







Commercial ventilation solutions from Broan will keep every room more comfortable.

From an expansive open office space, to a public restroom, to a smaller conference room, to spaces where some say a ventilation fan just won't fit, Broan has affordable options that clear the air quickly.

**High Capacity Solutions** put powerful ventilation right where it's needed to clear the air in even large spaces. Our High Capacity Fans are perfect for ventilating public spaces—they feature heavy-duty motors that work effectively and quietly without getting noticed.





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LoProfile <sup>™</sup> and SmartSense <sup>®</sup> Fa	ns





Broan ULTRA™ Series ventilation fans and fan/lights deliver much more than you'd ever expect from a ventilation solution including fast, easy installation. That's because we built in everything specifiers demand—and everything contractors expect—in a continuous-duty ventilation solution. Whether you need smart technology that ensures rated CFM performance regardless of the ducting situation behind the wall, humidity or motion sensing solutions, there's an ULTRA Series™ fan or fan/light matched to your needs.

The LoProfile™ Fan goes where no other fan can, with a housing that fits 2x4 construction. Mount it vertically in a wall, or in a ceiling space that may be obstructed by other mechanical systems. It's an ideal solution for the most problematic spaces.

LoProfile Fan

Broan SmartSense

**Radiation Dampers** are a code requirement in many applications and are available for most models available in this catalog.

**See the full line at Broan.com.** There's an attractive solution for every need and any budget.



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with a powerful, continuous ventilation solution from Broan.

- 1 Acoustic housing insulation on most models reduces sound levels.
- Quiet, low-RPM, continuous operation motor is permanently lubricated to reduce maintenance.
- Automatic backdraft damper built into the duct connector for maximum comfort and efficiency.
- Resilient motor mounts minimize vibration for quieter, long-lasting operation.
- 5 Impact-resistant, balanced centrifugal blower wheel ensures consistent performance.
- 3 Round duct connectors on many models simplify installation.
- Heavy-gauge galvanized steel housing resists corrosion.
- 3 Quick wiring from inside or outside of the housing facilitates new and retrofit installation.
- Eight-way adjustable mounting brackets enable installation flexibility.

Independently tested and AMCA licensed for air and sound ratings.

All models 120 Volt.

Duct horizontally, vertically or in-line for installation flexibility.







The Broan High Capacity ventilation fan product line features a broad range of solutions so you can match the ventilation requirements to the space. You'll never over-or under-ventilate—or over-buy for that matter, either. With adjustable mounting brackets, wiring flexibility from either side of the housing, as well as horizontal, vertical and in-line ducting options, installing a Broan High Capacity Ventilation Fan is easy.

If you have a smaller space that needs continuous ventilation, consider our Heavy-Duty Fans and Fan/Lights. Sealed motors do not need lubrication and are engineered for continuous operation. Heavy-Duty Fans and Fan/Lights are a great solution for a small restroom, a utility closet, or any space where ventilation and light might be needed.

For every ventilation need—look no further than Broan.



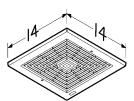
#### **VENTILATION FANS**

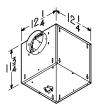
## Polymeric Grille



Model	CFM	Sones	Amps	Notes
L100*	109	0.9	1.1	White polymeric grille
L150*	157	1.5	1.3	White polymeric grille

See pages 12–13 for CFM details. \*Sound insulation.



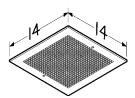


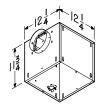
### **Metal Grille**



Model	CFM	Sones	Amps	Sound Insulation	Notes
L100MG*	115	0.9	1.1	Yes	White metal grille
L150MG*	161	1.4	1.3	Yes	White metal grille

See pages 12–13 for CFM details. \*Sound insulation.





#### **In-Line Ventilators**

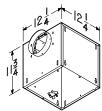


#### **Special Features**

- Models L100L, L150L
   Removable access panel, no insulation
- Two 6" round duct connectors
- No grille

Model	CFM	Sones	Amps	Sound Insulation	Notes
L100L	106	0.7	1.1	No	No grille
L150L	147	1.1	1.3	No	No grille

See pages 12-13 for CFM details.



#### **100/150 FEATURES**

- 6" round metal duct connector
- Single, impact-resistant centrifugal blower wheel housing
- 20 gauge galvanized steel housing
- Duct horizontally or 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
- Broan Electronic Variable Speed Controls adjust blower speed and sound level (available separately)

#### Model 80L

#### Adjust ventilation easily in any room.

Variable Speed Control mounts inside the fan housing and allows blower speed adjustment.

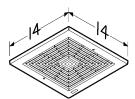
- For Broan High Capacity Fans L100-L900L
- · Speed control with metal housing
- Fan insulation is perforated for easy installation
- 120V, 3 amps, 60 Hz

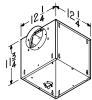




Model	CFM	Sones	Amps	Notes
L200*	210	1.7	1.8	White polymeric grille
L250*	259	2.2	2.1	White polymeric grille
L300*	308	2.9	2.6	White polymeric grille

See pages 12–13 for CFM details. \*Sound insulation.





# Polymeric Grille



#### **Special Features**

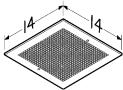
#### Model L300KMG

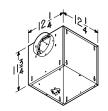
Removable access panel; Suitable for kitchen use

Model	CFM	Sones	Amps	Notes
L200MG*	215	1.9	1.8	White metal grille
L250MG*	265	2.5	2.1	White metal grille
L300MG*	316	3.0	2.6	White metal grille
L300KMG	277	3.1	2.6	White metal grille

See pages 12–13 for CFM details. \*Sound insulation.







