure that the fresh air is drawn through the room. Bathroom doors should not be sealed too tightly at the bottom in order to allow "makeup air" to enter the room when the door is closed.

**In what direction should I orient the exhaust outlet?** The exhaust outlet is the point where air is discharged through the body of the fan housing into the ductwork. During installation, orient your fan with the exhaust outlet pointing toward the exit vent on your roof or wall to minimize turns in ductwork that impede airflow.

**Will a bath fan or wall-mount utility fan serve as a range hood?** No. Range hoods are specifically designed to handle grease and high temperature environments. Broan bath fans supplement odor and moisture removal in the kitchen, but are not intended for use as a range hood.

**Can I use CFL or LED bulbs in fan/lights with A19 screw-base sockets?** Yes, if key guidelines are followed. Go to broan.com FAQs for details.

# PROPER INSTALLATION MAKES ALL THE DIFFERENCE.




Pre-installed screws, keyhole slots and alignment tabs facilitate installation, taking the guesswork out of proper mounting.

Elbows, turns, long ducts and ductwork smaller than the fan's exit outlet will reduce performance.

Use wide aluminum foil or duct tape to join smooth metal ductwork seams.

Do not let flexible ductwork sag as this impedes airflow.

During installation, orient the bath fan outlet in the direction of the home's exit point to minimize duct turns.

Before adding an elbow or bend,allow 24" to 36" of straight run from the fan outlet point.

Duct-wrap insulation (R-5 or above) will help minimize condensation in cold climates, especially on long duct runs.

Quick guideline: For bathrooms up to 100 square feet, the HVI recommends ventilation of at least 1 CFM per square foot (about eight air changes per hour). For bathrooms over 100 square feet, add up the needs of each fixture to determine the total ventilation rate:

- Toilet 50 CFM
- Shower 50 CFM
- Bathtub 50 CFM
- Jetted tub 100 CFM

# EASY STEPS FOR CHOOSING AND SIZING THE RIGHT VENTILATION FAN FOR YOUR HOME.

**Determine which rooms could use ventilation, and how much is needed. Spot ventilation** is used in localized areas to remove moisture, odor and airborne pollutants quickly. Most commonly used in the bath or powder room, spot ventilation can also be used in a laundry room, exercise area, closet, or bedroom, wherever air should be changed frequently. Decorative and recessed models can be ideal solutions for these situations. According to the Home Ventilating Institute (HVI), Air Changes per Hour (ACH) for comfortable and healthy living should be as follows: Bathrooms: 8 changes, Kitchens: 15 changes, Living/Bedrooms: 6 changes. Broan bath fans, utility fans and high capacity fans can meet these needs.

**Calculate the air movement necessary for proper ventilation.** Air movement is measured in Cubic Feet per Minute (CFM). To determine CFM requirements, first determine the size of your room. Measure and multiply the length, width and ceiling height of your room to determine cubic footage. Then use the multiplication factor of .13 and round up to the next "ten." See the three examples that follow.

**Example 1:**
Bathroom with 8' ceiling:
7' wide x 9' long x 8' high x .13 = 66. Select a bath fan with at least 70 CFM

**Example 2:**
Bathroom with 9' ceiling: 10' wide x 9' long x 9' high x .13 = 105. Select a bath fan with at least 110 CFM

**Example 3:**
For a bathroom with a vaulted ceiling, use the average ceiling height at the wall and the peak:8' wide x 12' long x ((8' at wall + 12' at peak) / 2 = 10') average height x .13 = 125. Select a fan(s) with at least 130 CFM

**Account for long duct runs and ductwork that turns before it reaches the exterior vent.** When airflow is restricted in any way it slows down. Just as a car must slow down for a sharp corner, air decelerates when going through a turn in a duct run. Whenever possible, create a straight duct run with large radius turns, if they're necessary at all. Rigid ductwork is optimal because airflow restriction is minimized. Flexible tubing may be convenient to install, but resistance is created as air is moved over the spiral metal frame of the tubing. With long duct runs or ducts with multiple turns the fan works harder, noise increases and fan performance (CFM) is compromised. Select a fan model with an even greater CFM rating to compensate.

**6" ducting overcomes most performance-related installation issues.** Broan's ULTRA and QTX Green Series fans deliver high performance in virtually any real-world installation. They are engineered with a 6" duct connector for peak air movement and extremely quiet operation, even when the duct run is not short and straight.

## INVENT Fans and Fan/Lights

| Model | Page | CFM | Sones, HVI-Certified | Baths up to ( ) Sq Ft | Lighting Watts Main/ Night Light | ENERGY STAR® | Fluorescent Lighting | Duct Size" | Housing Dims L" | Housing Dims W" | Housing Dims H" | Grille Dims L" | Grille Dims W" | Grille Finish | Amps |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AE80** | 26 | 80 | 0.8 | 75 | — | Yes | — | 4 | 9¼ | 10 | 5¾ | 11⅜ | 12 | White Polymeric | 0.3 |
| **AE110** | 26 | 110 | 1.3 | 105 | — | Yes | — | 4 | 9¼ | 10 | 5¾ | 11⅜ | 12 | White Polymeric | 0.3 |
| **AE80B** | 26 | 80 | 1.5 | 75 | — | Yes | — | 4 | 9¼ | 10 | 5¾ | 11⅜ | 12 | White Polymeric | 0.3 |
| **AE50** | 26 | 50 | 0.5 | 45 | — | Yes | — | 4 | 9¼ | 10 | 5¾ | 11⅜ | 12 | White Polymeric | 0.2 |
| **A80HD*** | 26 | 80 | 2.0 | 75 | — | No | — | 4 | 9¼ | 10 | 5¾ | 11 | 12 | White Painted Metal | 0.37 |
| **A80** | 26 | 80 | 2.0 | 75 | — | No | — | 4 | 9¼ | 10 | 5¾ | 11⅜ | 12 | White Polymeric | 0.37 |
| **AE80S** | 20 | 80 | 0.8 | 75 | — | Yes | | 4 | 9¼ | 10 | 5¾ | 11⅜ | 12 | White Polymeric | 0.3 |
| **A110** | 26 | 110 | 3.0 | 105 | — | No | — | 4 | 9¼ | 10 | 5¾ | 11⅜ | 12 | White Polymeric | 0.4 |
| **AE110S** | 20 | 110 | 1.0 | 100 | — | Yes | | 4 | 9¼ | 10 | 5¾ | 11⅜ | 12 | White Polymeric | 0.3 |
| **A80L**** | 26 | 80 | 1.0 | 75 | A19 Base | No | — | 4 | 9¼ | 10 | 5¾ | 11½ | 12⅛ | White Polymeric | 1.2 |
| **A110L**** | 26 | 110 | 1.3 | 105 | A19 Base | No | — | 4 | 9¼ | 10 | 5¾ | 11½ | 12⅛ | White Polymeric | 1.2 |
| **A50L**** | 26 | 50 | 1.5 | 45 | A19 Base | No | — | 4 | 9¼ | 10 | 5¾ | 11½ | 12⅛ | White Polymeric | 1.0 |
| **A70L**** | 26 | 70 | 2.0 | 65 | A19 Base | No | — | 4 | 9¼ | 10 | 5¾ | 11½ | 12⅛ | White Polymeric | 1.2 |
| **AE80BL** | 26 | 80 | 1.5 | 75 | 11W LED | Yes | LED | 4 | 9¼ | 10 | 5¾ | 11¾ | 12½ | White Polymeric | 0.3 |
| **AE80L** | 26 | 80 | 0.8 | 75 | 11W LED | Yes | LED | 4 | 9¼ | 10 | 5¾ | 11¾ | 12½ | White Polymeric | 0.3 |
| **AE80SL** | 20 | 80 | 0.8 | 75 | 11W LED | Yes | LED | 4 | 9¼ | 10 | 5¾ | 11¾ | 12½ | White Polymeric | 1.2 |
| **AE110L** | 26 | 110 | 1.3 | 105 | 11W LED | Yes | LED | 4 | 9¼ | 10 | 5¾ | 11¾ | 12½ | White Polymeric | 0.3 |
| **AE110SL** | 20 | 110 | 1.0 | 100 | 11W LED | Yes | LED | 4 | 9¼ | 10 | 5¾ | 11¾ | 12½ | White Polymeric | 1.2 |

*Metal grille. **Bulb not included.

## Fans

| Model | Page | CFM | Sones, HVI-Certified | Baths up to ( ) Sq Ft | ENERGY STAR® | Duct Size" | Housing Dims L" | Housing Dims W" | Housing Dims H" | Grille Dims L" | Grille Dims W" | Grille Finish | Amps |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **670** | 30 | 50 | 3.5 | 45 | — | 3 | 7¼ | 7½ | 3⅝ | 9 | 9¼ | White Polymeric | 0.8 |
| **671** | 30 | 70 | 6.0 | 65 | — | 3 | 7¼ | 7½ | 3⅝ | 9 | 9¼ | White Polymeric | 1.2 |
| **682** | 31 | — | — | — | — | Duct-free | 7⅛ | 7⅛ | 3¾ | 8½ | 8½ | White Polymeric | 1.0 |
| **688** | 30 | 50 | 4.0 | 45 | — | 3 | 7¼ | 7½ | 3⅝ | 9 | 9¼ | White Polymeric | 0.9 |
| **689** | 30 | 60 | 5.5 | 55 | — | 3 | 7¼ | 7½ | 3⅝ | 9 | 9¼ | White Polymeric | 1.5 |
| **690**** | 31 | 60 | 3.0 | 55 | — | — | — | — | — | 9⅝ | 11⅛ | White Polymeric | 1.5 |
| **LP80** | 29 | 80 | 1.0 | 75 | Yes | 4 / 3 | 11⅜ | 10½ | 4 | 13 | 13¾ | White Polymeric | 0.3 |
| **SPK110** | 37 | 110 | 1.0 | 75 | Yes | 4 | 11⅜ | 10½ | 7¾ | 13 | 14 | White Polymeric | 0.9 |
| **SSQTXE080** | 23 | 80 | — | — | Yes | — | 11⅜ | 10½ | 7¾ | — | — | — | — |
| **SSQTXE110** | 23 | 110 | — | — | Yes | — | 11⅜ | 10½ | 7¾ | — | — | — | — |
| **QTXE080** | 18 | 80 | 0.3 | 75 | Yes | 6 | 11⅜ | 10½ | 7⅝ | 13 | 14 | White Polymeric | 0.4 |
| **QTXE110** | 18 | 110 | 0.7 | 100 | Yes | 6 | 11⅜ | 10½ | 7⅝ | 13 | 14 | White Polymeric | 0.3 |
| **QTXE110S** | 20 | 110 | 0.7 | 100 | Yes | 6 | 11⅜ | 10½ | 7⅝ | 12⅞ | 13¾ | White Polymeric | 0.3 |
| **QTXE150** | 18 | 150 | 1.4 | 140 | Yes | 6 | 11⅜ | 10½ | 7⅝ | 13 | 14 | White Polymeric | 0.5 |
| **RB80** | 15 | 80 | <0.3 | 75 | Yes | 4 | 11⅜ | 10½ | 7⅝ | 13 | 13¾ | White Polymeric | 0.3 |
| **RB110** | 15 | 110 | 0.6 | 100 | Yes | 4 | 11⅜ | 10½ | 7⅝ | 13 | 13¾ | White Polymeric | 0.3 |
| **XB50** | 13 | 50 | <0.3 | 45 | Yes | 6 / 4 | 10½ | 11⅜ | 7⅝ | 13 | 13¾ | White Polymeric | 0.1 |
| **XB80** | 13 | 80 | <0.3* | 75 | Yes | 6 / 4 | 10½ | 11⅜ | 7⅝ | 13 | 13¾ | White Polymeric | 0.1 |
| **XB110** | 13 | 110 | <0.3 | 100 | Yes | 6 | 10½ | 11⅜ | 7⅝ | 13 | 13¾ | White Polymeric | 0.2 |
| **XB110H** | 13 | 110 | <0.3 | 100 | Yes | 6 | 10½ | 11⅜ | 7⅝ | 13⅛ | 14 | White Polymeric | 0.2 |
| **ZB80** | 13 | 80 | <0.3* | 75 | Yes | 6 / 4 | 10½ | 11⅜ | 7⅝ | 13 | 13¾ | White Polymeric | 0.1 |
| **ZB80M** | 13 | 80 | <0.3* | 75 | Yes | 6 / 4 | 10½ | 11⅜ | 7⅝ | 13⅛ | 14 | White Polymeric | 0.1 |
| **ZB110** | 13 | 110 | <0.3 | 100 | Yes | 6 | 10½ | 11⅜ | 7⅝ | 13 | 13¾ | White Polymeric | 0.2 |
| **ZB110H** | 13 | 110 | <0.3 | 100 | Yes | 6 | 10½ | 11⅜ | 7⅝ | 13⅛ | 14 | White Polymeric | 0.2 |
| **ZB110M** | 13 | 110 | <0.3 | 100 | Yes | 6 | 10½ | 11⅜ | 7⅝ | 13⅛ | 14 | White Polymeric | 0.2 |

Radiation Dampers can be found on page 11, 19, 22, 27, 29 and 72

*With 6" duct (with 4" duct 0.3)

**Replacement grille and motor kit

## Fan/Lights

| Model | Page | CFM | Sones, HVI-Certified | Baths up to ( ) Sq Ft | Lighting Watts Main/ Night Light | ENERGY STAR® | Fluorescent Lighting | Duct Size" | Housing Dims L" | Housing Dims W" | Housing Dims H" | Grille Dims L" | Grille Dims W" | Grille Finish | Amps |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **657** | 30 | 70 | 4.0 | 65 | 100 | — | — | 4 | 14¼ | 8¼ | 5¾ | 16¾ | 10⅝ | White Polymeric | 2.0 |
| **678** | 30 | 50 | 2.5 | 45 | 100 | — | — | 4 | 8¼ | 8 | 5¾ | 11⅛ | 10⅝ | White Polymeric | 1.6 |
| **696** | 30 | 100 | 4.5 | 90 | 100 | — | — | 4 | 14¼ | 8¼ | 5¾ | 16¾ | 10⅝ | White Polymeric | 2.0 |
| **741SN** | 35 | 70 | 3.5 | 65 | 120 (2-60W) | — | — | 4 | 8¼ | 8 | 5¾ | 13⅜ Dia | — | Satin Nickel | 2.2 |
| **754SN** | 35 | 70 | 3.5 | 65 | 120 (2-60W) | — | — | 4 | 8¼ | 8 | 5¾ | 13⅛ Dia | — | Nickel | 2.2 |
| **761BN** | 35 | 80 | 2.5 | 75 | 120 (2-60W) | — | — | 4 | 8¼ | 8 | 5¾ | 13⅜ Dia | — | Brushed Nickel | 1.6 |
| **761RB** | 35 | 80 | 2.5 | 75 | 120 (2-60W) | — | — | 4 | 8¼ | 8 | 5¾ | 13⅜ Dia | — | Oil-rubbed Bronze | 1.6 |
| **761WHA** | 35 | 80 | 2.5 | 75 | 120 (2-60W) | — | — | 4 | 8¼ | 8 | 5¾ | 13⅜ Dia | — | White | 1.6 |
| **744** | 34 | 70 | 1.5 | 65 | 75 | — | — | 4 | 8¼ | 12¾ | 6¾ | 7⅜ Dia | — | Matte White | 1.2 |
| **744FL** | 34 | 70 | 1.5 | 65 | 14 | Yes | Yes | 4 | 8¼ | 12¾ | 6¾ | 7⅜ Dia | — | Matte White | 0.7 |
| **744LED** | 34 | 70 | 1.5 | 65 | 10W LED | Yes | — | 4 | 8¼ | 12¾ | 6¾ | 7⅜ Dia | — | Matte White | 0.55 |
| **744SFL** | 34 | 70 | 1.5 | 65 | 14 | Yes | Yes | 4 | 8¼ | 12¾ | 6¾ | 7⅜ Dia | — | Matte White | 0.7 |
| **750** | 30 | 100 | 3.5 | 90 | 100 / 7 | — | — | 4 | 9 | 9 | 6 | 15 Dia | — | White Polymeric | 1.9 |
| **751** | 30 | 100 | 3.5 | 90 | 100 | — | — | 4 | 9 | 9 | 6 | 15 Dia | — | White Polymeric | 1.9 |
| **791LEDM** | 35 | 100 | 1.5 | 100 | 9W LED | Yes | LED | 4 | 9¼ | 10 | 5¾ | 12⅝ | 12⅝ | White | 0.5 |
| **HD80L** | 30 | 80 | 2.5 | 75 | 100 | — | — | 4 | 8¼ | 8 | 5¾ | 11⅛ | 10⅝ | White Polymeric | 1.6 |
| **QTXE080FLT** | 18 | 80 | 0.3 | 75 | 2- 18W fluor/4 | Yes | Yes | 6 | 11⅜ | 10½ | 7⅝ | 13⅜ | 14¼ | White Polymeric | 1.0 |
| **QTXE150FLT** | 18 | 150 | 1.4 | 140 | 2- 18W fluor/4 | Yes | Yes | 6 | 11⅜ | 10½ | 7⅝ | 13⅜ | 14¼ | White Polymeric | 1.2 |
| **RB80L** | 15 | 80 | <0.3 | 75 | 2- 18W fluor/4 | Yes | Yes | 4 | 11⅜ | 10½ | 7⅝ | 13 | 13¾ | White Polymeric | 1.0 |
| **RB110L** | 15 | 110 | 0.8 | 100 | 2- 18W fluor/4 | Yes | Yes | 4 | 11⅜ | 10½ | 7⅝ | 13 | 13¾ | White Polymeric | 1.0 |
| **XB50L** | 13 | 50 | <0.3 | 45 | 2- 18W fluor/4 | Yes | Yes | 6 / 4 | 10½ | 11⅜ | 7⅝ | 13 | 13¾ | White Polymeric | 0.7 |
| **XB80L** | 13 | 80 | <0.3* | 75 | 2- 18W fluor/4 | Yes | Yes | 6 / 4 | 10½ | 11⅜ | 7⅝ | 13 | 13¾ | White Polymeric | 0.7 |
| **XB110L** | 13 | 110 | <0.3 | 100 | 2- 18W fluor/4 | Yes | Yes | 6 | 10½ | 11⅜ | 7⅝ | 13 | 13¾ | White Polymeric | 0.9 |
| **XB110HL** | 13 | 110 | <0.3 | 100 | 2- 18W fluor/4 | Yes | Yes | 6 | 10½ | 11⅜ | 7⅝ | 13⅛ | 14 | White Polymeric | 0.9 |
| **ZB80L** | 13 | 80 | <0.3* | 75 | 2- 18W fluor/4 | Yes | Yes | 6 / 4 | 10½ | 11⅜ | 7⅝ | 13 | 13¾ | White Polymeric | 0.8 |
| **ZB80ML** | 13 | 80 | <0.3* | 75 | 2- 18W fluor/4 | Yes | Yes | 6 / 4 | 10½ | 11⅜ | 7⅝ | 13⅛ | 14 | White Polymeric | 0.8 |
| **ZB110L** | 13 | 110 | <0.3 | 100 | 2- 18W fluor/4 | Yes | Yes | 6 | 10½ | 11⅜ | 7⅝ | 13 | 13¾ | White Polymeric | 0.9 |
| **ZB110HL** | 13 | 110 | <0.3 | 100 | 2- 18W fluor/4 | Yes | Yes | 6 | 10½ | 11⅜ | 7⅝ | 13⅛ | 14 | White Polymeric | 0.9 |
| **ZB110ML** | 13 | 110 | <0.3 | 100 | 2- 18W fluor/4 | Yes | Yes | 6 | 10½ | 11⅜ | 7⅝ | 13⅛ | 14 | White Polymeric | 0.9 |

*With 6" duct (with 4" duct 0.3)

## Heater/Fan/Lights

| Model | Page | CFM | Sones, HVI-Certified | Lighting Watts Main/ Night Light | Housing Dimensions L" | Housing Dimensions W" | Housing Dimensions H" | Grille Dimensions L" | Grille Dimensions W" | Grille Finish | Duct Size" | Total Connected Amps | Total Connected Load In Watts | Total Connected Heater Wattage | BTU |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **100HL** | 44 | 100 | 2.0 | 100W | 16 | 10¼ | 5⅞ | 17½ | 11½ | White Polymeric | 4 | 14.5 | 1830 | 1500 | 5120 |
| **100HFL** | 44 | 100 | 2.0 | 27W Fluor. (Incl.) | 16 | 10¼ | 5⅞ | 17½ | 11½ | White Polymeric | 4 | 14.0 | 1760 | 1500 | 5120 |
| **162*** | 45 | 70 | 4.0 | *250W (1) | 8⅛ | 8⅜ | 6⅜ | 10¼ | 10¼ | White Polymeric | 4 | 2.5 | 300 | 250* | 853 |
| **164*** | 45 | 70 | 4.0 | *250W (2) | 14¼ | 8⅜ | 6⅜ | 15⅝ | 10¼ | White Polymeric | 4 | 4.5 | 545 | 500* | 1707 |
| **655** | 44 | 70 | 4.0 | 100W | 14¼ | 8¼ | 5¾ | 16¾ | 10⅝ | White Polymeric | 4 | 12.8 | 1536 | 1300 | 4437 |
| **656** | 44 | — | — | 100W | 14¼ | 8¼ | 5¾ | 16¾ | 10⅝ | White Polymeric | — | 11.9 | 1428 | 1300 | 4437 |
| **658** | 44 | 70 | 4.0 | n/a | 14¼ | 8¼ | 5¾ | 16¾ | 10⅝ | White Polymeric | 4 | 11.9 | 1428 | 1300 | 4437 |
| **659** | 44 | 50 | 2.5 | 100W | 14¼ | 8¼ | 5¾ | 16¾ | 10⅝ | White Polymeric | 4 | 12.0 | 1440 | 1300 | 4437 |
| **QTX110HL** | 43 | 110 | 0.9 | 120W/7W | 17⅝ | 11⅜ | 7⅝ | 20 | 15 | White Polymeric | 6 | 14.6 | 1710 | 1500 | 5120 |
| **QTX110HFLT** | 43 | 110 | 0.9 | 36W Fluor. (GU24 Incl.)/7W | 17⅝ | 11⅜ | 7⅝ | 20 | 15 | White Polymeric | 6 | 13.9 | 1626 | 1500 | 5120 |

*Ventilation Fan/Bulb Heater versions

## Bulb Heater (no fan)

| Model | Page | CFM | Sones, HVI-Certified | Lighting Watts Main/ Night Light | Housing Dimensions L" | Housing Dimensions W" | Housing Dimensions H" | Grille Dimensions L" | Grille Dimensions W" | Grille Finish | Duct Size" | Total Connected Amps | Total Connected Load In Watts | Total Connected Heater Wattage | BTU |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **161** | 45 | | | n/a | 8 1/8 | 8 3/8 | 6 3/8 | 10 1/4 | 10 1/4 | White Polymeric | | 2.1 | | 250 | 853 |
| **163** | 45 | | | n/a | 8 1/8 | 14 1/4 | 6 3/8 | 15 5/8 | 10 1/4 | White Polymeric | | 4.3 | | 500 | 1707 |

See models 162 and 164 above for Ventilation Fan/Bulb Heater versions

## Utility Fans

| Model | Page | CFM | Sones | Housing Dimensions L" | Housing Dimensions W" | Housing Dimensions H" | Grille Dimensions L" | Grille Dimensions W" | Amps | Duct Size |
|---|---|---|---|---|---|---|---|---|---|---|
| **12C** | 38 | 360 | 8.0 | — | 11 1/2 Sq | — | 13 1/2 Sq | | 1.7 | Direct Discharge |
| **502** | 38 | 270 | 8.0 | 16 3/4 | 13 7/8 | 3 1/4 | 13 1/2 Sq | | 1.7 | 3 1/4" x 10" |
| **503** | 38 | 160 | 5.0 | 14 | 12 | 3 1/4 | 11 1/2 Sq | | 1.5 | 3 1/4" x 10" |
| **504** | 38 | 350 | 6.5 | — | 10 1/4 Rd | 7 | 13 1/2 Sq | | 1.7 | 10" |
| **505** | 38 | 180 | 6.5 | — | 8 1/4 Rd | 7 | 11 1/2 Sq | | 1.5 | 8" |
| **506** | 38 | 470 | 8.0 | — | 10 3/8 Rd | — | 13 1/2 Sq | | 1.7 | Direct Discharge |
| **507** | 38 | 250 | 7.0 | — | 8 3/8 Rd | — | 11 1/2 Sq | | 1.5 | Direct Discharge |
| **508** | 38 | 270 | 6.0 | — | 10 3/8 Rd | — | 13 1/2 Sq | | 1.7 | Direct Discharge |
| **509** | 38 | 180 | 6.5 | — | 8 3/8 Rd | — | 13 1/2 Sq | | 1.5 | Direct Discharge |
| **509S** | 38 | 180 | 6.5 | — | 8 3/8 Rd | — | 13 1/2 Sq | | 1.5 | Direct Discharge |
| **510** | 38 | 380 | 6.5 | — | 11 1/2 Sq | — | 13 1/2 Sq | | 1.7 | Room to room wall fan |
| **511** | 38 | 180 | 4.5 | — | 11 1/2 Sq | — | 13 1/2 Sq | | 0.9 | Room to room wall fan |
| **512** | 38 | 90 | 3.5 | — | 6 Rd | — | 8 Dia | | 0.7 | Room to room wall fan |
| **512M** | 38 | 70 | 3.5 | — | 6 Rd | — | 8 Dia | | 0.7 | Direct Discharge |
| **673** | 38 | 60 | 4.5 | — | 6 1/4 Rd | 5 1/4 | 8 Dia | | 1.0 | 6" |

## In-Line Ventilators

| Model | Page | CFM | 0.2" Ps Sones | Housing Dimensions L" | Housing Dimensions W" | Housing Dimensions H" | Amps | Duct Size |
|---|---|---|---|---|---|---|---|---|
| **MP100** | 40 | 110 | 1.0 | 11 | 10 1/2 | 9 1/2 | 0.5 | 4- 4" Rd Inlets, 6" Rd Outlet |
| **MP140** | 40 | 150 | 1.5 | 11 | 10 1/2 | 9 1/2 | 0.8 | 4- 4" Rd Inlets, 6" Rd Outlet |
| **MP200** | 40 | 210 | 2.0 | 11 | 10 1/2 | 9 1/2 | 1.3 | 4- 4" Rd Inlets, 6" Rd Outlet |
| **MP280** | 40 | 290 | 3.0 | 15 1/4 | 14 1/4 | 14 3/4 | 2.5 | 4- 4" Rd Inlets, 6" Rd Outlet |
| **SP100** | 40 | 110 | 1.0 | 11 | 10 1/2 | 9 1/2 | 0.5 | 6" Rd Inlet and Outlet |
| **SP140** | 40 | 150 | 1.5 | 11 | 10 1/2 | 9 1/2 | 0.8 | 6" Rd Inlet and Outlet |
| **SP200** | 40 | 210 | 2.0 | 11 | 10 1/2 | 9 1/2 | 1.3 | 6" Rd Inlet and Outlet |

## Powered Attic Ventilators—Gable and Roof Mount

| Model | Page | Description | Housing Dimensions L" | Housing Dimensions W" | Housing Dimensions H" | CFM | Sones | Amps | Dome Color | Dome Material |
|---|---|---|---|---|---|---|---|---|---|---|
| **349BR** | 47 | PAV–Roof Mount | 25 Sq | 24 1/2 Dia Dome | 9 | 1000 | n/a | 4.0 | Dark Brown | Metal |
| **350BK** | 47 | PAV–Roof Mount | 22 1/4 Sq | 23 1/4 Dia Dome | 8 | 1050 | n/a | 3.6 | Black | PVC |
| **350BR** | 47 | PAV–Roof Mount | 22 1/4 Sq | 23 1/4 Dia Dome | 8 | 1050 | n/a | 3.6 | Brown | PVC |
| **353** | 47 | PAV–Gable Mount | 15 Dia | — | 8 | 1020 | n/a | 3.4 | — | — |
| **35316** | 47 | PAV–Gable Mount | 15 Dia | — | 8 | 1600 | n/a | 3.9 | — | — |
| **355BK** | 47 | PAV–Roof Mount | 22 1/4 Sq | 23 1/4 Dia Dome | 8 | 1200 | n/a | 4.3 | Black | PVC |
| **355BR** | 47 | PAV–Roof Mount | 22 1/4 Sq | 23 1/4 Dia Dome | 8 | 1200 | n/a | 4.3 | Brown | PVC |
| **356BK** | 47 | PAV–Roof Mount | 22 1/4 Sq | 23 1/4 Dia Dome | 8 | 1600 | n/a | 8.0 | Black | PVC |
| **356BR** | 47 | PAV–Roof Mount | 22 1/4 Sq | 23 1/4 Dia Dome | 8 | 1600 | n/a | 8.0 | Brown | PVC |
| **358** | 47 | PAV–Roof Mount | 22 1/4 Sq | 23 1/4 Dia Dome | 8 | 1200 | n/a | 4.3 | Silver | Metal |

## Solar-Powered Attic Ventilators—Surface, Curb, Remote and Gable

| Model* | Page | Mount | Color | Housing Material* | Solar Panel Power Output | Pieces | Dome/Panel Dimensions (inches) | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Height" | Width" | Length" |
| **345CSOBK** | 48 | Curb | Black | ABS Plastic | 28 Watts | 1 pc | 11 | 29 7/8 | 26 5/8 |
| **345CSOWW** | 48 | Curb | Weathered Wood | ABS Plastic | 28 Watts | 1 pc | 11 | 29 7/8 | 26 5/8 |
| **345GOBK** | 49 | Gable | Black | ABS Plastic | 28 Watts | 2 pcs | 3/4 / 11 | 30 / 19 3/4 | 26 5/8 / 19 3/4 |
| **345GOWW** | 49 | Gable | Weathered Wood | ABS Plastic | 28 Watts | 2 pcs | 3/4 / 11 | 30 / 19 3/4 | 26 5/8 / 19 3/4 |
| **345RSOBK** | 49 | Remote | Black | ABS Plastic | 28 Watts | 2 pcs | 3/4 / 9 | 30 / 29 7/8 | 26 5/8 / 26 5/8 |
| **345RSOWW** | 49 | Remote | Weathered Wood | ABS Plastic | 28 Watts | 2 pcs | 3/4 / 9 | 30 / 29 7/8 | 26 5/8 / 26 5/8 |
| **345SOBK** | 48 | Surface | Black | ABS Plastic | 28 Watts | 1 pc | 9 | 29 7/8 | 26 5/8 |
| **345SOWW** | 48 | Surface | Weathered Wood | ABS Plastic | 28 Watts | 1 pc | 9 | 29 7/8 | 26 5/8 |

*All UV-enhanced ABS plastic housings may be painted to match roof color









# HIGH
# NEED HIGH





# -TRAFFIC ENVIRONMENTS
# PERFORMANCE VENTILATION.



**LOOKING FOR AN EXCEPTIONALLY QUIET SOLUTION TO LIGHT COMMERCIAL VENTILATION?** With their heavy-duty motors, Broan High Capacity Ventilation Fans are the perfect answer for ventilating conference rooms, dining areas, public restrooms and other heavily-trafficked spaces. Low-vibration and low-profile, these discrete products work quietly and powerfully behind the scenes to remove odor, humidity and air-borne particulates that affect indoor air quality.

## 100/150 CFM FEATURES

- 6" round metal duct connector
- Single, impact-resistant centrifugal blower wheel housing
- 20 gauge galvanized steel housing
- Duct horizontally, vertically, or in-line with a separate adapter
- Low profile, white polymeric or painted white enamel metal grille
- Models L100L and L150L are UL Listed for use over bathtubs or showers when connected to a GFCI branch circuit
- Model 80L Variable Speed Control adjusts blower speed and sound level (available separately)

## 200/250/300 CFM FEATURES

- 8" round metal duct connector
- Single, impact-resistant centrifugal blower wheel (Model L300KMG has a metal wheel)
- 20 gauge galvanized steel housing
- Duct horizontally, vertically, or in-line with a separate adapter
- Models L200L, L250L and L300L are UL Listed for use over bathtubs or showers when connected to a GFCI branch circuit
- Model 80L Variable Speed Control adjusts blower speed and sound level (available separately)

## SPECIAL FEATURES FOR

**Model L300KMG**

- Removable access panel; Suitable for kitchen use

**Models L100L, L150L**

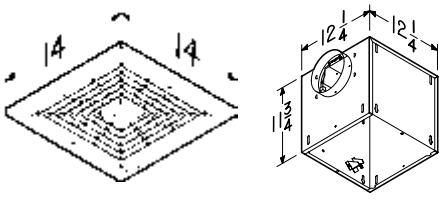
- Removable access panel, no insulation
- Two 6" round duct connectors
- No grille

**Models L200L L250L, L300L**

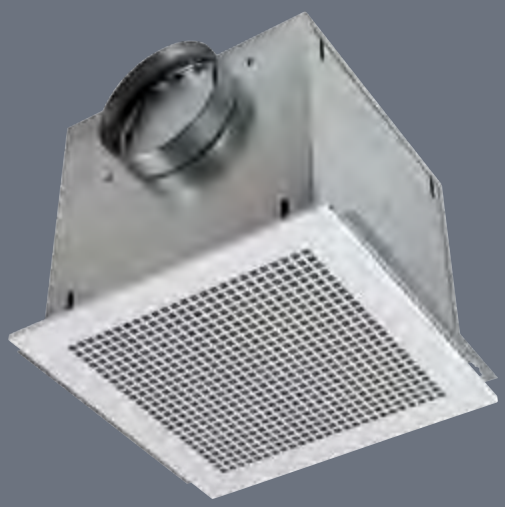
- Suitable for kitchen installations
- Removable access panel, no insulation
- Two 8" round duct connectors

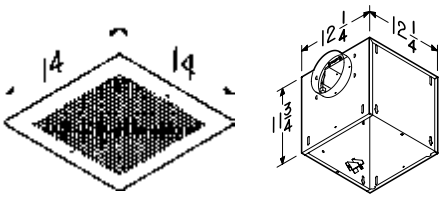
**L100 | L150 | L200 | L250 | L300**
**POLYMERIC GRILL**






**L100MG | L150MG | L200MG | L250MG, L300MG | L300KMG**
**METAL GRILL**






Metal grilles are not acceptable for use over tub or shower.

## 100–300 CFM Specifications

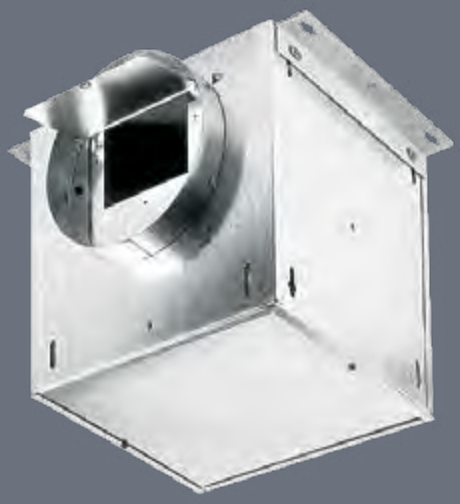
| Model | CFM | Sones | Amps | Sound Insulation | Notes |
|---|---|---|---|---|---|
| **White Polymeric Grill** | | | | | |
| **L100** | 109 | 0.9 | 1.1 | Yes | |
| **L150** | 157 | 1.5 | 1.3 | Yes | |
| **L200** | 210 | 1.7 | 1.8 | Yes | |
| **L250** | 259 | 2.2 | 2.1 | Yes | |
| **L300** | 308 | 2.9 | 2.6 | Yes | |
| **White Metal Grill** | | | | | |
| **L100MG** | 115 | 0.9 | 1.1 | Yes | |
| **L150MG** | 161 | 1.4 | 1.3 | Yes | |
| **L200MG** | 215 | 1.9 | 1.8 | No | |
| **L250MG** | 265 | 2.5 | 2.1 | No | |
| **L300MG** | 316 | 3.0 | 2.6 | No | |
| **L300KMG** | 277 | 3.1 | 2.6 | No | |
| **In-line Ventilator** | | | | | |
| **L100L** | 106 | 0.7 | 1.1 | No | No Grille |
| **L150L** | 147 | 1.1 | 1.3 | No | No Grille |
| **L200L** | 195 | 1.9 | 1.8 | No | No Grille |
| **L250L** | 245 | 2.3 | 2.1 | No | No Grille |
| **L300L** | 293 | 3.1 | 2.6 | No | No Grille |

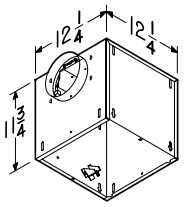
See page 71 for CFM details.

# FOR EVERY VENTILATION NEED



**L100L | L150L | L200L | L250L | L300L**
**IN-LINE VENTILATORS**






## MODEL 80L

- Adjust ventilation easily in any room
- Variable Speed Control mounts inside the fan housing and allows blower speed adjustment
- For Broan High Capacity Fans L100–L900
- Speed control with metal housing
- Fan insulation is perforated for easy installation
- 120V, 3 amps, 60 Hz

**80L**
**VARIABLE SPEED CONTROL**



c UL us

## 400/500/700 CFM FEATURES

- 4½" x 18½" duct connector
- Two impact-resistant centrifugal blower wheels
- Duct horizontally or vertically—In-line available with separate adapter
- Quiet automatic backdraft dampers
- Variable Speed Control adjusts blower speed and sound level (available separately)
- Models with "K" suffix suitable for kitchens
- Not for use over tub or shower

**Models L400L, L500L, L700L**

- Removable access panel; no insulation

**Model L400K**

- Suitable for kitchens
- Two metal centrifugal blower wheels
- Order Aluminum Filter LAF2

**Model L500K**

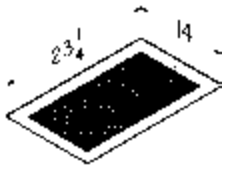
- Two metal centrifugal blower wheels
- Order Aluminum Filter LAF2
- Suitable for kitchens

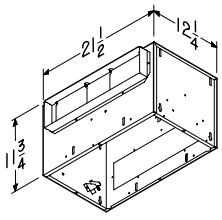
**L400* | L400K | L500* | L500K | L700***
**METAL GRILLE**

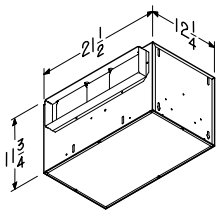


**L400L | L500L | L700L**
**IN-LINE VENTILATORS**






## 400–700 CFM Specifications

| Model | CFM | Sones | Amps | Sound Insulation | Notes |
|---|---|---|---|---|---|
| **L400** | 434 | 2.3 | 1.4 | Yes | Metal grille |
| **L400K** | 406 | 3.3 | 1.4 | No | Suitable for kitchens |
| **L500** | 514 | 3.3 | 2.2 | Yes | Metal grille |
| **L500K** | 481 | 4.4 | 2.2 | No | Suitable for kitchens |
| **L700** | 701 | 4.7 | 2.9 | Yes | Metal grille |
| **L400L** | 406 | 1.6 | 1.4 | No | No grille |
| **L500L** | 519 | 3.4 | 2.2 | No | No grille |
| **L700L** | 681 | 3.7 | 2.9 | No | No grille |

*See page 71 for CFM details.
Metal grilles are not acceptable for use over tub or shower.

