

**BROAN**

**Ventilation Solutions**

**Exhaust**

**Balanced**

**HEPA + Balanced**



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# Today's tightly constructed homes seal in more than you think.



## What gets in, stays in.

Insulation advancements, whole-house wraps and airtight doors and windows are proven construction solutions to help manage your heating and cooling budget. However, they also affect the quality of your indoor air. While tightly sealed doors and windows keep the heat and cold from entering the home, they also trap stale air inside. Fresh air ventilation is critical for odor, moisture, and carbon dioxide removal. Odors and gases cannot be removed by filtration systems alone and can make indoor air 100 times more polluted than outside air. A place of comfort and security can become an unhealthy environment.

Broan recommends adherence to the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Standard 62.2, "Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings." To ensure healthy and comfortable indoor air quality, be sure your ventilation system meets this standard.



# The key to improving indoor air quality.

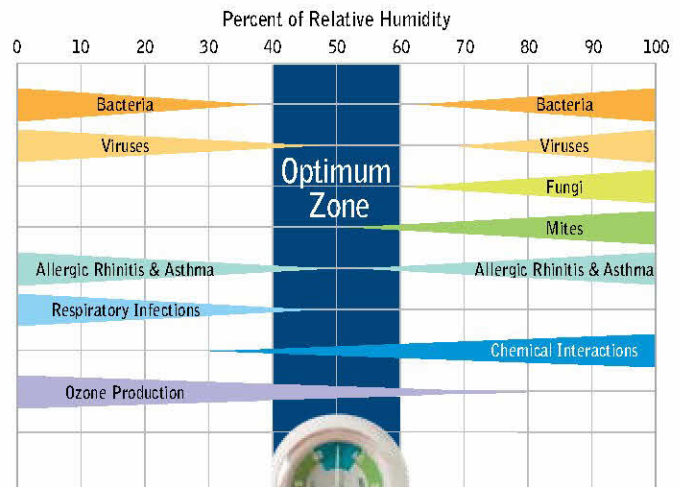
## Eliminating or minimizing sources of indoor air pollution.

Awareness and information are the keys to better understanding indoor air quality. Eliminating smoking indoors and regularly cleaning and maintaining your HEPA\* equipment are good first steps to removing contaminants in your home.

**Intermittent and Whole-house ventilation.** Proper ventilation has two main components. **Intermittent ventilation** removes pollutants at the source through manually operated bathroom fans and kitchen range hoods. Rapidly eliminating humidity and contaminants at the source lessens the possibility of dissipation throughout the home. **Continuous whole-house ventilation** continually removes and dilutes pollutants not captured by intermittent ventilation. This constant exchange of fresh air provides for a more healthy and comfortable home.

**Filter incoming outside air with a whole-house air cleaning system.** Using a HEPA\* filtration system with antimicrobial protection will lower the airborne concentration of dust, pollen and other particulates. HEPA\* is different from electronic air cleaners that typically produce ozone, which itself is classified as a pollutant. And, portable air cleaners have been cited as ineffective by leading consumer safety organizations.

**Control indoor humidity.** While humidity is not a pollutant, it can create a range of problems, from health concerns to structural problems. Maintain indoor relative humidity between 40 to 60 percent to minimize mold, mildew and other possible hazards.



In the optimum zone of 40% 60% relative humidity, you'll minimize problems.



## Broan has ventilation options for every home and budget.

### 1 Exhaust Ventilation: Expel stale air automatically.

Bath ventilation fans that once worked independently can now be coordinated in an economical, integrated system called Broan SmartSense.®

### 2 Balanced Ventilation: Blend fresh outside air with indoor air.

Step up to Balanced Ventilation to replace stale air with fresh, outside air.

### 3 HEPA\* + Balanced Ventilation: Blend in fresh outside air and continuously filter.

Our best solution filters microscopic particles as small as 0.3 microns from incoming fresh air and indoor air. For comparison, a human hair is 150 microns thick.