#### Metal Grille



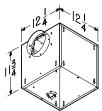
#### **Special Features**

#### Models L200L L250L, L300L

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

Model	CFM	Sones	Amps	Notes
L200L	195	1.9	1.8	No grille
L250L	245	2.3	2.1	No grille
L300L	293	3.1	2.6	No grille

See pages 12–13 for CFM details.



### **In-Line Ventilators**



#### 200/250/300 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 or 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
- Use Broan Electronic Variable Speed Control to adjust blower speed and sound level (available separately)

#### 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





#### **VENTILATION FANS**

### Metal Grille

#### **Special Features**

#### Model L400K

- Suitable for kitchensTwo metal centrifugal blower wheels
- Order Aluminum Filter LAF2

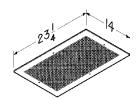
#### Model L500K

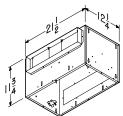
- Two metal centrifugal blower wheels
- Order Aluminum Filter LAF2
- Suitable for kitchens

Model	CFM	Sones	Amps	Sound Insulation	Notes
L400*	434	2.3	1.4	Yes	Metal grille
L400K	406	3.3	1.4		Suitable for kitchens
L500*	514	3.3	2.2	Yes	Metal grille
L500K	481	4.4	2.2		Suitable for kitchens
L700*	701	4.7	2.9	Yes	Metal grille

See pages 12–13 for CFM details.

\*Sound insulation.





#### **In-Line Ventilators**

#### **Special Features**

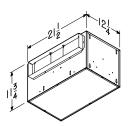
#### Models L400L L500L, L700L

 Removable access panel; no insulation

Model	CFM	Sones	Amps	Notes	
L400L	406	1.6	1.4	No grille	
L500L	519	3.4	2.2	No grille	
L700L	681	3.7	2.9	No grille	

See pages 12-13 for CFM details.





#### 400/500/700 FEATURES

- 4-1/2" x 18-1/2" duct connector
- Two impact-resistant centrifugal blower wheels
- Duct horizontally or vertically – In-line available with separate adapter
- Quiet automatic backdraft dampers
- Use Broan Electronic Variable Speed Control to adjust blower speed and sound level (available separately)
- Models with "K" suffix suitable for kitchens

#### 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





#### HIGH CAPACITY VENTILATION FANS

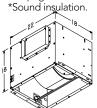
#### **Special Features**

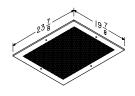
Models L900, L1500 (shown)

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

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

See pages 12-13 for CFM details.





# **In-Line Ventilators**

Metal Grille

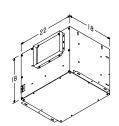
#### **Special Features**

#### Models L900L, L1500L

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

Model	CFM	Sones	Amps	Notes
L900L	894	3.8	3.0	In-line
L1500L	1214	6.7	5.0	In-line

See pages 12-13 for CFM details.



#### **Special Features**

#### Model L2000L

- 38"L x 14-5/8"W x 14-5/8"H
- Fits 7-3/4" x 33-3/4" duct
- Optional metal grille (Model G102) and damper kit (Model D100)

Model	CFM	Sones	Amps	Notes	
L2000L	1791	9.4	5.8	In-line	

See pages 12–13 for CFM details.



### **In-Line Ventilators**



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

#### **L900 / L1500 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
- Use Electronic Variable Speed Control to adjust blower speed and sound level (available separately)

#### 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





### **Heavy Duty Ventilation**



#### **Special Features**

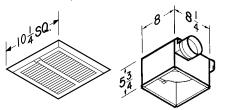
#### Model HD50, HD80

- Enclosed motors with long-life bearings for continuous operation
- Rugged metal fan grille for added durability
- Can be mounted in wall or ceiling
- Grille torsion spring-mounted for easy installation
- Pre-wired outlet for plug-in motor plate
- AMCA licensed for both air and sound



Model	CFIVI	Sones	Amps	Lighting
HD50*	50	1.5	0.4	_
HD80	80	2.5	0.6	_

\*ENERGY STAR® qualified.



# Heavy Duty Ventilation with light

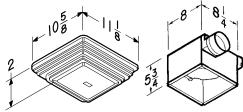


#### **Special Features**

#### Model HD50L, HD80L

- Enclosed motors with long-life bearings for continuous operation
- Can be mounted in wall or ceiling
- Pre-wired outlet for plug-in motor plate and light
- AMCA licensed for both air and sound

Model	CFM	Sones	Amps	Lighting
HD50L	50	1.5	1.2	100W
HD80L	80	2.5	1.5	100W
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#### **HEAVY DUTY FEATURES**

- · Classic white grilles
- Plug-in, permanently lubricated motor
- Efficient polymeric fan impeller
- Mounting ears offer sturdy, quick installation
- UL Listed for use over bathtubs or showers when connected to a GFCI protected branch circuit
- Polymeric duct connectors with tapered sleeves for easier, positive ducting fits 2" x 6" ceiling construction
- Shatter resistant polymeric light lenses
- Select models available in Project Packs
- Lighted models recommended with optional two-function wall control
- Type IC
- Fan only models available with radiation/fire damper

#### **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 3-1/4" 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 21-1/4") 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
- 4-1/2" x 18-1/2"
- duct intake

#### Model 983L

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

### **Duct Transitions**

### Models 423 & T81212

- · Galvanized steel
- 423: (4-1/2" x 18-1/2" to 10" round)
- T81212: (8" x 12" to 12" round)



#### Vibration Dampening Hangers (Not shown)

#### Model V104 (For Model L2000L)

- Heavy gauge steel construction
- Neoprene vibration dampening cushion
- Maximum load 75 lbs (each)
- For 3/8" 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**