## 900/1500/2000 CFM FEATURES

- 8" x 12" duct
- Painted white enamel metal grille
- Single, impact-resistant centrifugal blower wheel
- Ducted horizontally or vertically, or in-line with separate adapter
- Model 80L Variable Speed Control adjusts blower speed and sound level (available separately)
- Not for use over tub or shower

**Models L900, L1500 (shown)**

- L900 can use the 80L variable speed blower control (sold separately)

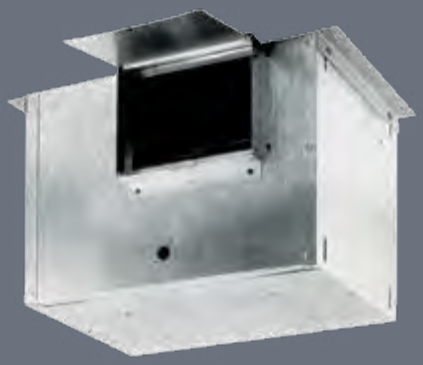
**Models L900L, L1500L**

- Removable access panel; no insulation
- Can use the 80L variable speed blower control (sold separately)

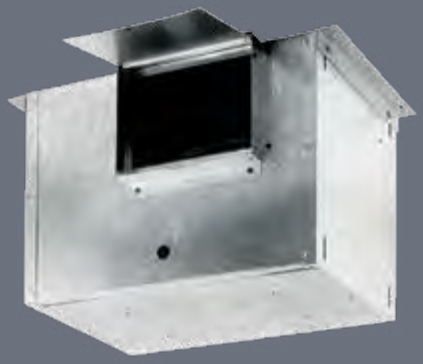
**Model L2000L**

- 38"L x 14⅝"W x 14⅝"H
- Fits 7¾" x 33¾" duct
- Optional metal grille (Model G102) and damper kit (Model D100)

**L900 | L1500***
**METAL GRILLE**



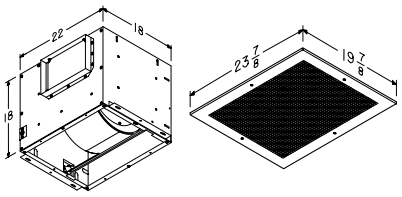
**L900L | L1500L**
**IN-LINE VENTILATORS**

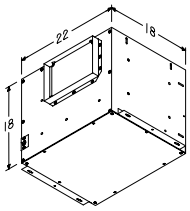


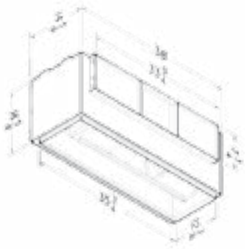
**L2000L**
**IN-LINE VENTILATORS**



Shown with optional metal grille (Model G102) and damper kit (Model D100).



**80L**
**VARIABLE SPEED CONTROL**



## 900–2000 CFM Specifications

| Model | CFM | Sones | Amps | Notes |
|---|---|---|---|---|
| **L900** | 901 | 4.1 | 3.0 | Painted white enamel metal grille |
| **L1500** | 1513 | 8.4 | 5.0 | Painted white enamel metal grille |
| **L900L** | 894 | 3.8 | 3.0 | In-line |
| **L1500L** | 1214 | 6.7 | 5.0 | In-line |
| **L2000L** | 1791 | 9.4 | 5.8 | In-line |

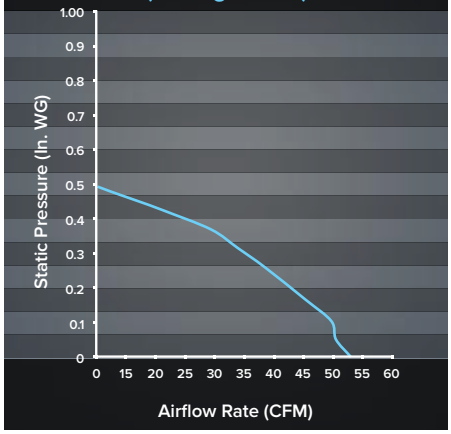
See page 71 for CFM details.
Metal grilles are not acceptable for use over tub or shower.

## MODEL 80L

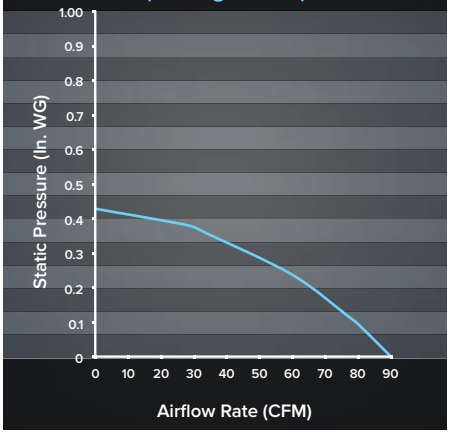
- Adjust ventilation easily in any room
- Variable Speed Control mounts inside the fan housing and allows blower speed adjustment
- For Broan High Capacity Fans L100–L900L
- Speed control with metal housing
- Fan insulation is perforated for easy installation
- 120V, 3 amps, 60 Hz

## PERFORMANCE DATA INVENT

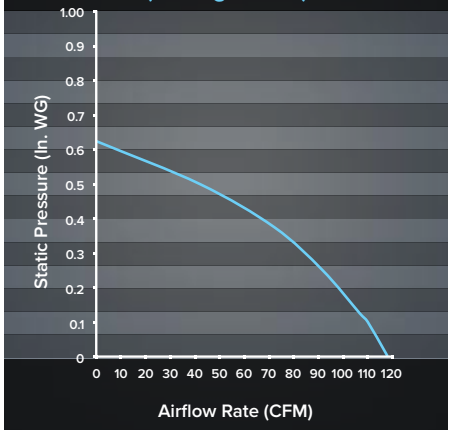
### AE50 (Ceiling Mount)



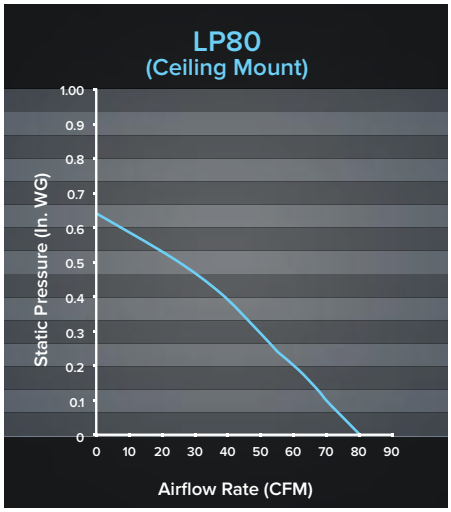

### AE80, AE80B (Ceiling Mount)



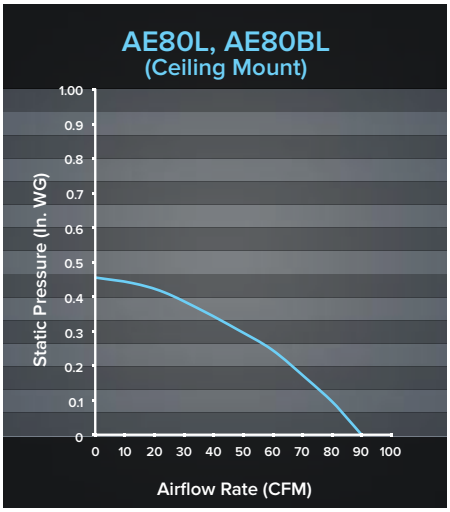

### AE110 (Ceiling Mount)



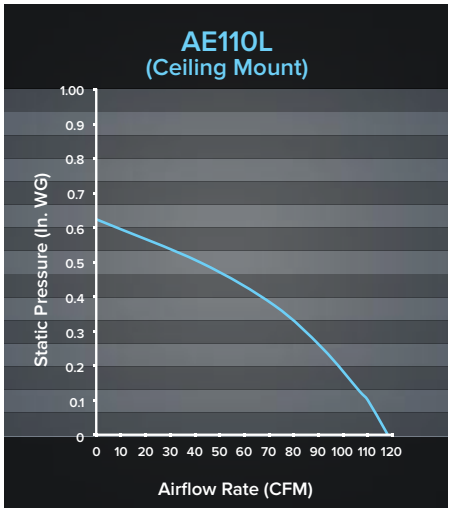

### LP80 (Ceiling Mount)



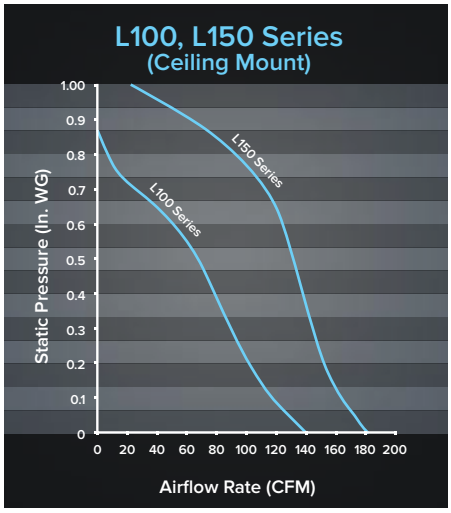

### AE80L, AE80BL (Ceiling Mount)

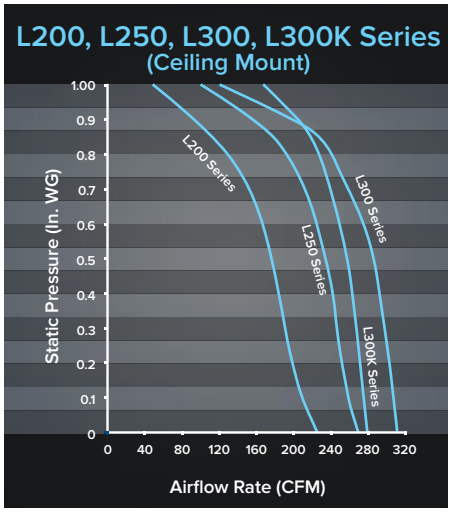


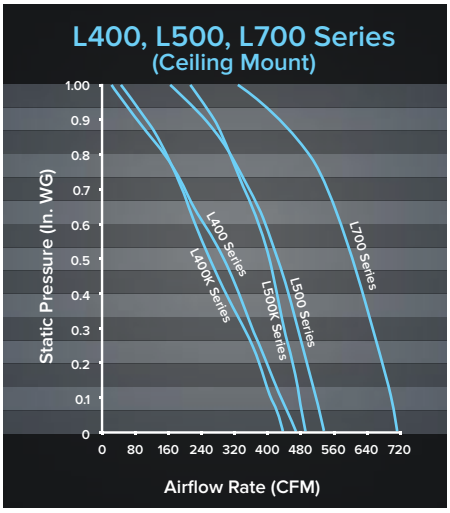

### AE110L (Ceiling Mount)

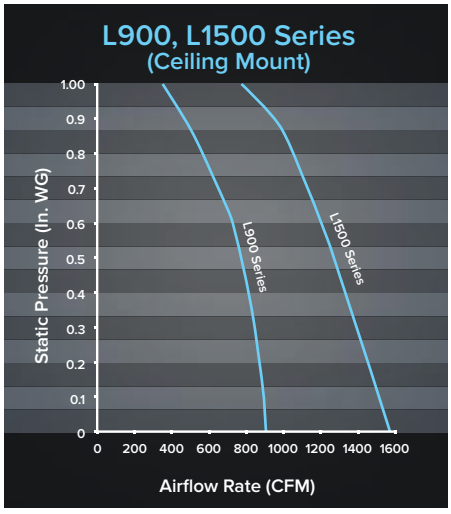


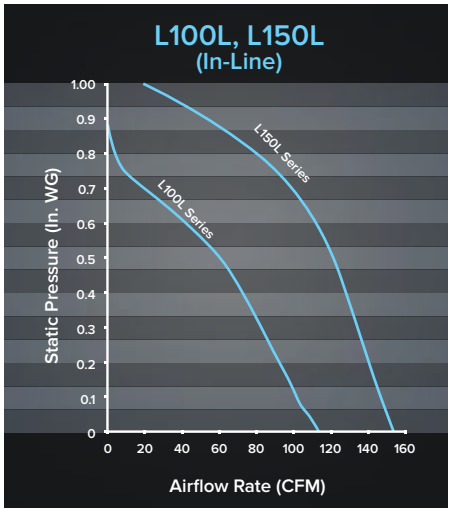
# PERFORMANCE DATA LIGHT COMMERCIAL

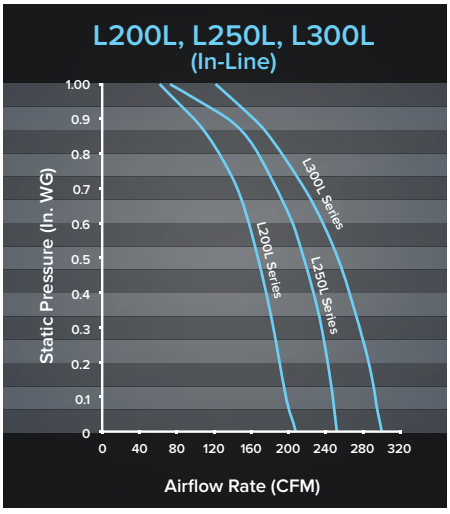


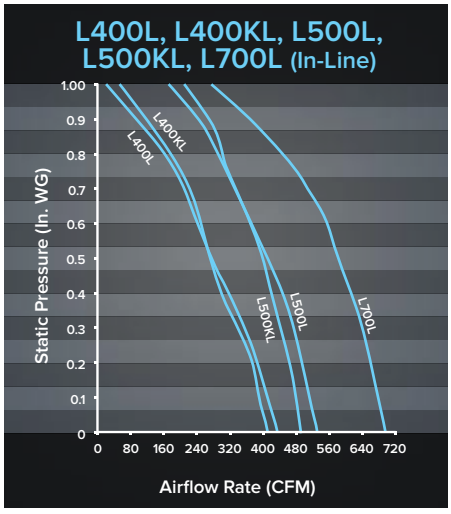



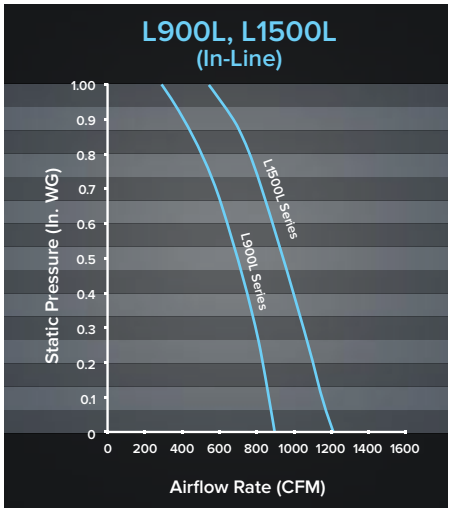



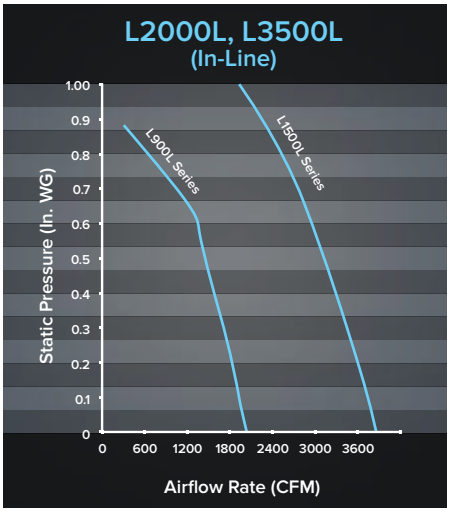




For In-line models, performance listed is for straight-through ducting at .125" static pressure.
For complete Sones and CFM at other static pressures, see our Web site at www.Broan.com.

## ROOF CAPS

### Model 437

- High-capacity design up to 1200 CFM
- Built-in bird screen
- Steel housing, black electrically bonded epoxy finish

### Model 611

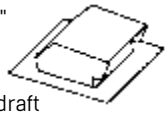
- For flat roof installation
- Aluminum natural finish
- For up to 8" round duct

### Model 611CM

- For curb mount installation
- Other features same as Model 611

### Model 612
- For flat roof installation
- Aluminum natural finish
- For up to 12" round duct

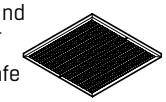
### Model 612CM
- For curb mount installation
- Other features same as Model 612

### Model 634

- For 3¼" x 10" or up to 8" round duct
- Built-in backdraft damper and bird screen
- Steel housing, black electrically bonded epoxy finish

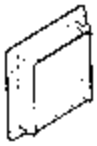
### Model 634M
- Same as Model 634, except for 6" round duct

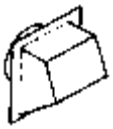
### Model 644
- Same as Model 634, except aluminum natural finish

## GREASE FILTERS

### Models LAF1 & LAF2

- Aluminum mesh filter traps grease and protects motor
- Dishwasher safe
- LAF1 (12" x 12") for L100/150/200/250/300 Series
- LAF1 for use with metal grilles
- LAF2 (12" x 21¼") for L400/500 Series

## WALL CAPS

### Model 441

- For 10" round duct
- Steel with aluminum louvers

### Model 613

- For 12" round duct
- Built-in backdraft damper and bird screen
- Aluminum natural finish

### Model 641
- Same as Model 613, except for 6" round duct

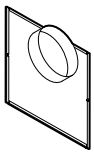
### Model 643

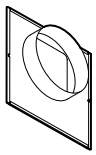
- For 8" round duct
- Built-in backdraft damper
- Aluminum natural finish

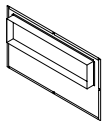
### Model 843BL

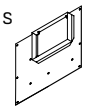
- For 6" round duct
- Built-in backdraft damper and bird screen
- Black finish

## IN-LINE ADAPTERS

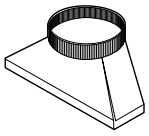
### Model 961L

- For L100/L150 Series
- Galvanized steel
- 6" round duct intake

### Model 981L

- For L200/L250/L300 Series
- Galvanized steel
- 8" round duct intake

### Model 982L

- For L400/L500/L700 Series
- Galvanized steel
- 4½" x 18½" duct intake

### Model 983L

- For L900/L1500 Series
- Galvanized steel
- 8" x 12" duct intake

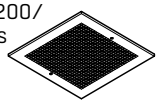
## DUCT TRANSITIONS

### Models 423 & T81212

- Galvanized steel
- 423: (4½" x 18½" to 10" round)
- T81212: (8" x 12" to 12" round)

## VIBRATION DAMPENING HANGERS

### Model V104 (not shown)
- For Model L2000L
- Heavy gauge steel construction
- Neoprene vibration dampening cushion
- Maximum load 75 lbs (each)
- For ⅜" diameter threaded rod (available separately from others)
- Set of four required for each ventilator

## METAL GRILLE KIT

### Model MG1

- For L100/150/200/250/300 Series
- White enamel painted steel
- Mounting screws included

## RADIATION DAMPERS

When excessive heat is detected, the breakaway fusible link triggers the closing of the radiation damper's fire resistant screen to prevent smoke and fire from traveling through ductwork.

### Features

- 165° fusible link
- Galvanized steel frame
- Stainless steel negator-type closure spring

### High Capacity Models RD1, RD2, RD3 (not shown)
- UL rated 3-hour ceiling radiation dampers
- High temperature, non-asbestos, reinforced fiber thermal fabric
- RD1 (12½" x 12½") for L100/150/200/250/300 Series
- RD2 (21¾" x 12½") for L400/500/700 Series
- RD3 (22¼" x 18¼") for L900/1500 Series

# WALL CONTROLS

## REMOTE IN-LINE VENTILATOR ACCESSORIES

### Model DH100W



- Dehumidistat
- Dual voltage (24V/120V)
- Variable setting from 20–80% relative humidity
- Usage guide included

### Model 70TW



- Thermostat for any fan 120, 250, 277 VAC, 22 amp capacity

## DECORATOR WALL CONTROLS

### Model 69W



- Single-Function Controls
- 120V, 15 amps

## SPEED CONTROLS

### Model 57W, 57V 3-Amp



- 120V, 3 amps
- Fits single-gang box
- Positive on/off action—dial for variable selection of air speeds and sound levels
- Built-in radio noise suppressor
- Blister packs available (P57W)

### Model 72W, 72V 6-Amp



- 120V, 6 amps—Models 72W, 72V
- Same features as 57W/57V

## TIMER & OFF-DELAY CONTROLS

### Model 64V, 64W

- Fan/Light Control with Off-Delay
- Fan and light operate together when control is turned on
- Fan continues to operate for a user adjustable time period 5-60 minutes after light is turned off
- Center position bypasses timer and turns fan and light off immediately
- Fits single-gang box
- 120V, 4 amps (fan), 4 amps (light)
- Requires hot and neutral wires in the switch box

### Model 80L

- For Broan High Capacity Fans L100–L900L
- Speed control with metal housing
- Fan insulation is perforated for easy installation
- 120V, 3 amps, 60 Hz
- cUL Listed

## TWO-FUNCTION CONTROLS

### Model 68W, 68V



- Two-Function Controls
- Two independent, 120V, 15 amp rocker switches (20 amps total)
- Fits single-gang box
- Blister packs available (P68W, P68V)

## TIMER & OFF-DELAY CONTROLS

### Model 59W, 59V, 71V



- Model 59W, 59V—up to 60 minutes
- Model 71V—up to 12 hours
- Fits single-gang box
- 120V, 20 amps; 240V, 10 amps
- Blister packs available (P59W, P59V)
- Operate continuously or for any set period

### Model 61W, 61V



- Operate for any set period up to 15 minutes (no "continuous on" position)
- Other features same as 59W/59V

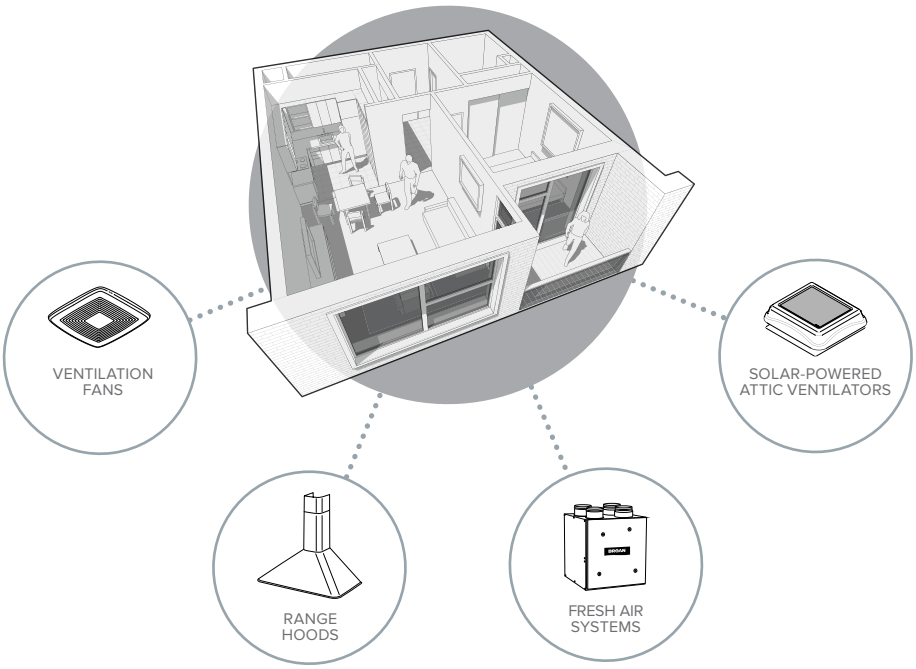
## Specifications

| | CFM/Sones .125" Ps (AMCA) | | Housing Dimensions | | | Grille Dimensions | | Amps | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Model | CFM | Sones | L" | W" | H" | L" | W" | at 60 Hz | Duct" | Watts | Volts |
| L100 | 109 | 0.9 | 12¼ | 12¼ | 11¾ | 14 | 14 | 1.1 | 6 | 87 | 120 |
| L100L | 106 | 0.7 | 12¼ | 12¼ | 11¾ | — | — | 1.1 | 6 | 87 | 120 |
| L100MG | 115 | 0.9 | 12¼ | 12¼ | 11¾ | 14 | 14 | 1.1 | 6 | 87 | 120 |
| L150 | 157 | 1.5 | 12¼ | 12¼ | 11¾ | 14 | 14 | 1.3 | 6 | 100 | 120 |
| L150L | 147 | 1.1 | 12¼ | 12¼ | 11¾ | — | — | 1.3 | 6 | 100 | 120 |
| L150MG | 161 | 1.4 | 12¼ | 12¼ | 11¾ | 14 | 14 | 1.3 | 6 | 100 | 120 |
| L200 | 210 | 1.7 | 12¼ | 12¼ | 11¾ | 14 | 14 | 1.8 | 8 | 127 | 120 |
| L200L | 195 | 1.9 | 12¼ | 12¼ | 11¾ | — | — | 1.8 | 8 | 127 | 120 |
| L200MG | 215 | 1.9 | 12¼ | 12¼ | 11¾ | 14 | 14 | 1.8 | 8 | 127 | 120 |
| L250 | 259 | 2.2 | 12¼ | 12¼ | 11¾ | 14 | 14 | 2.1 | 8 | 166 | 120 |
| L250L | 245 | 2.3 | 12¼ | 12¼ | 11¾ | — | — | 2.1 | 8 | 166 | 120 |
| L250MG | 265 | 2.5 | 12¼ | 12¼ | 11¾ | 14 | 14 | 2.1 | 8 | 166 | 120 |
| L300 | 308 | 2.9 | 12¼ | 12¼ | 11¾ | 14 | 14 | 2.6 | 8 | 212 | 120 |
| L300KMG | 277 | 3.1 | 12¼ | 12¼ | 11¾ | 14 | 14 | 2.6 | 8 | 212 | 120 |
| L300L | 293 | 3.1 | 12¼ | 12¼ | 11¾ | — | — | 2.6 | 8 | 212 | 120 |
| L300MG | 316 | 3.0 | 12¼ | 12¼ | 11¾ | 14 | 14 | 2.6 | 8 | 212 | 120 |
| L400 | 434 | 2.3 | 21½ | 12¼ | 11¾ | 23¼ | 14 | 1.4 | 4½ x 18½ | 146 | 120 |
| L400K | 406 | 3.3 | 21½ | 12¼ | 11¾ | 23¼ | 14 | 1.4 | 4½ x 18½ | 146 | 120 |
| L400L | 406 | 1.6 | 21½ | 12¼ | 11¾ | — | — | 1.4 | 4½ x 18½ | 146 | 120 |
| L500 | 514 | 3.3 | 21½ | 12¼ | 11¾ | 23¼ | 14 | 2.2 | 4½ x 18½ | 232 | 120 |
| L500K | 481 | 4.4 | 21½ | 12¼ | 11¾ | 23¼ | 14 | 2.2 | 4½ x 18½ | 232 | 120 |
| L500L | 519 | 3.4 | 21½ | 12¼ | 11¾ | — | — | 2.2 | 4½ x 18½ | 232 | 120 |
| L700 | 701 | 4.7 | 21½ | 12¼ | 11¾ | 23¼ | 14 | 2.9 | 4½ x 18½ | 313 | 120 |
| L700L | 681 | 3.7 | 21½ | 12¼ | 11¾ | — | — | 2.9 | 4½ x 18½ | 313 | 120 |
| L900 | 901 | 4.1 | 22 | 18 | 18 | 23⅞ | 19⅞ | 3.0 | 8 x 12 | 306 | 120 |
| L900L | 894 | 3.8 | 22 | 18 | 18 | — | — | 3.0 | 8 x 12 | 306 | 120 |
| L1500 | 1513 | 8.4 | 22 | 18 | 18 | 23⅞ | 19⅞ | 5.0 | 8 x 12 | 468 | 120 |
| L1500L | 1214 | 6.7 | 22 | 18 | 18 | — | — | 5.0 | 8 x 12 | 468 | 120 |
| L2000L | 1791 | 9.4 | 38 | 14⅝ | 14⅝ | — | — | 5.8 | 7¾ x 33¾ | 590 | 120 |

Sones and CFM listed for ceiling mount models are for horizontal ducting at .125" static pressure

## Wall Controls

| Model | L100–L700 Series | L900 Series | L1500 Series | L2000L | HD50L HD80L |
|---|---|---|---|---|---|
| 57W 57V | • | | | | |
| 59W 59V | • | • | • | • | |
| 61W 61V | • | • | • | • | |
| 64W 64V | • | • | | | |
| 68W 68V | | | | | • |
| 69W | • | • | • | • | |
| 70TW | • | • | • | • | |
| 71V | • | • | • | • | |
| 72W 72V | • | • | • | • | |
| 80L | • | • | | | |
| DH 100W | • | • | • | • | |




THE LEADER IN RESIDENTIAL INDOOR AIR QUALITY.
WELCOME TO A BROAN HOME.

**Broan®** is America's leading brand of residential ventilation products including range hoods, ventilation fans, heater/fan/light combination units, fresh air systems, whole-house fans and electric and solar-powered attic ventilators.

BROAN®

## Broan.com

Broan-NuTone LLC, 926 W. State Street
Hartford, WI 53027 **800-558-1711**
In Canada call **877-896-1119**

America's Choice For Green Builders.® Proud to be ENERGY STAR® partners.

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BROAN

BROAN VENTILATION SOLUTIONS.

# BETTER AIR. BETTER LIFE.



## VENTILATION FANS



# WHEN YOUR HOME BREATHES,







## WHY INDOOR AIR QUALITY IS IMPORTANT TO YOU.

Consider this, according to the EPA (epa.gov), indoor air quality is five times worse than outdoor air quality. Most homeowners know that indoor air quality is important, but not all recognize what contributes to poor indoor air quality, the potential effects and harm, and how to address these problems. Broan is here to help. For more than 80 years, Broan has led the industry with residential ventilation solutions that improve indoor air quality and provide healthier home environments.

*Moisture* *that is not properly ventilated can cause mildew and mold formation, which can potentially lead to structural problems and health problems. Exhaust ventilation solutions from Broan remove humidity at the source to help maintain the optimal humidity balance of 40 to 60 percent.*

*Off-gassing* *from construction materials, carpeting, adhesives and synthetic materials—as well as solvents from common household cleaners—can accumulate in tightly built homes. Look to Broan for continuous ventilation solutions that meet ASHRAE 62.2.*

*Particulates* *from dust, allergens, pet dander, and more can contribute to poor indoor air quality up to 100 times dirtier than outside air. With a properly ventilated home, you create a more enjoyable, comfortable and healthier environment.*

*Cooking effluents* *from food preparation can infiltrate the whole house in minutes. Grease, oils and aromas settle permanently into carpets, furniture, clothing and other surfaces. Kitchen ventilation solutions help eliminate cooking effluents for a cleaner, more comfortable and healthier environment.*

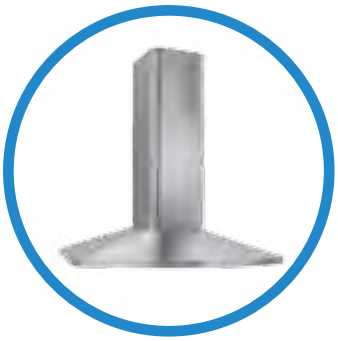
# YOU BREATHE EASIER TOO.

## BROAN CAN IMPROVE INDOOR AIR QUALITY IN EVERY ROOM OF THE HOME.

From clearing humidity in the bathroom to removing heat, steam and airborne effluents in the kitchen. From whole-house HEPA air filtration and balanced fresh air exchange solutions to attic ventilation. From the family room to the master bedroom and in every room in between, no company knows residential and light commercial ventilation like Broan-NuTone. After more than 80 years, countless innovations and a commitment to indoor air quality, trust Broan to clear up every concern.



**EXHAUST VENTILATION**
removes excess moisture and odor from any room in the home, and can also provide continuous, whole-house ventilation.



**KITCHEN VENTILATION**
expels cooking effluents from food preparation to eliminate airborne pollutants from spreading through the entire house.



**FRESH AIR SYSTEMS**
efficiently exchanges inside air with fresh outside air, and removes airborne particulate with HEPA filtration.

---

### *DID YOU KNOW?**

#### Knowing the facts goes a long way toward a healthier indoor environment:

Just **46%** recognize not having a bathroom fan has a negative impact on indoor air quality—only 42% recognize that a lack of a range hood also has a negative impact.

**60%** have a fan in each bathroom but only one in five let it run for 10 minutes after showering.

#### Some homeowners don't recognize the causes of poor indoor air quality:

Only **42%** are concerned about moisture that causes mold or mildew.

Only **33%** know food aromas after preparation is an indicator of poor IAQ.

**81%** don't know that a foggy mirror means poor IAQ.

#### Most homeowners are tuned in to residential Indoor Air Quality concerns:

**60%** know that indoor air quality has a greater impact on their health than outdoor air quality.

**90%** realize poor indoor air quality contributes to certain health issues and that healthy air helps prevent illness.

* 2014 Kelton Broan-NuTone Air Quality Survey

# INDOOR AIR QUALITY IS IMPORTANT IN EVERY ROOM OF THE HOME, NOT JUST THE BATHROOM.


2–9 INTRODUCTION

10–15 ULTRA™ SERIES

16–19 QT SERIES

20–21 SENSING FANS

22–23 SMARTSENSE SERIES

24–27 INVENT™ SERIES

28–29 LOPROFILE™

30–31 CLASSIC VENTILATION

32–35 ARCHITECTURAL FAN/LIGHTS

36–41 SPECIALTY

42–45 HEATER/FAN/LIGHTS

46–49 ATTIC VENTILATORS

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58–59 INSTALLATION NOTES

60–63 SPECIFICATIONS

64–73 LIGHT COMMERCIAL









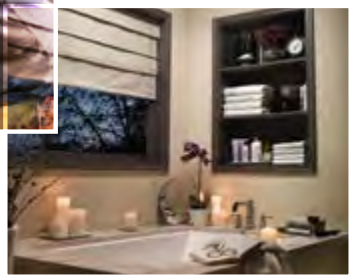


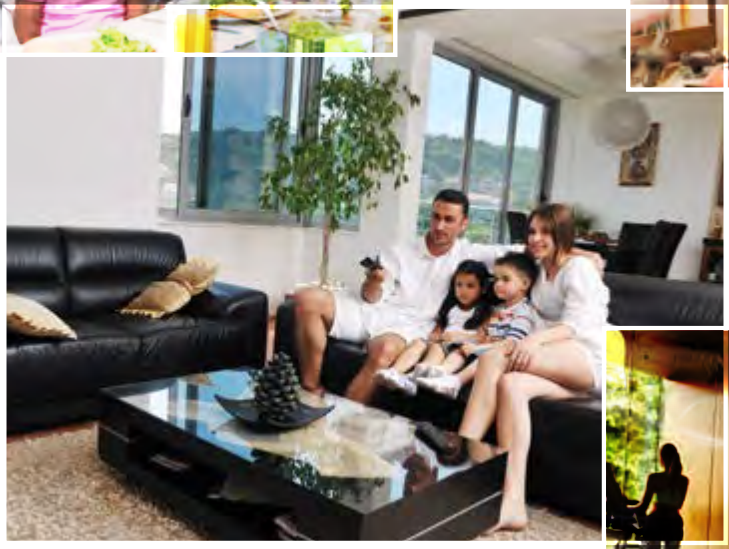


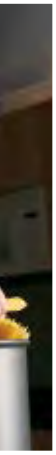


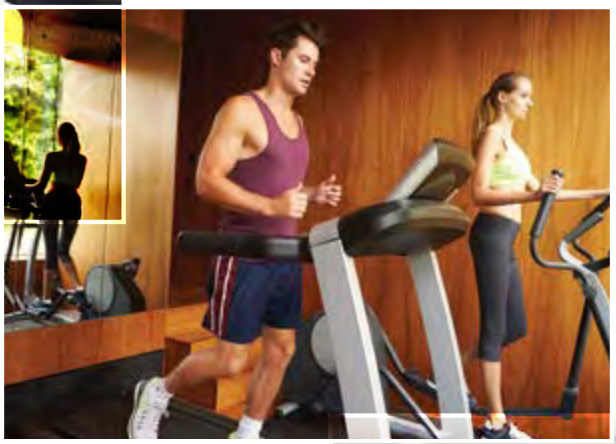


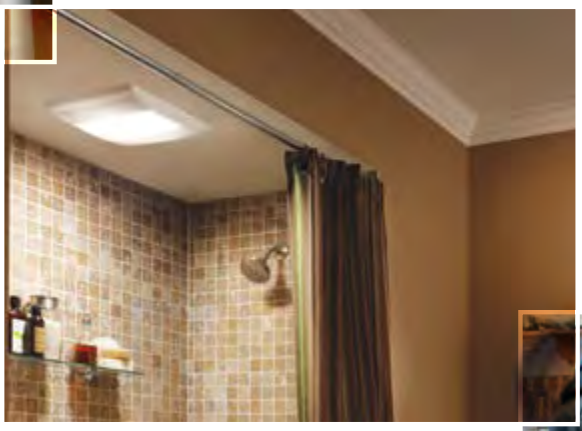
















The original
1932 Motordor

## THE UNDISPUTED LEADER IN INDOOR AIR QUALITY SINCE 1932.

# INDUSTRY LEADERSHIP ISN'T A CLAIM. IT'S EARNED THROUGH INNOVATION.

**In southeastern Wisconsin some eight decades ago,** an engineer named Henry Broan had a revelation: Wouldn't a built-in mechanical ventilation solution help to provide better indoor air quality in the kitchen? And so, Motordor was conceived—the first kitchen ventilator—and a company was born. Once Mr. Broan had invented a new category, other applications were the natural next step. The bath ventilation fan soon followed, as the passion for improving indoor air quality continued.

**Leadership is built on standards,** all to help ensure the professionalism of an industry. So in 1957, Broan was among five companies that founded the Home Ventilating Institute (HVI). To this day the HVI mark ensures what's stated on the package is tested and certified for your confidence. Because Mr. Broan believed that if you paid good money for something, you deserved to get what was promised.

Throughout the years, countless innovations followed, including some of the first certified ventilation fans and range hoods with efficient motors and lighting that reduced energy consumption by as much as 70%. And as homes were built tighter, Broan was on the leading edge of whole-house ventilation solutions with HEPA filtration and energy recovery capabilities. Today, Broan continues to lead the industry with efficient and quiet ventilation solutions that are easier than ever to install.

