



Broan SmartSense® Intelligent Ventilation System



January 2008



Improve air quality throughout the home — automatically and efficiently.

Broan Ultra Silent™ ventilation fans that once worked independently now work together as an integrated ventilation system in the Broan SmartSense® Intelligent Ventilation System. Because these fans ventilate from different locations, you're assured of ongoing fresh air distribution throughout the home.

Why do I need to ventilate all day?

Proper ventilation exhausts stale indoor air and minimizes opportunities for mold and mildew growth. It also helps remove gases and particles not trapped by any filtration unit. With Broan SmartSense®, you get an automatic ventilation solution that minimizes the presence of pollutants such as household cleaners, VOCs, carbon monoxide and off-gassing from building materials, carpets and other furnishings.

Broan SmartSense® meets intermittent and continuous ventilation requirements of ASHRAE* 62 and other related guidelines (including building codes derived from the ASHRAE standard).

How does it work?

The Broan SmartSense® system continually monitors and activates Broan Ultra Silent™ fans day and night, cycling them throughout the home to distribute fresh air. 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.

Installs as easily as an exhaust fan.

Simply recess the fan housing in the ceiling, vent with 6" duct to the exterior of the home and connect the power wires. No control wiring is necessary. After installation, program the controls to match the size of the home.

An economic alternative to other systems.

Broan SmartSense® utilizes exhaust ventilation fans normally installed in the home and automatically adjusts the total run-time based on square footage and number of bedrooms. Broan SmartSense® controls monitor normal manual fan operation, and adjust ventilation time as needed to optimize energy usage. Broan SmartSense® is more cost effective and energy efficient than other ventilation strategies such as supply side systems that require the use of the home's air handler. Because only one fan is running at a time, Broan SmartSense® uses less than 40 watts during ventilation cycles.

Broan SmartSense® meets 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.