- UL rated 3-hour ceiling radiation dampers
- · High temperature, non-asbestos, reinforced fiber thermal fabric
- RD1 (12-1/2" x 12-1/2") for L100/150/200/250/300 Series
- RD2 (21-3/4" x 12-1/2") for L400/500/700 Series
- RD3 (22-1/4" x 18-1/4") for L900/1500 Series

#### **Model RDJ1 Radiation** Damper for HD50 and HD80



Radiation damper accessory with metal grille, metal duct connector, hanger bars and plaster

guard (no housing)





- span up to 24" • 4" metal duct connector

Model RDH Project

**Housing Pack** 

with damper

#### Finish Packs for 80RDF, 110RDF, **HD50RDF & HD80RDF** (compatible with RDH)



- Project Finish Packs include:
- Assembled motor plate, wheel and plug-in motor
- Rugged metal grille for added durability

Model	CFM	Sones	Type/Pack Qty	Notes
RDJ1	_	_	Housing/1	
RDH	_	_	Accessory/1	<u> </u>
80RDF	80	2.5	Finish/4	_
110RDF	110	4.0	Finish/4	<u> </u>
HD50RDF*	50	1.5	Finish/4	Heavy-duty Motor
HD80RDF	80	2.5	Finish/4	Heavy-duty Motor



ENERGY STAR® qualified

# **Accessory Switches**

### **Indicator Light Controls**

#### Model 69WL, 69VL

- Single-Function Controls
- Ideal for use with quiet models, or Remote In-Line Ventilators
- 120V, 20 amps
- Blister packs (P69WL, P69VL)
- Red light indicates power is on

#### Remote In-Line Ventilator Accessories

#### Model DH100W

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

#### **Model T24H**

- 24-Hour Programmable Timer
- 120V, 8 amps
- Sets up to 36 on/off cycles as short as 20 minutes
- Manual on/off override switch
- Fits single-gang box

#### 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

Housing

 Other features same as 57W/57V



Grille

#### **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)

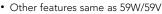
# Timer & Off-delay Controls

#### 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

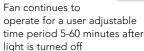
 Operate for any set period up to 15 minutes (no "continuous on" position)



# Timer & Off-delay Controls

#### Model 64V, 64W

- Fan/Light Control with Off-Delay
- Fan and light operate together when control is turned on



- 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

### **Switches**

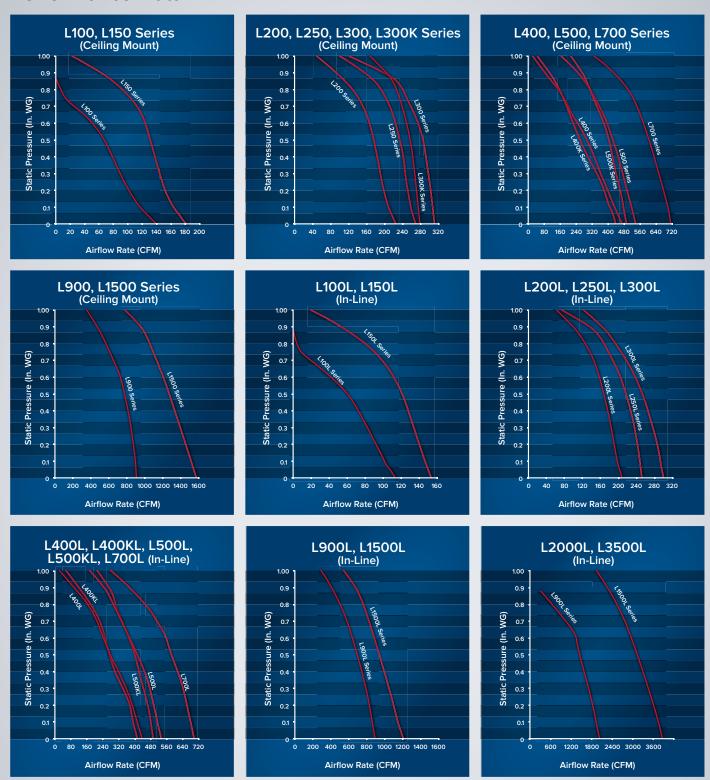
	L100- L700 Series		L1500 Series	L2000L	HD50L HD80L
57W 57V	•				
59W 59V	•	•	•	•	
61W 61V	•	•	•	•	
64W 64V	•	•			
68W 68V					•
69W	•	•	•	•	
69WL 69VL	•	•	•	•	
70TW	•	•	•	•	
71V	•	•	•	•	
72W 72V	•	•	•	•	
80L	•	•			
DH 100W	•	•	•	•	
T24H	•	•		•	