You see, leadership isn't about entering a market, offering a handful of products, and staking a claim. Leadership is earned and proven through a passion and commitment to finding novel solutions to real problems time and time again. This is exactly why Broan has taken the job of improving air quality in our homes very seriously for more than 80 years.

## **WE INVENTED** THE CATEGORY IN 1932. WE HAVE NO INTENTION OF STOPPING.

**1933:** Kitchen ventilator: Motordor is sold




**1955:** Founder of the Home Ventilating Institute

2100 HVI CERTIFIED



**1956:** The bath fan

**1959:** The fan/light

**1965:** Introduced the first heater fan light

Broan MANUFACTURING CO., INC.



**1993:** The first humidity sensing fan hits the shelves



# DID YOU KNOW?

*Professional* **contractors** *recognize the Broan ventilation brand above all others.*

*Broan-NuTone is the* **only** *company in North America with an HVI Certified on-site sound testing facility.*

***Twenty-four**** *of the top 25 builders specify the Broan brand. More builders use Broan ventilation products than any other brand.*

**2015 Hanley Wood Builder Brand Use Study*

*Broan is a* **three-time** *winner of the International Service Excellence award. The Customer Service Institute of America recognizes organizations for customer service professionalism.*

**ENERGY STAR** *A partner since 2005, Broan has one of the largest ENERGY STAR offerings in the industry, including many ENERGY STAR Most Efficient products.* ***energystar.gov***

*Broan was a* **founding member** *of the Home Ventilating Institute,® an independent organization that certifies airflow and sound performance of ventilation products.* ***hvi.org***

**About 80%** *of Broan products are manufactured in our state-of-the-art manufacturing facilities in Hartford, Wisconsin.*

**2004:** The quiet fan <0.3 sones



**2004:** The first recessed fan light



**2005:** The ENERGY STAR® certified fan

**2012:** The first fan enabling easy room-side installation



**2014:** The first fan with Soft Surround™ LED lighting technology



**2015:** The wireless speaker fan



# BROAN KNOWS TODAY'S STRINGENT VENTILATION CODES AND STANDARDS.

Because today's homes are built tighter than ever before, what gets in stays in, unless mechanically ventilated out. Premium ventilation solutions from Broan dramatically reduce moisture as well as airborne pollutants from off-gassing building materials, adhesives and household cleaners. They also help eliminate allergens, dust, pet dander and cooking effluents—everything that contributes to poor indoor air quality.

**Both spot and whole-house ventilation are important.**
Spot ventilation products remove pollutants at the source when they occur—think bathroom fans and kitchen range hoods—quickly eliminating humidity, odor and cooking effluents.

Whole-house ventilation, also known as continuous or dwelling unit ventilation (DUV), continually removes what's not captured by spot ventilation for a more healthy and comfortable home.

**Understanding today's ventilation requirements.**
The American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) set the industry standard for ventilation and acceptable indoor air quality for low-rise residential buildings with ASHRAE 62.2. It sets the minimum standard for spot or local ventilation of individual bathrooms of 50 Cubic Feet per Minute (CFM) delivered airflow at 3.0 sones or less. It also specifies the requirements for whole-house ventilation of an entire dwelling at the maximum sound rating of 1.0 sone for ventilation fans.

**Code adoption growing rapidly.**
California was a leader in this area with their Title 24 Code. Other state and city governments are quickly adopting similar codes such as the International Energy Conservation Code (IECC) to improve energy efficiency as well as indoor air quality.

Above-code green building programs such as ENERGY STAR® for Homes, ENERGY STAR® Indoor Air Plus, the Leadership in Energy and Environment Design (LEED) Certification Building Program and the National Association of Home Builders (NAHB) Green Building Standard are certified green building programs that promote human health and conserve natural resources. Let Broan help you meet the goals of these programs.

**You've come to the right place for product solutions.**
With Broan's extensive product line-up, including exhaust and balanced ventilation options such as Heat Recovery Ventilators (HRVs) and Energy Recovery Ventilators (ERVs), you're sure to find the ideal solution to meet your needs.

## SELECTING THE PROPER WHOLE HOUSE RESIDENTIAL VENTILATION SOLUTION.

Sizing your solution is a factor of square footage and the number of bedrooms in the dwelling to meet requirements. These charts are based on ASHRAE 62.2. Note that the 2010 and 2013 versions are different. Most states still operate under 62.2–2010 rates. Before specifying, check local building codes to ensure it meets requirements.

### ASHRAE 62.2—2010 Required Continuous Ventilation Rate (CFM)

| Floor Area Sq. Ft. | 0–1 BR | 2–3 BR | 4–5 BR | 6–7 BR | >7 BR |
|---|---|---|---|---|---|
| <1500 | 30 | 45 | 60 | 75 | 90 |
| 1501–3000 | 45 | 60 | 75 | 90 | 105 |
| 3001–4500 | 60 | 75 | 90 | 105 | 120 |
| 4501–6000 | 75 | 90 | 105 | 120 | 135 |
| 6001–7500 | 90 | 105 | 120 | 135 | 150 |
| >7500 | 105 | 120 | 135 | 150 | 165 |

### ASHRAE 62.2—2013 Required Continuous Ventilation Rate (CFM)

| Floor Area Sq. Ft. | 0–1 BR | 2–3 BR | 4–5 BR | 6–7 BR | >7 BR |
|---|---|---|---|---|---|
| <500 | 30 | 40 | 45 | 55 | 60 |
| 500–1000 | 45 | 55 | 60 | 70 | 75 |
| 1001–1500 | 60 | 70 | 70 | 85 | 90 |
| 1501–2000 | 75 | 85 | 90 | 100 | 105 |
| 2001–2500 | 90 | 100 | 105 | 115 | 120 |
| 2501–3000 | 105 | 115 | 120 | 130 | 135 |
| 3001–3500 | 120 | 130 | 135 | 145 | 150 |
| >3501 | 135 | 145 | 150 | 160 | 165 |

## AN ALTERNATIVE FORMULA APPROACH TO THE TABLES GIVEN ABOVE.

An alternative formula approach to the tables given above also exists and typically results in a lower, more precise CFM requirement. Under the more common 62.2-2010 version, continuous CFM requirements can be calculated using a formula as follows.
CFM = .01 x floor area (in square feet) plus 7.5 x (number of bedrooms + 1).

**Example:** A 3,500 square foot home with 4 bedrooms would require 73 CFM
.01 x 3,500 = 35
7.5 x (4+1) = 38
Add together for a total of 73 CFM
(as compared to the 90 from the above table).

The 62.2-2013 version increases the multiplier for floor area from .01 to .03. Note however that infiltration credits can be taken if blower door testing is conducted.

## Whole-house Ventilation Options

| Fan Series | Model | CFM | 0.25" CFM | Sones | Motor Type | Sensing | Duct Size | Page No. |
|---|---|---|---|---|---|---|---|---|
| ULTRA Green™ Multi Speed | **ZB80** | 80 | 80 | <0.3* | DC | — | 6" or 4" | 12–13 |
| | **ZB80M** | 80 | 80 | <0.3* | DC | Motion | 6" or 4" | 12–13 |
| | **ZB110** | 110 | 110 | <0.3 | DC | — | 6" | 12–13 |
| | **ZB110H** | 110 | 110 | <0.3 | DC | Humidity | 6" | 12–13 |
| | **ZB110M** | 110 | 110 | <0.3 | DC | Motion | 6" | 12–13 |
| ULTRA Green™ Single Speed | **XB50** | 50 | 50 | <0.3 | DC | — | 6" or 4" | 12–13 |
| | **XB80** | 80 | 80 | <0.3* | DC | — | 6" or 4" | 12–13 |
| | **XB110** | 110 | 110 | <0.3 | DC | — | 6" | 12–13 |
| | **XB110H** | 110 | 110 | <0.3 | DC | Humidity | 6" | 12–13 |
| ULTRA Pro | **RB80** | 80 | 60 | <0.3 | PSC | — | 4" | 15 |
| | **RB110** | 110 | 91 | 0.6 | PSC | — | 4" | 15 |
| QTXE SmartSense** | **QTXE080** | 80 | 56 | 0.3 | PSC | — | 6" | 18 |
| | **QTXE110** | 110 | 86 | 0.7 | PSC | — | 6" | 18 |
| | **SSQTXE080** | 80 | 56 | 0.7 | PSC | — | 6" | 22–23 |
| | **SSQTXE110** | 110 | 86 | 0.7 | PSC | — | 6" | 22–23 |
| LoProfile | **LP80** | 80 | 55 | 1.0 | PSC | — | 4" | 29 |
| InVent | **AE80** | 80 | 60 | 0.8 | PSC | — | 4" | 26 |
| | **AE50** | 50 | 92 | 0.5 | PSC | — | 4" | 26 |

ENERGY STAR® fans use 70% less energy, on average, than standard models and may qualify for local utility rebates

*With 6" duct (0.3 sones with 4" duct)
**SmartSense Models: SSQTXE080 and SSQTXE110 (see pages 22 and 23)

| Fan/Light Series | Model | CFM | 0.25" CFM | Sones | Motor Type | Sensing | Duct Size | Page No. |
|---|---|---|---|---|---|---|---|---|
| ULTRA Green™ Multi Speed | **ZB80L** | 80 | 80 | <0.3* | DC | — | 6" or 4" | 12–13 |
| | **ZB80ML** | 80 | 80 | <0.3* | DC | Motion | 6" or 4" | 12–13 |
| | **ZB110L** | 110 | 110 | <0.3 | DC | — | 6" | 12–13 |
| | **ZB110HL** | 110 | 110 | <0.3 | DC | Humidity | 6" | 12–13 |
| | **ZB110ML** | 110 | 110 | <0.3 | DC | Motion | 6" | 12–13 |
| ULTRA Green™ Single Speed | **XB50L** | 50 | 50 | <0.3 | DC | — | 6" or 4" | 12–13 |
| | **XB80L** | 80 | 80 | <0.3* | DC | — | 6" or 4" | 12–13 |
| | **XB110L** | 110 | 110 | <0.3 | DC | — | 6" | 12–13 |
| | **XB110HL** | 110 | 110 | <0.3 | DC | Humidity | 6" | 12–13 |
| ULTRA Pro | **RB80L** | 80 | 60 | <0.3 | PSC | — | 4" | 15 |
| | **RB110L** | 110 | 91 | 0.8 | PSC | — | 4" | 15 |
| QTXE | **QTXE080FLT** | 80 | 56 | 0.3 | PSC | — | 6" | 18 |
| | **QTXE110FLT** | 110 | 86 | 0.7 | PSC | — | 6" | 18 |
| InVent | **AE80L** | 80 | 60 | 0.8 | PSC | — | 4" | 26 |
| | **A80L** | 80 | 92 | 1.0 | PSC | — | 4" | 26 |

ENERGY STAR® fans use 70% less energy, on average, than standard models and may qualify for local utility rebates

Note that in addition to exhaust solutions to meet DUV requirements, we also offer a full line of balanced ventilation models (HRVs and ERVs).

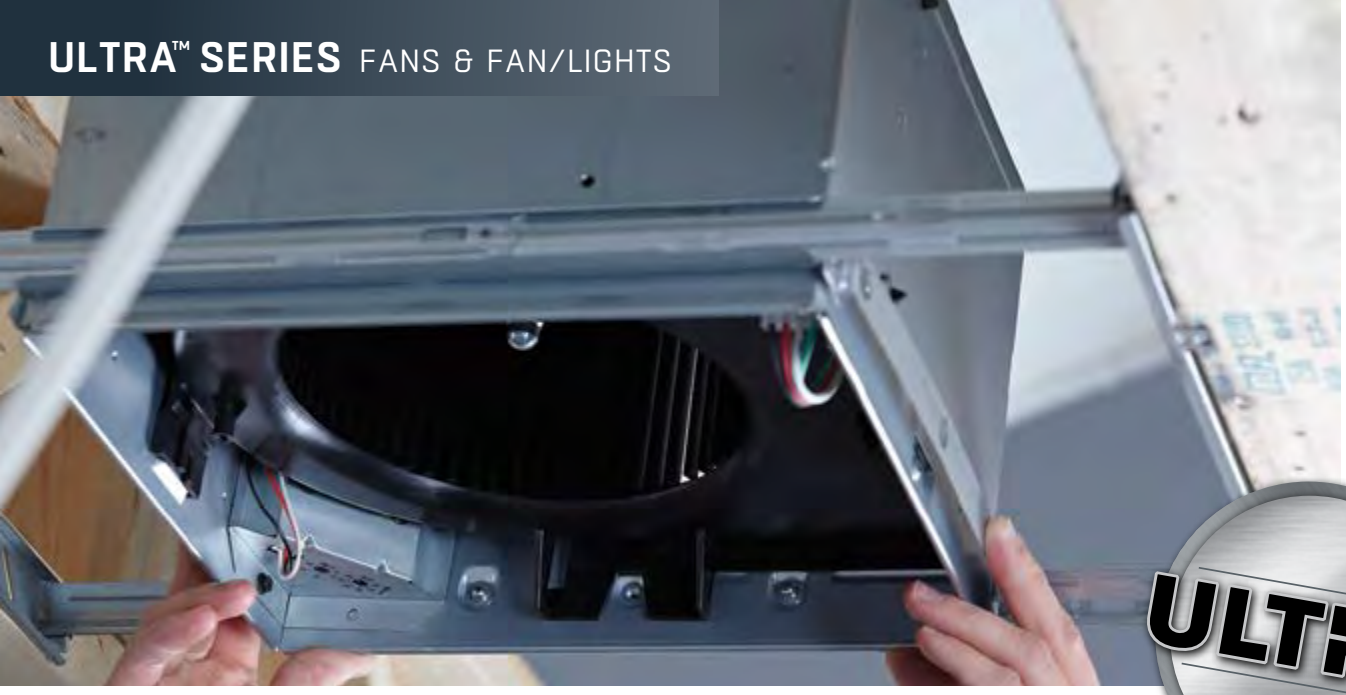



# BROAN CODE KEY

## The exclusive online tool that ensures compliant ventilation selection.

Specifying a dwelling unit ventilation (DUV) system for residences can be complicated. Code Key from Broan is the only online resource that helps you select the right product in minutes. Choose the dwelling's state, home size facts and user preferences to receive a list of recommended ventilation products. Change parameters to instantly see a range of options. Code Key requires no software and works on mobile devices. It's another way Broan—the pioneer in ventilation for more than 80 years—leads the ventilation industry with forward-thinking products and customer service.

**Broan.com/tools-landing-page/codekey**

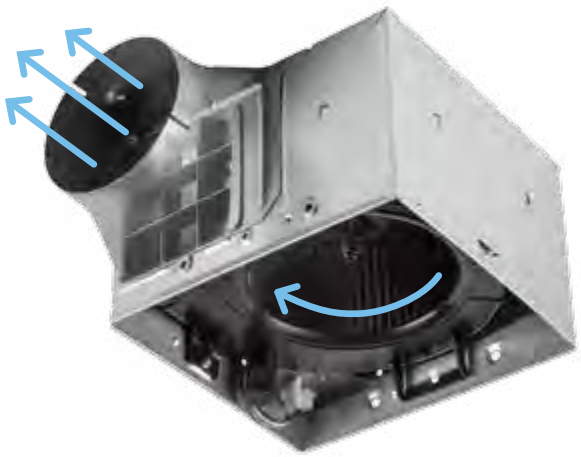


# A REVOLUTION IN VENTILATION FAN TECHNOLOGY

# *ENGINEERED TO SIMPLIFY INSTALLATION.*

**WE DIDN'T JUST CHANGE ONE THING TO MAKE INSTALLATIONS FASTER, WE CHANGED EVERYTHING.** From a unique telescoping mounting frame that installs room-side on retro-fits to an easy-to-insert housing and blower that snap into place, we designed the ULTRA™ Series to be the fastest, easiest, most universal installation in new construction or retro-fit. No matter what's behind the drywall on your next retro-fit job, you'll never have another difficult installation. And just as important, the ULTRA™ Series meets whole-house mechanical ventilation codes and green building program requirements. It's a revolutionary way to install and a revolutionary way to ventilate.



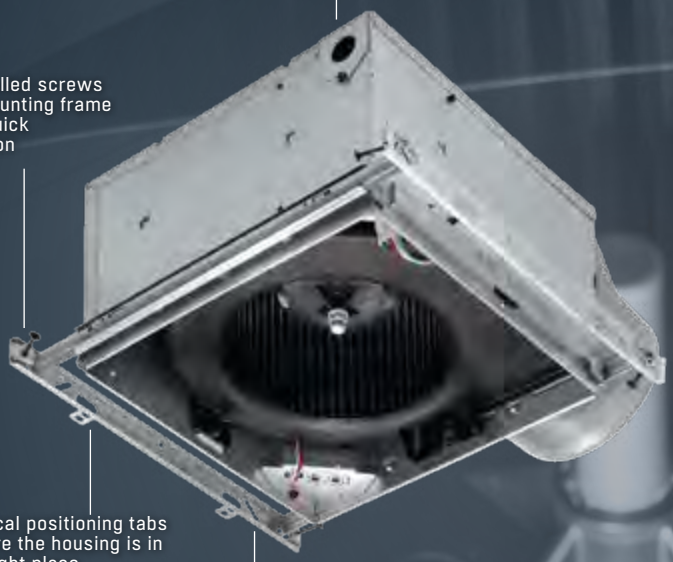


QSTREAM™

## SOUND TECHNOLOGY

Reduce sound levels and improve sound quality in real-world installations. The innovative, patent-pending QStream™ technology utilizes airflow-smoothing baffles that reduce turbulence which means the blower can turn more slowly and quietly—without airflow loss.*

*Not available on 110 CFM ULTRA Green™ Models




## ULTRAQUICK™

### INSTALLATION TECHNOLOGY

ULTRA™ Series Ventilation Fans are engineered to be the fastest, easiest, most universal installation in remodel, retrofit and new construction—in any type of joist or truss system. Exclusive features simplify room-side installation to save valuable time and money.

For energy saving options see ULTRA GREEN on page 12

## RDFU PREMIUM RADIATION DAMPER FOR ULTRA GREEN™ AND ULTRA PRO™ FANS.

When the air temperature passing through the damper exceeds 165°F the fusible link melts, triggering the thermal fabric to automatically close across the damper. Airflow is interrupted by a flame and heat barrier, preventing the rapid spread of fire to other areas.

- Motor serviceable without disturbing drywall
- Galvanized steel frame
- High temperature, non-asbestos, reinforced fiber thermal fabric
- Stainless steel closure springs
- 165°F fusible link
- Use the same grille provided with the ULTRA™ Series fan
- Use Model RDFU with RDJUMPU for ULTRA Green™ and ULTRA Pro™ models with lighting and/or sensing
- UL Standard 555C Classified



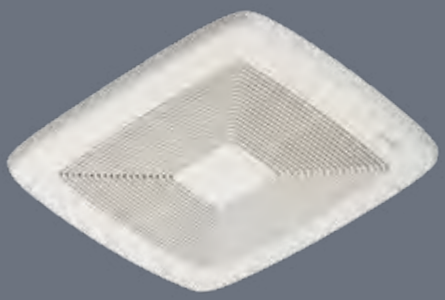
## THE PERFECT SOLUTION TO MEET TODAY'S CONTINUOUS VENTILATION REQUIREMENTS.

Built for easy installation in either new construction or retrofit applications, the ULTRA Green™ Series makes it simple to ventilate any room in the house. In today's tightly built homes, unhealthy pollutants and excess humidity stay trapped inside unless they are mechanically vented away. Exclusive ULTRA Smart™ DC Motor and Control Technology enables fans to maintain their powerful operation—even at high static pressures—and provide required air movement levels for whole-house ventilation, all while meeting spot ventilation needs on demand. Continuous CFM levels can be precisely adjusted to meet the specific needs of each home.

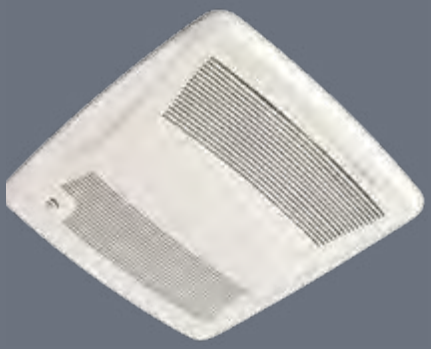
- HVI certified at <0.3 Sones, ULTRA Silent™ Sound Technology provides the quietest sound rating obtainable
- 50, 80 or 110 CFM
- Intermittent and continuous ventilation
- ULTRA Smart™ DC Motor and Control Technology monitors performance and adjusts motor speed to ensure rated air movement
- ENERGY STAR® certified
- ULTRA Quick™ Installation Technology saves time with the fastest, easiest, most universal installation
- XB and ZB models feature 6" ducting—50 and 80 CFM models include an optional 6" to 4" duct reducer
- Bright, energy efficient 36 watt fluorescent lighting
- UL Listed for use over bathtub or shower when connected to a GFCI protected branch circuit
- Type IC
- Fits 2" x 8" ceiling construction
- Optional RDFU Premium Radiation Damper Kit available for all XB and ZB models.
- Models XB50, XB80, ZB50 and ZB80 feature QStream Technology

Fastest, Easiest, Most Universal Installation ULTRA GREEN™

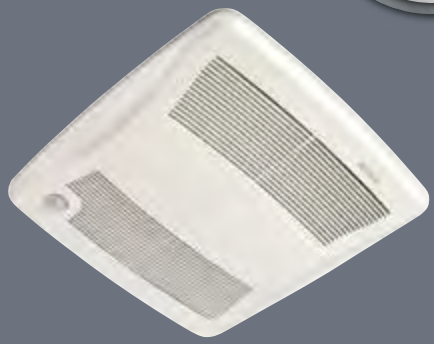
**XB50 | XB80 | XB110 | ZB80 | ZB110 FANS**



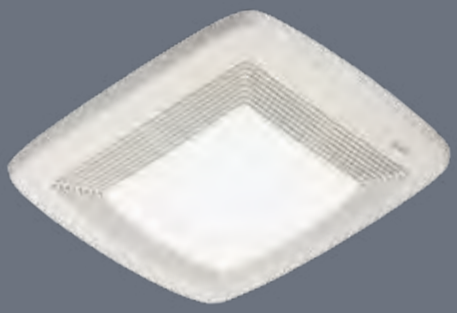
**XB110H | ZB110H HUMIDITY SENSING FANS**



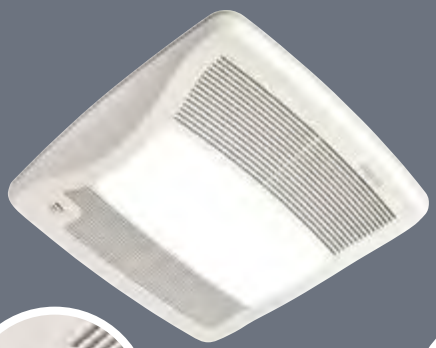
**ZB80M | ZB110M MOTION SENSING FANS**



**XB50L | XB80L | XB110L | ZB80L | ZB110L FAN/LIGHTS**



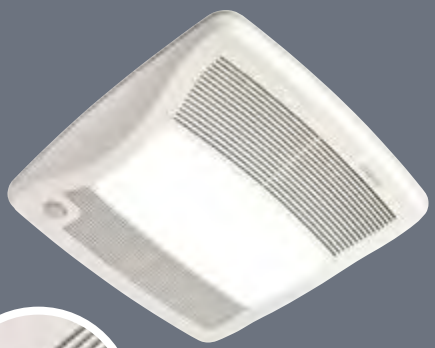
**XB110HL | ZB110HL HUMIDITY SENSING FAN/LIGHTS**





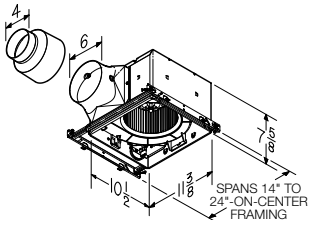
Humidity Sensing

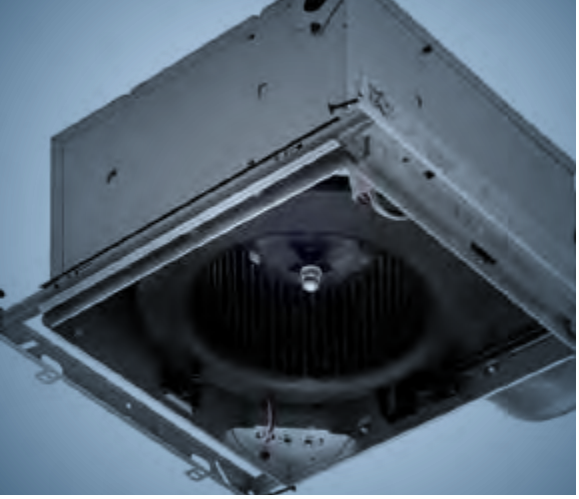
**ZB80ML | ZB110ML MOTION SENSING FAN/LIGHTS**





Motion Sensing





## ULTRASMART™
### DC MOTOR AND CONTROL TECHNOLOGY

To virtually ensure full-rated performance—regardless of the ducting situation—ULTRA Green™ Series fans automatically monitor and adjust CFM output. For continuous ventilation needs, multi-speed models may be precisely set as low as 30 CFM to avoid costly over-ventilating. A second dial controls runtime at maximum CFM. Our DC motor is the most efficient in our line—80 CFM models use only 5.8 watts.

## ULTRASILENT™
### SOUND TECHNOLOGY

ULTRA Green™ Series Ventilation Fans are HVI certified at a remarkable <0.3 Sones; the quietest sound rating obtainable. A dynamically balanced DC motor mounted behind the wheel, a state-of-the-art blower that reduces turbulence, and a free-flowing 6" duct outlet opening that won't inhibit airflow make it possible. There's no quieter fan available.

## POWERFUL
### MOTION & SENSING TECHNOLOGIES

ULTRA Fans with Sensaire humidity sensing technology detect the rapid rise in humidity at the ceiling level. This means that they will react to shower humidity much faster than competitive fans or wall controls. Multi-speed models turn the fan speed up from the lower continuous CFM level. Single-speed models turn the fan on automatically.

ULTRA Fans with motion sensing and multi-speed capability automatically turn the fan up to maximum speed from the lower continuous setting when motion is detected which is ideal for family members who forget to turn the fan on.

**ULTRA GREEN™ SERIES FANS SAVE UP TO 10 HERS POINTS AND UP TO $200 PER YEAR IN OPERATING COST.***

| Model | CFM | Sones | Light/Night Light | Humidity Sensing | Motion Sensing | Ducting | Grill Dimensions (in) L | Grill Dimensions (in) W | ENERGY STAR® |
|---|---|---|---|---|---|---|---|---|---|
| **Single-speed Fans** | | | | | | | | | |
| **XB50** | 50<br>50 | <0.3<br><0.3 | — | — | — | 6"<br>6" to 4" reducer | 13 | 13 3/4 | Yes |
| **XB80** | 80<br>80 | <0.3<br>0.3 | — | — | — | 6"<br>6" to 4" reducer | 13 | 13 3/4 | Yes |
| **XB110** | 110 | <0.3 | — | — | — | 6" | 13 | 13 3/4 | Yes |
| **XB110H** | 110 | <0.3 | — | Yes | | 6" | 13 1/8 | 14 | Yes |
| **Single-speed Fan/Lights** | | | | | | | | | |
| **XB50L** | 50<br>50 | <0.3<br><0.3 | 2- 18W GU24 / 4W | — | — | 6"<br>6" to 4" reducer | 13 | 13 3/4 | Yes |
| **XB80L** | 80<br>80 | <0.3<br>0.3 | 2- 18W GU24 / 4W | — | — | 6"<br>6" to 4" reducer | 13 | 13 3/4 | Yes |
| **XB110L** | 110 | <0.3 | 2- 18W GU24 / 4W | — | — | 6" | 13 | 13 3/4 | Yes |
| **XB110HL** | 110 | <0.3 | 2- 18W GU24 / 4W | Yes | — | 6" | 13 1/8 | 14 | Yes |
| **Multi-speed Fans** | | | | | | | | | |
| **ZB80** | 80<br>80 | <0.3<br>0.3 | — | — | — | 6"<br>6" to 4" reducer | 13 | 13 3/4 | Yes |
| **ZB80M** | 80<br>80 | <0.3<br>0.3 | — | — | Yes | 6"<br>6" to 4" reducer | 13 1/8 | 14 | Yes |
| **ZB110** | 110 | <0.3 | — | — | — | 6" | 13 | 13 3/4 | Yes |
| **ZB110H** | 110 | <0.3 | — | Yes | — | 6" | 13 1/8 | 14 | Yes |
| **ZB110M** | 110 | <0.3 | — | — | Yes | 6" | 13 1/8 | 14 | Yes |
| **Multi-speed Fan/Lights** | | | | | | | | | |
| **ZB80L** | 80<br>80 | <0.3<br>0.3 | 2- 18W GU24 / 4W | — | — | 6"<br>6" to 4" reducer | 13 | 13 3/4 | Yes |
| **ZB80ML** | 80<br>80 | <0.3<br>0.3 | 2- 18W GU24 / 4W | — | Yes | 6"<br>6" to 4" reducer | 13 1/8 | 14 | Yes |
| **ZB110L** | 110 | <0.3 | 2- 18W GU24 / 4W | — | — | 6" | 13 | 13 3/4 | Yes |
| **ZB110HL** | 110 | <0.3 | 2- 18W GU24 / 4W | Yes | — | 6" | 13 1/8 | 14 | Yes |
| **ZB110ML** | 110 | <0.3 | 2- 18W GU24 / 4W | — | Yes | 6" | 13 1/8 | 14 | Yes |

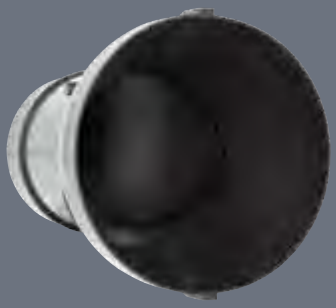
ENERGY STAR® fans use 70% less energy, on average, than standard models and may qualify for local utility rebates

* Compared to a central fan-integrated system when used for continuous ventilation; based on software calculations and analysis conducted by Broan-NuTone.

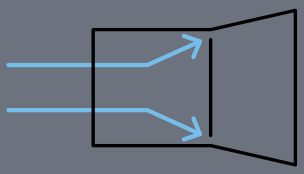
## QFLOW™ TECHNOLOGY MEANS SMOOTHER AIRFLOW
# AND OPTIMAL BACKDRAFT SEALING.

**QFlow™ Damper Technology.** Patent-pending QFlow technology helps achieve desired building airtightness scores when the fan is off. It also removes the duct damper flap from the airstream path, reducing static pressure and noise when the fan is on.

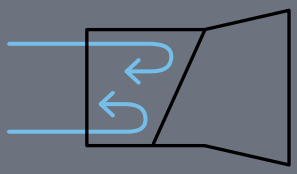
## FAN OFF



Without QFlow, outdoor air can intrude past the damper edges.

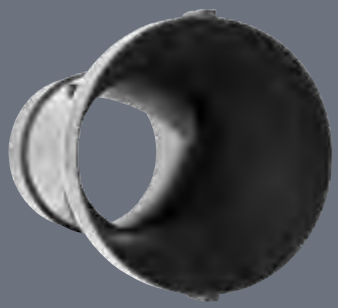


With QFlow, outdoor air intrusion is blocked with its edge-to-edge design.

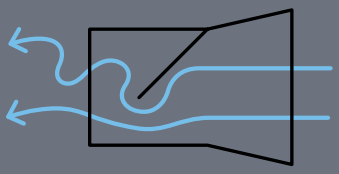


## FAN ON

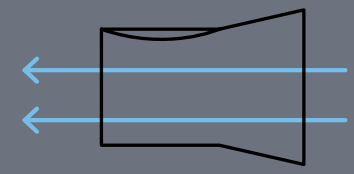
Pre-installed screws in the mounting frame enable quick installation



Without QFlow, the flap impedes airflow which increases static pressure, turbulence and noise.



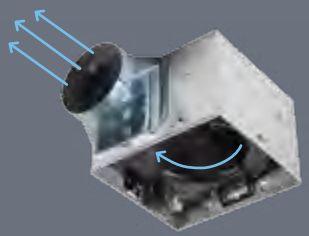
With QFlow, the flap lifts out of the way, minimizing turbulence for more quiet operation.



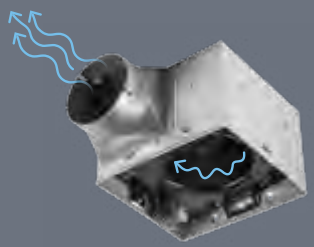
# REDUCE SOUND LEVELS AND IMPROVE
## SOUND QUALITY IN REAL-WORLD INSTALLATIONS.

QSTREAM™ SOUND TECHNOLOGY

The innovative, patent-pending QStream™ technology utilizes airflow-smoothing baffles that reduce turbulence which means the blower can turn more slowly and quietly—without airflow loss.*



With QStream™ Technology



Without QStream™ Technology

*Not available on 110 CFM ULTRA Green™ Models

# ULTRAQUICK™
## INSTALLATION TECHNOLOGY

ULTRA™ Series Ventilation Fans are engineered to be the fastest, easiest, most universal installation in remodel, retrofit or new construction—in any type of joist or truss system. Exclusive features simplify room-side installation to save valuable time and money.




## ULTRA PRO FEATURES

- Provide your customers extremely quiet operation with innovative sound reduction technologies.
- QStream™ technology features airflow-smoothing baffles to reduce turbulence.
- Optional RDFU Premium Radiation Damper Kit available for RB models.

The preferred install choice for professionals to deliver quiet performance




## Ultra Pro Series

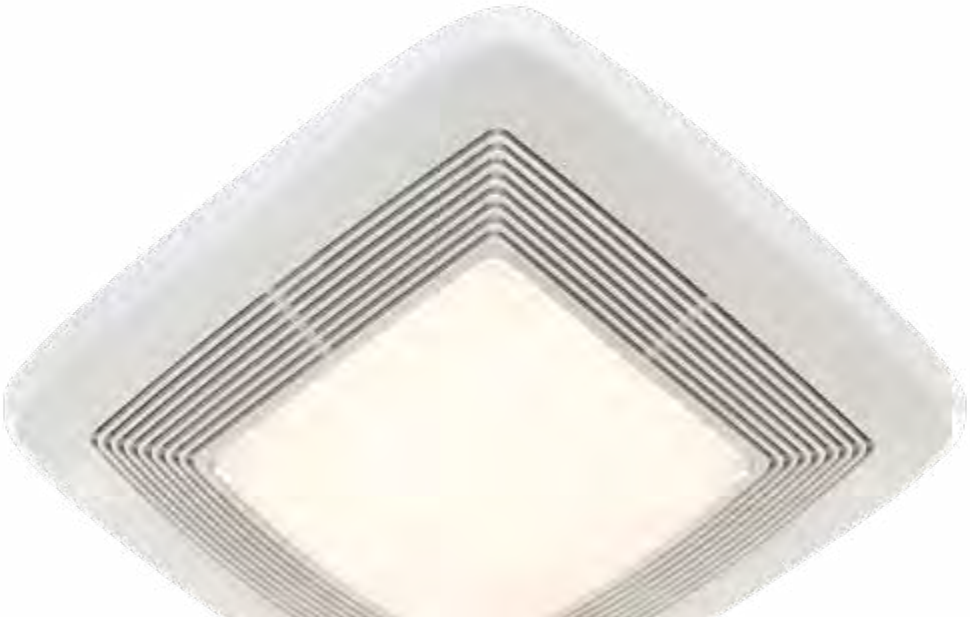
| Model | Duct Size | CFM | Sones | Light/Night Light | Housing Dims (in) W | Housing Dims (in) L | Housing Dims (in) H | Grille Dims (in) L | Grille Dims (in) W | Grille Finish | UL Listed for Tub/Shower Use | ENERGY STAR® |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Single-Speed Fans** | | | | | | | | | | | | |
| **RB80** | 4" | 80 | <0.3 | — | 11 3/8 | 10 1/2 | 7 5/8 | 13 | 14 | White Polymeric | Yes | Yes |
| **RB110** | 4" | 110 | 0.6 | — | 11 3/8 | 10 1/2 | 7 5/8 | 13 | 14 | White Polymeric | Yes | Yes |
| **Single-Speed Fan/Lights** | | | | | | | | | | | | |
| **RB80L** | 4" | 80 | <0.3 | 2- 18W GU24 / 4W | 11 3/8 | 10 1/2 | 7 5/8 | 13 | 13 3/4 | White Polymeric | Yes | Yes |
| **RB110L** | 4" | 110 | 0.8 | 2- 18W GU24 / 4W | 11 3/8 | 10 1/2 | 7 5/8 | 13 | 13 3/4 | White Polymeric | Yes | Yes |

ENERGY STAR® fans use 70% less energy, on average, than standard models and may qualify for local utility rebates



BROAN QT SERIES

# **SO QUIET,** YOU MIGHT EASILY FORGET





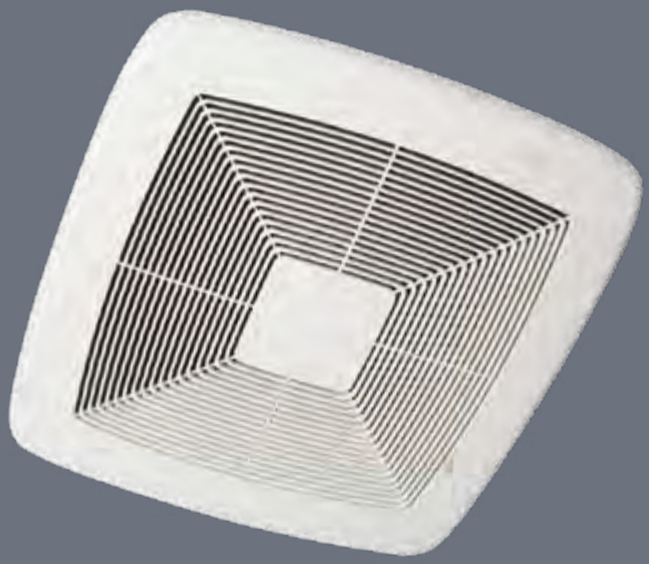



**PEACEFUL MOMENTS CAN BE ENJOYED EVEN MORE WITH VENTILATION FROM A QUIET, QT SERIES FAN.** The very quiet Broan QT Series is the ideal solution for any room that benefits from ventilation. Most QT models operate at less than one sone—the sound of a quiet running refrigerator. But quiet operation doesn't mean less power. Installed properly, the QT Series maintains full-rated airflow in real-world installations. So choose a QT Series bath fan, fan/light or heater/fan/light for your application. Broan has the perfect solution for every room.