\*High Efficiency Particulate Air

# Exhaust stale air from any room:

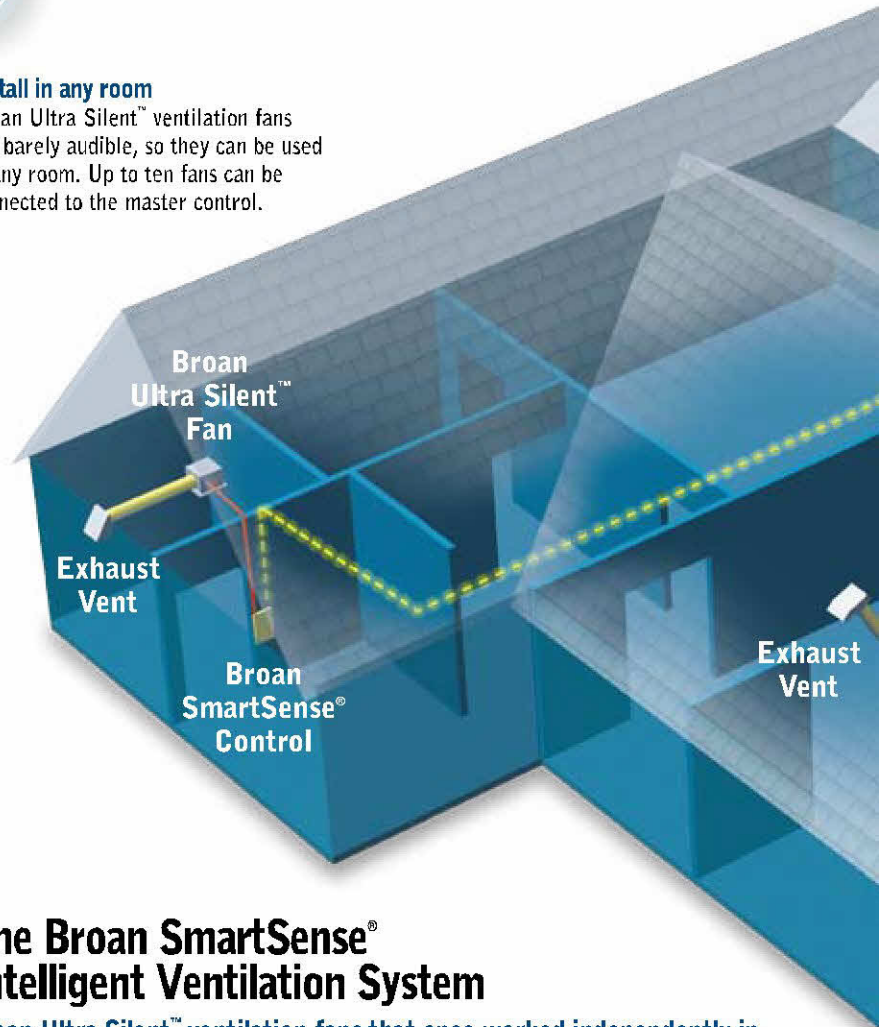
Here's why Broan SmartSense® makes sense.

- Broan SmartSense® enables independent ventilation fans in your home to work as a coordinated system. It's an economical solution for fresher air.
- Broan SmartSense® automatically coordinates the operation of ventilation fans, running them intermittently throughout the day when necessary.
- The master Broan SmartSense® control monitors total run-time (manual and automatic) to deliver optimal ventilation from as many as ten fans.
- Broan Ultra Silent™ operation means the SmartSense system can be installed in a family room, home office, or even a bedroom.

## 1 Exhaust Ventilation

### Install in any room

Broan Ultra Silent™ ventilation fans are barely audible, so they can be used in any room. Up to ten fans can be connected to the master control.



## The Broan SmartSense® Intelligent Ventilation System

**Broan Ultra Silent™ ventilation fans that once worked independently in separate rooms now work together as an integrated ventilation system.**