# Specifications CFM/Sones .125" Ps

		ICA)		Dimension	S	Dime	nsions	Amps			
	CFM	Sones	L"	W"	H"	L"	W"	at 60 Hz	Duct"	Watts	Volts
L100	109	0.9	121/4	121/4	11¾	14	14	1.1	6	87	120
L100L	106	0.7	121/4	121/4	11¾	_	_	1.1	6	87	120
L100MG	115	0.9	121/4	121/4	11¾	14	14	1.1	6	87	120
L150	157	1.5	121/4	121/4	11¾	14	14	1.3	6	100	120
L150L	147	1.1	121/4	121/4	11¾	_	_	1.3	6	100	120
L150MG	161	1.4	121/4	121/4	11¾	14	14	1.3	6	100	120
L200	210	1.7	121/4	121/4	11¾	14	14	1.8	8	127	120
L200L	195	1.9	121/4	121/4	11¾	_	_	1.8	8	127	120
L200MG	215	1.9	121/4	121/4	11¾	14	14	1.8	8	127	120
L250	259	2.2	121/4	121/4	11¾	14	14	2.1	8	166	120
L250L	245	2.3	121/4	121/4	11¾	_	_	2.1	8	166	120
L250MG	265	2.5	121/4	121/4	11¾	14	14	2.1	8	166	120
L300	308	2.9	121/4	121/4	11¾	14	14	2.6	8	212	120
L300KMG	277	3.1	121/4	121/4	11¾	14	14	2.6	8	212	120
L300L	293	3.1	121/4	121/4	11¾	_	_	2.6	8	212	120
L300MG	316	3.0	121/4	121/4	11¾	14	14	2.6	8	212	120
L400	434	2.3	211/2	121/4	11¾	231/4	14	1.4	4½ x 18½	146	120
L400K	406	3.3	211/2	121/4	11¾	231/4	14	1.4	4½ x 18½	146	120
L400L	406	1.6	211/2	121/4	11¾	_	_	1.4	4½ x 18½	146	120
L500	514	3.3	211/2	121/4	11¾	231/4	14	2.2	4½ x 18½	232	120
L500K	481	4.4	211/2	121/4	11¾	231/4	14	2.2	4½ x 18½	232	120
L500L	519	3.4	21½	121/4	11¾			2.2	4½ x 18½	232	120
L700	701	4.7	21½	121/4	11¾	231/4	14	2.9	4½ x 18½	313	120
L700L	681	3.7	21½	121/4	11¾			2.9	4½ x 18½	313	120
L900	901	4.1	22	18	18	23%	19%	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	23%	191/8	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	14%	14%	_	_	5.8	7¾ x 33¾	590	120

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

# Performance Data



# Premium ventilation helps reduce airborne pollutants.

Today's homes are built tightly for energy efficiency. But what's good for heating and air-conditioning bills means unwanted and unhealthy pollutants stay trapped inside unless they are mechanically vented away.

#### Intermittent and continuous ventilation.

Intermittent or "spot" ventilation focuses on removing contaminants from a specific area at a specific time, such as running a bath fan during a shower. Continuous ventilation—also known as whole-house ventilation—is becoming increasingly popular and continually removes contaminants generated in our homes every day.

Continuous ventilation is being required to meet building codes such as California Title 24, or green building standards such as Leadership in Energy Efficient Design (LEED) or ENERGY STAR® for Homes. These types of programs reference the ASHRAE 62.2 residential ventilation standard that details the amount of

air in cubic feet per minute (CFM) needed for whole-house ventilation, based on square footage and the number of bedrooms in the home (see chart below).

Broan offers multiple solutions for these applications. They not only meet the continuous or whole-house needs but also the spot or local ventilation needs traditionally associated with ventilation fans such as removing excess shower humidity or bathroom odors.

Our new ULTRA™ Series ventilation fans have the ability to easily and efficiently handle the job—especially multi-speed models and those with ULTRA Sense™ humidity or motion sensing technology.

Or you can choose our Broan SmartSense® system which allows multiple fans to communicate wirelessly for evenly distributed multi-point ventilation throughout the home.

### ASHRAE 62.2 Whole Building Ventilation Requirements

	nber of rooms	0–1	2–3	4–5
OU.	< 1500	30	45	60
re Footag	1501 to 3000	45	60	75
Home Square Footage	3001 to 4500	60	75	90
ĭ ·	4501 to 6000	75	90	105

For more details see ASHRAE Standard 62.2-2010

Use this simple formula or the chart to calculate the required CFM for continuous ventilation.

CFM =  $.01 \times$  floor area (in square feet) plus 7.5 x (number of bedrooms + 1). Example: A 3,000 square foot home with 3 bedrooms would require 60 cfm:  $.01 \times 3,000 = 30$ 

 $7.5 \times (3+1) = 30$ 

Add together for a total of 60 CFM



All ULTRA™ Series Ventilation Fans are ENERGY STAR® qualified.

# ULTRA™ Series Ventilation Fans. The solution for spot and continuous ventilation needs.

Our exclusive ULTRA Smart<sup>™</sup> Control Technology enables these fans to maintain their powerful operation even at high static pressures, and supply the required air movement levels for whole-house ventilation while meeting the spot ventilation needs of a bathroom. Available in multi-speed versions, the continuous lower CFM levels of ULTRA<sup>™</sup> Series Ventilation Fans can be adjusted to meet the specific needs of each home.

For even greater ease of use, models with ULTRA Sense™ Humidity or Motion Sensing Technology will automatically adjust to maximum CFM levels when the need is detected.

Since whole-house fans may run at all times, quiet operation is extremely important. The last thing that anybody wants is to be kept awake by a loud fan. The ASHRAE 62.2 standard requires whole-house fans to be rated at 1.0 sones or less. All ULTRA™ Series Ventilation Fans feature ULTRA Silent™ Sound Technology, greatly surpassing this requirement by measuring a barely audible ≤0.3 sones. Choosing an ENERGY STAR® qualified fan is always a good idea, but it is even more important for whole-house fans that may run all the time. ULTRA™ Series Ventilation Fans with ULTRA Green™ DC Motor Technology meet ENERGY STAR® CFM-per-watt requirements and in some cases are nearly 10 times more efficient.

Excess humidity, for example, can cause damaging and unhealthy mold growth. Other pollutants include pollen and volatile organic compounds (VOCs) which off-gas from building materials or exist in products we use every day such as cosmetics and cleaning chemicals. Visit www.epa.gov for more information on pollutants.





Vertical positioning tabs ensure the housing is in the right place.



For no-hassle installation, the blowe simply snaps into the housing.



You can hear—and feel—when fan housing snaps into place. The easy-to-position carriage enables location adjustment between joists to ensure desired ceiling placement.