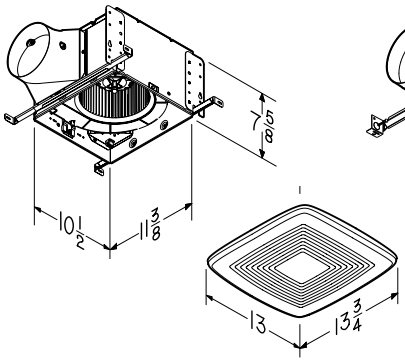
## QTXE FAN FEATURES

- Very quiet operation 0.3 to 1.4 sones
- 80 CFM to 150 CFM
- QTXE features 6" ducting for superior performance
- QTXE models are ENERGY STAR® certified
- HVI Certified
- QTXE includes hanger bar system for fast, flexible installation for all types of construction
- Motor engineered for continuous operation
- UL Listed for use over bathtub or shower when connected to a GFCI protected branch circuit
- Fits 2" x 8" ceiling construction
- Radiation damper available separately, see page 19

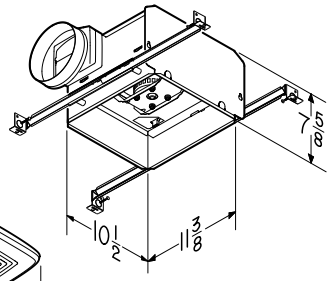
**QTXE**



**QTXE150**




**QTXE080, QTXE110**



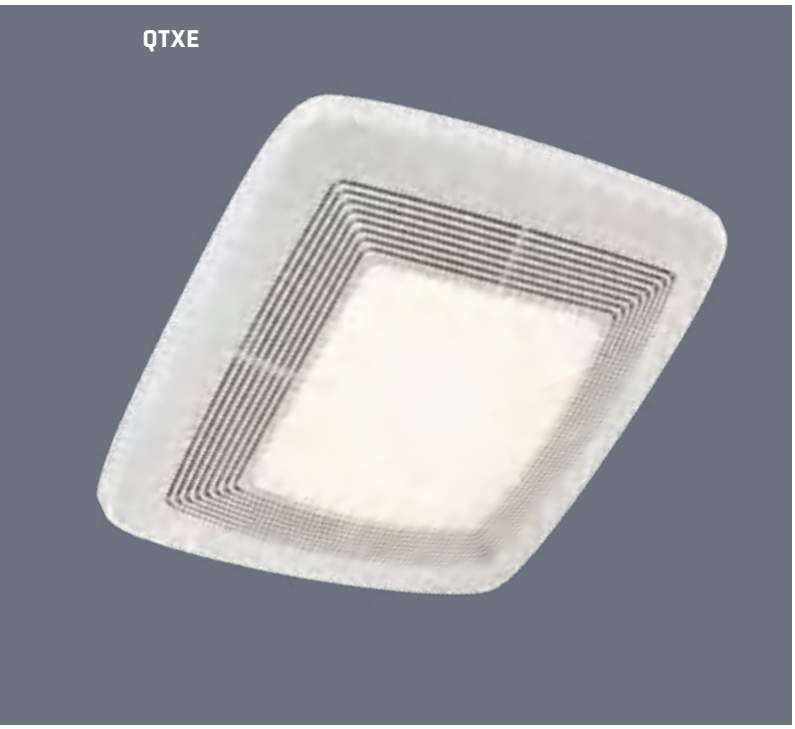

**Broan QT Series™ Bath Fans.** A bath fan needn't call attention to itself, especially when you don't want it to overpower the design of your bath or powder room. More important, it shouldn't call attention to itself when it's working. So we developed the QT Series™ to provide very relaxing ventilation. With an energy efficient option, it simply does its job quietly, in every sense of the word.

| Model | CFM | Sones | Lighting | Bath Sq. Ft. | Ducting | ENERGY STAR® |
|---|---|---|---|---|---|---|
| **QTXE080** | 80 | 0.3 | | 75 | 6"▲ | Yes |
| **QTXE110** | 110 | 0.7 | | 100 | 6"▲ | Yes |
| **QTXE150** | 150 | 1.4 | | 140 | 6"▲ | Yes |
| **QTXE080FLT** | 80 | 0.3 | 36W◆ / 4W* | 75 | 6"▲ | Yes |
| **QTXE110FLT** | 110 | 0.7 | 36W◆ / 4W* | 100 | 6"▲ | Yes |
| **QTXE150FLT** | 150 | 1.4 | 36W◆ / 4W* | 135 | 6"▲ | Yes |

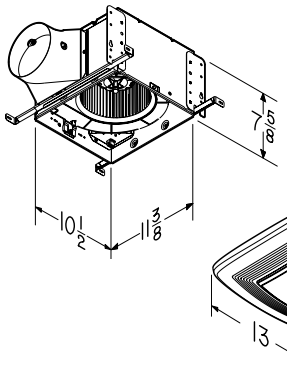
ENERGY STAR® fans use 70% less energy, on average, than standard models and may qualify for local utility rebates
▲ See page 54 for 6" ducting (DT6W) product specifications
◆ 2, 18 watt GU24 based fluorescent bulbs included
* Night-light bulbs not included

## QTXE FAN/LIGHT FEATURES

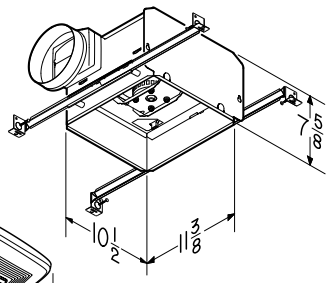
- Very quiet operation 0.3 to 1.4 sones
- 80 CFM to 150 CFM
- QTXE models feature 6" ducting for superior performance
- QTXE models are ENERGY STAR® certified
- Bright, energy efficient 36 watt fluorescent lighting (2, 18 watt GU24 based bulbs) included with non-sensing QTXE and QTRE models
- QTXE includes hanger bar system for fast and flexible installation for all types of construction
- 4 watt night light on all models (bulb not included)
- Motor engineered for continuous operation
- UL Listed for use over bathtub or shower when connected to a GFCI protected branch circuit
- HVI Certified
- Type IC
- Fits 2" x 8" ceiling construction
- Radiation damper available separately, see below




QTXE150FLT




QTXE080FLT, QTXE110FLT




**Broan QT Series™ Fan/Lights.** The QT Series™ is the ultimate bath fan solution for today's homes. Select a QT Series™ fan/light to bring simple elegance to any bath or powder room. By sight or by sound, you'll barely notice a QT Series™ fan. Except, of course, when you need just the right amount of ventilation and light at the touch of a switch.

## PREMIUM RADIATION DAMPERS FEATURES

- Motor serviceable without disturbing drywall
- Galvanized steel frame
- High temperature, non-asbestos, reinforced fiber thermal fabric
- UL Standard 555C Classified
- Stainless steel closure springs
- 165°F fusible link
- Use the same grille provided with the QT Series™ fan

**Premium Radiation Dampers.** When the air temperature passing through the damper exceeds 165°F the fusible link melts, triggering the thermal fabric to automatically close across the damper. Airflow is interrupted by a flame and heat barrier, preventing the rapid spread of fire to other areas.




| Radiation Dampers | Description |
|---|---|
| **RDFQF** | For QTXE080 & QTXE110 |
| **RDFQL** | For QTXE080FLT & QTXE110FLT |
| **RDFQL plus RDJUMPQ** | For QTXE110S |

# SENSING FANS FOR QT AND INVENT

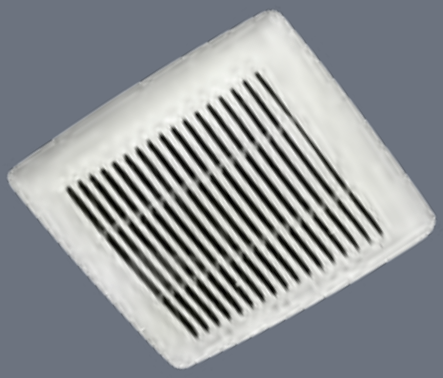
**Humidity Sensing Fans with Sensaire® Technology.** Broan Sensaire® technology is a hands-free solution to fighting excess humidity and possible mold problems. It detects rapid increases in moisture levels at the ceiling, where steam and humidity naturally rise, and automatically turns the fan on.

With fans this quiet, we included automatic shutoff to save worry, and money. Broan Sensaire® technology is a perfect solution for high traffic bathrooms, the kids' bathroom, or for anyone who leaves the house before humidity is properly vented.

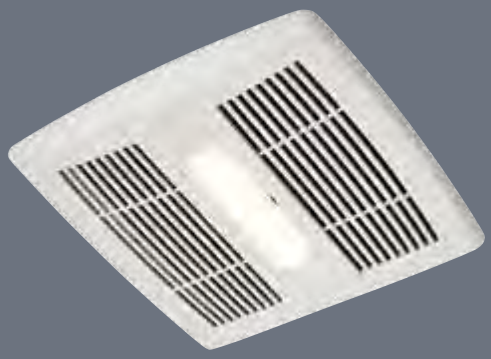
**QTXE110S**



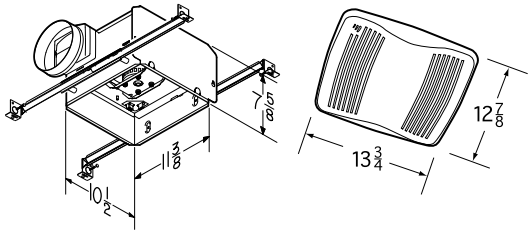
**INVENT AE80S | AE110S**



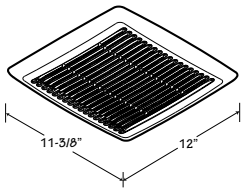
**INVENT AE80SL | AE110SL**



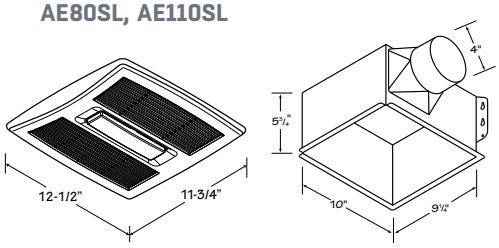
**QTXE11S**




**AE80S, AE110S**




**AE80SL, AE110SL**




## SENSAIRE® HUMIDITY SENSING FEATURES

- Detects a rapid rise in humidity
- User adjustable sensitivity control
- Easy to set shut off timer ranges from 5–60 minutes
- UL listed for use over bathtub and shower when connected to a GFCI protected branch circuit
- Energy Star Certified
- HVI CertifiedRDM1 radiation damper accessory for InVent Series

## QTXE HUMIDITY SENSING FAN FEATURES

- Grille mounted humidity sensor for faster reaction time
- Fits 2" X 8" ceiling contruction
- RDFQF radiation damper with RDJUMP accessory
- Includes hanger bar system for fast and flexible installation for all types of construction

## INVENT HUMIDITY SENSING FAN AND FAN/LIGHT FEATURES

- FoldAway™ mounting ears for a 100% room side installation
- Efficient LED Lighting
- Fits 2" X 6" construction

| Model | CFM | Sones | Bath Sq. Ft. | Lighting | Ducting | ENERGY STAR® |
|---|---|---|---|---|---|---|
| **QTXE110S** | 110 | 0.7 | 100 | — | 6"▲ | Yes |
| **AE80S** | 80 | 0.8 | 75 | — | 4" | Yes |
| **AE110S** | 110 | 1.0 | 100 | — | 4" | Yes |
| **AE80SL** | 80 | 0.8 | 75 | 11 watt LED | 4" | Yes |
| **AE110SL** | 110 | 1.0 | 100 | 11 watt LED | 4" | Yes |

ENERGY STAR® fans use 70% less energy, on average, than standard models and may qualify for local utility rebates

▲ See page 54 for 6" ducting (DT6W) product specifications

## INVENT SENSING FAN PROJECT PACKS

**A000HFS PROJECT PACK**

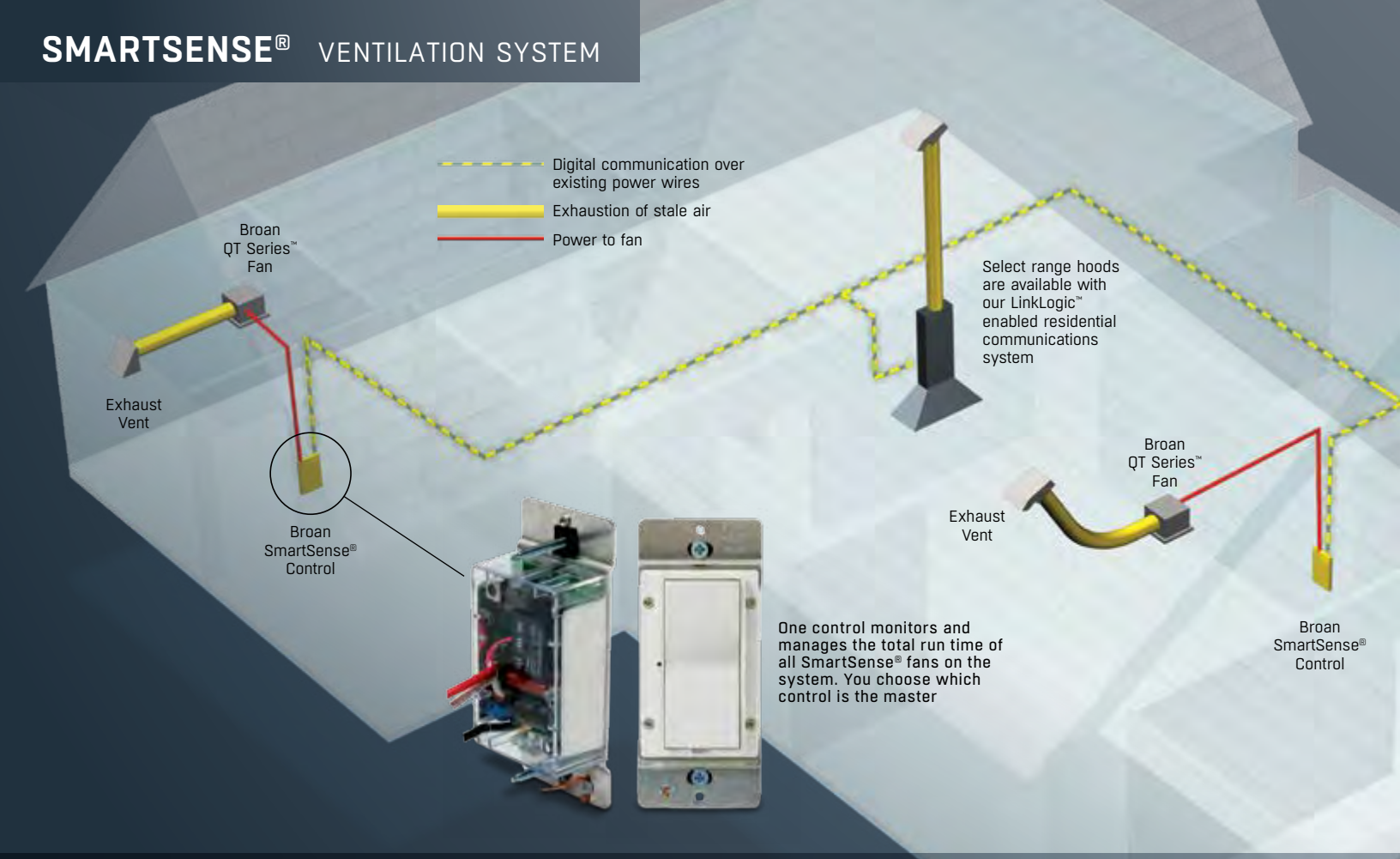


**Simplify Installation with Project Packs.**
Project Packs are available with four fan housings. When drywall work and painting is finished, the fan components needed to complete the job are available in a finish pack kit under a separate model number which includes the motor plate, motor, wheel and grille. See the matrix below for Project Pack order information.

| Project Pack | Kit number | For model |
|---|---|---|
| **Four-pack of FAN housings only:** | A000HFS | |
| **Four-pack finish kits for FAN models:** | AE80F<br>AE110F | AE80S<br>AE110S |

**AE80F | AE110F FINISH KITS**






# BROAN SMARTSENSE®

## AUTOMATICALLY COORDINATE YOUR BATH FANS

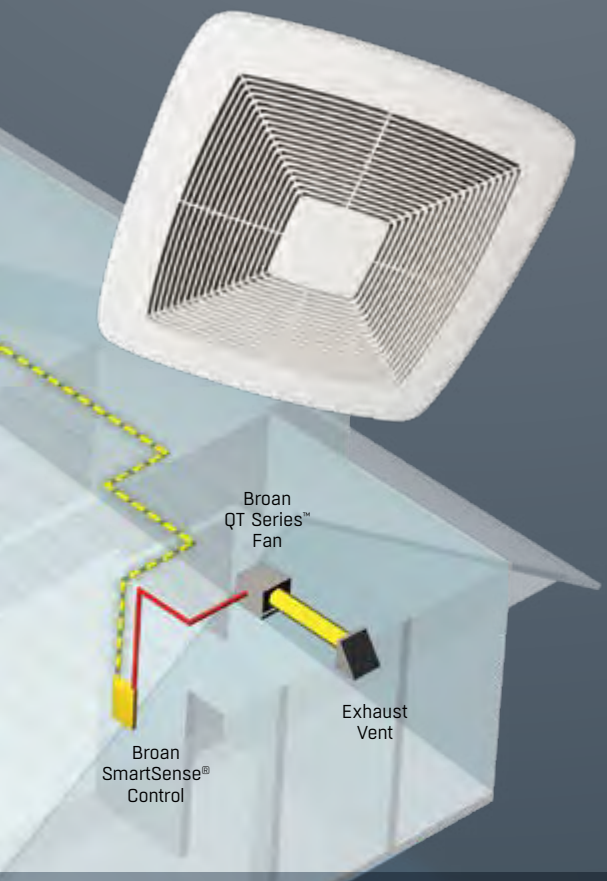
**RDFQF**



### RDFQF PREMIUM RADIATION DAMPER FEATURES.

When the air temperature passing through the damper exceeds 165°F the fusible link melts, triggering the thermal fabric to automatically close across the damper. Airflow is interrupted by a flame and heat barrier, preventing the rapid spread of fire to other areas.

**SSQTXE080 | SSQTXE110**




## A SMART, ECONOMICAL OPTION TO MEET ASHRAE STANDARD 62.2.

Since most homes have several ventilation fans, Broan SmartSense® automatically operates your fans to ventilate your home around the clock. It's one solution for continuous and spot ventilation requirements.

A SmartSense® system coordinates ventilation fans in various locations to introduce fresher, healthier air. It may be programmed to ventilate based on the home's size, automatically cycling different fans based in the dwelling based on square footage and the number of bedrooms. LinkLogic control is at the heart of the system and requires no separate control wiring. SmartSense® is cost effective as it does require integration with the home's air handler, and with only one fan running at a time, it uses less than 40 watts during ventilation cycles.

| Model | CFM | Dimension |
|---|---|---|
| **SSQTXE080** | 80 | $11\frac{3}{8}$ x $10\frac{1}{2}$ x $7\frac{5}{8}$ |
| **SSQTXE110** | 110 | $11\frac{3}{8}$ x $10\frac{1}{2}$ x $7\frac{5}{8}$ |

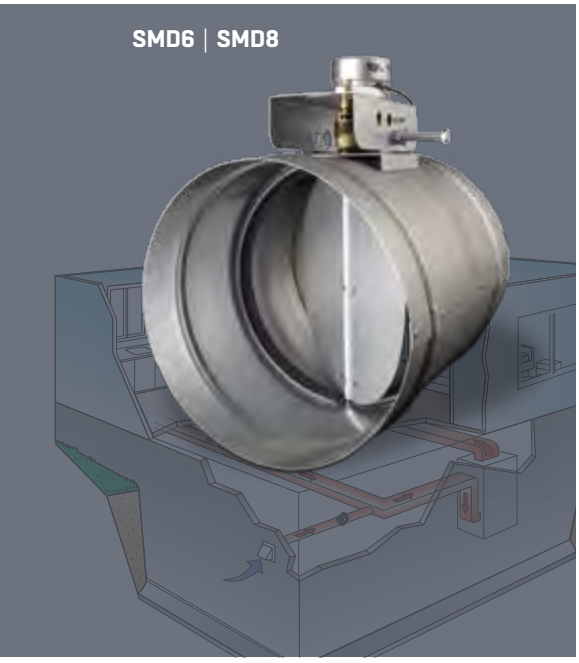
LinkLogic™

**Wireless home control technology powered by INSTEON™.**

- New timed-off and delayed-off features with new firmware
- Automatically operates the SMD series Make-Up Air Damper for installations requiring make-up air
- Interfaces with other LinkLogic® enabled products by Broan® or BEST®

# AND RANGE HOOD TO VENTILATE YOUR HOME.

**SMD6 | SMD8**



## A BROAN AUTOMATIC MAKE-UP AIR DAMPER INTELLIGENTLY BRINGS FRESH AIR INSIDE.

The damper communicates with SSQTXE080 and SSQTXE110 fans as well as select BEST® and Broan range hoods to form a complete balanced ventilation system that ensures fresh air is available while ventilation is in process. This ensures balanced indoor air pressure while preventing unwanted air infiltration and wasted energy. SmartSense™ automatically operates the Make-Up Air Damper for installations requiring make-up air.

### Easy Installation

- Located in a 6-inch or 8-inch duct running between an exterior wall fresh air inlet (641FA or 643FA) to an interior location such as a cold-air return or supply duct
- Locally powered by a 24 VAC transformer
- Communicates over existing home electrical wiring

### Broan Make-Up Air Damper features:

- Heavy-duty galvanized steel construction
- 24 VAC transformer
- 6-inch round (SMD6), 8-inch round (SMD8)
- Use with any single fan or combination of SSQTXE080 or SSQTXE110 fans

® 2100 HVI CERTIFIED

# FLEXIBILITY FOR NEW CONSTRUCTION AND



## INVENT SERIES FANS WITH TRUESEAL™ DAMPER TECHNOLOGY CAN SAVE UP TO 1 HERS POINT AND UP TO $9 PER YEAR IN OPERATING COSTS*.

FoldAway™ Mounting Ears are precisely positioned for new construction and fold flat for room-side retrofits. Every installation can be handled more efficiently.



With our TrueSeal™ Damper Technology, InVent fans reduce air leakage by up to 50% compared to competitive models[1] resulting in better home performance via blower door tests.



EzDuct™ Connector enables room-side installation without attic access. Attach the housing, pull the duct through, attach the EzDuct™ Connector and reset it with one screw.



*Compared to competitive fans; based on software calculations and analysis conducted by Broan-NuTone. Testing reflects total fan housing air tightness.

[1]See Broan.com/InVent for details.

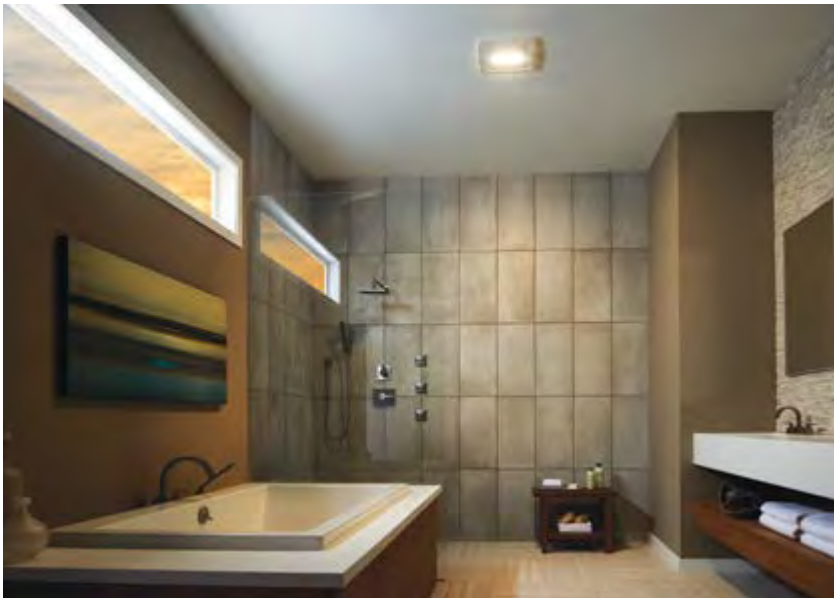


# ROOM-SIDE RETROFIT FROM ONE FAN.

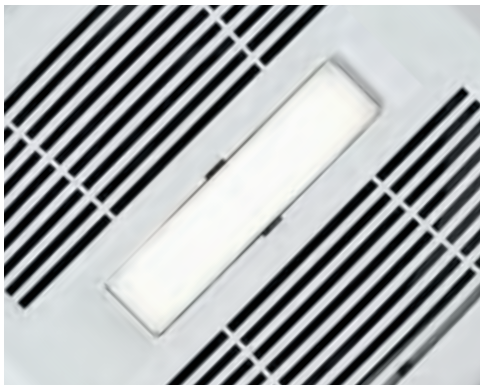
## VERSATILE INSTALLATION. AIRTIGHT PERFORMANCE. LED LIGHTING.

InVent Series gives professionals smart options for new construction or room-side retrofits in one, hard-working product line. InVent is about innovations such as FoldAway™ mounting ears and TrueSeal™ Damper Technology that improves building airtightness like never before. With fresh grille designs and a full range of operating points, there's an InVent Series solution for every installation.

InVent™ SERIES



LED Lighting offers greater energy efficiency and longevity, and adds a unique design detail to this hard-working fan. 11 watt, 800 Lumens integrated LED module lasts up to 25,000 hours.



InVent™ SERIES

## INVENT FAN & FAN/LIGHT FEATURES

**AE50, AE80, AE110, AE80B, A80, A80HD, A110**

- FoldAway™ mounting ears allow for easy installation in both new construction and room-side replacement
- New TrueSeal™ damper technology forms a tighter seal to reduce backdrafts
- EzDuct™ Connector allows room-side installation with no attic access required
- Effective ventilation clears humidity and odors
- Attractive grille styling

**AE80L, AE80BL, AE110L**

- LED Fan/Light with 11 watt, 800 Lumens, 3000K, 80 CRI integrated module
- LED lasts up to 25,000 hours for maintenance-free convenience

**A50L, A70L, A80L, A110L**

- Incandescent Fan/Light with A19 Base (bulb not included)

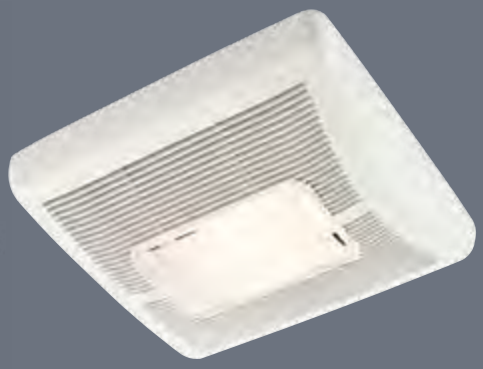
**AE50 | A80 | AE80 | AE80B | A110 | AE110**



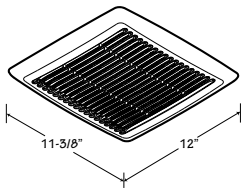
**AE80L | AE80BL | AE110L**



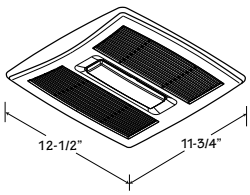
**A50L | A70L | A80L | A110L**



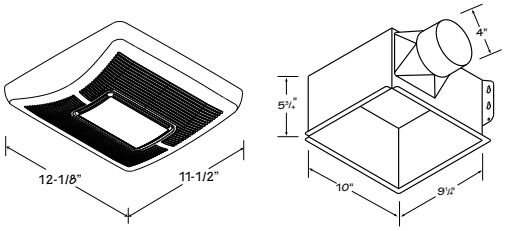
**AE50, A80, AE80, AE80B, A110, AE110**




**AE80L, AE80BL, AE110L**




**A50L, A70L, A80L, A110L**




## INVENT Fan Models

| Model | CFM | Sones | ENERGY STAR® |
|---|---|---|---|
| **A80** | 80 | 2.0 | No |
| **A80HD*** | 80 | 2.0 | No |
| **A110** | 110 | 3.0 | No |
| **AE50** | 50 | 0.5 | Yes |
| **AE80** | 80 | 0.8 | Yes |
| **AE80B** | 80 | 1.5 | Yes |
| **AE110** | 110 | 1.3 | Yes |

ENERGY STAR® fans use 70% less energy, on average, than standard models and may qualify for local utility rebates

*Metal Grille

## INVENT Fan/Light Models

| Model | CFM | Sones | Lighting | ENERGY STAR® |
|---|---|---|---|---|
| **A50L** | 50 | 1.5 | A19 Base** | No |
| **A70L** | 70 | 2.0 | A19 Base** | No |
| **A80L** | 80 | 1.0 | A19 Base** | No |
| **A110L** | 110 | 1.3 | A19 Base** | No |
| **AE80BL** | 80 | 1.5 | LED | Yes |
| **AE80L** | 80 | 0.8 | LED | Yes |
| **AE110L** | 110 | 1.3 | LED | Yes |

ENERGY STAR® fans use 70% less energy, on average, than standard models and may qualify for local utility rebates

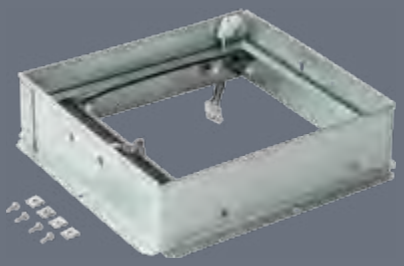
**Bulb Not Included

## INVENT™ SERIES ACCESSORIES

A range of accessories ensures a custom fit in any application. Choose optional duct connectors, a radiation damper and a metal grille for commercial installations, and hanger bars for exact positioning.

With our QFlow™ Duct Connector (MODEL MQF4), InVent fans reduce air leakage by up to 65% compared to competitive models[1], offering an extremely tight seal when closed and completely open airflow when open.

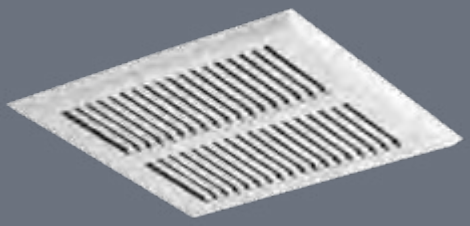
**RDM1 RADIATION DAMPER for fans and ENERGY STAR fan/lights only**



**MQF4 DUCT CONNECTOR**



**MMG METAL GRILL**



**MHB4 HANGER BARS**



**MMDC4 METAL DUCT CONNECTOR**



**Broan InVent™ Series Project Packs.** Keep your job on schedule and your inventory safe. Even if the final fan or fan/light product has not been selected, a project pack enables you to install a fan or fan/light housing now and choose the right-sized finish pack later. You won't have an open box on the job site with a motor and grille that could be lost or damaged.

### INVENT Fan Finish Packs

| Model | CFM | Sones | ENERGY STAR® |
|---|---|---|---|
| **A80F** | 80 | 2.0 | No |
| **A80HDF*** | 80 | 2.0 | No |
| **A110F** | 110 | 3.0 | No |
| **AE50F** | 50 | 0.5 | Yes |
| **AE80BF** | 80 | 1.5 | Yes |
| **AE80F** | 80 | 0.8 | Yes |
| **AE110F** | 110 | 1.3 | Yes |

ENERGY STAR® fans use 70% less energy, on average, than standard models and may qualify for local utility rebates

*Metal Grille

### INVENT Fan/Light Finish Packs

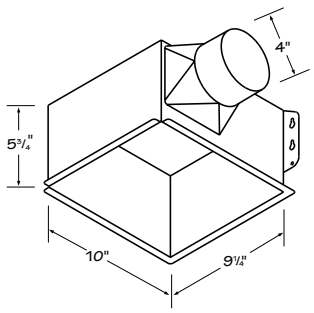
| Model | CFM | Sones | Lighting | ENERGY STAR® |
|---|---|---|---|---|
| **A70LF** | 70 | 2.0 | A19 Base** | No |
| **AE80BLF** | 80 | 1.5 | LED | Yes |
| **AE80LF** | 80 | 0.8 | LED | Yes |
| **AE110LF** | 100 | 1.3 | LED | Yes |

ENERGY STAR® fans use 70% less energy, on average, than standard models and may qualify for local utility rebates

**Bulb Not Included

### INVENT Housing Packs

| Model | Description |
|---|---|
| **A000HF** | Fan Housing |
| **A000HL** | Fan/Light Housing |




[1]Testing reflects total fan housing air tightness. See Broan.com/InVent for details.



# A WELL VENTILATED ROOM IS A HEALTHIER



## LOOK TO BROAN, THE VENTILATION EXPERTS, TO KEEP EVERY ROOM OF YOUR HOUSE FRESH.

Broan engineers the right product to fit every application, room size and need. Select from a variety of features that best meet your spot ventilation needs. Begin by assessing how powerful the fan should be or whether you could use additional lighting in your space. Think about what product style, finish or shape would look best. Rest assured, if you're concerned about saving money and energy, Broan bath fans that feature ENERGY STAR® can reduce energy consumption by as much as 70%. Broan has the perfect product designed around your needs.





# ROOM.

**Wall or ceiling mount, LoProfile is the right fan for a tight fit.** The new Broan LoProfile™ Fan is our latest solution for installations where conventional ventilation simply won't fit. Where multi-family applications require it, the LoProfile™ fan is narrow enough to be installed in a wall between 2x4 studs. When plumbing or electrical obstructions are found behind the drywall in ceiling remodel applications our LoProfile™ fan can still fit without having to move anything. And that means most any room with space constraints can have powerful, quiet, efficient ventilation.

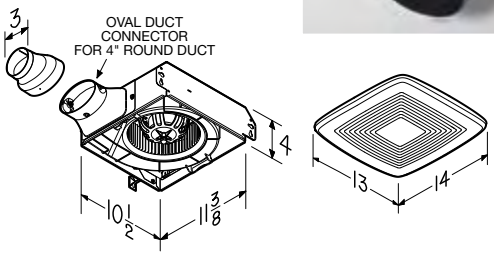



The oval connector accepts standard 4" duct, or 3" duct with the supplied adapter



Electrical connections can be made through the top or the side of the housing



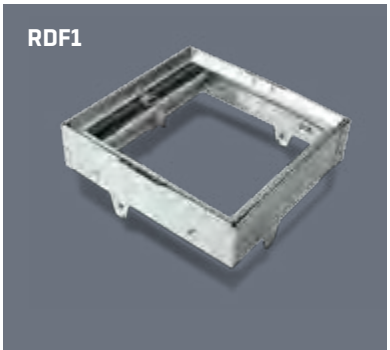



| Model | CFM | Sones | ENERGY STAR® |
|---|---|---|---|
| **LP80** | 80 | 1.0 | Yes |

ENERGY STAR® fans use 70% less energy, on average, than standard models and may qualify for local utility rebates

## FEATURES

- Fits in 2x4 ceiling or wall construction
- 80 CFM with 4" duct ensures ample air movement; 70 CFM with 3" duct reducer
- >50 CFM at 0.25" static pressure meets ASHRAE 62.2 local ventilation requirements (with 4" oval duct or 3" round duct)
- Only 1.0 sones for quiet operation (4" duct)
- 4" oval or 3" round duct connection for installation flexibility
- Efficient operation lowers utility bills
- Ideal for multi-family applications
- Compatible with RDF1 Premium Radiation Damper
- Project Packs available



## FAN/LIGHT FEATURES

**657, 696**

- Powerful centrifugal blower
- White polymeric grille complements virtually any decor
- A19 base lighting (bulb not included)
- Ceiling mount

**750, 751**

- Powerful centrifugal blower
- Round design eliminates squaring with walls
- Model 751 is the same as Model 750, but without a night light
- A19 base lighting (bulb not included)
- Ceiling mount

**678, HD80L**

- White polymeric grille complements virtually any décor
- Ceiling mount
- Project Packs available
- HD80L designed for continuous operation

## CEILING & WALL MOUNT FEATURES

**670, 671, 688, 689**

- Compact housing fits between ceiling joists or wall studs
- Metal grille kits (available separately)
- Project Packs available for most models

**657 | 696**



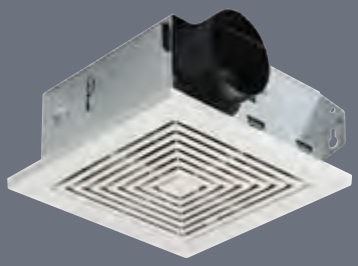
**750 | 751**



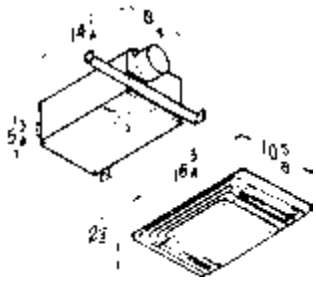
**678 | HD80L**



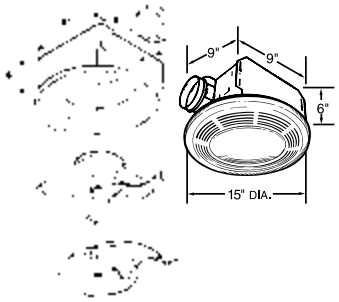
**670 | 671 | 688 | 689**



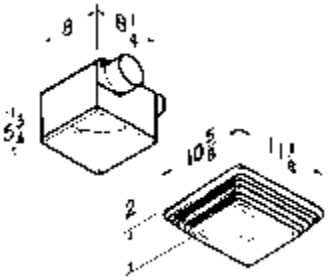
**657, 696**



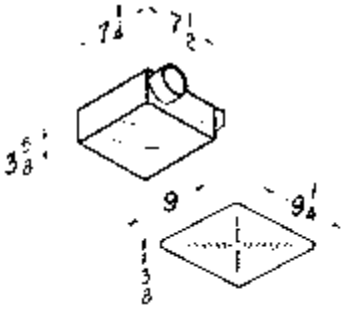
**750, 751**




**678, HD80L**



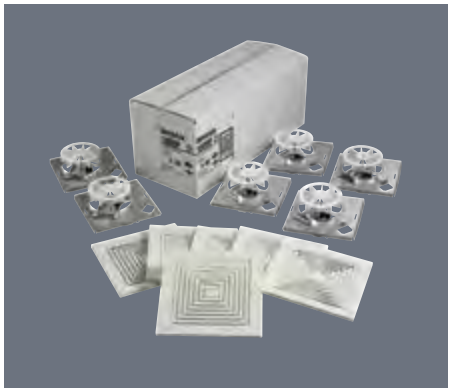
**670, 671, 688, 689**



| Model | CFM | Sones | Light/Night Light | Ducting |
|---|---|---|---|---|
| **657** | 70 | 4.0 | A19 Base | 4" |
| **696** | 100 | 4.5 | A19 Base | 4" |
| **750** | 100 | 3.5 | A19 Base / 7W | 4" |
| **751** | 100 | 3.5 | A19 Base | 4" |
| **678** | 50 | 2.5 | A19 Base | 4" |
| **HD80L** | 80 | 2.5 | A19 Base | 4" |

| Model | CFM | Sones | Ducting | Mounts |
|---|---|---|---|---|
| **670** | 50 | 3.5 | 3" | Wall / Ceiling |
| **671** | 70 | 6.0 | 3" | Wall / Ceiling |
| **688** | 50 | 4.0 | 3" | Wall / Ceiling |
| **689** | 60 | 5.5 | 3" | Wall / Ceiling |

HVI® 2100 CERTIFIED



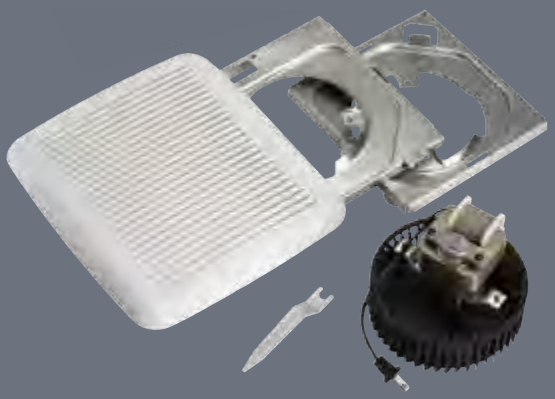
**Project Packs.** Convenient options for today's contractor. Broan "H" Packs include rough-in housings only, making multi-unit installation more convenient. "F" Packs allow motor/blower and grille assemblies to be ordered separately, nearer project completion, to help avoid losing, damaging or having to store components.