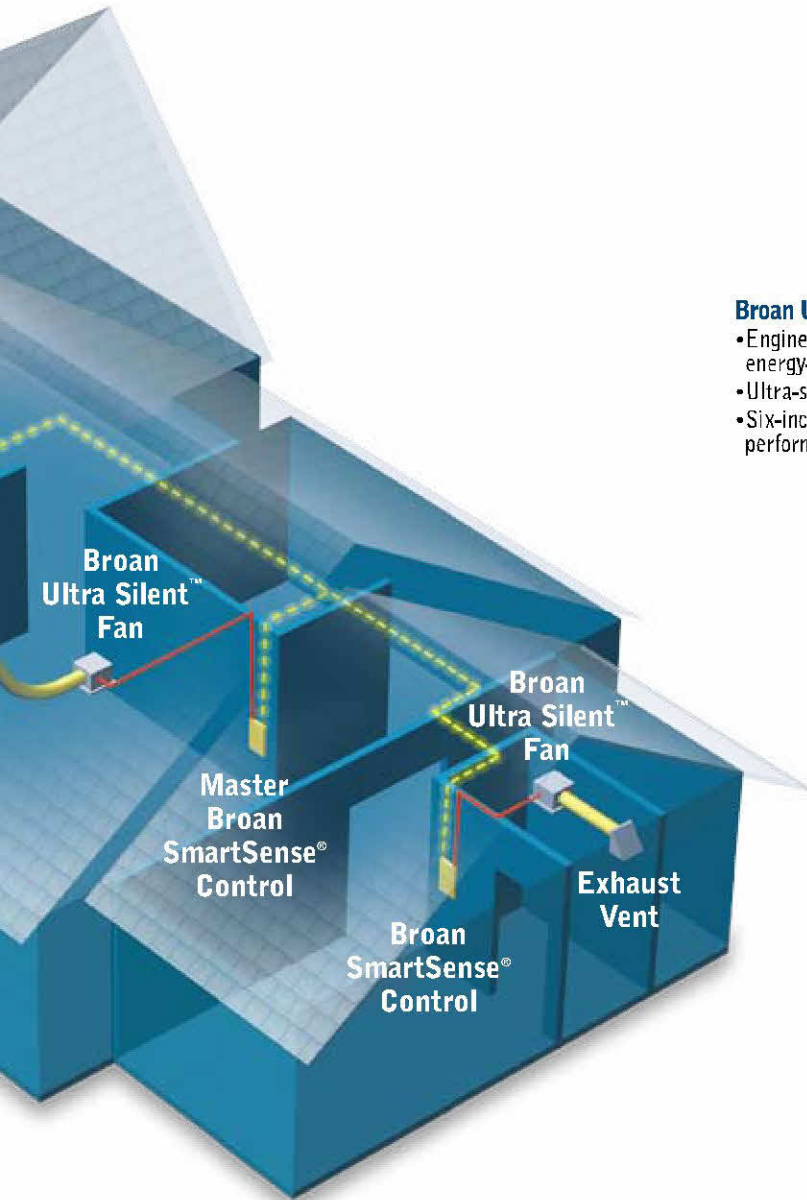
The Broan SmartSense® system continually monitors and activates Broan Ultra Silent™ fans day and night, cycling them throughout the home to distribute fresh air when necessary. Broan Ultra Silent™ fans operate at a barely audible 0.3 and 0.7 sones, so they are ideal for any area of the home that might require additional ventilation. Even in a bedroom in the middle of the night, you'll never know they're running.

### Master control

All Broan SmartSense® controls digitally communicate with the "master control" over existing power lines in the home. They tell the master how much ventilation each fan has achieved through manual and automatic operation.



**Broan SmartSense® Controls include white and almond colored paddles**



### Broan Ultra Silent™ Fans

- Engineered for continuous, energy-efficient operation.
- Ultra-silent operation: 0.3 and 0.7 Sones.
- Six-inch ducting guarantees sound and CFM performance ratings.

Use this chart to determine the recommended continuous ventilation rate in CFM (Cubic Feet per Minute) for homes of various sizes.

		Number of Bedrooms		
		0-1	2-3	4-5
Home Square Footage	< 1500	30	45	60
	1501 to 3000	45	60	75
	3001 to 4500	60	75	90
	4501 to 6000	75	90	105

Chart numbers in Cubic Feet per Minute. For more details see ASHRAE code 62.1-2004 and 62.2-2004.



Broan SmartSense® is the smart choice to meet intermittent and whole-building ventilation requirements of green building programs such as Leadership in Energy Efficient Design (LEED), NAHB Green Building Guidelines and ENERGY STAR Indoor Air Package. Broan SmartSense is the smart choice to meet ASHRAE 62.2 related ventilation building code requirements.

### Up to ten fans can be installed on one Broan SmartSense® Ventilation System.

Combine two-fan and three-fan kits as needed	80 CFM Fan			110 CFM Fan			SmartSense® Controls	Phase Coupler
	L"	W"	H"	L"	W"	H"		
	11-3/8	10-1/2	7-3/4	11-3/8	10-1/2	7-3/4		
<b>SMSK102: Two-fan Kit</b>	1			1			2	1
<b>SMSK103: Three-fan Kit</b>	2			1			3	1



**SMSK102 Kit** contains Broan Ultra Silent™ fans (one 110 CFM fan, one 80 CFM fan), two Broan SmartSense® controls and a phase coupler. Includes white and almond colored paddles.



**SMSK103 Kit** contains Broan Ultra Silent™ fans (one 110 CFM fan, two 80 CFM fans), three Broan SmartSense® controls and a phase coupler. Includes white and almond colored paddles.