The expandable mounting frame adjusts from 14"–24" and fits any type of joist, I-Joist or truss construction.

# 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 to an easy-to-insert housing and blower that snap into place, we designed the ULTRA™ Series for fast, easy, universal application.

No matter what's behind the drywall on your next job, you'll never have to do another difficult installation. ULTRA™ Series Ventilation Fans and Fan/Lights are up to 60% faster in retrofits and up to 20% faster in new construction.

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.





Pre-installed screws in the mounting frame enable quick installation.



Inside/outside wiring capability provides flexible new or retrofit installation.

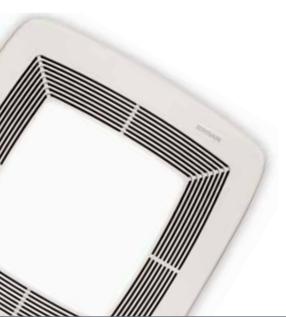


For room-side installation, pull the duct through the opening, attach the duct to the connector, push the connector into place and fasten to the housing with only one screw.



# **ULTRAGREEN**DC MOTOR TECHNOLOGY

ULTRA<sup>™</sup> Series Ventilation Fans are a virtually silent continuous ventilation solution for ASHRAE 62.2 and programs such as LEED, ENERGY STAR® for Homes and CA Title 24. Choose single speed (X1) or multi-speed (X2) versions to get functionality you require for the job. Our DC Motor is the most efficient in our line—80 CFM models use only 5.8 watts.



# **ULTRA**LUCENT<sup>™</sup> LIGHTING TECHNOLOGY

The design of the ULTRA™ Series light lens distributes illumination evenly while using less wattage. Two 18 watt bulbs deliver the brightness of models previously requiring 60 watts of CFL output, maximizing the lumen output per watt of the bulb.

# **ULTRA**SMART<sup>™</sup> CONTROL TECHNOLOGY

To virtually ensure full-rated performance—regardless of the ducting situation—ULTRA™ Series fans automatically monitor and adjust CFM output. For continuous ventilation needs, X2 multispeed models may be precisely set as low as 30 CFM to avoid costly over-ventilating. A second dial controls runtime at maximum CFM when lingering humidity and odors need to be cleared. Both dials need only be set once.

# **ULTRA**SILENT™ SOUND TECHNOLOGY

ULTRA<sup>™</sup> 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.



## ULTRASENSE™ H HUMIDITY SENSING TECHNOLOGY

ULTRA Sense<sup>™</sup> H sensing fans detect the rapid rise in humidity at the ceiling level. This means that they will react to shower humidity much faster than other competitive fans or wall controls that wait for a relative humidity set-point to be reached. You can enjoy a humidity-free, comfortable environment much more quickly when taking a shower or bath. Multi-speed models turn the fan speed up from the lower continuous CFM level. Single-speed models turn the fan on automatically. As humidity decreases the sensor initiates the shut-down timer (can be set from five to 60 minutes) and returns multi-speed fans to continuous ventilation levels and switches single-speed models off.



ULTRA Sense™ M fans with 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.

Fresh, comfortable air—not to mention a mold-free environment—becomes a constant companion without having to think about it. After motion is no longer present, the user-set delay timer (five to 60 minutes) will automatically turn the fan back down to ensure that humidity and odor have been fully cleared while saving energy.

Once it's set, forget about it.



#### **VENTILATION FANS**



Model	CFM	Sones	Amps
XB50	50	<0.3	0.1
XB80	80	<0.3*	0.1
XB110	110	<0.3	0.2
ZB80	30–80	<0.3*	0.1
ZB110	30–110	<0.3	0.2

See pages 22–23 for specifications.

\*80 CFM models are 0.3 Sones when using 6" to 4" duct reducer





50 and 80 CFM Models include a 6" to 4" duct

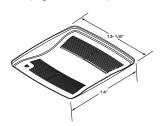
### ULTRA Sense™ Humidity Sensing Fan



- Humidity sensing models detect rapid rise in humidity
  - Multi-speed models increase speed from lower continuous levels
  - Single speed models turn fan on

Model	CFM	Sones	Amps
XB110H	110	<0.3	0.2
ZB110H	30–110	<0.3	0.2

See pages 22-23 for specifications.



### **ULTRA Sense™ Motion Sensing Fan**



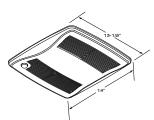
#### **Special Features**

- Motion sensing models are multi-speed and increase speed from lower continuous levels
- 5–60 minute adjustable delay timer before turning fan off or down

Model	CFM	Sones	Amps
ZB80M	30–80	<0.3*	0.1
ZB110M	30–110	<0.3	0.2

See pages 22–23 for specifications.

\*80 CFM models are 0.3 Sones when using 6" to 4" duct reducer



#### **ULTRA**™ FEATURES

- 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<sup>™</sup> Control Technology monitors performance and adjusts motor speed to ensure rated air movement
- ENERGY STAR® qualified with ULTRA Green™ DC Motor Technology
- 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 RDFI Premium Radiation Damper Kit available for models ZB110, ZB80, XB110, XB80 & XB50



#### **ULTRA SERIES**

#### **VENTILATION FAN/LIGHTS**

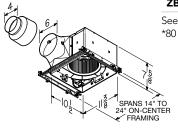
#### **Special Features**

• 2-18 Watt GU24 fluorescent lamps

Model	CFM	Sones	Lighting	Amps
XB50L	50	<0.3	2-18W GU24	0.7
XB80L	80	<0.3*	2-18W GU24	0.7
XB110L	110	<0.3	2-18W GU24	0.9
ZB80L	30–80	<0.3*	2-18W GU24	0.8
ZB110L	30–110	<0.3	2-18W GU24	0.9

See pages 22-23 for specifications.