## 690 BATH FAN UPGRADE KIT

The Broan bath fan upgrade kit lets you convert your old bath fan to a brand new unit in just 10 minutes. Improve performance, reduce the sound level, and upgrade the appearance of your economy fan in minutes.

- Cut sound levels up to 50%
- Boost air movement up to 20%
- 10 minute installation
- 60 CFM, 3.0 Sones
- Modern white grille
- No special tools needed

690



Included: Grille; two motor plates, depending on your fan model; wrench; quieter plug-in fan motor



1. Remove old grille



3. Attach new fan and new motor plate. Install into existing housing



2. Remove old fan assembly



4. Install new grille

### Measure your existing fan housing to ensure proper fit

| For use only with these bath fan models.* | | Measurements | Yes | No |
|---|---|---|---|---|
|  | NuTone 693, 695, 696N | 7½" x 7¼" | • | |
| | | 8" x 7¼" | • | |
|  | Broan 670, 671, 688, 689 | 7½" x 7¼" | • | |
| | | 8" x 8¼" | | • |
|  | Nautilus N671, N688 | 7½" x 7¼" | • | |
| | | 8" x 8¼" | | • |

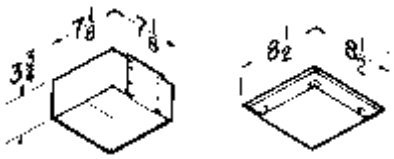
*No other usage has been tested or authorized by Broan-NuTone LLC.

### Broan 690 Upgrade Kit replaces the models below

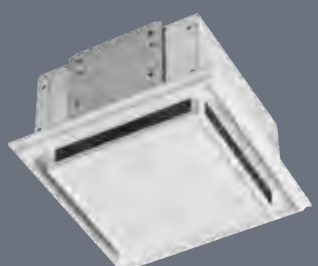
| If your grille looks like this: | The fan is very likely one of these models: | Housing dimensions: |
|---|---|---|
|  | NuTone 693, 695, 696N | 7½" x 7¼" or 8" x 7¼" |
|  | Broan 670, 671, 688, 689<br>Nautilus N671, N688 | 7½" x 7¼"<br>Not compatible with 8" x 8¼" |

## 682 DUCT FREE FAN

- Patented, fast snap-in metal housing installation
- Fan circulates air past replaceable activated charcoal filter
- Fits 2" x 4" ceiling or wall construction



682



| Model | CFM | Sones | Lighting | Notes |
|---|---|---|---|---|
| **682** | — | — | — | Duct-free Circulation |
| **S97009563** | — | — | — | Replacement filter |

**Duct-free.** This easy-to-install solution is ideal where air circulation is needed but ducting is impossible or impractical. Use it as a solution for half baths or rooms where humidity isn't a concern.

## QUALITY VENTILATION THAT COMPLEMENTS YOUR DÉCOR.

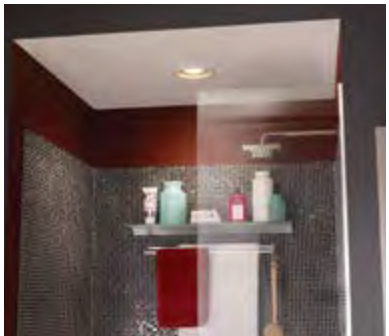
Every room needs ventilation, from closets to bedrooms to baths. But adding a fan/light combination that complements or enhances the room décor has been challenging. That's why the Broan Architectural products are perfect. Imagine a fan/light combination fixture that unobtrusively blends into the ceiling. Or a statement fan/light with a stunning LED perimeter glow that showcases your unique décor. The Architectural series helps you meet your decorating challenges without compromising your style.

# VENTILATION THAT MOVES IN RATHER



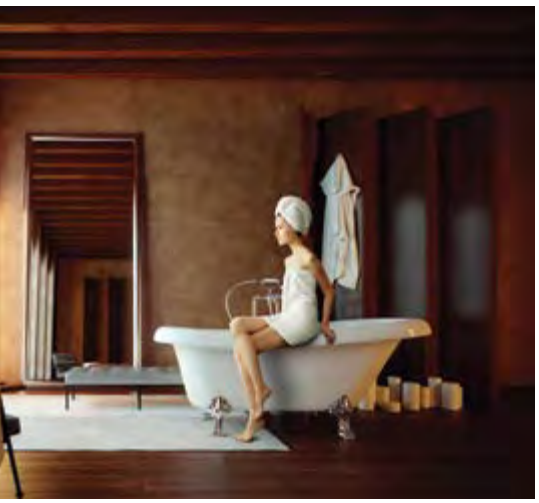


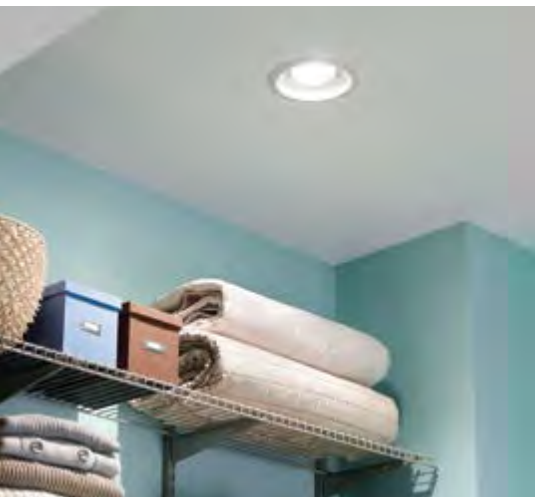






# THE AIR,
# MOVING WAYS.











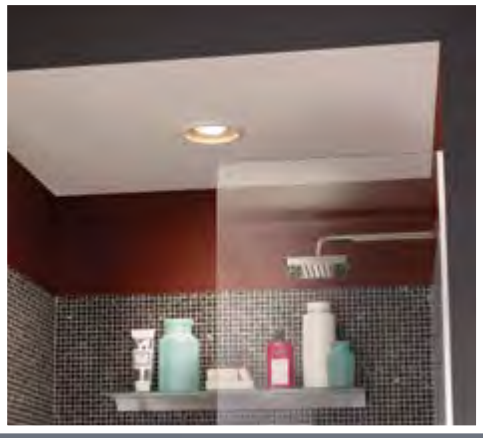
## 744 SERIES RECESSED FAN/LIGHT FEATURES

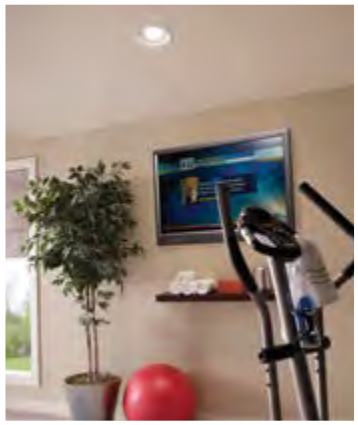
- High efficiency centrifugal fan
- 70 CFM at 1.5 sones
- Trim matched to designs of major recessed light manufacturers
- Put multiple units in larger rooms
- Model 744 uses a standard A19 base, 75 watt maximum (R30 or BR30 for standard applications)
- Models 744FL and 744SFL include a 16 watt, GU24 based, R30 shaped CFL bulb (included)
- Model 744LED includes a 10 watt, GU24 based LED bulb (included)
- All models UL Listed for use over bathtub or shower when connected to a GFCI protected branch circuit. Model 744 requires a PAR30L or PAR30LN type bulb (not included)
- 6 7/8" high housing appropriate for new construction and 2" x 8" ceiling joists
- 4" round duct connector
- Optional wall control switches available
- Type IC, sealed housing
- Not for use over cooking surfaces

**Humidity Sensing Model 744SFL Features**

- SensAire® technology detects the rapid rise in humidity and automatically turns the fan on and off
- Humidity is sensed at the ceiling level
- Easily accessible sensitivity adjustment
- Easy-to-set 5–60 minute shut-off timer

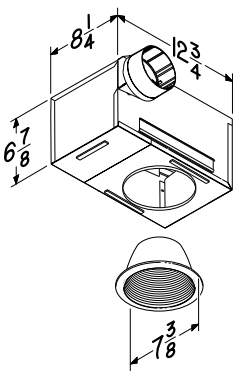




SensAire® technology behind the trim detects changes in humidity and automatically turns the fan on and off

*YOU'D NEVER KNOW*
*IT'S A FAN, AND THAT'S THE POINT*




| Model | CFM | Sones | Lighting | Humidity Sensing | Ducting | ENERGY STAR® |
|---|---|---|---|---|---|---|
| **744** | 70 | 1.5 | 75W MAX | — | 4" | — |
| **744FL** | 70 | 1.5 | 16W Fluor. | — | 4" | Yes |
| **744LED** | 70 | 1.5 | 10W LED | — | 4" | Yes |
| **744SFL** | 70 | 1.5 | 16W Fluor. | Yes | 4" | Yes |

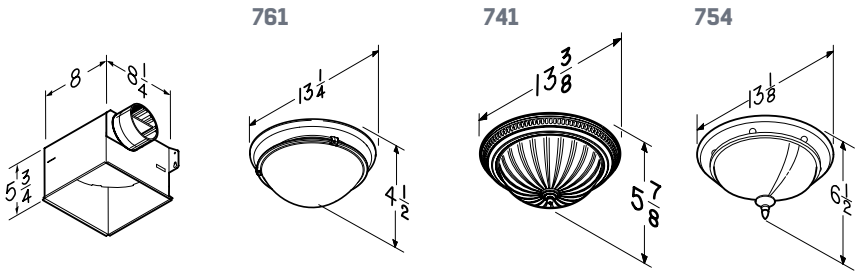
ENERGY STAR® fans use 70% less energy, on average, than standard models and may qualify for local utility rebates

**Broan took recessed lighting a step further by incorporating powerful, quiet ventilation in the same design.** These fan/lights disappear into the ceiling and match perfectly with other recessed lights. Models 744, 744FL and 744LED are practical ventilation solutions for any room in the house, such as the utility room, kitchen or high-traffic family room—any space you wish to keep fresh and comfortable. In the bath, Model 744SFL starts automatically when a rapid rise in humidity is detected. You'll never forget to turn the fan on again.

## DECORATIVE FAN/LIGHT FIXTURE FEATURES

- 70 or 80 CFM at 2.5 or 3.5 Sones
- Corrosion-resistant finishes
- Beautifully styled glass globes
- Use two 60-watt incandescent candelabra bulbs (not included)
- Plug-in lighting fixture and permanently lubricated motor
- Polymeric blower wheel
- Not UL approved for use over bathtubs or showers
- Sturdy, keyholed mounting brackets for quick, accurate installation
- Fits 2" x 6" ceiling construction
- Tapered, polymeric 4" round duct fitting for easy, positive duct connection and no metallic clatter
- Type IC



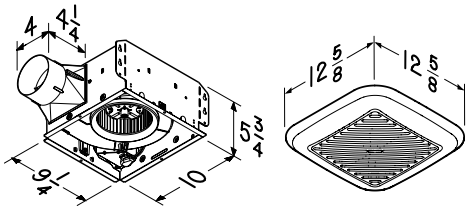

| Model | CFM | Sones | Lighting | Bulb Type | Finish | Glass |
|---|---|---|---|---|---|---|
| **761BN** | 80 | 2.5 | 2-60W | Candelabra | Brushed Nickel | White Opal |
| **761RB** | 80 | 2.5 | 2-60W | Candelabra | Oil-Rubbed Bronze | Ivory Alabaster |
| **761WHA** | 80 | 2.5 | 2-60W | Candelabra | White | White Alabaster |
| **741SN** | 70 | 3.5 | 2-60W | Standard | Satin Nickel | Frosted |
| **754RB** | 70 | 3.5 | 2-60W | Candelabra | Oil-Rubbed Bronze | White Alabaster |

**A beautiful balance of elegance and performance.**
Now you can ventilate while adding quiet elegance and exceptional design to any room in your home with beautifully styled glass globe lighting. These fan/lights are available in corrosion-resistant decorator finishes.

## FAN WITH SOFT SURROUND™ TECHNOLOGY FEATURES

- LED lasts up to 25,000 hours, nearly eliminating the hassle of bulb replacement
- 9 watt lighting for extreme energy efficiency
- Bright 800 lumen integrated LED light engine for energy efficiency
- 3000K color temperature provides bright, soft light ideal for bathrooms
- Minimum 80 Color Rendering Index (CRI) which meets ENERGY STAR® requirements
- Fits in 2" x 6" ceiling construction
- 110 CFM for strong air movement
- 1.5 sones for quiet operation
- ENERGY STAR® certified
- 4" duct connector balances powerful, quiet operation with easy installation
- UL listed for use over bathtubs and showers when connected to a GFCI protected branch circuit
- Type IC for use in direct contact with thermal insulation




| Model | CFM | Sones | Lighting | HVI | Ducting | ENERGY STAR® |
|---|---|---|---|---|---|---|
| **791LEDM** | 110 | 1.5 | 9W LED | Yes | 4" | Yes |

ENERGY STAR® fans use 70% less energy, on average, than standard models and may qualify for local utility rebates

*Patent pending





EVERY ROOM CAN BE MORE



COMFORTABLE WITH A LITTLE VEN

**THERE'S A BROAN VENTILATION SOLUTION FOR EVERY ROOM IN YOUR HOME.** Without doubt, every room needs ventilation. That's why our specialty lines deliver clean, fresh air where you need it most–including your bathrooms, laundry room, recreation room, workshop or nursery. Look to our room-to-room, wall/ceiling mount, through-wall or vertical discharge utility fans for powerful spot ventilation. Or, install our remote mounted in-line ventilation system for a quiet whole-house solution. Our recessed fan/lights perfectly match other recessed fixtures, including humidity sensing options that start automatically when a rapid rise in humidity is detected. Elegant, simple, practical and powerful. Exactly what you've come to expect from Broan.

SENSONIC™
YOUR MUSIC OUT OF SIGHT

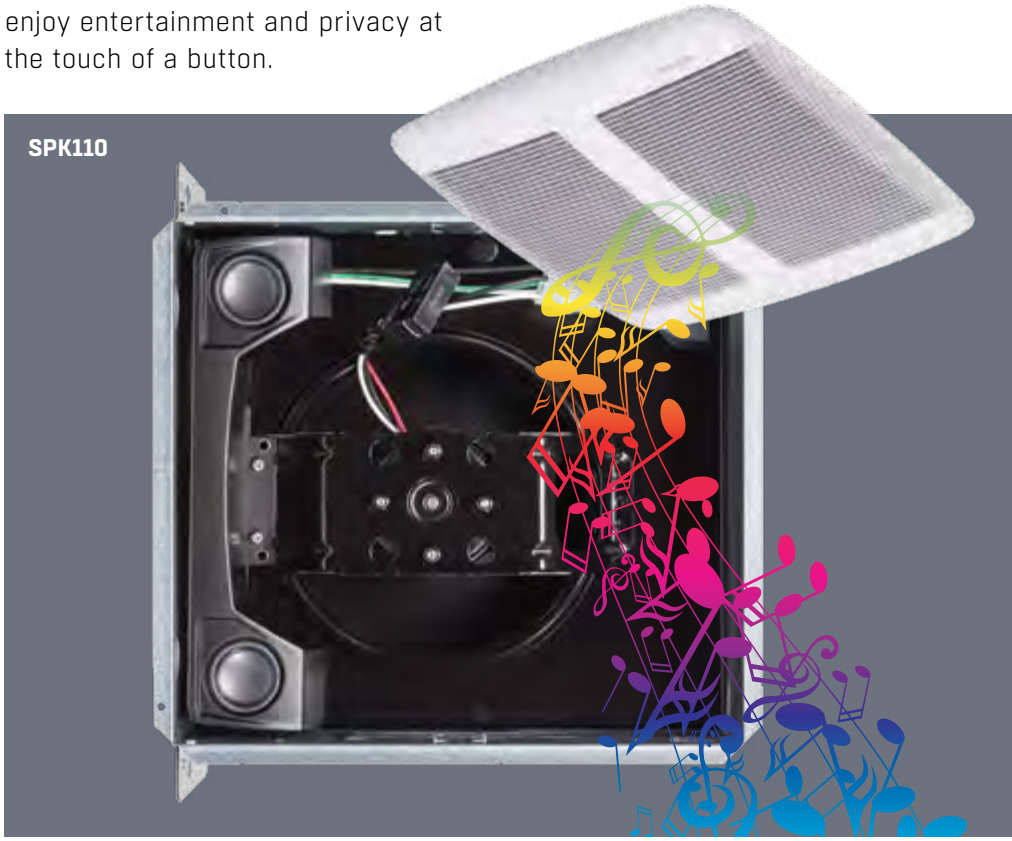
# VENTILATION FOR THE MUSIC FAN

**Quiet Ventilation Fan with Quality Wireless Speakers.**

It's your music—out of sight. Unlike wireless speakers that require counter space, Sensonic™ speakers with *Bluetooth*® wireless technology fill your room with rich sound from above. From hard rock to news talk, play any audio through the dual high-fidelity speakers and enjoy entertainment and privacy at the touch of a button.

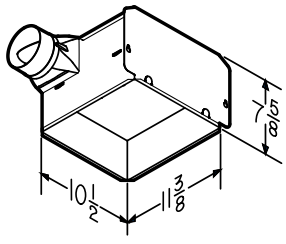


TILATION.




## SENSONIC FEATURES

- Dual High-Fidelity Sensonic™ Speakers
- Brilliant audio performance concealed behind your fan grille
- Play any audio through most *Bluetooth*®-enabled devices
- Effective, extremely quiet ventilation clears humidity and odors quickly
- ENERGY STAR® certified
- UL Listed for use over bathtub or shower when installed with a GFCI protected branch circuit
- Type IC for use in direct contact with thermal insulation
- Fits 2"x 8" ceiling construction
- Includes unique spacer for easy I-joist mounting
- Mounts between joists with optional QTHB1 Hanger Bar Kit (sold separately)




**SPKACC**



Speaker also available as an accessory. Quickly and easily add a high-fidelity Sensonic™ speaker to most Broan or NuTone QT Series Ventilation Fans

| Model | Description | CFM | Sones | Ducting |
|---|---|---|---|---|
| **SPK110** | Fan with Speaker | 110 | 1.0 | 4" |
| **SPKACC** | Speaker Accessory | — | — | — |

Bluetooth®

The *Bluetooth*® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Broan-NuTone LLC is under license.

HVI® 2100 CERTIFIED

## THROUGH-WALL FANS

- Housing adjusts to fit walls from 4½"–9½" thick
- Specially designed polymeric fan blade
- Built-in damper minimizes backdrafts for energy efficiency
- Paintable polymeric grilles
- Accessorize with wall switch or variable speed wall control

**508** (10"), **509/509S** (8")
- 509S: features an integral ON/OFF rotary switch–no wall switch to wire

**512M**
- 6" Through-Wall

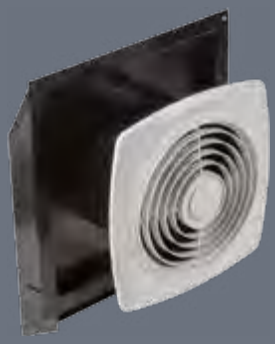
- Louvered exterior wall cap with built-in bird screen
- 6" diameter flexible aluminum duct included

**12C MOTORDOR®**
- 10" Through-Wall
- Separate motor opens and closes the vent door automatically

## WALL/CEILING-MOUNT, SIDE DISCHARGE FANS

**502, 503**
- Installs easily between ceiling joists or wall studs
- Built-in damper prevents backdrafts
- Fits 3¼" x 10" duct

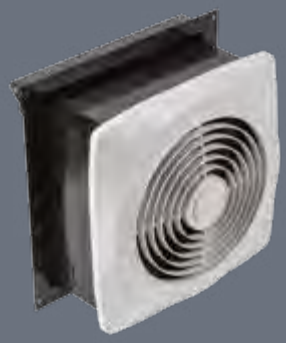
**508 | 509 | 509S**



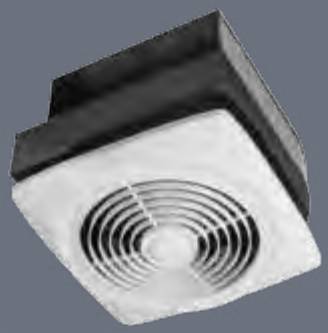
**512M**



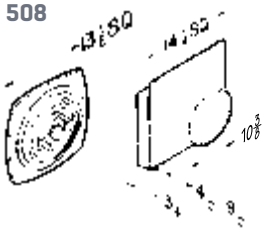
**12C MOTORDOR®**



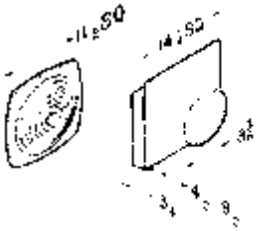
**502 | 503**



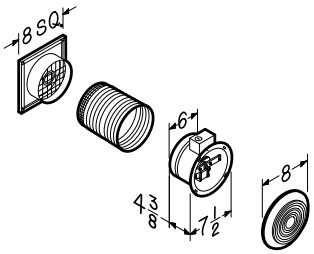
**508**



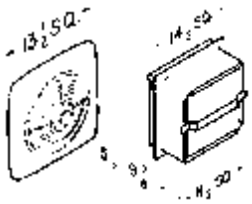
**509/509S**



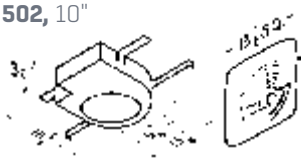
**512M**



**12C Motordor®**



**502,** 10"



**503,** 8"



| Model | CFM | Sones | Diameter | Sizing Specifications |
|---|---|---|---|---|
| **506** | 470 | 8.0 | 10" | Fits 4½"–9½" thick walls |
| **507** | 250 | 7.0 | 8" | Fits 4½"–9½" thick walls |
| **510** | 380 | 6.5 | 10" | Fits 3"–5½" thick walls |
| **511** | 180 | 4.5 | 8" | Fits 3"–5½" thick walls |
| **502** | 270 | 8.0 | 10" | Fits 3¼" x 10" duct |
| **503** | 160 | 5.0 | 8" | Fits 3¼" x 10" duct |
| **508** | 270 | 6.0 | 10" | Fits 4½"–9½" thick walls |
| **509/509S** | 180 | 6.5 | 8" | Fits 4½"–9½" thick walls<br>509S Integral ON/OFF Rotary Switch |
| **512** | 90 | 3.5 | 6" | Fits up to 5⅛" thick walls |
| **512M** | 70 | 3.5 | 6" | Fits up to 5¼"–10" thick walls |
| **12C Motordor®** | 360 | 8.0 | 10" | Fits 5½"–9⅞" thick walls |
| **504** | 350 | 6.5 | 10" | Fits 10" round duct |
| **505** | 180 | 6.5 | 8" | Fits 8" round duct |
| **673** | 60 | 4.5 | 6" | Fits 6" round duct |

## VERTICAL DISCHARGE

- Galvanized steel housing installs easily between ceiling joists
- Steel mounting brackets with keyhole slots for fast installation

**504**
- 10" vertical discharge
- Fits 10" round duct–use Model 472 transition/ damper (available separately) for 8" round duct (performance will be reduced)

**505**
- 8" vertical discharge with built-in damper
- 8" fan, 8¼" diameter housing

**673**
- 6" vertical discharge with built-in damper
- 6" paintable fan, spin-on, white polymeric grille

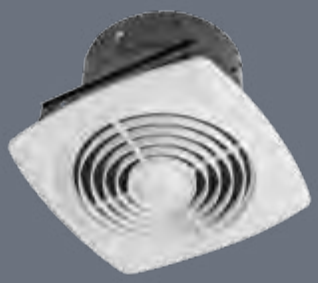
## CHAIN-OPERATED UTILITY FANS

- Pull-chain opens the door and starts fan
- Housing adjusts to fit walls from 4½"–9½" thick
- Specially designed polymeric fan blade
- Housing features foam-insulated door for energy efficiency

**506**
- 10" fan (10 3/8" diameter sleeve)

**507**
- 8" fan (8 3/8" diameter sleeve)

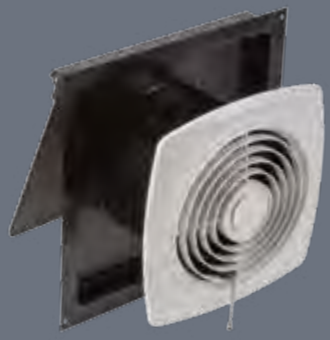
**504 | 505**



**673**



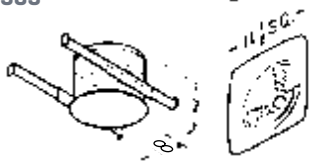
**506 | 507**



**504**



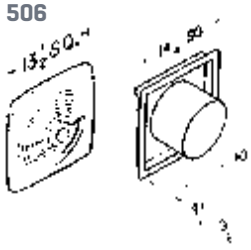
**505**



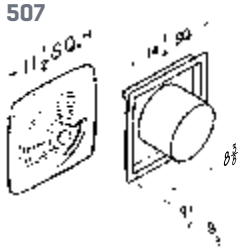
**673**



**506**



**507**



## ROOM-TO-ROOM FANS

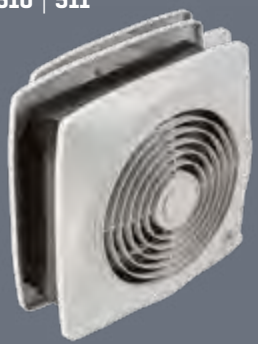
Room-to-Room ventilators provide quick solutions where more ventilation is needed—without installing new ductwork.

- Built-in variable speed control
- Easy installation through wall 3"–5½" thick
- Permanently lubricated motor
- Paintable white polymeric grilles
- Not for use in kitchens

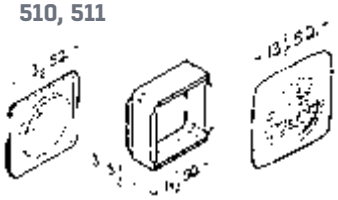
**510,** 10"; **511,** 8"

**512**
- 6" Room-to-Room
- Use 57W or 57V variable speed control separately

**510 | 511**



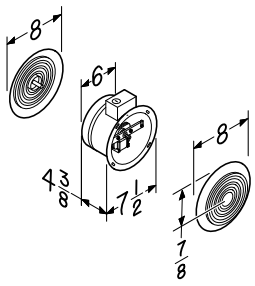
**510, 511**



**512**



**512**



## MULTI- AND SINGLE-PORT IN-LINE VENTILATORS FEATURES

- Energy-efficient, permanently lubricated motors
- High pressure centrifugal blowers easily accommodate long duct runs
- Designed for quick, easy installation
- HVI certified and AMCA licensed
- Suitable for intermittent or continuous ventilation applications
- Removable panels offer easy access to the motor without disturbing ductwork
- Plug-in blower simplifies wiring

**Multi-Port In-Line Ventilators**

- Ventilate multiple bathrooms or other rooms simultaneously
- Great solution for large, open spaces
- Install in virtually any orientation
- 6" round outlet; 4" round inlets (two inlet duct covers included)
- Use 2, 3 or all 4 inlet ports

**Single-Port In-Line Ventilators**

- Ventilate any room in virtual silence
- 6" round outlet and inlet for easy duct connections

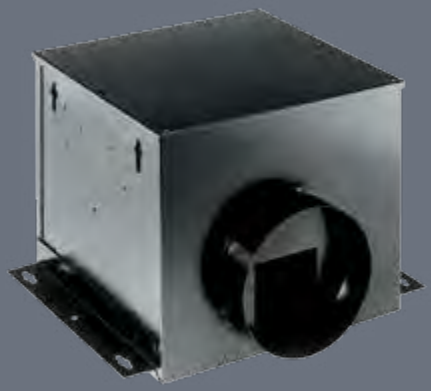
**MP100 | MP140 | MP200**



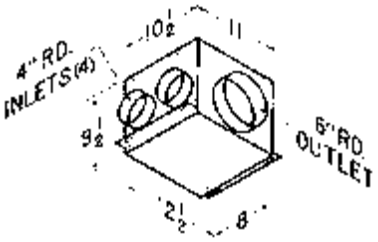
**MP280**



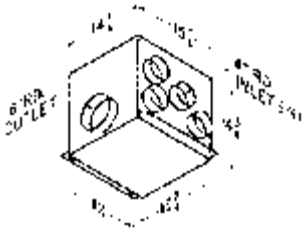
**SP100 | SP140 | SP200**



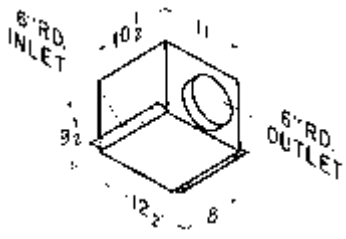
**MP100, MP140, MP200**




**MP280**



**SP100, SP140, SP200**



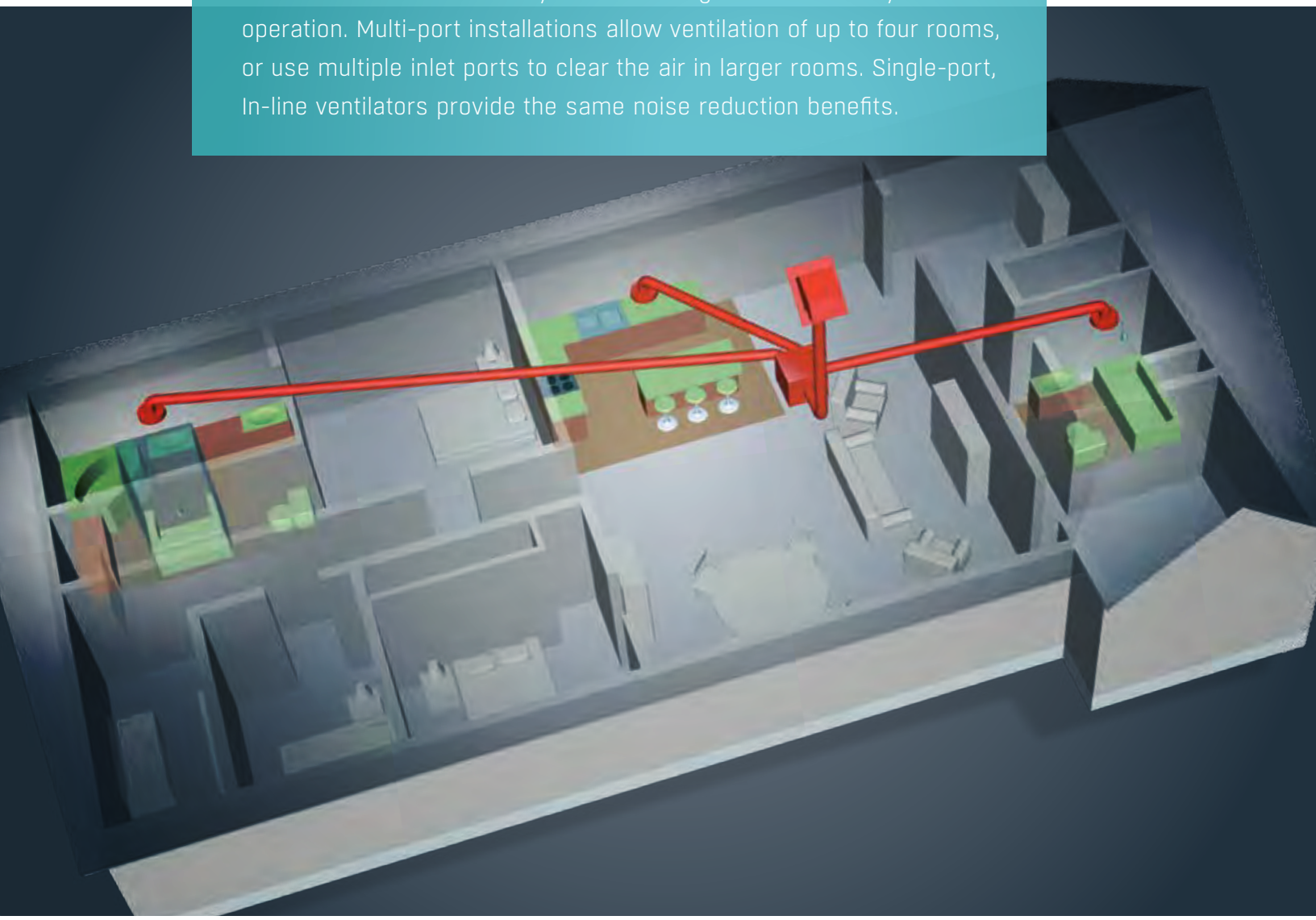

| Multi-Port | CFM | Sones | Notes |
|---|---|---|---|
| **MP100** | 110 | 1.0 | Four inlets |
| **MP140** | 150 | 1.5 | Four inlets |
| **MP200** | 210 | 2.0 | Four inlets |
| **MP280** | 290 | 3.0 | Four inlets |
| **SP100** | 110 | 1.0 | One inlet only |
| **SP140** | 150 | 1.5 | One inlet only |
| **SP200** | 210 | 2.0 | One inlet only |

HVI rated air flow at 0.2" static pressure. Sound test procedures are similar to HVI tests for other exhaust fans.

**Remote Mounted In-Line Ventilation Fans.**
Quiet and efficient residential solutions. The concept is simple: mount a high-performance ventilator in an out-of-the-way spot and you get the power with virtually no sound. Install the housing in the attic or the basement, wherever it's most convenient and discrete.

## WITH A MULTI-PORT, IN-LINE VENTILATION SOLUTION

the blower is mounted away from the living area for virtually silent operation. Multi-port installations allow ventilation of up to four rooms, or use multiple inlet ports to clear the air in larger rooms. Single-port, In-line ventilators provide the same noise reduction benefits.



**CVG4 | CVG6**



**Room Inlets**

- Models available for 6" (CVG6) or 4" (CVG4) round duct
- Install in ceiling or wall
- Paint to match room décor
- Available in six packs only

## Accessories

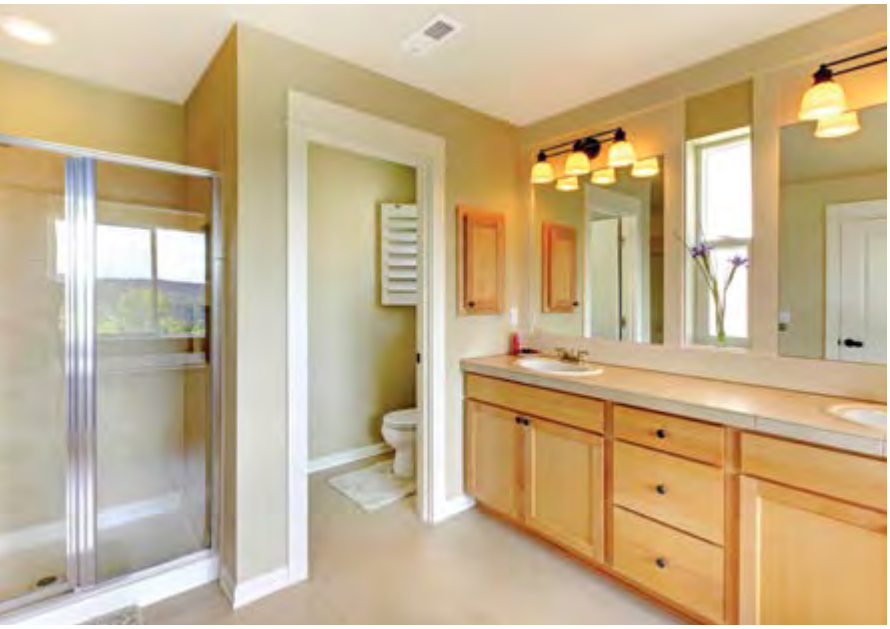
| Model | Description | Ducting/Size | Notes |
|---|---|---|---|
| **CVG4** | Grille Intake | 4" | Round Grille |
| **CVG6** | Grille Intake | 6" | Round Grille |
| **CVLD4** | Sleeve | 4" | Sleeve with damper |
| **CVLD6** | Sleeve | 6" | Sleeve with damper |
| **CVL4** | Sleeve | 4" | Sleeve without damper |
| **CVL6** | Sleeve | 6" | Sleeve without damper |
| **FY6** | Y Adapter Only | 6" x 6" x 6" | |



# INSTANT HEAT, RIGHT WHEN YOU NE
# AND ONLY WHERE YOU

## POWERFUL HEATING, LIGHT AND VENTILATION AT THE TOUCH OF A SWITCH.

No matter where you live your house can become chilled. Maybe it's early fall before the furnace is on, or maybe the cool desert nights mean colder rooms. And there's certainly one room you never want to be chilly—the bathroom. Whether it's taking a morning shower, or relaxing in a whirlpool at the end of a long day, your family appreciates a warm, comfortable bathroom. Broan heater/fan/lights are the perfect solution. You have instant heat to quickly warm up the room, a quiet ventilation fan to remove excess humidity and a convenient light–all in one fixture. Each one can be operated separately, or they can be used simultaneously when needed, no furnace required.