*The American Society of Heating, Refrigeration and Air Conditioning Engineers



Main Bath



Laundry Room



Rec Room



Workshop



Second Bath

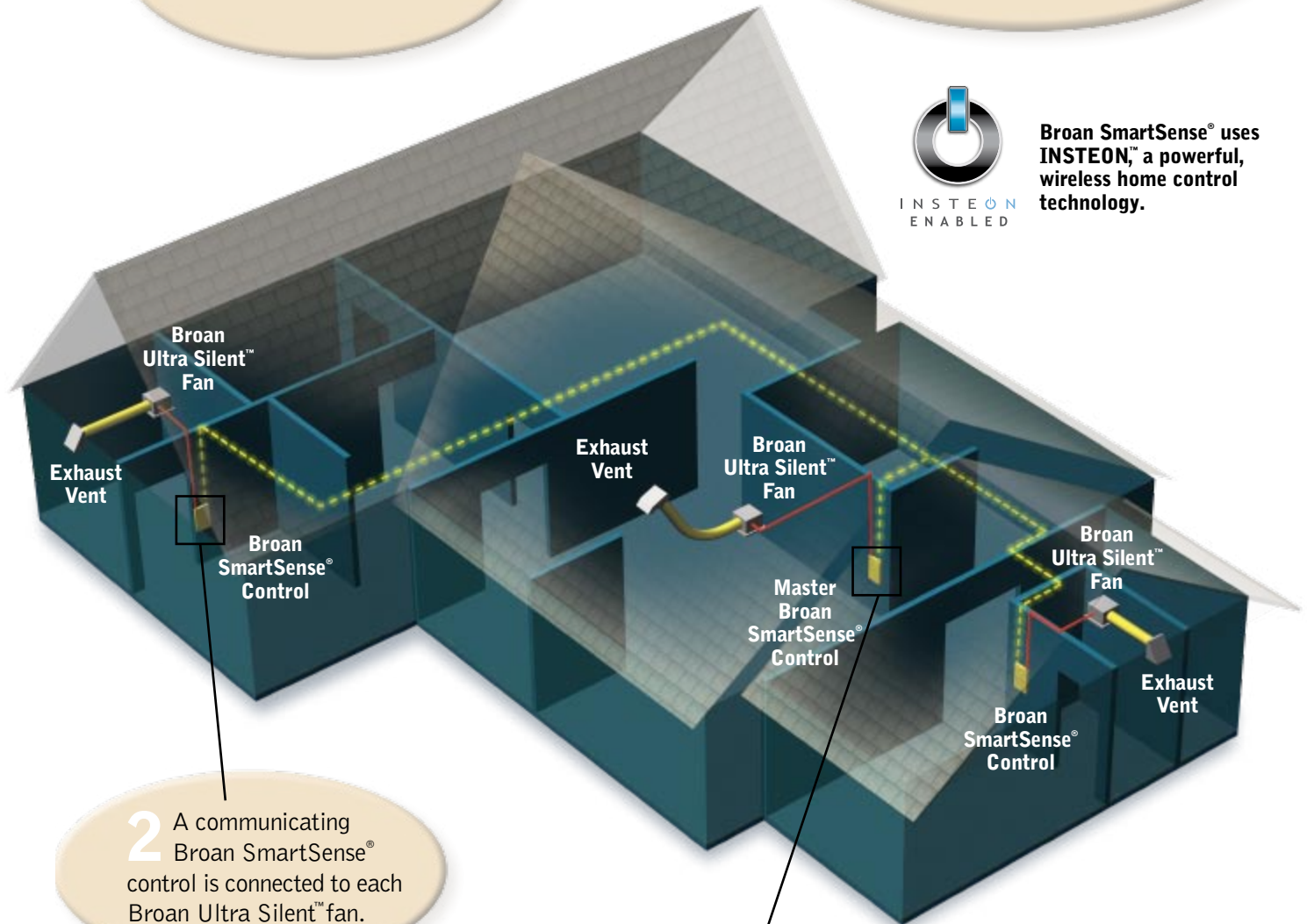
The Broan SmartSense® Intelligent Ventilation System.

1 Install Broan Ultra Silent™ fans throughout the home, wherever ventilation is needed.

3 All Broan SmartSense® controls communicate with the “master control” over existing power wires in the home, telling the master how much ventilation each fan has achieved through manual operation.



Broan SmartSense® uses **INSTEON™**, a powerful, wireless home control technology.



2 A communicating Broan SmartSense® control is connected to each Broan Ultra Silent™ fan.

4 Designate one Broan SmartSense® control as the “master.” The “master control” calculates how much run-time is necessary after deducting manual usage. It intermittently turns fans on and off to achieve optimal ventilation.

Programming Broan SmartSense® controls.

Broan SmartSense® controls monitor and control all fans on the system. Programming the control involves just two simple steps:

1. Choose one control to be the master, and enter your ventilation rate based on home size and number of bedrooms.*
2. An easy two-click procedure registers system fans with the master.



*Broan SmartSense® is compliant with ASHRAE code 62.1-2004 and 62.2-2004, the nationally recognized indoor air quality standard (The American Society of Heating, Refrigeration and Air Conditioning Engineers).

Convenient two- and three-fan kits.



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.

For ventilation professionals.

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.

Recommended rooms for the Broan SmartSense® system.

Use the following list to help determine the types of rooms that could use a Broan Ultra Silent™ fan. Note that each bathroom, shower stall and watercloset must have at least one. Combine two- and three-fan kits to achieve the number of fans needed. Broan SmartSense® systems will recognize up to ten fans.

- One for each bathroom
- Shower stall
- Laundry room
- Rec room
- Workshop
- Watercloset
- Exercise room
- Home office
- Playroom



**Isn't it time for a smart solution
to home ventilation?**

Broan. The leader in residential ventilation.



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

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

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Broan-NuTone, LLC, 926 W. State Street, Hartford, WI 53027 • **800-558-1711**

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