\*80 CFM models are 0.3 Sones when using 6" to 4" duct reducer





50 and 80 CFM Models include a 6" to 4" duct reducer

# 8

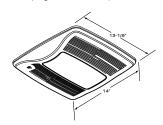
**ULTRA™** Series Fan/Light

#### **Special Features**

- 2-18 Watt GU24 fluorescent lamps
- Humidity sensing models detect rapid rise in humidity
  - Multi-speed models increase speed from low continuous level
  - Single speed models turn fan on

Model	CFM	Sones	Lighting	Amps
XB110HL	110	< 0.3	2-18W GU24	0.9
ZB110HL	30–110	< 0.3	2-18W GU24	0.9

See pages 22-23 for specifications.



### ULTRA Sense™ Humidity Sensing Fan/Light



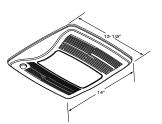
#### **Special Features**

- 2-18 Watt GU24 fluorescent lamps
- Motion sensing models are multi-speed and increase speed from lower continuous levels
- 5–60 minute adjustable delay timer before turning fan off or down

Model	CFM	Sones	Lighting	Amps
ZB80ML	30–80	<0.3*	2-18W GU24	0.9
ZB110ML	30–110	< 0.3	2-18W GU24	0.9

See pages 22–23 for specifications.

\*80 CFM models are 0.3 Sones when using 6" to 4" duct reducer



# **ULTRA Sense™ Motion Sensing Fan/Light**



### **RDF1 Premium Radiation Damper**

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.

- 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
- Available for models ZB110, ZB80, XB110, XB80 an XB50



# **ULTRA**<sup>™</sup> Series Specifications

From sound levels of <0.3 sones—the lowest rating achievable—to miserly wattage levels and incredible power under static pressure, ULTRA™ Series delivers performance for today's demanding requirements.

Model	Duct Size	СЕМ	Constant CFM Range	Sones	Light <sup>1</sup> / Night Light	Sensing	ENERGY STAR		Housing ensions L		Gri Dimens L	ille ions (in) W	Grille Finish	Amps <sup>2</sup>	UL Tub/ Shower
Single-Sp	peed Fans														
XB50	6" 6" to 4" reducer	50 50		<0.3 <0.3			Yes	11-3/8	10-1/2	7-5/8	13	14	White Polymeric	0.1	Yes
XB80	6" 6" to 4" reducer	80 80		<0.3 0.3			Yes	11-3/8	10-1/2	7-5/8	13	14	White Polymeric	0.1	Yes
XB110	6"	110		<0.3			Yes	11-3/8	10-1/2	7-5/8	13	14	White Polymeric	0.2	Yes
хв110н	6"	110		<0.3		Humidity	Yes	11-3/8	10-1/2	7-5/8	13-1/8	14	White Polymeric	0.3	Yes
Single-Sp	peed Fan/Lights														
XB50L	6" 6" to 4" reducer	50 50		<0.3 <0.3	2-18W GU24 / 4W		Yes	11-3/8	10-1/2	7-5/8	13	13-3/4	White Polymeric	0.7	Yes
XB80L	6" 6" to 4" reducer	80 80		<0.3 0.3	2-18W GU24 / 4W		Yes	11-3/8	10-1/2	7-5/8	13	13-3/4	White Polymeric	0.7	Yes
XB110L	6"	110		<0.3	2-18W GU24 / 4W		Yes	11-3/8	10-1/2	7-5/8	13	13-3/4	White Polymeric	0.9	Yes
XB110HL	6"	110		<0.3	2-18W GU24 / 4W	Humidity	Yes	11-3/8	10-1/2	7-5/8	13-1/8	14	White Polymeric	1.0	Yes
Multi-Spe	eed Fans														
ZB80	6" 6" to 4" reducer	80 80	30–80 30–80	<0.3 0.3			Yes	11-3/8	10-1/2	7-5/8	13	14	White Polymeric	0.1	Yes
ZB80M	6" 6" to 4" reducer	80 80	30–80 30–80	<0.3 0.3		Motion	Yes	11-3/8	10-1/2	7-5/8	13-1/8	14	White Polymeric	0.1	Yes
ZB110	6"	110	30-110	<0.3			Yes	11-3/8	10-1/2	7-5/8	13	14	White Polymeric	0.2	Yes
ZB110H	6"	110	30-110	<0.3		Humidity	Yes	11-3/8	10-1/2	7-5/8	13-1/8	14	White Polymeric	0.3	Yes
ZB110M	6"	110	30-110	<0.3		Motion	Yes	11-3/8	10-1/2	7-5/8	13-1/8	14	White Polymeric	0.3	Yes
Multi-Spe	eed Fan/Lights														
ZB80L	6" 6" to 4" reducer	80 80	30–80 30–80	<0.3 0.3	2-18W GU24 / 4W		Yes	11-3/8	10-1/2	7-5/8	13	13-3/4	White Polymeric	0.8	Yes
ZB80ML	6" 6" to 4" reducer	80 80	30–80 30–80	<0.3 0.3	2-18W GU24 / 4W	Motion	Yes	11-3/8	10-1/2	7-5/8	13-1/8	14	White Polymeric	0.9	Yes
ZB110L	6"	110	30–110	<0.3	2-18W GU24 / 4W		Yes	11-3/8	10-1/2	7-5/8	13	13-3/4	White Polymeric	0.9	Yes
ZB110HL	6"	110	30–110	<0.3	2-18W GU24 / 4W	Humidity	Yes	11-3/8	10-1/2	7-5/8	13-1/8	14	White Polymeric	1.0	Yes
ZB110ML	6"	110	30–110	<0.3	2-18W GU24 / 4W	Motion	Yes	11-3/8	10-1/2	7-5/8	13-1/8	14	White Polymeric	1.0	Yes