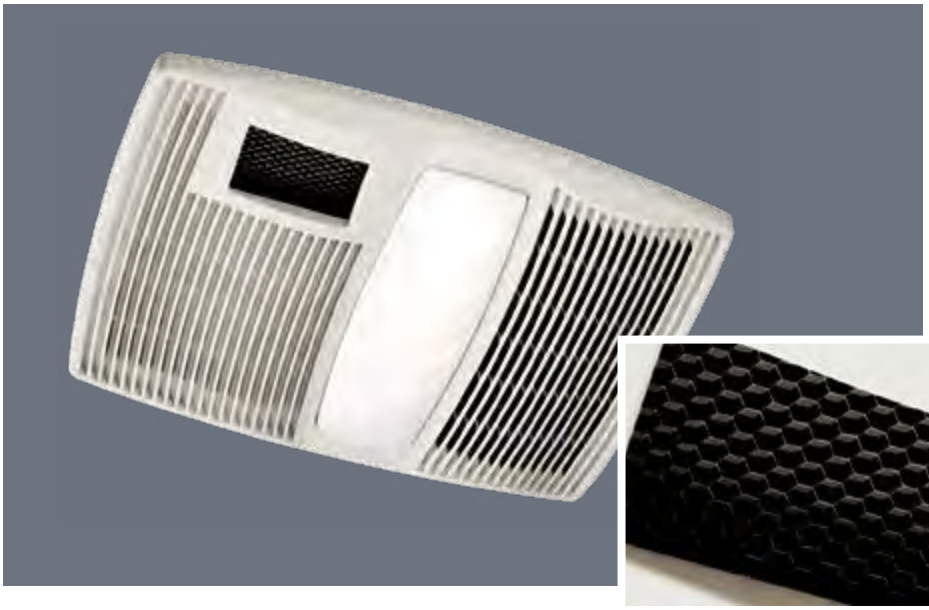


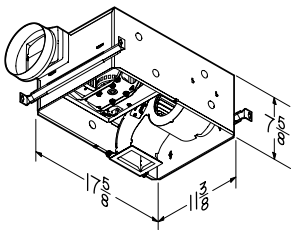


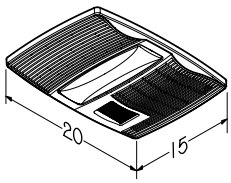
ED IT.
WANT IT.

## QT SERIES FEATURES

- Efficient PowerHeat™ heater design
- Choice of standard A19 base (2, 60 watt) lighting (bulbs not included) or energy-efficient 36 watt GU24 fluorescent (bulbs included)
- Fan motor is engineered for continuous operation
- HVI Certified
- Type IC
- Requires a dedicated 20 amp circuit
- Switches sold separately
- 7 watt night-light bulb not included






PowerHeat™ is a Broan design that maximizes heat output per watt. With the heater element close to the forced air exit grille, the internal components are not heated. Heat is delivered into the room and does not escape into the ceiling or attic space.



## Heater/Fan/Light

| Model | CFM | Sones | Bath Sq Ft. | Lighting/ Night Light | Heater Watts | Ducting |
|---|---|---|---|---|---|---|
| **QTX110HL** | 110 | 0.9 | 100 | Std. A19 Base (2- 60W)** / 7W** | 1500 | 6" |
| **QTX110HFLT** | 110 | 0.9 | 100 | 36W Fluorescent (2- 18W)* / 7W** | 1500 | 6" |

*Bulbs included
**Bulbs not included

HVI CERTIFIED

## DIRECTIONALLY ADJUSTABLE HEATER/FAN LIGHT FEATURES

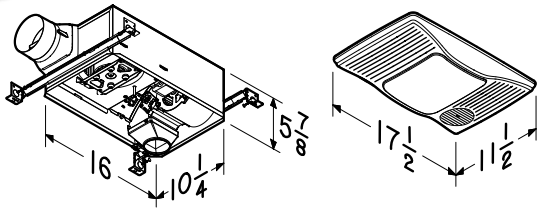
- Heater/Fan/Light brings convenient, comforting warmth to your bathroom
- Quiet, high-output heater with exclusive directionally adjustable design (see below)
- 4" ducting for new construction or retrofit
- Multi-function wall switches sold separately
- Choice of Standard A19 base or energy-efficient 27 watt GU24 (bulb included) fluorescent lighting
- Fan motor is engineered for continuous operation
- HVI Certified
- Type IC
- Requires a dedicated 20 amp circuit
- Fits 2" x 6" ceiling construction

**100HL | 100HFL**






**100HL, 100HFL**




## Heater/Fan/Lights

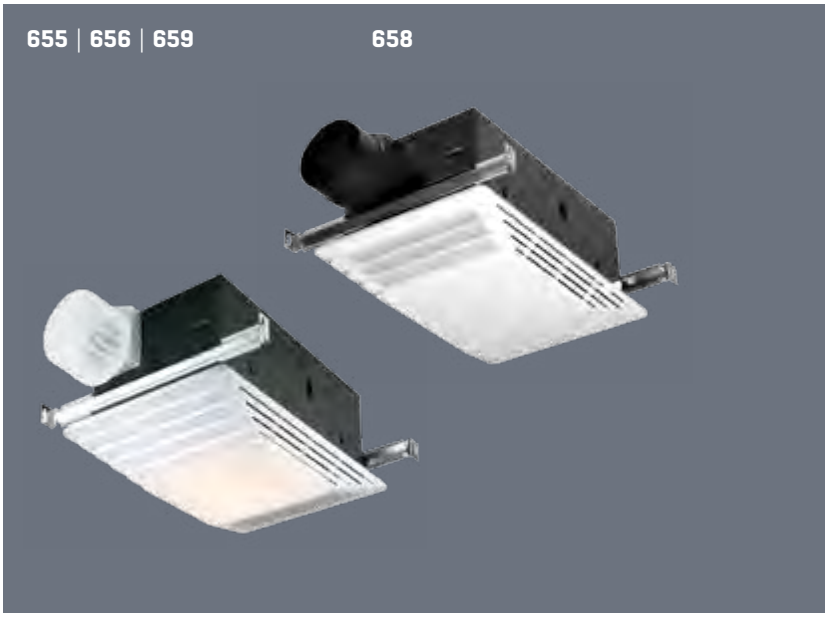
| Model | CFM | Sones | Bath Sq Ft. | Lighting | Heater Watts | Ducting |
|---|---|---|---|---|---|---|
| **100HL** | 100 | 2.0 | 90 | Std A19 Base | 1500 | 4" |
| **100HFL** | 100 | 2.0 | 90 | 27W GU24 Fluorescent | 1500 | 4" |

**Broan Directionally-adjustable Heater/Fan/Lights.**
With our 360° directionally-adjustable heat outlet, you're assured the heat will end up exactly where you need it.

## HEATER/FAN & HEATER/FAN/LIGHT FEATURES

- Designer white polymeric grilles complement virtually any décor
- 1300 watt heaters
- Fan, light and heater function independently or together
- Type IC
- Fits 2" x 6" ceiling construction
- Two- or three-function wall controls are available separately
- **655:** 20-amp circuit required
- **659:** 15-amp circuit required
- **656:** Heater/Light Only, 15-amp circuit required
- **658:** Heater/Fan, 15-amp circuit acceptable

**655 | 656 | 659** **658**



**655, 656, 659 Grille** **658 Grille**




## Heaters & Heater Fans

| Model | CFM | Sones | Lighting | Ducting | Heater |
|---|---|---|---|---|---|
| **655** | 70 | 4.0 | Std A19 Base | 4" | 1300W |
| **656** | — | — | Std A19 Base | — | 1300W |
| **658** | 70 | 4.0 | No Light | 4" | 1300W |
| **659** | 50 | 2.5 | Std A19 Base | 4" | 1300W |

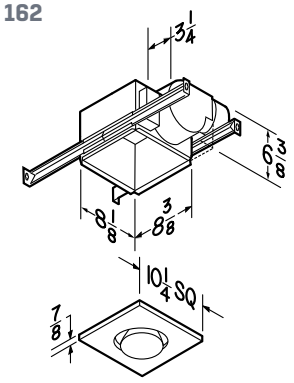
## BULB HEATER/FAN FEATURES

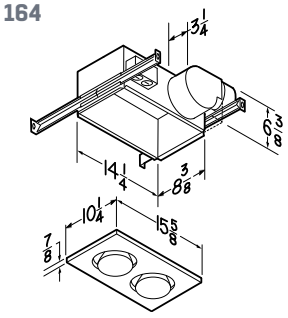
- Quiet, highly efficient polymeric blower wheels
- Polymeric dampers prevent backdrafts and eliminate mechanical noise
- Polymeric 4" round duct connectors with tapered sleeves simplify ducting
- Operate fan and heater independently or together
- Attractive white polymeric grilles
- Compact steel housings with adjustable mounting brackets with keyhole slots that span up to 24"
- 250 watt R40 or BR40 size infrared bulbs (not included)
- Type IC, UL Listed for 60°C wiring (retrofits)
- **162:** One-Bulb Heater/Fan
- **164:** Two-Bulb Heater/ Fan, Two-function control (available separately)

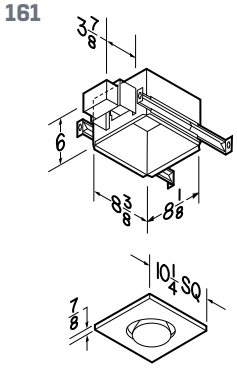
## ONE OR TWO-BULB HEATERS—NO FAN

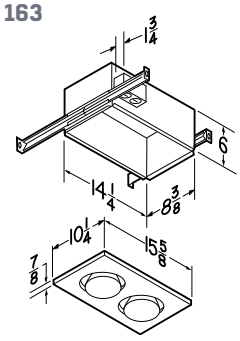
- Infrared bulbs deliver energy-saving warmth
- Get instant comfort in the bathroom without turning up the central thermostat
- 250 watt R40/BR40 size infrared bulbs (not included)
- Attractive, white polymeric grilles
- Compact steel housings
- Adjustable mounting brackets with keyhole slots span up to 24"
- **161:** One-Bulb Heater, UL Listed for 75°C wiring
- **163:** Two-Bulb Heater, Type IC




**Bulb Heater Fans.** Silent warmth and superior ventilation. Trust Broan Bulb Heater/Fans and Bulb Heaters for energy-saving warmth and instant comfort without ever having to touch your central thermostat. These units deliver superior performance and excellent ventilation in a compact package.

### Bulb Heater/Fan & Bulb Heaters

| Model | CFM | Sones | Bulb Watts |
|---|---|---|---|
| **162**[1] | 70 | 4.0 | 250 |
| **164**[1] | 70 | 4.0 | 500 |
| **161*** | — | — | 250 |
| **163** | — | — | 500 |

*NOT IC RATED
[1] HVI certified



# PULL THE HEAT OUT OF YOUR ATTIC.
# PUT MONEY BACK IN YOUR WALLET.



**Prevent heat and moisture build-up.** In summer, attics can reach 150°F or more, warming your living area, increasing the air-conditioning load, and adding to your energy bill. In winter, ice dams can result, and moist air can condense causing mildew, rotting wood and wet insulation. Year-round attic ventilation ensures a cooler, drier attic that can extend roof life by preventing rot, premature aging and shingle distortion. A cooler attic extends the life of your air conditioner and lowers air conditioning expense.

**How Much Ventilation Do You Need?** Effective ventilation requires air to exit at or near the peak of the roof with replacement air drawn through soffit venting and louvers. The Home Ventilating Institute (HVI) recommends at least 10 air changes hourly to equalize temperature. Determine your attic ventilation needs below, or try the **Attic Ventilation Calculator at broan.com.**

## DETERMINE YOUR VENTILATION NEEDS

**1.** Calculate the volume of your attic, in cubic feet, depending on the style of your home's roof.

**Attic Volume for Gable Roof:** Volume = Length x Width x Height x ½

**Attic Volume for Hip Roof:** Volume = Length x Width x Height x ⅓

**2.** Attic Volume x 10 Air Changes per Hour = Total Cubic Feet per Hour of ventilation recommended.

**3.** Total Cubic Feet per Hour 60 Minutes/ Hour = Cubic Feet Per Minute (CFM) of Ventilation Recommended.

**Example:** Average Gable Attic Volume = 58¾' x 29' x 7¼' x ½ = 6,176 Cubic Feet 6,176 Cubic Feet x 10 Air Changes/Hour = 61,760 Cubic Feet/Hour ÷ 60 Min./Hour = 1,029 CFM

**4.** Replacement air is drawn through vents in your soffit. To determine the minimum soffit vent area required (in square inches) multiply the total CFM of your powered ventilator(s) by 0.48. This number is the total square inches of soffit venting required by your powered ventilator(s).

**Example:** 1,029 CFM x 0.48 = 494 Square Inches of soffit vent area recommended

## ACCESSORIES

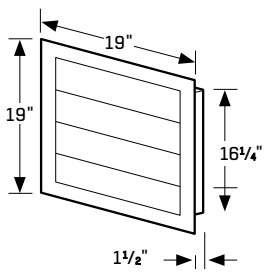
**433**



For use with Broan Models 353, 35316, 345GOBK or 345GOWW.

### 433 Automatic Shutter for Gable Mount Attic Ventilators

- Feature counter-balanced aluminum vanes that automatically open and close when the ventilator turns on and off
- Better air flow than stationary attic louvers
- Extruded aluminum frame fits flush with outside wall
- Weather-tight closure
- Easy to install




### DH100W Humidistat



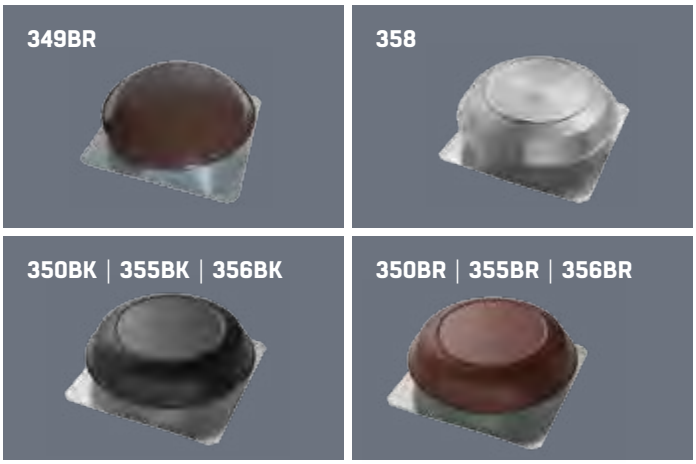
- Sold separately for use with all Broan powered attic ventilators. Humidistats automatically turn on the fan when moisture in the attic is detected

### Model 73

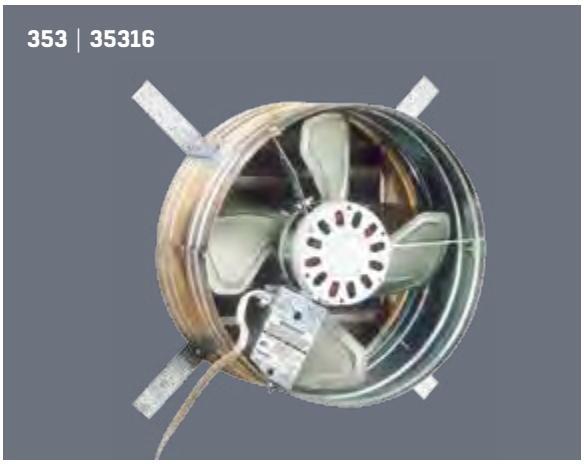


- High Temperature Cut-off sold separately for use with all Broan powered attic ventilators. High temperature controls automatically turn off the ventilator at 204°F
- For additional switches see page 52–53

**ROOF MOUNT, POWERED ATTIC VENTILATION**




**GABLE MOUNT, POWERED ATTIC VENTILATION**




## Powered Attic Ventilation Specifications

| Model | Attic Sq Ft | AMPs | CFM* | RPM | Height | Diameter | Dome Material | Color |
|---|---|---|---|---|---|---|---|---|
| **Roof Mount** | | | | | | | | |
| **349BR** | Up to 1400 | 4 | 1000 | 1050 | 9" | 24½" | Painted Steel | Dark Brown |
| **350BR \| 350BK** | Up to 1500 | 3.6 | 1050 | 1000 | 8" | 23¼" | PVC | Brown/Black |
| **355BR \| 355BK** | Up to 1715 | 4.3 | 1200 | 1050 | 8" | 23¼" | PVC | Brown/Black |
| **356BR \| 356BK** | Up to 2285 | 8.0 | 1600 | 1500 | 8" | 23¼" | PVC | Brown/Black |
| **358** | Up to 1715 | 4.3 | 1200 | 1050 | 8" | 23¼" | Aluminum | Silver |
| **Gable Mount** | | | | | | | | |
| **353†** | Up to 1460 | 3.4 | 1020 / 760** | 1030 | — | — | — | — |
| **35316†** | Up to 2285 | 3.9 | 1600 / 1160** | 1420 | — | — | — | — |

# DETERMINING THE CFM* REQUIREMENTS FOR YOUR ATTIC

## Gable Mount Ventilators

| Roof Pitch | 8/12 or Less | | 9/12 | | 12/12 | | 15/12 | |
|---|---|---|---|---|---|---|---|---|
| | Standard Louver | 433 Louver | Standard Louver | 433 Louver | Standard Louver | 433 Louver | Standard Louver | 433 Louver |
| **Light Colored Roof Square Footage** | | | | | | | | |
| **353** | 1085 | 1460 | 1015 | 1360 | 570 | 765 | 355 | 385 |
| **35316** | 1658 | 2285 | 1549 | 2135 | 870 | 200 | 559 | 770 |
| **Dark Colored Roof Square Footage** | | | | | | | | |
| **353** | 950 | 1275 | 880 | 1185 | 500 | 670 | 315 | 425 |
| **35316** | 1442 | 1985 | 1347 | 1855 | 757 | 1055 | 486 | 670 |

Numbers in charts are attic square footage that fan can ventilate.

## Roof Mount Ventilators

| Roof Pitch | CFM | 8/12 or Less | 9/12 | 12/12 | 15/12 |
|---|---|---|---|---|---|
| **Light Colored Roof Square Footage** | | | | | |
| **349BR** | 1000 | 1490 | 1180 | 782 | 501 |
| **350BR, 350BK** | 1050 | 1500 | 1399 | 790 | 508 |
| **355BR, 355BK** | 1200 | 1715 | 1600 | 900 | 575 |
| **356BR, 356BK** | 1600 | 2285 | 2135 | 1200 | 770 |
| **358** | 1200 | 1715 | 1600 | 900 | 575 |
| **Dark Colored Roof Square Footage** | | | | | |
| **349BR** | 1000 | 1290 | 1200 | 684 | 427 |
| **350BR, 350BK** | 1050 | 1304 | 1219 | 694 | 430 |
| **355BR, 355BK** | 1200 | 1495 | 1390 | 790 | 505 |
| **356BR, 356BK** | 1600 | 1985 | 1855 | 1055 | 670 |
| **358** | 1200 | 1495 | 1390 | 790 | 505 |

† Model 433 Automatic Shutter Accessory sold separately. See page 46.
*Exhaust capacity HVI certified @ .03" static pressure.
**Higher CFM with Model 433 shutter. Lower CFM with standard wood louvre.
The Home Ventilating Institute (HVI) recommends 1 sq. ft. of open air inlet per 300 CFM of fan capacity. The best location for these air intake vents is under the eaves with direct access to the attic. Vents for gable installations should be placed at the end of the house opposite the installed ventilator. Failure to provide these intakes could cause natural-draft gas appliances to backdraft.

# VENTILATE YOUR ATTIC WITH THE POWER OF THE SUN.



**Surface Mount—345SOBK and 345SOWW**
For most roofs, our one piece SPAV is the perfect solution. Because our solar cells are highly efficient at capturing the sun's energy, there is no need for unsightly raised panels or tracking systems. Instead, what you see is a low profile ventilator in a contoured design that integrates well with the roof.

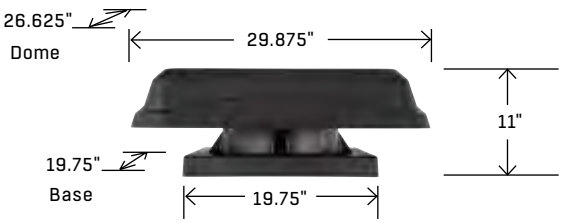
**Curb Mount—345CSOBK and 345CSOWW**
Identical in design to the Surface Mount unit but with an added lip for flat, tiled, or unusually steep roof installations. A Curb Mount installation requires the fabrication of a simple curb box frame made from treated 2x4s to create a solid platform and better manage water runoff.









**Solar Panel** Integrated, low profile, 28 watt Solar Panel efficiently captures sunlight from dawn to dusk without the unsightly props or pivoting stands used by some manufacturers. Rugged, tempered glass withstands large hail and resists delaminating.

**Housing** Attractive, low profile, molded design, of UV-stabilized, color-dyed, rugged ABS plastic withstands impact from hail and resists fading. May also be painted to match roof color for installation flexibility.

**Motor** Direct-current, variable speed 17 volt motor is dynamically balanced for superior performance and silent operation.

**Fan** 12" Diameter, one-piece aluminum 5-blade, fan pitched for maximum air flow.

**Hardware** Stainless steel fasteners secure galvanized steel brackets and aluminum, heavy gauge screen for durability and corrosion resistance. Screen keeps out insects, animals, and birds without impeding airflow.

**Optional Thermostat—Model CWT45** Easy to install, this optional accessory disables the motor below 50° for climates where cold-weather condensation isn't a concern and to extend motor life. The thermostat activates the motor at temperatures above 61° to vent air from dawn through dusk.



30% Federal Tax Credit

Visit broan.com for more information.

## Remote Mount, 345RSOBK and 345RSOWW

In some cases, installing the ventilator in a location that is either less visible, more convenient to reach from the roof-side, or more accessible from the attic-side, is desirable. Remote mount enables the ventilator to be installed independent of the solar panel, up to 50' away (15' of wire included). Locate the remote, flat panel to receive the best sunlight exposure and hide the ventilator from view.

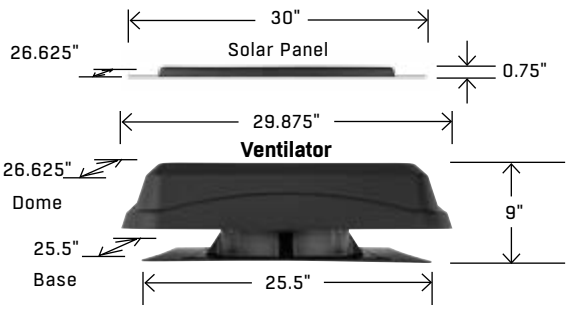
## Gable Mount, 345GOBK & 345GOWW

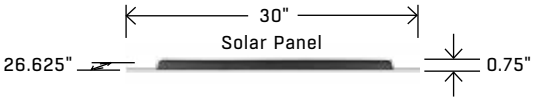
If roof mounting is not possible or desired, gable installation provides the benefits of the SPAV with a remote-mounted, flat solar panel positioned to best capture the sun's energy, up to 50' away (15' of wire included). Finish the outside with a Broan model 433 gable shutter.









# THE PERFECT CONTROL SOLUTION FOR EVERY ROOM AND NEED.



INDICATOR LIGHT CONTROL FOR CONVENIENCE

## INDICATOR LIGHT CONTROLS

### Model 69W*



- Single-Function Controls
- Ideal for use with quiet models, or Remote In-Line Ventilators
- 120V, 15 amps

### Model 269WL, 269VL



- Two-Function Controls
- For use especially with quiet models and an auxiliary light source
- Lighted fan control 120V, 20 amps; unlighted 120/240/277V, 15 amps
- Fits two-gang box
- Controls available in White (W) or Ivory (V)

### Model 685WL, 685VL



- Three-Function Controls
- For use especially with quiet models
- Lighted fan control 120V, 20 amps; two additional on/off rocker switches 120V, 15 amps each (20 amps total)
- Fits two-gang box
- Blister packs (P685WL, P685VL)
- Controls available in White (W) or Ivory (V)

## THERMOSTAT AND HUMIDITY CONTROLS

### Model 82W



- SensAire® technology responds to humidity up to 70% faster than competitive models; setpoint mode satisfies CA requirements
- Continuous ventilation mode helps to meet ASHRAE 62.2
- Compatible with any existing fan within electrical ratings
- Available in white; faceplate not included
- 120V, 4 amp

### Model 70TW



- Thermostat for any fan
- 120, 250, 277 VAC,
- 22 amp capacity
- Fits single-gang box only

### Model DH100W*



- Dehumidistat
- Dual voltage (24V/120V)
- Variable setting from 20–80% relative humidity
- Usage guide included
- Fits single-gang box only

## MULTI-FUNCTION CONTROLS

### Model 66W, 66V, 67W





- Three-Function Controls
- Three independent, 120V, 15 amp rocker switches (20 amps total)
- Fits single-gang opening
- Blister packs available (P66W, P66V, P67W)
- Controls available in White (W) or Ivory (V)
- Wall plates available in: White (66W) or Ivory (66V); Polished chrome finish (67W)

### Model 68W, 68V



- Two-Function Controls
- Two independent, 120V, 15 amp rocker switches(20 amps total)
- Fits single-gang box
- Blister packs available (P68W, P68V)
- Controls available in White (W) or Ivory (V)

### Model 77DW, 77DV



- Four-Function Controls
- Single switch provides three settings for fan sensor (On-Auto-Off) on Sensing models
- Remaining switches for light/night light
- Works with QTX110HL heater/fan/light/night light
- Controls available in White (W) or Ivory (V)
- Fits single-gang opening
- Blister packs available (P77DW)

*Also for use with Powered Attic Ventilators—see pages 46–47



MULTI-FUNCTION CONTROL
TO SUIT EVERY NEED



SPEED CONTROL FOR QUIETER
OPERATION OR FULL POWER



HUMIDITY SENSING TO HELP
PREVENT FOGGY MIRRORS

## SPEED CONTROLS

### Model 57W, 57V (3-amp)



- 120V, 3 amps
- Fits single-gang box
- Positive on/off action—dial for variable selection of air speeds and sound levels
- Built-in radio noise suppressor
- Controls available in White (W) or Ivory (V)
- Blister packs available (P57W)

### Model 72W, 72V (6-amp)



- 120V, 6 amps—Models 72W, 72V
- Fits single-gang box only
- Positive on/off action—dial for variable selection of air speeds and sound levels
- Built-in radio noise suppressor
- Controls available in White (W) or Ivory (V)

### Model 78W, 78V



- 4-speed "no-hum" ceiling fan speed control
- Decorator wall plate
- Screws included
- 120V AC 1.5 amp
- Controls available in White (W) or Ivory (V)

## TIMER AND OFF-DELAY CONTROLS

### Model 59W, 59V, 71V*





- Model 59W, 59V—up to 60 minutes
- Model 71V—up to 12 hours
- Fits single-gang box
- 120V, 20 amps; 240V, 10 amps
- Operate continuously or for any set period
- Controls available in White (W) or Ivory (V)
- Blister packs available (P59W, P59V)

### Model 61W, 61V



- Operate for any set period up to 15 minutes (no "continuous on" position)
- Fits single-gang box
- 120V, 20 amps; 240V, 10 amps
- Controls available in White (W) or Ivory (V)

### Model 62W



- 60 Minute
- Two separate 120V, 15 amp on/off rocker switches (20 amps total)
- 120V, 20 amps or 240V, 10 amp timer
- Timer operates continuously or for any set period up to 60 minutes
- Fits two-gang box
- Controls available in White (W)

### Model 63W, 63V



- 60 Minute
- Separate 120V, 15 amp on/off rocker switch
- Timer operates continuously or for any set period up to 60 minutes
- Fits two-gang box only
- Controls available in White (W) or Ivory (V)

### Model 64W, 64V



- Fan/Light Control with Off-Delay
- Fan and light operate together when control is turned on
- Fan continues to operate for a user adjustable time period 5–60 minutes after light is turned off
- Center position bypasses timer and turns fan and light off immediately
- Fits single-gang box only
- 120V, 4 amps (fan), 4 amps (light)
- Requires hot and neutral wires in the switch box
- Controls available in White (W) or Ivory (V)

*Also for use with Powered Attic Ventilators—see pages 46–47

## SELECTION GUIDE

| | | 57W 57V | 59W | 61W 61V | 62W | 63W 63V | 64W 64V | 66W 66V | 67W | 68W 68V | 69WL 69VL | 70TW | 71V | 72W 72V | 73 | 77DW 77DV | 78W 78V | 269WL 269VL | 685WL | 82W, DH100W |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Utility Fans | 12C | | • | • | | | • | | | | • | • | • | • | | | • | | | • |
| | 502 | • | • | • | | | • | | | | • | • | • | • | | | • | | | • |
| | 503 | • | • | • | | | • | | | | • | • | • | • | | | • | | | • |
| | 504 | • | • | • | | | • | | | | • | • | • | • | | | • | | | • |
| | 505 | • | • | • | | | • | | | | • | • | • | • | | | • | | | • |
| | 506 & 507 | | | | | | | | | | | | | | | | | | | |
| | 508 | • | • | • | | | • | | | | • | • | • | • | | | • | | | • |
| | 509 | • | • | • | | | | | | | • | • | | • | | | • | | | • |
| | 509S[1] | | • | • | | | • | | | | | • | • | | | | • | | | • |
| | 510[2] | | • | • | | | • | | | | | • | • | | | | • | | | • |
| | 511[2] | | | | | | | | | | | • | | | | | • | | | |
| | 512 & 512M | • | • | • | | | | | | | • | • | • | • | | | • | | | • |
| | 673 | | • | • | | | • | | | | • | • | • | | | | • | | | • |
| Ventilation Fans | 670 | • | • | • | | | • | | | | • | • | • | • | | | • | | | • |
| | 671 | • | • | • | | | • | | | | • | • | • | • | | | • | | | • |
| | 682 | • | • | • | | | • | | | | • | • | • | • | | | • | | | • |
| | 688 | • | • | • | | | • | | | | • | • | • | • | | | • | | | • |
| | 689 | • | • | • | | | • | | | | • | • | • | • | | | • | | | • |
| | 690 | • | • | • | | | • | | | | • | • | • | • | | | • | | | • |
| | LP80 | • | • | • | | | • | | | | • | • | • | • | | | • | | | • |
| | QTXE080 QTXE110, QTXE150 | | • | • | | • | • | | | • | • | • | • | | | | • | • | | • |
| | QTXE110S | | | | | | | | | • | • | | | | | | | | | |
| | XB50 | | | | | | | | | | • | | | | | | | • | | • |
| | XB80 | | | | | | | | | | • | | | | | | | • | | • |
| | XB110 | | | | | | | | | | • | | | | | | | • | | • |
| | XB110H | | | | | | | | | • | • | | | | | | | • | | • |
| | ZB80 | | | | | | | | | • | | | | | | | | • | • | • |
| | ZB80M | | | | | | | | | • | • | | | | | | | • | | • |
| | ZB110 | | | | | | | | | • | | | | | | | | • | • | • |
| | ZB110H | | | | | | | | | • | • | | | | | | | • | | • |
| | ZB110M | | | | | | | | | • | • | | | | | | | • | | • |
| | RB80, RB110 | | • | • | | | | | | | • | | | | | | | | | • |
| | A80HD | • | • | • | | | | | | | • | | | | | | | | | • |
| | AE50, A80, AE80, AE80B, AE80S, A110, AE110, AE110S | • | • | • | | | | | | | • | | | | | | | | | • |
| Ventilation Fan/Lights | 657 | • | • | • | | • | • | | | • | | • | • | • | | | | | | • |
| | 678 | • | • | • | | • | • | | | • | | • | • | • | | | | | | • |
| | 696 | • | • | • | | • | • | | | • | | • | • | • | | | | | | • |
| | 741SN | • | • | • | | • | • | | | • | | • | • | • | | | | | | • |
| | 744 | | | | | • | | | | • | | • | | | | | | | | • |
| | 744FL | | | | | • | | | | • | | • | | | | | | | | • |
| | 744LED | | | | | • | | | | • | | • | | | | | | | | • |
| | 744SFL | | | | | • | | • | • | • | | • | | | | | | | | • |
| | 750 | • | • | • | • | | • | • | • | • | | • | • | • | | | | • | • | • |
| | 751 | • | • | • | | • | • | | | • | | • | • | • | | | | • | | • |
| | 754SN | • | • | • | | • | • | | | • | | • | • | • | | | | • | | • |
| | 761BN, 761RB, 761WHA | • | • | • | | • | • | | | • | | • | • | • | | | | | | • |
| | 791LEDM | • | • | | | | • | | | • | | • | | | | | | • | | |
| | RB80L, RB110L | | | | | • | • | | | • | | | | | | | | • | | • |
| | AE80L, AE80BL, AE80SL, AE110L, AE110SL | • | | | | • | • | | | • | | | | | | | | • | | • |
| | A50L, A70L, A80L A110L | • | | | | • | • | | | • | | | | | | | | • | | • |

[1]Built-in on/off switch. [2]Built-in on/off variable switch

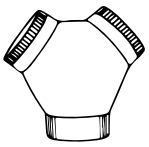
| | | 57W 57V | 59W | 61W 61V | 62W | 63W 63V | 64W 64V | 66W 66V | 67W | 68W 68V | 69WL 69VL | 70TW | 71V | 72W 72V | 73 | 77DW 77DV | 78W 78V | 269WL 269VL | 685WL | 82W, DH100W |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ventilation Fan/Lights Continued | HD80L | • | • | • | | • | • | | | • | | • | • | • | | | | • | | • |
| | QTXE080FLT, QTXE110FLT, QTXE150FLT | | • | • | • | • | • | • | | | | • | • | | | | | | • | • |
| | XB50L | | | | | | | • | • | | | | | | | | | | • | • |
| | XB80L | | | | | | | • | • | | | | | | | | | | • | • |
| | XB110L | | | | | | | • | • | | | | | | | | | | • | • |
| | XB110HL | | | | | | | • | • | | | | | | | • | | | | • |
| | ZB80L | | | | | | | | | | | | | | | • | | | | • |
| | ZB80ML | | | | | | | | | | | | | | | • | | | | • |
| | ZB110L | | | | | | | | | | | | | | | • | | | | • |
| | ZB110HL | | | | | | | • | • | | | | | | | • | | | | • |
| | ZB110ML | | | | | | | | | | | | | | | • | | | | • |
| Heater/Fan/ Lights | 100HL | • | • | • | • | | | • | • | | | • | • | • | | | | | | • |
| | 100HFL | • | • | • | • | | | • | • | | | • | • | • | | | | | | • |
| | 161 | | • | • | | | • | | | | • | | | | | | | | | • |
| | 162 | • | • | • | | • | • | | | • | | • | • | • | | | | • | | • |
| | 163 | | • | • | | • | | | | | • | | | | | | | | | • |
| | 164 | • | • | • | • | • | | • | • | • | | • | • | • | | | | • | • | • |
| | 655 | • | • | • | • | | | • | • | | | • | • | • | | | | • | • | • |
| | 656 | | • | • | | • | | | | | | • | • | | | | | | | • |
| | 658 | • | • | • | | • | | | | • | | • | • | • | | | | • | | • |
| | 659 | • | • | • | • | | | • | • | | | • | • | • | | | | • | • | • |
| | QTX110HL | | • | • | • | | | • | • | | | • | • | | | • | | | | • |
| | QTX110HFL | | • | • | • | | | • | • | | | • | • | | | • | | | | • |
| In-Line | MP100, MP140 MP200 | • | • | • | | | | | | | • | • | • | • | | | | | | • |
| | MP280 | • | • | • | | | | | | | • | • | • | • | | | | | | • |
| | SP100, SP140, SP200 | • | • | • | | | | | | | • | • | • | • | | | | | | • |
| Attic Ventilation | 349BR | | • | • | | | | | | | • | • | • | • | • | | | | | • |
| | 350BK | | • | • | | | | | | | • | • | • | • | • | | | | | • |
| | 350BR | | • | • | | | | | | | • | • | • | • | • | | | | | • |
| | 353 | | • | • | | | | | | | • | • | • | • | • | | | | | • |
| | 35316 | | • | • | | | | | | | • | • | • | • | • | | | | | • |
| | 355BK | | • | • | | | | | | | • | • | • | • | • | | | | | • |
| | 355BR | | • | • | | | | | | | • | • | • | • | • | | | | | • |
| | 356BK | | • | • | | | | | | | • | • | • | | • | | | | | • |
| | 356BR | | • | • | | | | | | | • | • | • | | • | | | | | • |
| | 358 | | • | • | | | | | | | • | • | • | • | • | | | | | • |

[1]Built-in on/off switch. [2]Built-in on/off variable switch

# DUCTING ACCESSORIES

## ADAPTERS

### Model FY6
- 6" x 6" x 6" Y adapter



### Model FY86
- 8" x 6" x 6" Y adapter

## DAMPERS

### Model 97 Damper
- 7" spring-loaded, in-line damper

### Model BP87 Damper
- 7" vertical discharge damper

## DUCTING

### Model 406 Round Duct
- 6" round duct
- 2' galvanized section



### Model 407 Round Duct
- 7" round duct
- 2' galvanized section

### Model 410 Round Duct
- 10" round duct
- 2' galvanized section

### Model 889 Duct
- 3¼" x 10" duct
- 2' galvanized sections



### Models DT4C & DT6C Non-Insulated Flexible Duct
- 4" (DT4C) or 6" (DT6C) round
- DT4C is a 4-pack
- 25' standard length



### Models DT4W, DT6W & 804DU Insulated Flexible Duct
- 4" (DT4W & 804DU) or 6" (DT6W) round
- 25' standard length

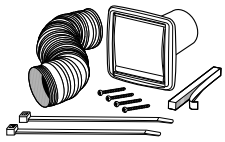


## DUCTING KITS

### Model RVK1A* Flexible Roof Ducting Kit
- Includes Model 636 Roof Cap
- 4" diameter metal duct connector
- 2 duct clamps
- 4" to 3" reducer
- 8' of 4" flexible aluminum ducting



### Model WVK2A* Flexible Wall Ducting Kit
- Includes white polymeric wall cap
- 4" diameter metal duct connector
- 2 duct clamps
- 4" to 3" reducer
- 5' of 4" flexible aluminum ducting



## ELBOWS

### Model 415 Adjustable Elbow
- Fits 7" round duct



### Model 418 Adjustable Elbow
- Fits 10" round duct

### Model 419 Adjustable Elbow
- Fits 6" round duct

### Model 428 Vertical Elbow
- Fits 3¼" x 10" duct



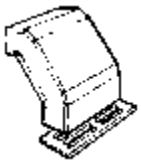
### Model 429 Horizontal Elbow
- Fits 3¼" x 10" duct



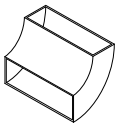
### Model 430 Short Eave Elbow
- For 3¼" x 10" duct
- Includes backdraft damper and grille (black)
- Only recommended for fans with more than 160 CFM



### Model 431 Long Eave Elbow
- For 3¼" x 10" duct
- Includes backdraft damper and grille (black)
- Only recommended for fans with more than 160 CFM



### Model 839 Elbow
- 90° turn
- For use with 3¼" x 10" duct



## FILTERS

### Model 834 Filter
- For 8" fans

### Model 854 Filter
- Aluminum mesh grease filter
- For 10" fans

### Model 99010042 Aluminum Filter
- Fits Utility Ventilator Models 503, 503MG, 505, 505MG, 509, 509MG, 509S and 509SMG



### Model 99010271 Aluminum Filter
- Fits Utility Ventilator Models 12C, 12CMG, 502, 502MG, 504, 504MG, 508, 508MG, 510, 510MG, 511 and 511MG

## METAL GRILLE KIT

### Model 97011308
- Steel baked white enamel finish
- Fits fan Models 670, 671, 676, 684, 688 and 689
- Grille size is 10¼" square

## ROOF CAPS

### Model 437* 10" Round
- High-capacity design up to 1200 CFM
- Backdraft damper and built-in bird screen
- Steel housing, black electrically bonded epoxy finish



### Model 611 Roof Cap*
- For flat roof installation
- Aluminum natural finish
- For up to 8" round duct



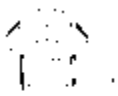
### Model 611CM Roof Cap*
- For curb mount installation
- Other features same as Model 611



### Model 612 Roof Cap*
- For flat roof installation
- Aluminum natural finish
- For up to 12" round duct



### Model 612CM Roof Cap*
- For curb mount installation
- Other features same as Model 612



### Model 634 Roof Cap*
- For 3¼" x 10" or up to 8" round duct
- Black
- Backdraft damper and birdscreen



*Not for use with dryers.