<sup>&</sup>lt;sup>1</sup>Fluorescent color temperature: 3500K <sup>2</sup>Total connected load





PATENTS PENDING

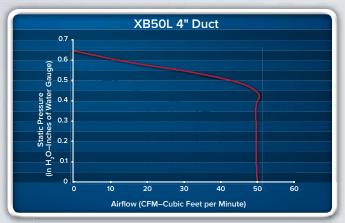
# **ULTRA**<sup>™</sup> Series Performance Data

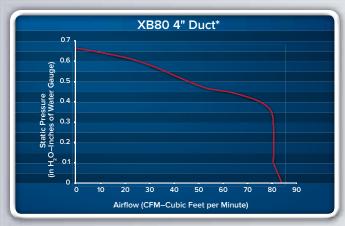
				6" Duc			4" Duct					
		0.1 Ps—Static Pressure (in H₂O)			H₂O)	0.25 Ps		l <sub>2</sub> O)	0.25 Ps			
Model		Airflow (CFM)	Sound (Sones)	Power* (Watts)	Efficacy* (CFM/Watt)	Airflow (CFM)	Airflow (CFM)	Sound (Sones)	Power* (Watts)	Efficacy* (CFM/Watt)	Airflow (CFM)	
Single-Spe	ed Fans											
XB50		50	<0.3	4.9	11.8	49	50	<0.3	5.1	9.8	50	
XB80		80	<0.3	5.8	13.7	79	80	0.3	7.6	10.5	80	
XB110		110	<0.3	7.7	14.2	110	_	_	_	_	_	
XB110H		110	<0.3	8.3	13.3	110	_	_	_	_	_	
Single-Spe	ed Fan/Lights											
XB50L		50	<0.3	4.9	11.8	48	50	<0.3	5.3	9.4	50	
XB80L		80	<0.3	6.0	13.3	80	80	0.3	7.3	10.9	80	
XB110L		110	<0.3	8.7	12.6	110	_	_	_	_	_	
XB110HL		110	<0.3	9.3	11.8	110	_	_	_	_	_	
Multi-Spee	ed Fans											
	Airflow Rate Setting (CFM)											
	80	80	<0.3	5.8	13.7	79	80	0.3	7.6	10.5	80	
	70	70	<0.3	5.1	13.7	71	70	<0.3	6.5	10.7	70	
ZB80	60	60	<0.3	4.4	13.6	61	60	<0.3	5.5	10.9	60	
ZB80M*	50	50	<0.3	4.0	12.7	49	50	<0.3	5.1	10.3	47	
	40	40	<0.3	3.7	12.1	36	40	<0.3	4.3	10.9	34	
	30	30	<0.3	3.4	11.4	23	30	<0.3	3.9	10.2	22	
	110	110	<0.3	7.7	14.2	110	_	-	_	-	-	
	100	100	<0.3	7.0	14.2	100	-	-	-	-	-	
	90	90	<0.3	6.4	14.0	90	_	-	-	-	-	
ZB110	80	80	<0.3	5.8	13.7	80	-	-	-	-	-	
ZB110H* ZB110M*	70	70	<0.3	5.1	13.7	70	-			_	_	
	60	60	<0.3	4.6	13.0	60	-	-	-		_	
	50	50	<0.3	4.1	12.1	50	_	-	-	-	_	
	40	40	<0.3	3.7	10.8	40	-		_	-	_	
	30	30	<0.3	3.3	9.0	30	_	_	-	-	-	
Multi-Spee	ed Fan/Lights									_		
	Airflow Rate Setting (CFM)											
	80	80	<0.3	6.0	13.3	80	80	0.3	7.3	10.9	80	
ZB80L	70	70	<0.3	5.6	12.5	71	70	<0.3	6.7	10.4	71	
	60	60	<0.3	4.7	12.7	63	60	<0.3	5.7	10.5	61	
ZB80ML*	50	50	<0.3	4.2	11.9	54	50	<0.3	4.7	10.6	51	
	40	40	<0.3	3.4	12.3	39	40	<0.3	3.9	10.7	38	
ZB110L	30	30	<0.3	3.4	10.0	26	30	<0.3	3.4	10.5	25	
	110	110	<0.3	8.7	12.6	110	-	_	-	_	-	
	100	100	<0.3	7.3	13.6	100	_	_	_	-	_	
	90	90	<0.3	6.5	13.8	90		_	_	_	_	
	80	80	<0.3	6.0	13.3	80		_	_		_	
ZB110HL* ZB110ML*	70	70	<0.3	5.2	13.4	70	_	_	_	_	_	
	60 E0	60	<0.3	4.6	13.0	60	_	_		_	_	
	50	50	<0.3	4.1	12.1	50	_	_	_	_	_	
	40	40	<0.3	3.6	11.1	40	_	_	_	_	_	
	30	30	<0.3	3.3	9.0	30	_	_		_		

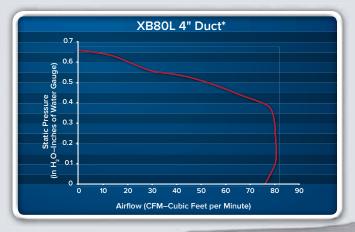
<sup>\*</sup>Power (watts) shown on multi-speed models are for non-sensing models. Add 0.6 watts for sensing models and adjust efficacy (CFM/watt) accordingly.