## ROOF CAPS CONTINUED

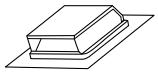
### Model 634M Roof Cap*
- Same as Model 634 except for 6" round duct

### Model 636 Roof Cap*
- For 3" or 4" round duct
- Built-in backdraft damper and bird screen
- Steel baked black enamel finish



### Model 636AL Roof Cap*
- Same as Model 636, except aluminum natural finish

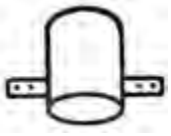
### Model 644 Roof Cap*
- Same as Model 634, except for aluminum natural finish



## SLEEVES

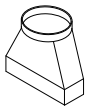
### Model CVLD4
- 4" sleeve with damper

### Model CVLD6
- 6" sleeve with damper

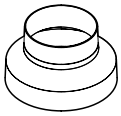


## TRANSITIONS

### Model 886 Transition
- Converts 7" round to 3¼" x 10" duct



### Model 475 Transition
- Converts 6" round duct to 4" round duct reducer
- Available in 6 Pack (475B)

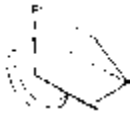


### Model 413 Transition
- Converts 3¼" x 10" duct to 8" round duct



## WALL CAPS

### Model 613 Wall Cap*
- For 12" round duct
- Built-in backdraft damper and bird screen
- Aluminum natural finish



### Model 639 Wall Cap*
- For 3¼" x 10" duct
- Spring-loaded backdraft damper
- Built-in bird screen
- Steel baked black enamel finish



### Model 649 Wall Cap*
- Same as Model 639, except aluminum natural finish

### Model 641 Wall Cap*
- For 6" round duct
- Built-in backdraft damper and bird screen
- Aluminum natural finish
- Model 647 for 7" Round duct



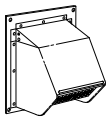
### Model 647 Wall Cap*
- For 7" round duct
- Other features same as Model 641



### Model 649 Wall Cap*
- Same as Model 639, except aluminum natural finish

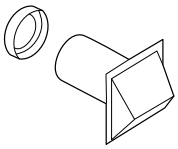


### Model 843BL Wall Cap*
- For 6" round duct
- Built-in backdraft damper and bird screen
- Black finish



## WALL CAPS CONTINUED

### Models 885AL and 885BL Wall Cap*
- For 3" or 4" round duct
- 4" to 3" transition included
- Aluminum natural finish (885AL) and steel black enamel finish (885BL)
- Standard package—6 to a carton
- Built-in bird screen and damper



### Model 642
- For 4" round duct
- Aluminum natural finish
- 4 to a carton

### Model 643 Wall Cap*
- For 8" round duct
- Aluminum natural finish
- Backdraft damper, no birdscreen



### Model 646 Louvered Wall* Cap for 6" Round Duct
- Single pack
- White polymeric



### Model WC650 Wall Cap*
- For 4" round duct
- White polymeric
- 4 to a carton



*Not for use with dryers.

## TECHNICAL

**What is a sone, and how is it measured?** A sone is a measurement of sound of how sound is sensed. The lower the sone value, the quieter the listening environment. One sone is the equivalent of a quiet refrigerator. Broan fans feature the quietest rating possible at <0.3 sones as tested for HVI certification.

**What does "HVI certified" mean?** The Home Ventilating Institute (HVI) is an independent organization that certifies the airflow and sound performance of Broan products. For more information visit **www.hvi.org**.

**What is ENERGY STAR®?** Refer to the product matrix for specific Broan fans that meet ENERGY STAR® requirements. Many of these Broan products use high efficiency motors and lighting to reduce energy consumption by as much as 70%. Learn more about ENERGY STAR® at **www.energystar.gov**.

**What does CFM mean?** Cubic Feet per Minute (CFM) is the measure of air volume moved by the fan blower. Choose a fan with a CFM rating appropriate for your room size to ensure adequate ventilation.

**What does "static pressure" mean?** Static pressure is the measurement of airflow resistance as it is pushed through ductwork which reduces the effectiveness of the fan. Learn more on the Home Ventilating Institute website **www.hvi.org.**

**What is whole-house ventilation?** Whole-house ventilation provides today's airtight homes with a relatively constant and controlled lower level of ventilation. Broan offers many virtually silent continuous ventilation solutions for ASHRAE 62.2 and programs such as LEED, ENERGY STAR® for Homes and CA Title 24.

## OPERATION

**How do I size a fan properly for my room size and the duct run?** See the sizing guidelines on page 59 for details on proper sizing. This section provides an explanation and examples to help you make the right decision.

**How long should a bath fan run after a shower is used?** The Home Ventilating Institute recommends that a fan should be left on for 20 minutes more to clear humidity adequately and to ensure moisture and condensation is minimized.

**How does Sensing Technology operate?** Broan has unique sensing technology that detects humidity or motion. Multi-speed models automatically turn the fan speed up when someone enters the room or there is a rapid rise in the humidity level from the lower continuous CFM level. Single-speed models turn the fan on automatically.

**How does the delay-off timer operate?** Delay-off timers automatically shut the fan off after a time interval set by the user.

**Why do the windows and mirrors fog even when the fan is running?** If windows and mirrors are very cold, condensation can still form on these surfaces. And if your bathroom is sealed tightly, replacement air may not be entering the room fast enough to displace the moist air. Fan placement can also be a factor. Your fan should be located far from the replacement air source to ensure the moist air is drawn out first. Finally, make sure your ductwork is as short and straight as it can be in order to ensure proper air outflow.

**Why is water dripping from the grille of the fan?** Dripping water is either condensation (usually due to cold ductwork or improper duct installation), or a problem with the seal on a wall or roof vent. Insulated ductwork can help solve condensation problems, and running the fan longer will ensure moisture is completely removed from the duct.

**Will Broan fans work in wall-mount applications?** Refer to the product matrix for specific Broan bath and utility fans that may be wall mounted.

**What type of exhaust fan is best for a sauna or hot tub area?** High CFM-rated devices are normally recommended for this type of application.

**Can I use a fan in a steam shower?** No. Since these are normally sealed chambers, a vacuum will be created.

## INSTALLATION

**Can I mount Broan fans above my tub and shower?** Most Broan fans are rated for use over a shower or bathtub with a GFCI (Ground Fault Circuit Interrupter).

**Can my bath fan be surrounded by insulation?** Yes. Broan bath fans are designed to provide adequate cooling for motors and lighting, as well as products with integral heaters.

**Can I vent more than one bath fan out of a roof or wall cap?** No. Always follow the manufacturer's recommended ventilation requirements.

**What is the Broan Ventilation fan warranty?** Go to **http://www.broan.com/warranty** for this information.

**Do I need attic access to install a fan in a retrofit situation?** Refer to the product matrix for specific Broan fans that may be installed without access from above with features such as telescoping mounting frames, snap-in housings, bendable mounting ears, drywall-mounting tabs and inside-out mounting duct connectors. Room-side retrofit installations are now a reality.

**Can I install a heater over the bathtub or in a shower?** No. Heaters are not UL Listed (Underwriter's Laboratory) for installation over a bathtub or in a shower.

**Can I use an inline or multi-port fan in one large bathroom?** Yes, this works the best for large rooms because you can install the ports over the areas where the ventilation is needed the most (source control). The size of the multi-port would be determined by the size of the room.

**Can larger diameter ducting be used with my bath fan?** Yes, larger diameters will result in improved performance.

**Can I use a smaller diameter duct than what the fan is designed for?** This is not recommended. It will cause the fan to run harder, greatly reducing the CFM performance of the fan and create excess noise.

**What type of duct is recommended, rigid or flexible?** It is recommended, where possible, to use rigid duct. It has less resistance to air flow and allows the fan to operate much more efficiently. If flexible duct is used, be sure the duct is as straight as possible.

**Can I exhaust my fan into my attic instead of out the roof or wall?** Never exhaust air into spaces within walls, ceilings, attics, crawl spaces or garages. Humidity may damage the structure and insulation.

**Where should the exhaust fan be located?** Exhaust fans should be located in or near the shower or tub, and in an enclosed water closet. Keep exhaust points opposite the supply air source to ensure that the fresh air is drawn through the room. Bathroom doors should not be sealed too tightly at the bottom in order to allow "makeup air" to enter the room when the door is closed.

**In what direction should I orient the exhaust outlet?** The exhaust outlet is the point where air is discharged through the body of the fan housing into the ductwork. During installation, orient your fan with the exhaust outlet pointing toward the exit vent on your roof or wall to minimize turns in ductwork that impede airflow.

**Will a bath fan or wall-mount utility fan serve as a range hood?** No. Range hoods are specifically designed to handle grease and high temperature environments. Broan bath fans supplement odor and moisture removal in the kitchen, but are not intended for use as a range hood.

**Can I use CFL or LED bulbs in fan/lights with A19 screw-base sockets?** Yes, if key guidelines are followed. Go to broan.com FAQs for details.

# PROPER INSTALLATION MAKES ALL THE DIFFERENCE.




Pre-installed screws, keyhole slots and alignment tabs facilitate installation, taking the guesswork out of proper mounting.

Elbows, turns, long ducts and ductwork smaller than the fan's exit outlet will reduce performance.

Use wide aluminum foil or duct tape to join smooth metal ductwork seams.

Do not let flexible ductwork sag as this impedes airflow.

During installation, orient the bath fan outlet in the direction of the home's exit point to minimize duct turns.

Before adding an elbow or bend,allow 24" to 36" of straight run from the fan outlet point.

Duct-wrap insulation (R-5 or above) will help minimize condensation in cold climates, especially on long duct runs.

Quick guideline: For bathrooms up to 100 square feet, the HVI recommends ventilation of at least 1 CFM per square foot (about eight air changes per hour). For bathrooms over 100 square feet, add up the needs of each fixture to determine the total ventilation rate:

- Toilet 50 CFM
- Shower 50 CFM
- Bathtub 50 CFM
- Jetted tub 100 CFM

# EASY STEPS FOR CHOOSING AND SIZING THE RIGHT VENTILATION FAN FOR YOUR HOME.

**Determine which rooms could use ventilation, and how much is needed. Spot ventilation** is used in localized areas to remove moisture, odor and airborne pollutants quickly. Most commonly used in the bath or powder room, spot ventilation can also be used in a laundry room, exercise area, closet, or bedroom, wherever air should be changed frequently. Decorative and recessed models can be ideal solutions for these situations. According to the Home Ventilating Institute (HVI), Air Changes per Hour (ACH) for comfortable and healthy living should be as follows: Bathrooms: 8 changes, Kitchens: 15 changes, Living/Bedrooms: 6 changes. Broan bath fans, utility fans and high capacity fans can meet these needs.

**Calculate the air movement necessary for proper ventilation.** Air movement is measured in Cubic Feet per Minute (CFM). To determine CFM requirements, first determine the size of your room. Measure and multiply the length, width and ceiling height of your room to determine cubic footage. Then use the multiplication factor of .13 and round up to the next "ten." See the three examples that follow.

**Example 1:**
Bathroom with 8' ceiling:
7' wide x 9' long x 8' high x .13 = 66. Select a bath fan with at least 70 CFM

**Example 2:**
Bathroom with 9' ceiling: 10' wide x 9' long x 9' high x .13 = 105. Select a bath fan with at least 110 CFM

**Example 3:**
For a bathroom with a vaulted ceiling, use the average ceiling height at the wall and the peak:8' wide x 12' long x ((8' at wall + 12' at peak) / 2 = 10') average height x .13 = 125. Select a fan(s) with at least 130 CFM

**Account for long duct runs and ductwork that turns before it reaches the exterior vent.** When airflow is restricted in any way it slows down. Just as a car must slow down for a sharp corner, air decelerates when going through a turn in a duct run. Whenever possible, create a straight duct run with large radius turns, if they're necessary at all. Rigid ductwork is optimal because airflow restriction is minimized. Flexible tubing may be convenient to install, but resistance is created as air is moved over the spiral metal frame of the tubing. With long duct runs or ducts with multiple turns the fan works harder, noise increases and fan performance (CFM) is compromised. Select a fan model with an even greater CFM rating to compensate.

**6" ducting overcomes most performance-related installation issues.** Broan's ULTRA and QTX Green Series fans deliver high performance in virtually any real-world installation. They are engineered with a 6" duct connector for peak air movement and extremely quiet operation, even when the duct run is not short and straight.

## INVENT Fans and Fan/Lights

| Model | Page | CFM | Sones, HVI-Certified | Baths up to ( ) Sq Ft | Lighting Watts Main/ Night Light | ENERGY STAR® | Fluorescent Lighting | Duct Size" | Housing Dims L" | Housing Dims W" | Housing Dims H" | Grille Dims L" | Grille Dims W" | Grille Finish | Amps |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AE80** | 26 | 80 | 0.8 | 75 | — | Yes | — | 4 | 9¼ | 10 | 5¾ | 11⅜ | 12 | White Polymeric | 0.3 |
| **AE110** | 26 | 110 | 1.3 | 105 | — | Yes | — | 4 | 9¼ | 10 | 5¾ | 11⅜ | 12 | White Polymeric | 0.3 |
| **AE80B** | 26 | 80 | 1.5 | 75 | — | Yes | — | 4 | 9¼ | 10 | 5¾ | 11⅜ | 12 | White Polymeric | 0.3 |
| **AE50** | 26 | 50 | 0.5 | 45 | — | Yes | — | 4 | 9¼ | 10 | 5¾ | 11⅜ | 12 | White Polymeric | 0.2 |
| **A80HD*** | 26 | 80 | 2.0 | 75 | — | No | — | 4 | 9¼ | 10 | 5¾ | 11 | 12 | White Painted Metal | 0.37 |
| **A80** | 26 | 80 | 2.0 | 75 | — | No | — | 4 | 9¼ | 10 | 5¾ | 11⅜ | 12 | White Polymeric | 0.37 |
| **AE80S** | 20 | 80 | 0.8 | 75 | — | Yes | | 4 | 9¼ | 10 | 5¾ | 11⅜ | 12 | White Polymeric | 0.3 |
| **A110** | 26 | 110 | 3.0 | 105 | — | No | — | 4 | 9¼ | 10 | 5¾ | 11⅜ | 12 | White Polymeric | 0.4 |
| **AE110S** | 20 | 110 | 1.0 | 100 | — | Yes | | 4 | 9¼ | 10 | 5¾ | 11⅜ | 12 | White Polymeric | 0.3 |
| **A80L**** | 26 | 80 | 1.0 | 75 | A19 Base | No | — | 4 | 9¼ | 10 | 5¾ | 11½ | 12⅛ | White Polymeric | 1.2 |
| **A110L**** | 26 | 110 | 1.3 | 105 | A19 Base | No | — | 4 | 9¼ | 10 | 5¾ | 11½ | 12⅛ | White Polymeric | 1.2 |
| **A50L**** | 26 | 50 | 1.5 | 45 | A19 Base | No | — | 4 | 9¼ | 10 | 5¾ | 11½ | 12⅛ | White Polymeric | 1.0 |
| **A70L**** | 26 | 70 | 2.0 | 65 | A19 Base | No | — | 4 | 9¼ | 10 | 5¾ | 11½ | 12⅛ | White Polymeric | 1.2 |
| **AE80BL** | 26 | 80 | 1.5 | 75 | 11W LED | Yes | LED | 4 | 9¼ | 10 | 5¾ | 11¾ | 12½ | White Polymeric | 0.3 |
| **AE80L** | 26 | 80 | 0.8 | 75 | 11W LED | Yes | LED | 4 | 9¼ | 10 | 5¾ | 11¾ | 12½ | White Polymeric | 0.3 |
| **AE80SL** | 20 | 80 | 0.8 | 75 | 11W LED | Yes | LED | 4 | 9¼ | 10 | 5¾ | 11¾ | 12½ | White Polymeric | 1.2 |
| **AE110L** | 26 | 110 | 1.3 | 105 | 11W LED | Yes | LED | 4 | 9¼ | 10 | 5¾ | 11¾ | 12½ | White Polymeric | 0.3 |
| **AE110SL** | 20 | 110 | 1.0 | 100 | 11W LED | Yes | LED | 4 | 9¼ | 10 | 5¾ | 11¾ | 12½ | White Polymeric | 1.2 |

*Metal grille. **Bulb not included.

## Fans

| Model | Page | CFM | Sones, HVI-Certified | Baths up to ( ) Sq Ft | ENERGY STAR® | Duct Size" | Housing Dims L" | Housing Dims W" | Housing Dims H" | Grille Dims L" | Grille Dims W" | Grille Finish | Amps |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **670** | 30 | 50 | 3.5 | 45 | — | 3 | 7¼ | 7½ | 3⅝ | 9 | 9¼ | White Polymeric | 0.8 |
| **671** | 30 | 70 | 6.0 | 65 | — | 3 | 7¼ | 7½ | 3⅝ | 9 | 9¼ | White Polymeric | 1.2 |
| **682** | 31 | — | — | — | — | Duct-free | 7⅛ | 7⅛ | 3¾ | 8½ | 8½ | White Polymeric | 1.0 |
| **688** | 30 | 50 | 4.0 | 45 | — | 3 | 7¼ | 7½ | 3⅝ | 9 | 9¼ | White Polymeric | 0.9 |
| **689** | 30 | 60 | 5.5 | 55 | — | 3 | 7¼ | 7½ | 3⅝ | 9 | 9¼ | White Polymeric | 1.5 |
| **690**** | 31 | 60 | 3.0 | 55 | — | — | — | — | — | 9⅝ | 11⅛ | White Polymeric | 1.5 |
| **LP80** | 29 | 80 | 1.0 | 75 | Yes | 4 / 3 | 11⅜ | 10½ | 4 | 13 | 13¾ | White Polymeric | 0.3 |
| **SPK110** | 37 | 110 | 1.0 | 75 | Yes | 4 | 11⅜ | 10½ | 7¾ | 13 | 14 | White Polymeric | 0.9 |
| **SSQTXE080** | 23 | 80 | — | — | Yes | — | 11⅜ | 10½ | 7¾ | — | — | — | — |
| **SSQTXE110** | 23 | 110 | — | — | Yes | — | 11⅜ | 10½ | 7¾ | — | — | — | — |
| **QTXE080** | 18 | 80 | 0.3 | 75 | Yes | 6 | 11⅜ | 10½ | 7⅝ | 13 | 14 | White Polymeric | 0.4 |
| **QTXE110** | 18 | 110 | 0.7 | 100 | Yes | 6 | 11⅜ | 10½ | 7⅝ | 13 | 14 | White Polymeric | 0.3 |
| **QTXE110S** | 20 | 110 | 0.7 | 100 | Yes | 6 | 11⅜ | 10½ | 7⅝ | 12⅞ | 13¾ | White Polymeric | 0.3 |
| **QTXE150** | 18 | 150 | 1.4 | 140 | Yes | 6 | 11⅜ | 10½ | 7⅝ | 13 | 14 | White Polymeric | 0.5 |
| **RB80** | 15 | 80 | <0.3 | 75 | Yes | 4 | 11⅜ | 10½ | 7⅝ | 13 | 13¾ | White Polymeric | 0.3 |
| **RB110** | 15 | 110 | 0.6 | 100 | Yes | 4 | 11⅜ | 10½ | 7⅝ | 13 | 13¾ | White Polymeric | 0.3 |
| **XB50** | 13 | 50 | <0.3 | 45 | Yes | 6 / 4 | 10½ | 11⅜ | 7⅝ | 13 | 13¾ | White Polymeric | 0.1 |
| **XB80** | 13 | 80 | <0.3* | 75 | Yes | 6 / 4 | 10½ | 11⅜ | 7⅝ | 13 | 13¾ | White Polymeric | 0.1 |
| **XB110** | 13 | 110 | <0.3 | 100 | Yes | 6 | 10½ | 11⅜ | 7⅝ | 13 | 13¾ | White Polymeric | 0.2 |
| **XB110H** | 13 | 110 | <0.3 | 100 | Yes | 6 | 10½ | 11⅜ | 7⅝ | 13⅛ | 14 | White Polymeric | 0.2 |
| **ZB80** | 13 | 80 | <0.3* | 75 | Yes | 6 / 4 | 10½ | 11⅜ | 7⅝ | 13 | 13¾ | White Polymeric | 0.1 |
| **ZB80M** | 13 | 80 | <0.3* | 75 | Yes | 6 / 4 | 10½ | 11⅜ | 7⅝ | 13⅛ | 14 | White Polymeric | 0.1 |
| **ZB110** | 13 | 110 | <0.3 | 100 | Yes | 6 | 10½ | 11⅜ | 7⅝ | 13 | 13¾ | White Polymeric | 0.2 |
| **ZB110H** | 13 | 110 | <0.3 | 100 | Yes | 6 | 10½ | 11⅜ | 7⅝ | 13⅛ | 14 | White Polymeric | 0.2 |
| **ZB110M** | 13 | 110 | <0.3 | 100 | Yes | 6 | 10½ | 11⅜ | 7⅝ | 13⅛ | 14 | White Polymeric | 0.2 |

Radiation Dampers can be found on page 11, 19, 22, 27, 29 and 72

*With 6" duct (with 4" duct 0.3)

**Replacement grille and motor kit

## Fan/Lights

| Model | Page | CFM | Sones, HVI-Certified | Baths up to ( ) Sq Ft | Lighting Watts Main/ Night Light | ENERGY STAR® | Fluorescent Lighting | Duct Size" | Housing Dims L" | Housing Dims W" | Housing Dims H" | Grille Dims L" | Grille Dims W" | Grille Finish | Amps |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **657** | 30 | 70 | 4.0 | 65 | 100 | — | — | 4 | 14¼ | 8¼ | 5¾ | 16¾ | 10⅝ | White Polymeric | 2.0 |
| **678** | 30 | 50 | 2.5 | 45 | 100 | — | — | 4 | 8¼ | 8 | 5¾ | 11⅛ | 10⅝ | White Polymeric | 1.6 |
| **696** | 30 | 100 | 4.5 | 90 | 100 | — | — | 4 | 14¼ | 8¼ | 5¾ | 16¾ | 10⅝ | White Polymeric | 2.0 |
| **741SN** | 35 | 70 | 3.5 | 65 | 120 (2-60W) | — | — | 4 | 8¼ | 8 | 5¾ | 13⅜ Dia | — | Satin Nickel | 2.2 |
| **754SN** | 35 | 70 | 3.5 | 65 | 120 (2-60W) | — | — | 4 | 8¼ | 8 | 5¾ | 13⅛ Dia | — | Nickel | 2.2 |
| **761BN** | 35 | 80 | 2.5 | 75 | 120 (2-60W) | — | — | 4 | 8¼ | 8 | 5¾ | 13⅜ Dia | — | Brushed Nickel | 1.6 |
| **761RB** | 35 | 80 | 2.5 | 75 | 120 (2-60W) | — | — | 4 | 8¼ | 8 | 5¾ | 13⅜ Dia | — | Oil-rubbed Bronze | 1.6 |
| **761WHA** | 35 | 80 | 2.5 | 75 | 120 (2-60W) | — | — | 4 | 8¼ | 8 | 5¾ | 13⅜ Dia | — | White | 1.6 |
| **744** | 34 | 70 | 1.5 | 65 | 75 | — | — | 4 | 8¼ | 12¾ | 6¾ | 7⅜ Dia | — | Matte White | 1.2 |
| **744FL** | 34 | 70 | 1.5 | 65 | 14 | Yes | Yes | 4 | 8¼ | 12¾ | 6¾ | 7⅜ Dia | — | Matte White | 0.7 |
| **744LED** | 34 | 70 | 1.5 | 65 | 10W LED | Yes | — | 4 | 8¼ | 12¾ | 6¾ | 7⅜ Dia | — | Matte White | 0.55 |
| **744SFL** | 34 | 70 | 1.5 | 65 | 14 | Yes | Yes | 4 | 8¼ | 12¾ | 6¾ | 7⅜ Dia | — | Matte White | 0.7 |
| **750** | 30 | 100 | 3.5 | 90 | 100 / 7 | — | — | 4 | 9 | 9 | 6 | 15 Dia | — | White Polymeric | 1.9 |
| **751** | 30 | 100 | 3.5 | 90 | 100 | — | — | 4 | 9 | 9 | 6 | 15 Dia | — | White Polymeric | 1.9 |
| **791LEDM** | 35 | 100 | 1.5 | 100 | 9W LED | Yes | LED | 4 | 9¼ | 10 | 5¾ | 12⅝ | 12⅝ | White | 0.5 |
| **HD80L** | 30 | 80 | 2.5 | 75 | 100 | — | — | 4 | 8¼ | 8 | 5¾ | 11⅛ | 10⅝ | White Polymeric | 1.6 |
| **QTXE080FLT** | 18 | 80 | 0.3 | 75 | 2- 18W fluor/4 | Yes | Yes | 6 | 11⅜ | 10½ | 7⅝ | 13⅜ | 14¼ | White Polymeric | 1.0 |
| **QTXE150FLT** | 18 | 150 | 1.4 | 140 | 2- 18W fluor/4 | Yes | Yes | 6 | 11⅜ | 10½ | 7⅝ | 13⅜ | 14¼ | White Polymeric | 1.2 |
| **RB80L** | 15 | 80 | <0.3 | 75 | 2- 18W fluor/4 | Yes | Yes | 4 | 11⅜ | 10½ | 7⅝ | 13 | 13¾ | White Polymeric | 1.0 |
| **RB110L** | 15 | 110 | 0.8 | 100 | 2- 18W fluor/4 | Yes | Yes | 4 | 11⅜ | 10½ | 7⅝ | 13 | 13¾ | White Polymeric | 1.0 |
| **XB50L** | 13 | 50 | <0.3 | 45 | 2- 18W fluor/4 | Yes | Yes | 6 / 4 | 10½ | 11⅜ | 7⅝ | 13 | 13¾ | White Polymeric | 0.7 |
| **XB80L** | 13 | 80 | <0.3* | 75 | 2- 18W fluor/4 | Yes | Yes | 6 / 4 | 10½ | 11⅜ | 7⅝ | 13 | 13¾ | White Polymeric | 0.7 |
| **XB110L** | 13 | 110 | <0.3 | 100 | 2- 18W fluor/4 | Yes | Yes | 6 | 10½ | 11⅜ | 7⅝ | 13 | 13¾ | White Polymeric | 0.9 |
| **XB110HL** | 13 | 110 | <0.3 | 100 | 2- 18W fluor/4 | Yes | Yes | 6 | 10½ | 11⅜ | 7⅝ | 13⅛ | 14 | White Polymeric | 0.9 |
| **ZB80L** | 13 | 80 | <0.3* | 75 | 2- 18W fluor/4 | Yes | Yes | 6 / 4 | 10½ | 11⅜ | 7⅝ | 13 | 13¾ | White Polymeric | 0.8 |
| **ZB80ML** | 13 | 80 | <0.3* | 75 | 2- 18W fluor/4 | Yes | Yes | 6 / 4 | 10½ | 11⅜ | 7⅝ | 13⅛ | 14 | White Polymeric | 0.8 |
| **ZB110L** | 13 | 110 | <0.3 | 100 | 2- 18W fluor/4 | Yes | Yes | 6 | 10½ | 11⅜ | 7⅝ | 13 | 13¾ | White Polymeric | 0.9 |
| **ZB110HL** | 13 | 110 | <0.3 | 100 | 2- 18W fluor/4 | Yes | Yes | 6 | 10½ | 11⅜ | 7⅝ | 13⅛ | 14 | White Polymeric | 0.9 |
| **ZB110ML** | 13 | 110 | <0.3 | 100 | 2- 18W fluor/4 | Yes | Yes | 6 | 10½ | 11⅜ | 7⅝ | 13⅛ | 14 | White Polymeric | 0.9 |

*With 6" duct (with 4" duct 0.3)

## Heater/Fan/Lights

| Model | Page | CFM | Sones, HVI-Certified | Lighting Watts Main/ Night Light | Housing Dimensions L" | Housing Dimensions W" | Housing Dimensions H" | Grille Dimensions L" | Grille Dimensions W" | Grille Finish | Duct Size" | Total Connected Amps | Total Connected Load In Watts | Total Connected Heater Wattage | BTU |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **100HL** | 44 | 100 | 2.0 | 100W | 16 | 10¼ | 5⅞ | 17½ | 11½ | White Polymeric | 4 | 14.5 | 1830 | 1500 | 5120 |
| **100HFL** | 44 | 100 | 2.0 | 27W Fluor. (Incl.) | 16 | 10¼ | 5⅞ | 17½ | 11½ | White Polymeric | 4 | 14.0 | 1760 | 1500 | 5120 |
| **162*** | 45 | 70 | 4.0 | *250W (1) | 8⅛ | 8⅜ | 6⅜ | 10¼ | 10¼ | White Polymeric | 4 | 2.5 | 300 | 250* | 853 |
| **164*** | 45 | 70 | 4.0 | *250W (2) | 14¼ | 8⅜ | 6⅜ | 15⅝ | 10¼ | White Polymeric | 4 | 4.5 | 545 | 500* | 1707 |
| **655** | 44 | 70 | 4.0 | 100W | 14¼ | 8¼ | 5¾ | 16¾ | 10⅝ | White Polymeric | 4 | 12.8 | 1536 | 1300 | 4437 |
| **656** | 44 | — | — | 100W | 14¼ | 8¼ | 5¾ | 16¾ | 10⅝ | White Polymeric | — | 11.9 | 1428 | 1300 | 4437 |
| **658** | 44 | 70 | 4.0 | n/a | 14¼ | 8¼ | 5¾ | 16¾ | 10⅝ | White Polymeric | 4 | 11.9 | 1428 | 1300 | 4437 |
| **659** | 44 | 50 | 2.5 | 100W | 14¼ | 8¼ | 5¾ | 16¾ | 10⅝ | White Polymeric | 4 | 12.0 | 1440 | 1300 | 4437 |
| **QTX110HL** | 43 | 110 | 0.9 | 120W/7W | 17⅝ | 11⅜ | 7⅝ | 20 | 15 | White Polymeric | 6 | 14.6 | 1710 | 1500 | 5120 |
| **QTX110HFLT** | 43 | 110 | 0.9 | 36W Fluor. (GU24 Incl.)/7W | 17⅝ | 11⅜ | 7⅝ | 20 | 15 | White Polymeric | 6 | 13.9 | 1626 | 1500 | 5120 |

*Ventilation Fan/Bulb Heater versions

## Bulb Heater (no fan)

| Model | Page | CFM | Sones, HVI-Certified | Lighting Watts Main/ Night Light | Housing Dimensions L" | Housing Dimensions W" | Housing Dimensions H" | Grille Dimensions L" | Grille Dimensions W" | Grille Finish | Duct Size" | Total Connected Amps | Total Connected Load In Watts | Total Connected Heater Wattage | BTU |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **161** | 45 | | | n/a | 8 1/8 | 8 3/8 | 6 3/8 | 10 1/4 | 10 1/4 | White Polymeric | | 2.1 | | 250 | 853 |
| **163** | 45 | | | n/a | 8 1/8 | 14 1/4 | 6 3/8 | 15 5/8 | 10 1/4 | White Polymeric | | 4.3 | | 500 | 1707 |

See models 162 and 164 above for Ventilation Fan/Bulb Heater versions

## Utility Fans

| Model | Page | CFM | Sones | Housing Dimensions L" | Housing Dimensions W" | Housing Dimensions H" | Grille Dimensions L" | Grille Dimensions W" | Amps | Duct Size |
|---|---|---|---|---|---|---|---|---|---|---|
| **12C** | 38 | 360 | 8.0 | — | 11 1/2 Sq | — | 13 1/2 Sq | | 1.7 | Direct Discharge |
| **502** | 38 | 270 | 8.0 | 16 3/4 | 13 7/8 | 3 1/4 | 13 1/2 Sq | | 1.7 | 3 1/4" x 10" |
| **503** | 38 | 160 | 5.0 | 14 | 12 | 3 1/4 | 11 1/2 Sq | | 1.5 | 3 1/4" x 10" |
| **504** | 38 | 350 | 6.5 | — | 10 1/4 Rd | 7 | 13 1/2 Sq | | 1.7 | 10" |
| **505** | 38 | 180 | 6.5 | — | 8 1/4 Rd | 7 | 11 1/2 Sq | | 1.5 | 8" |
| **506** | 38 | 470 | 8.0 | — | 10 3/8 Rd | — | 13 1/2 Sq | | 1.7 | Direct Discharge |
| **507** | 38 | 250 | 7.0 | — | 8 3/8 Rd | — | 11 1/2 Sq | | 1.5 | Direct Discharge |
| **508** | 38 | 270 | 6.0 | — | 10 3/8 Rd | — | 13 1/2 Sq | | 1.7 | Direct Discharge |
| **509** | 38 | 180 | 6.5 | — | 8 3/8 Rd | — | 13 1/2 Sq | | 1.5 | Direct Discharge |
| **509S** | 38 | 180 | 6.5 | — | 8 3/8 Rd | — | 13 1/2 Sq | | 1.5 | Direct Discharge |
| **510** | 38 | 380 | 6.5 | — | 11 1/2 Sq | — | 13 1/2 Sq | | 1.7 | Room to room wall fan |
| **511** | 38 | 180 | 4.5 | — | 11 1/2 Sq | — | 13 1/2 Sq | | 0.9 | Room to room wall fan |
| **512** | 38 | 90 | 3.5 | — | 6 Rd | — | 8 Dia | | 0.7 | Room to room wall fan |
| **512M** | 38 | 70 | 3.5 | — | 6 Rd | — | 8 Dia | | 0.7 | Direct Discharge |
| **673** | 38 | 60 | 4.5 | — | 6 1/4 Rd | 5 1/4 | 8 Dia | | 1.0 | 6" |

## In-Line Ventilators

| Model | Page | CFM | 0.2" Ps Sones | Housing Dimensions L" | Housing Dimensions W" | Housing Dimensions H" | Amps | Duct Size |
|---|---|---|---|---|---|---|---|---|
| **MP100** | 40 | 110 | 1.0 | 11 | 10 1/2 | 9 1/2 | 0.5 | 4- 4" Rd Inlets, 6" Rd Outlet |
| **MP140** | 40 | 150 | 1.5 | 11 | 10 1/2 | 9 1/2 | 0.8 | 4- 4" Rd Inlets, 6" Rd Outlet |
| **MP200** | 40 | 210 | 2.0 | 11 | 10 1/2 | 9 1/2 | 1.3 | 4- 4" Rd Inlets, 6" Rd Outlet |
| **MP280** | 40 | 290 | 3.0 | 15 1/4 | 14 1/4 | 14 3/4 | 2.5 | 4- 4" Rd Inlets, 6" Rd Outlet |
| **SP100** | 40 | 110 | 1.0 | 11 | 10 1/2 | 9 1/2 | 0.5 | 6" Rd Inlet and Outlet |
| **SP140** | 40 | 150 | 1.5 | 11 | 10 1/2 | 9 1/2 | 0.8 | 6" Rd Inlet and Outlet |
| **SP200** | 40 | 210 | 2.0 | 11 | 10 1/2 | 9 1/2 | 1.3 | 6" Rd Inlet and Outlet |

## Powered Attic Ventilators—Gable and Roof Mount

| Model | Page | Description | Housing Dimensions L" | Housing Dimensions W" | Housing Dimensions H" | CFM | Sones | Amps | Dome Color | Dome Material |
|---|---|---|---|---|---|---|---|---|---|---|
| **349BR** | 47 | PAV–Roof Mount | 25 Sq | 24 1/2 Dia Dome | 9 | 1000 | n/a | 4.0 | Dark Brown | Metal |
| **350BK** | 47 | PAV–Roof Mount | 22 1/4 Sq | 23 1/4 Dia Dome | 8 | 1050 | n/a | 3.6 | Black | PVC |
| **350BR** | 47 | PAV–Roof Mount | 22 1/4 Sq | 23 1/4 Dia Dome | 8 | 1050 | n/a | 3.6 | Brown | PVC |
| **353** | 47 | PAV–Gable Mount | 15 Dia | — | 8 | 1020 | n/a | 3.4 | — | — |
| **35316** | 47 | PAV–Gable Mount | 15 Dia | — | 8 | 1600 | n/a | 3.9 | — | — |
| **355BK** | 47 | PAV–Roof Mount | 22 1/4 Sq | 23 1/4 Dia Dome | 8 | 1200 | n/a | 4.3 | Black | PVC |
| **355BR** | 47 | PAV–Roof Mount | 22 1/4 Sq | 23 1/4 Dia Dome | 8 | 1200 | n/a | 4.3 | Brown | PVC |
| **356BK** | 47 | PAV–Roof Mount | 22 1/4 Sq | 23 1/4 Dia Dome | 8 | 1600 | n/a | 8.0 | Black | PVC |
| **356BR** | 47 | PAV–Roof Mount | 22 1/4 Sq | 23 1/4 Dia Dome | 8 | 1600 | n/a | 8.0 | Brown | PVC |
| **358** | 47 | PAV–Roof Mount | 22 1/4 Sq | 23 1/4 Dia Dome | 8 | 1200 | n/a | 4.3 | Silver | Metal |

## Solar-Powered Attic Ventilators—Surface, Curb, Remote and Gable

| Model* | Page | Mount | Color | Housing Material* | Solar Panel Power Output | Pieces | Dome/Panel Dimensions (inches) | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Height" | Width" | Length" |
| **345CSOBK** | 48 | Curb | Black | ABS Plastic | 28 Watts | 1 pc | 11 | 29 7/8 | 26 5/8 |
| **345CSOWW** | 48 | Curb | Weathered Wood | ABS Plastic | 28 Watts | 1 pc | 11 | 29 7/8 | 26 5/8 |
| **345GOBK** | 49 | Gable | Black | ABS Plastic | 28 Watts | 2 pcs | 3/4 / 11 | 30 / 19 3/4 | 26 5/8 / 19 3/4 |
| **345GOWW** | 49 | Gable | Weathered Wood | ABS Plastic | 28 Watts | 2 pcs | 3/4 / 11 | 30 / 19 3/4 | 26 5/8 / 19 3/4 |
| **345RSOBK** | 49 | Remote | Black | ABS Plastic | 28 Watts | 2 pcs | 3/4 / 9 | 30 / 29 7/8 | 26 5/8 / 26 5/8 |
| **345RSOWW** | 49 | Remote | Weathered Wood | ABS Plastic | 28 Watts | 2 pcs | 3/4 / 9 | 30 / 29 7/8 | 26 5/8 / 26 5/8 |
| **345SOBK** | 48 | Surface | Black | ABS Plastic | 28 Watts | 1 pc | 9 | 29 7/8 | 26 5/8 |
| **345SOWW** | 48 | Surface | Weathered Wood | ABS Plastic | 28 Watts | 1 pc | 9 | 29 7/8 | 26 5/8 |

*All UV-enhanced ABS plastic housings may be painted to match roof color









# HIGH
# NEED HIGH





# -TRAFFIC ENVIRONMENTS
# PERFORMANCE VENTILATION.



**LOOKING FOR AN EXCEPTIONALLY QUIET SOLUTION TO LIGHT COMMERCIAL VENTILATION?** With their heavy-duty motors, Broan High Capacity Ventilation Fans are the perfect answer for ventilating conference rooms, dining areas, public restrooms and other heavily-trafficked spaces. Low-vibration and low-profile, these discrete products work quietly and powerfully behind the scenes to remove odor, humidity and air-borne particulates that affect indoor air quality.