# **ULTRA**™ Series Performance Data

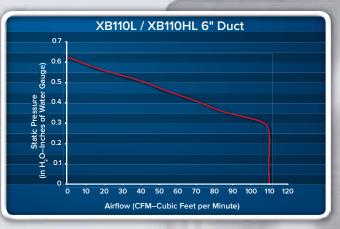




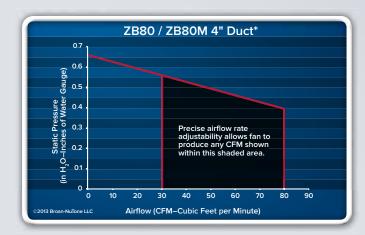


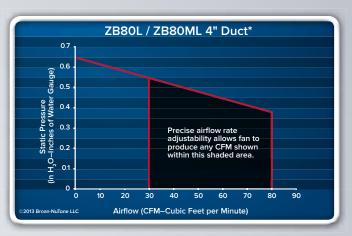


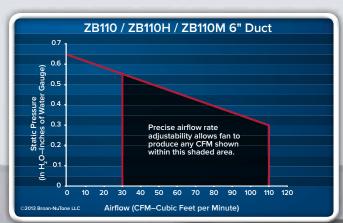


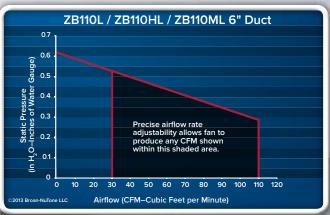


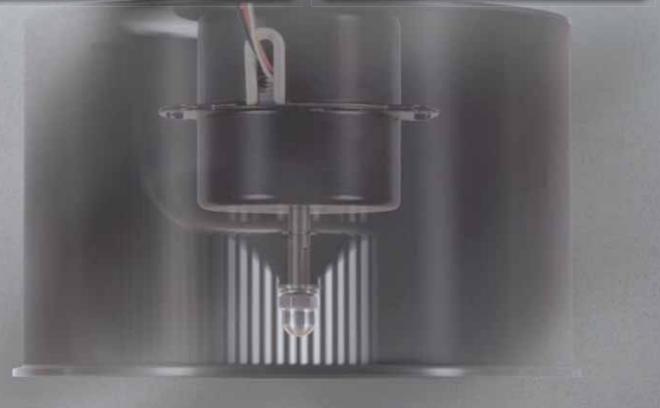
24 PATENTS PENDING













#### **Special Features**

#### Model LP80

- Fits in 2"x 4" 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 1.1 sones for extremely quiet operation
- 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 (see page 20)

Model	CFM	Sones	Amps
LP80*	80	1.1	0.3
ENERGYSTAR *EN	ERGY STAR® q	ualified.	WITTON HVI CERTIFIE
3, FC	OVAL DUCT CONNECTOR OR 4" ROUND DUCT		
		14 C	
		3 1	13 14

# Any room can have powerful, quiet ventilation, regardless of space constraints.

### 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 multifamily 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.

#### **SMARTSENSE**

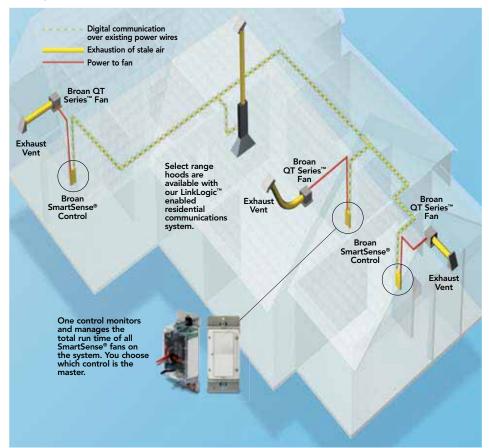
#### **Special Features**

Broan SmartSense® uses LinkLogic,® a powerful, wireless home control technology powered by INSTEON.™

- Timed-off and delayed-off features.
- 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.®
- · Automatic Off: Prevents the homeowner from leaving a QTXE SmartSense® fan on for extended periods of time because the fan could not be heard.
- Delayed Off: Automatically continues to run the SmartSense® fan for 20 minutes after the SmartSense control is manually turned off. This feature ensures all excess moisture is removed from shower areas
- · Includes control label required by ASHRAE 62.2, California Title 24 and other building codes and standards. Meets intermittent and whole-building ventilation requirements of green building programs such as LEED, NAHB Green Building Guidelines and ENERGY STAR® Indoor Air Package.



# Automatically coordinate your ventilation fans to provide a continuous ventilation solution.



#### Broan SmartSense® and QT Series ventilation fans.

The Broan SmartSense® control system will automatically operate fans to exhaust stale air at various points throughout the home. It's an easy way to enjoy the benefits of fresh, healthy air. Flexible enough to work with a single fan or as part of a system of up to 10 fans, Broan SmartSense systems require no separate control wiring.

The intelligence of the system lies in the LinkLogic control system. Programmed to match the home's size based on square footage and the number of bedrooms, Broan SmartSense® adjusts total fan run-time to properly ventilate the entire home. Like the ULTRA™ Series, It's a cost- and energy-efficient solution to other ventilation strategies that use the home's air handler. With only one fan running at a time, Broan SmartSense® uses less than 40 watts during ventilation cycles.

Broan QT Series fans operate at a barely audible 0.3 and 0.7 sones, so even in a bedroom you'll never know they're running.















**Broan®** is America's leading brand of residential ventilation products including range hoods, ventilation fans, heater/fan/light combination units, Indoor Air Quality (IAQ) Systems, built-in heaters, whole-house fans, electric and solar-powered attic ventilators and trash compactors.

**NuTone®** is America's leading brand of residential built-in convenience products including door chimes, central vacuum systems, intercom systems, ceiling fans, home theater speakers, medicine cabinets, ironing centers and ventilation fans.













# Make yours a Broan-NuTone home.

#### **Broan.com**

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