## 100/150 CFM FEATURES

- 6" round metal duct connector
- Single, impact-resistant centrifugal blower wheel housing
- 20 gauge galvanized steel housing
- Duct horizontally, vertically, or in-line with a separate adapter
- Low profile, white polymeric or painted white enamel metal grille
- Models L100L and L150L are UL Listed for use over bathtubs or showers when connected to a GFCI branch circuit
- Model 80L Variable Speed Control adjusts blower speed and sound level (available separately)

## 200/250/300 CFM FEATURES

- 8" round metal duct connector
- Single, impact-resistant centrifugal blower wheel (Model L300KMG has a metal wheel)
- 20 gauge galvanized steel housing
- Duct horizontally, vertically, or in-line with a separate adapter
- Models L200L, L250L and L300L are UL Listed for use over bathtubs or showers when connected to a GFCI branch circuit
- Model 80L Variable Speed Control adjusts blower speed and sound level (available separately)

## SPECIAL FEATURES FOR

**Model L300KMG**

- Removable access panel; Suitable for kitchen use

**Models L100L, L150L**

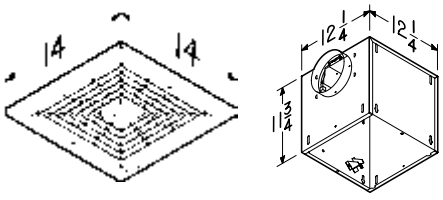
- Removable access panel, no insulation
- Two 6" round duct connectors
- No grille

**Models L200L L250L, L300L**

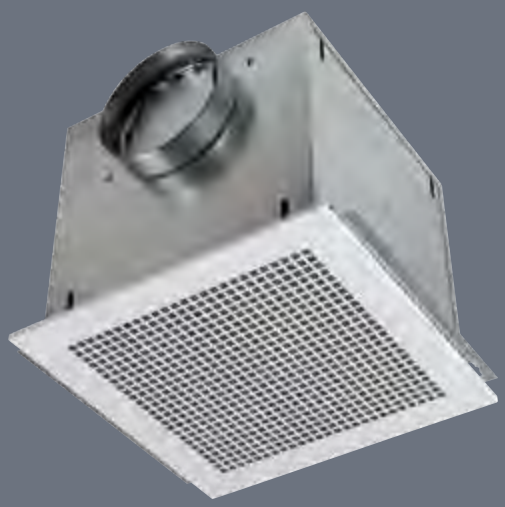
- Suitable for kitchen installations
- Removable access panel, no insulation
- Two 8" round duct connectors

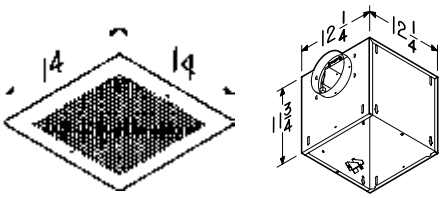
**L100 | L150 | L200 | L250 | L300**
**POLYMERIC GRILL**






**L100MG | L150MG | L200MG | L250MG, L300MG | L300KMG**
**METAL GRILL**






Metal grilles are not acceptable for use over tub or shower.

## 100–300 CFM Specifications

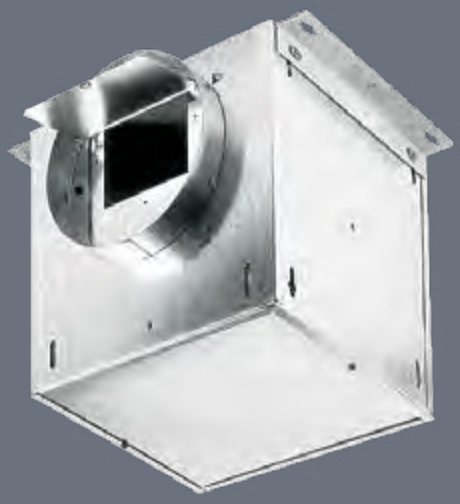
| Model | CFM | Sones | Amps | Sound Insulation | Notes |
|---|---|---|---|---|---|
| **White Polymeric Grill** | | | | | |
| **L100** | 109 | 0.9 | 1.1 | Yes | |
| **L150** | 157 | 1.5 | 1.3 | Yes | |
| **L200** | 210 | 1.7 | 1.8 | Yes | |
| **L250** | 259 | 2.2 | 2.1 | Yes | |
| **L300** | 308 | 2.9 | 2.6 | Yes | |
| **White Metal Grill** | | | | | |
| **L100MG** | 115 | 0.9 | 1.1 | Yes | |
| **L150MG** | 161 | 1.4 | 1.3 | Yes | |
| **L200MG** | 215 | 1.9 | 1.8 | No | |
| **L250MG** | 265 | 2.5 | 2.1 | No | |
| **L300MG** | 316 | 3.0 | 2.6 | No | |
| **L300KMG** | 277 | 3.1 | 2.6 | No | |
| **In-line Ventilator** | | | | | |
| **L100L** | 106 | 0.7 | 1.1 | No | No Grille |
| **L150L** | 147 | 1.1 | 1.3 | No | No Grille |
| **L200L** | 195 | 1.9 | 1.8 | No | No Grille |
| **L250L** | 245 | 2.3 | 2.1 | No | No Grille |
| **L300L** | 293 | 3.1 | 2.6 | No | No Grille |

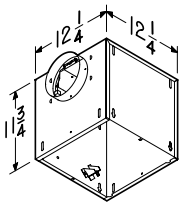
See page 71 for CFM details.

# FOR EVERY VENTILATION NEED



**L100L | L150L | L200L | L250L | L300L**
**IN-LINE VENTILATORS**






## MODEL 80L

- Adjust ventilation easily in any room
- Variable Speed Control mounts inside the fan housing and allows blower speed adjustment
- For Broan High Capacity Fans L100–L900
- Speed control with metal housing
- Fan insulation is perforated for easy installation
- 120V, 3 amps, 60 Hz

**80L**
**VARIABLE SPEED CONTROL**



c UL us

## 400/500/700 CFM FEATURES

- 4½" x 18½" duct connector
- Two impact-resistant centrifugal blower wheels
- Duct horizontally or vertically—In-line available with separate adapter
- Quiet automatic backdraft dampers
- Variable Speed Control adjusts blower speed and sound level (available separately)
- Models with "K" suffix suitable for kitchens
- Not for use over tub or shower

**Models L400L, L500L, L700L**

- Removable access panel; no insulation

**Model L400K**

- Suitable for kitchens
- Two metal centrifugal blower wheels
- Order Aluminum Filter LAF2

**Model L500K**

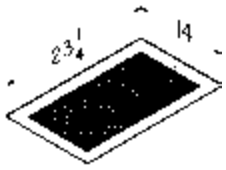
- Two metal centrifugal blower wheels
- Order Aluminum Filter LAF2
- Suitable for kitchens

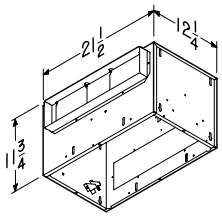
**L400* | L400K | L500* | L500K | L700***
**METAL GRILLE**

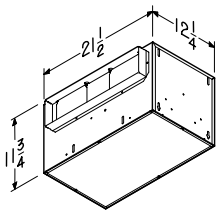


**L400L | L500L | L700L**
**IN-LINE VENTILATORS**






## 400–700 CFM Specifications

| Model | CFM | Sones | Amps | Sound Insulation | Notes |
|---|---|---|---|---|---|
| **L400** | 434 | 2.3 | 1.4 | Yes | Metal grille |
| **L400K** | 406 | 3.3 | 1.4 | No | Suitable for kitchens |
| **L500** | 514 | 3.3 | 2.2 | Yes | Metal grille |
| **L500K** | 481 | 4.4 | 2.2 | No | Suitable for kitchens |
| **L700** | 701 | 4.7 | 2.9 | Yes | Metal grille |
| **L400L** | 406 | 1.6 | 1.4 | No | No grille |
| **L500L** | 519 | 3.4 | 2.2 | No | No grille |
| **L700L** | 681 | 3.7 | 2.9 | No | No grille |

*See page 71 for CFM details.
Metal grilles are not acceptable for use over tub or shower.

## 900/1500/2000 CFM FEATURES

- 8" x 12" duct
- Painted white enamel metal grille
- Single, impact-resistant centrifugal blower wheel
- Ducted horizontally or vertically, or in-line with separate adapter
- Model 80L Variable Speed Control adjusts blower speed and sound level (available separately)
- Not for use over tub or shower

**Models L900, L1500 (shown)**

- L900 can use the 80L variable speed blower control (sold separately)

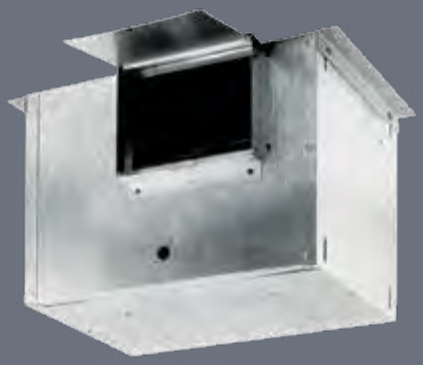
**Models L900L, L1500L**

- Removable access panel; no insulation
- Can use the 80L variable speed blower control (sold separately)

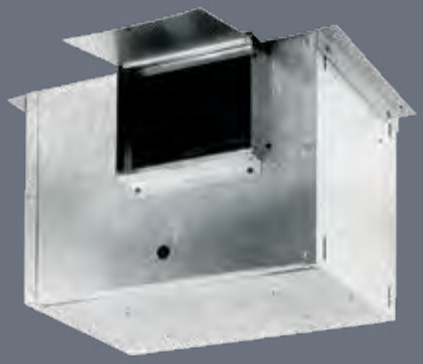
**Model L2000L**

- 38"L x 14⅝"W x 14⅝"H
- Fits 7¾" x 33¾" duct
- Optional metal grille (Model G102) and damper kit (Model D100)

**L900 | L1500***
**METAL GRILLE**



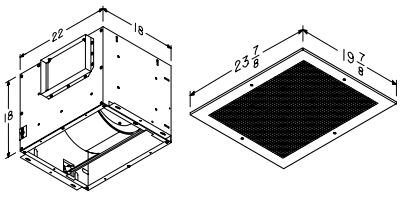
**L900L | L1500L**
**IN-LINE VENTILATORS**

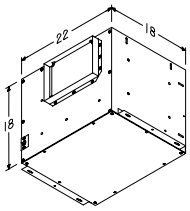


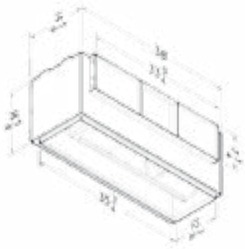
**L2000L**
**IN-LINE VENTILATORS**



Shown with optional metal grille (Model G102) and damper kit (Model D100).



**80L**
**VARIABLE SPEED CONTROL**



## 900–2000 CFM Specifications

| Model | CFM | Sones | Amps | Notes |
|---|---|---|---|---|
| **L900** | 901 | 4.1 | 3.0 | Painted white enamel metal grille |
| **L1500** | 1513 | 8.4 | 5.0 | Painted white enamel metal grille |
| **L900L** | 894 | 3.8 | 3.0 | In-line |
| **L1500L** | 1214 | 6.7 | 5.0 | In-line |
| **L2000L** | 1791 | 9.4 | 5.8 | In-line |

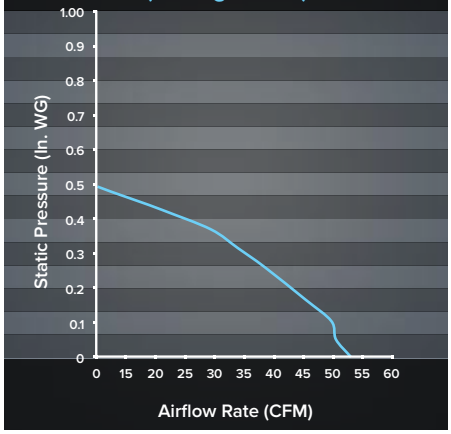
See page 71 for CFM details.
Metal grilles are not acceptable for use over tub or shower.

## MODEL 80L

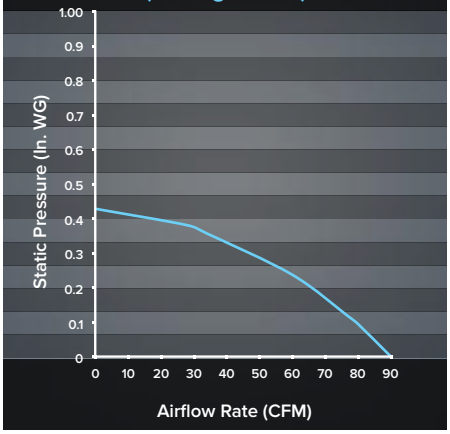
- Adjust ventilation easily in any room
- Variable Speed Control mounts inside the fan housing and allows blower speed adjustment
- For Broan High Capacity Fans L100–L900L
- Speed control with metal housing
- Fan insulation is perforated for easy installation
- 120V, 3 amps, 60 Hz

## PERFORMANCE DATA INVENT

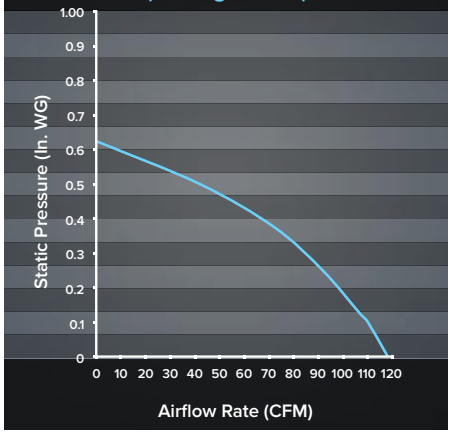
### AE50 (Ceiling Mount)



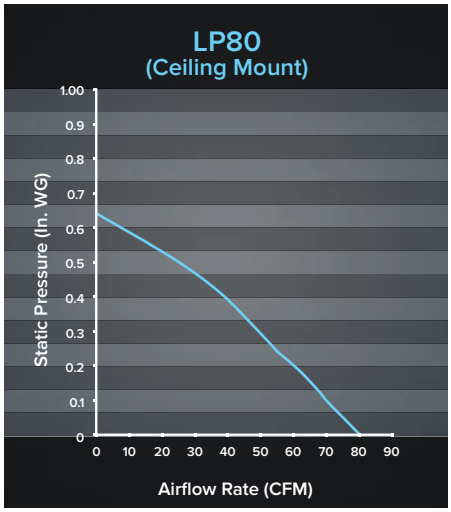

### AE80, AE80B (Ceiling Mount)



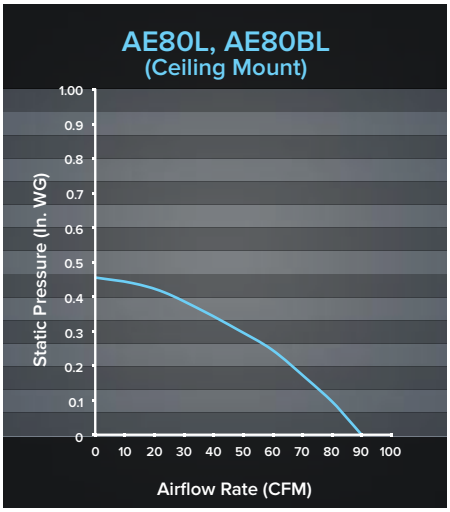

### AE110 (Ceiling Mount)



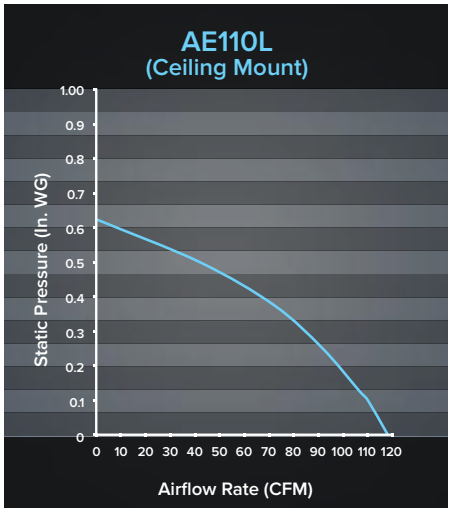

### LP80 (Ceiling Mount)



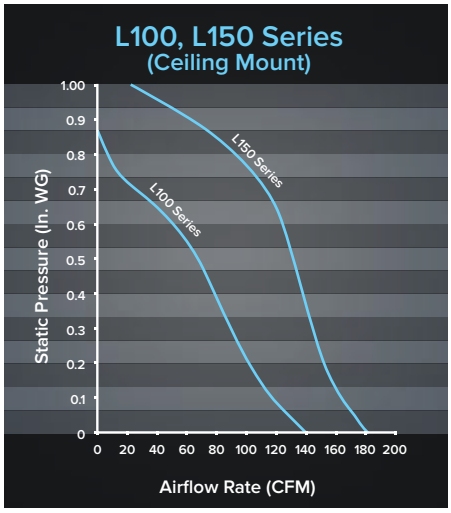

### AE80L, AE80BL (Ceiling Mount)

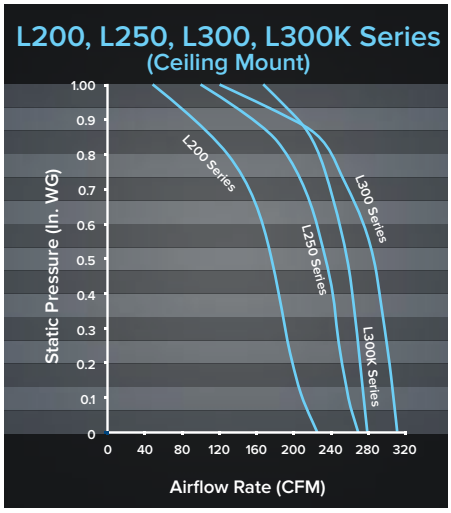


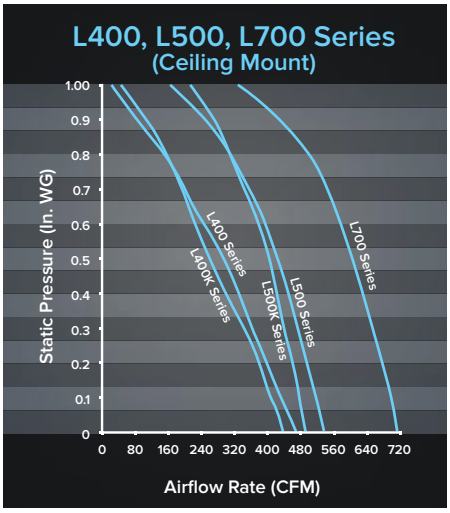

### AE110L (Ceiling Mount)

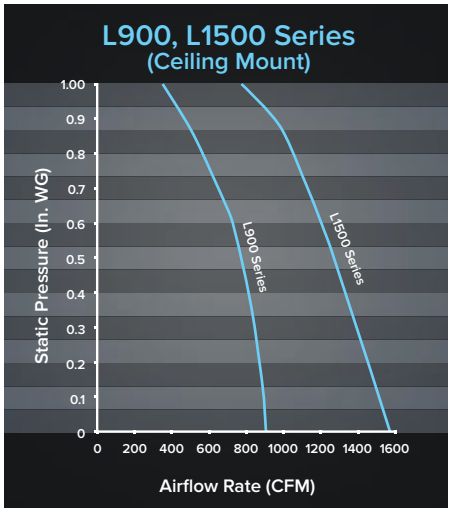


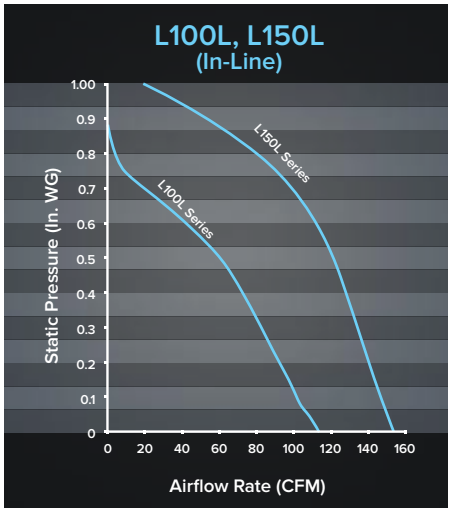
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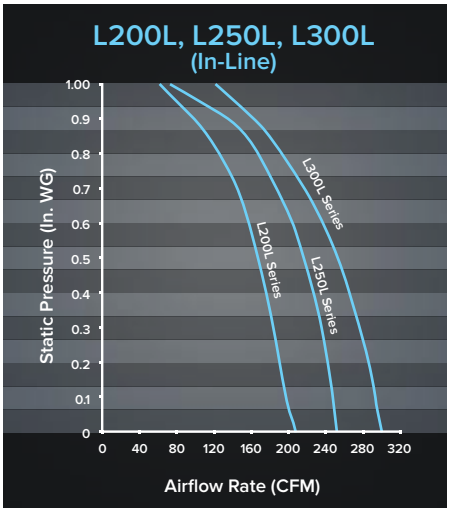


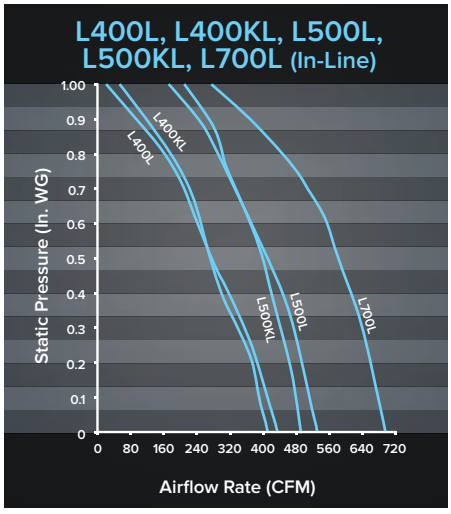



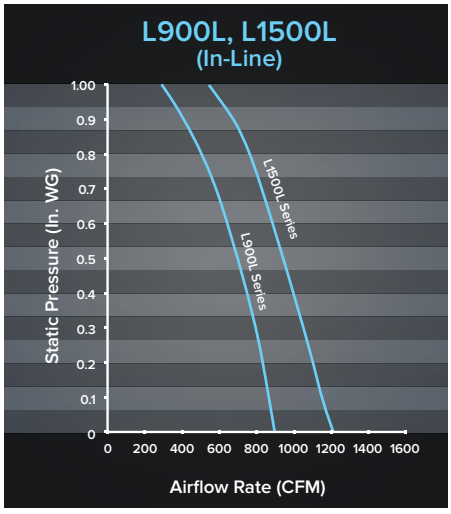



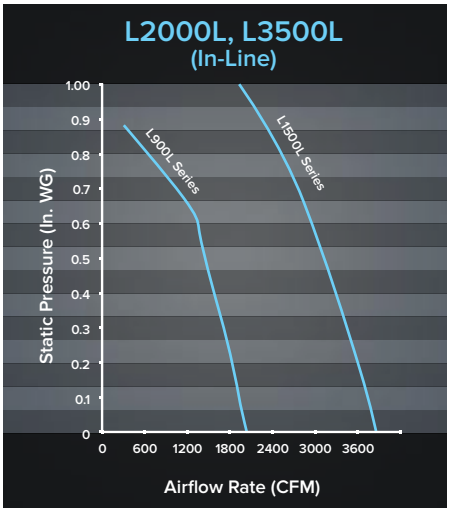




For In-line models, performance listed is for straight-through ducting at .125" static pressure.
For complete Sones and CFM at other static pressures, see our Web site at www.Broan.com.

## ROOF CAPS

### Model 437

- High-capacity design up to 1200 CFM
- Built-in bird screen
- Steel housing, black electrically bonded epoxy finish

### Model 611

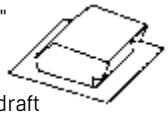
- For flat roof installation
- Aluminum natural finish
- For up to 8" round duct

### Model 611CM

- For curb mount installation
- Other features same as Model 611

### Model 612
- For flat roof installation
- Aluminum natural finish
- For up to 12" round duct

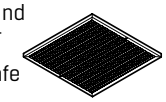
### Model 612CM
- For curb mount installation
- Other features same as Model 612

### Model 634

- For 3¼" x 10" or up to 8" round duct
- Built-in backdraft damper and bird screen
- Steel housing, black electrically bonded epoxy finish

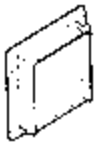
### Model 634M
- Same as Model 634, except for 6" round duct

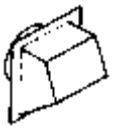
### Model 644
- Same as Model 634, except aluminum natural finish

## GREASE FILTERS

### Models LAF1 & LAF2

- Aluminum mesh filter traps grease and protects motor
- Dishwasher safe
- LAF1 (12" x 12") for L100/150/200/250/300 Series
- LAF1 for use with metal grilles
- LAF2 (12" x 21¼") for L400/500 Series

## WALL CAPS

### Model 441

- For 10" round duct
- Steel with aluminum louvers

### Model 613

- For 12" round duct
- Built-in backdraft damper and bird screen
- Aluminum natural finish

### Model 641
- Same as Model 613, except for 6" round duct

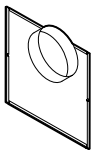
### Model 643

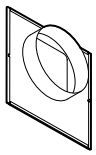
- For 8" round duct
- Built-in backdraft damper
- Aluminum natural finish

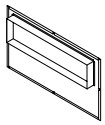
### Model 843BL

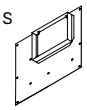
- For 6" round duct
- Built-in backdraft damper and bird screen
- Black finish

## IN-LINE ADAPTERS

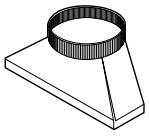
### Model 961L

- For L100/L150 Series
- Galvanized steel
- 6" round duct intake

### Model 981L

- For L200/L250/L300 Series
- Galvanized steel
- 8" round duct intake

### Model 982L

- For L400/L500/L700 Series
- Galvanized steel
- 4½" x 18½" duct intake

### Model 983L

- For L900/L1500 Series
- Galvanized steel
- 8" x 12" duct intake

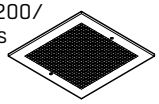
## DUCT TRANSITIONS

### Models 423 & T81212

- Galvanized steel
- 423: (4½" x 18½" to 10" round)
- T81212: (8" x 12" to 12" round)

## VIBRATION DAMPENING HANGERS

### Model V104 (not shown)
- For Model L2000L
- Heavy gauge steel construction
- Neoprene vibration dampening cushion
- Maximum load 75 lbs (each)
- For ⅜" diameter threaded rod (available separately from others)
- Set of four required for each ventilator

## METAL GRILLE KIT

### Model MG1

- For L100/150/200/250/300 Series
- White enamel painted steel
- Mounting screws included

## RADIATION DAMPERS

When excessive heat is detected, the breakaway fusible link triggers the closing of the radiation damper's fire resistant screen to prevent smoke and fire from traveling through ductwork.

### Features

- 165° fusible link
- Galvanized steel frame
- Stainless steel negator-type closure spring

### High Capacity Models RD1, RD2, RD3 (not shown)
- UL rated 3-hour ceiling radiation dampers
- High temperature, non-asbestos, reinforced fiber thermal fabric
- RD1 (12½" x 12½") for L100/150/200/250/300 Series
- RD2 (21¾" x 12½") for L400/500/700 Series
- RD3 (22¼" x 18¼") for L900/1500 Series

# WALL CONTROLS

## REMOTE IN-LINE VENTILATOR ACCESSORIES

### Model DH100W



- Dehumidistat
- Dual voltage (24V/120V)
- Variable setting from 20–80% relative humidity
- Usage guide included

### Model 70TW



- Thermostat for any fan 120, 250, 277 VAC, 22 amp capacity

## DECORATOR WALL CONTROLS

### Model 69W



- Single-Function Controls
- 120V, 15 amps

## SPEED CONTROLS

### Model 57W, 57V 3-Amp



- 120V, 3 amps
- Fits single-gang box
- Positive on/off action—dial for variable selection of air speeds and sound levels
- Built-in radio noise suppressor
- Blister packs available (P57W)

### Model 72W, 72V 6-Amp



- 120V, 6 amps—Models 72W, 72V
- Same features as 57W/57V

## TIMER & OFF-DELAY CONTROLS

### Model 64V, 64W

- Fan/Light Control with Off-Delay
- Fan and light operate together when control is turned on
- Fan continues to operate for a user adjustable time period 5-60 minutes after light is turned off
- Center position bypasses timer and turns fan and light off immediately
- Fits single-gang box
- 120V, 4 amps (fan), 4 amps (light)
- Requires hot and neutral wires in the switch box

### Model 80L

- For Broan High Capacity Fans L100–L900L
- Speed control with metal housing
- Fan insulation is perforated for easy installation
- 120V, 3 amps, 60 Hz
- cUL Listed

## TWO-FUNCTION CONTROLS

### Model 68W, 68V



- Two-Function Controls
- Two independent, 120V, 15 amp rocker switches (20 amps total)
- Fits single-gang box
- Blister packs available (P68W, P68V)

## TIMER & OFF-DELAY CONTROLS

### Model 59W, 59V, 71V



- Model 59W, 59V—up to 60 minutes
- Model 71V—up to 12 hours
- Fits single-gang box
- 120V, 20 amps; 240V, 10 amps
- Blister packs available (P59W, P59V)
- Operate continuously or for any set period

### Model 61W, 61V



- Operate for any set period up to 15 minutes (no "continuous on" position)
- Other features same as 59W/59V

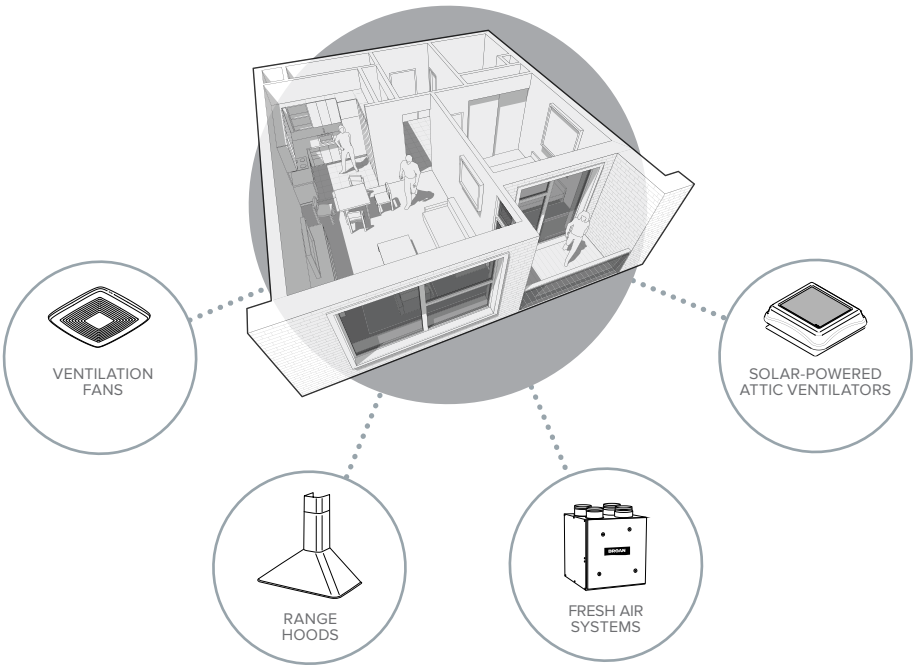
## Specifications

| | CFM/Sones .125" Ps (AMCA) | | Housing Dimensions | | | Grille Dimensions | | Amps | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Model | CFM | Sones | L" | W" | H" | L" | W" | at 60 Hz | Duct" | Watts | Volts |
| L100 | 109 | 0.9 | 12¼ | 12¼ | 11¾ | 14 | 14 | 1.1 | 6 | 87 | 120 |
| L100L | 106 | 0.7 | 12¼ | 12¼ | 11¾ | — | — | 1.1 | 6 | 87 | 120 |
| L100MG | 115 | 0.9 | 12¼ | 12¼ | 11¾ | 14 | 14 | 1.1 | 6 | 87 | 120 |
| L150 | 157 | 1.5 | 12¼ | 12¼ | 11¾ | 14 | 14 | 1.3 | 6 | 100 | 120 |
| L150L | 147 | 1.1 | 12¼ | 12¼ | 11¾ | — | — | 1.3 | 6 | 100 | 120 |
| L150MG | 161 | 1.4 | 12¼ | 12¼ | 11¾ | 14 | 14 | 1.3 | 6 | 100 | 120 |
| L200 | 210 | 1.7 | 12¼ | 12¼ | 11¾ | 14 | 14 | 1.8 | 8 | 127 | 120 |
| L200L | 195 | 1.9 | 12¼ | 12¼ | 11¾ | — | — | 1.8 | 8 | 127 | 120 |
| L200MG | 215 | 1.9 | 12¼ | 12¼ | 11¾ | 14 | 14 | 1.8 | 8 | 127 | 120 |
| L250 | 259 | 2.2 | 12¼ | 12¼ | 11¾ | 14 | 14 | 2.1 | 8 | 166 | 120 |
| L250L | 245 | 2.3 | 12¼ | 12¼ | 11¾ | — | — | 2.1 | 8 | 166 | 120 |
| L250MG | 265 | 2.5 | 12¼ | 12¼ | 11¾ | 14 | 14 | 2.1 | 8 | 166 | 120 |
| L300 | 308 | 2.9 | 12¼ | 12¼ | 11¾ | 14 | 14 | 2.6 | 8 | 212 | 120 |
| L300KMG | 277 | 3.1 | 12¼ | 12¼ | 11¾ | 14 | 14 | 2.6 | 8 | 212 | 120 |
| L300L | 293 | 3.1 | 12¼ | 12¼ | 11¾ | — | — | 2.6 | 8 | 212 | 120 |
| L300MG | 316 | 3.0 | 12¼ | 12¼ | 11¾ | 14 | 14 | 2.6 | 8 | 212 | 120 |
| L400 | 434 | 2.3 | 21½ | 12¼ | 11¾ | 23¼ | 14 | 1.4 | 4½ x 18½ | 146 | 120 |
| L400K | 406 | 3.3 | 21½ | 12¼ | 11¾ | 23¼ | 14 | 1.4 | 4½ x 18½ | 146 | 120 |
| L400L | 406 | 1.6 | 21½ | 12¼ | 11¾ | — | — | 1.4 | 4½ x 18½ | 146 | 120 |
| L500 | 514 | 3.3 | 21½ | 12¼ | 11¾ | 23¼ | 14 | 2.2 | 4½ x 18½ | 232 | 120 |
| L500K | 481 | 4.4 | 21½ | 12¼ | 11¾ | 23¼ | 14 | 2.2 | 4½ x 18½ | 232 | 120 |
| L500L | 519 | 3.4 | 21½ | 12¼ | 11¾ | — | — | 2.2 | 4½ x 18½ | 232 | 120 |
| L700 | 701 | 4.7 | 21½ | 12¼ | 11¾ | 23¼ | 14 | 2.9 | 4½ x 18½ | 313 | 120 |
| L700L | 681 | 3.7 | 21½ | 12¼ | 11¾ | — | — | 2.9 | 4½ x 18½ | 313 | 120 |
| L900 | 901 | 4.1 | 22 | 18 | 18 | 23⅞ | 19⅞ | 3.0 | 8 x 12 | 306 | 120 |
| L900L | 894 | 3.8 | 22 | 18 | 18 | — | — | 3.0 | 8 x 12 | 306 | 120 |
| L1500 | 1513 | 8.4 | 22 | 18 | 18 | 23⅞ | 19⅞ | 5.0 | 8 x 12 | 468 | 120 |
| L1500L | 1214 | 6.7 | 22 | 18 | 18 | — | — | 5.0 | 8 x 12 | 468 | 120 |
| L2000L | 1791 | 9.4 | 38 | 14⅝ | 14⅝ | — | — | 5.8 | 7¾ x 33¾ | 590 | 120 |

Sones and CFM listed for ceiling mount models are for horizontal ducting at .125" static pressure

## Wall Controls

| Model | L100–L700 Series | L900 Series | L1500 Series | L2000L | HD50L HD80L |
|---|---|---|---|---|---|
| 57W 57V | • | | | | |
| 59W 59V | • | • | • | • | |
| 61W 61V | • | • | • | • | |
| 64W 64V | • | • | | | |
| 68W 68V | | | | | • |
| 69W | • | • | • | • | |
| 70TW | • | • | • | • | |
| 71V | • | • | • | • | |
| 72W 72V | • | • | • | • | |
| 80L | • | • | | | |
| DH 100W | • | • | • | • | |




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