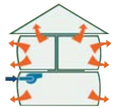
Causes of Unbalanced Air Pressure

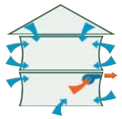
Supply ventilation systems push air into the home causing positive pressure. Conversely, when ventilation fans and range hood fans exhaust stale/polluted indoor air to the outside, negative air pressure develops unless the exhausted air is replaced by fresh outdoor air.

Effects of Positive Air Pressure (supply systems)



- Forces warm/humid air into wall cavities, resulting in potential mold/mildew and structural issues
- Unconditioned and typically uncontrolled air is pushed into the home, resulting in increased energy costs

Effects of Negative Air Pressure (exhaust systems)



- Exhaust fans unable to work at full, rated capacity
- Unconditioned and typically uncontrolled air is pulled into the home, resulting in increased energy costs
- Draws hot/humid air inside, causing mold/mildew and structural damage

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The Broan Make-Up Air Damper used in conjunction with Broan SmartSense® and select BEST® range hoods ensures proper ventilation in the home by effectively balancing indoor air pressure only when air is being exhausted.

Optimal Balanced Air Pressure

- Air intake and exhaust are equalized
- Ventilation devices function properly
- Helps maintain the home's integrity
- Enhances energy efficiency

Make-Up Air Damper Tools for Installers and Consumers

The Broan Make-Up Air Damper Application Guide explains what make-up air is and how the damper works in conjunction with range hood ventilation. Visit **www.broan.com/catalogs** to download a copy.

The Broan Range Hood Make-Up Air Specifier assists installers in specifying the right make-up air damper system for each installation. A simple form walks you through all the details for the State you are working in, and delivers specific product and installation results. Visit **www.Broan.com** and click on "**Specifier Tools**" in the top navigation, or visit **www.BESTrangehoods.com** and click on "**Trade Resources**" at the top of the page.

Broan. The leader in residential ventilation.

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.

America's Choice For Green Builders®
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Automatic Make-up Air Damper

August 2013

BROAN

Automatic Make-Up Air Damper

Equalized Air Pressure For A Well-Balanced Home (and budget)

Providing make-up air for exhaust devices is easy, controlling it is not—until now. Broan® Automatic Make-Up Air Dampers are the first to provide synchronized operation for kitchen, bath and whole house ventilation products. Installation is simple and requires no special wiring. The intelligent design options ensure optimum performance in a variety of installations and applications. Highly effective and affordable, Broan Automatic Make-Up Air Dampers strike the perfect balance to keep you and your home breathing easy. What's more, Broan has the tools to help installers specify the proper system. Based on state codes, our online "Range Hood Make-Up Air Specifier" guides the design for the right make-up air damper system in any home.

- Economical, ruggedly constructed galvanized motorized damper
- MD6TU, MD8TU and MD10TU are designed to work universally with any BEST or Broan range hood
- SMD6 and SMD8 are designed for use with Broan SmartSense ventilation fans and select BEST range hoods
- MD6T, MD8T and MD10T are designed for select BEST and Broan range hoods
- Can be controlled by more than one Broan or BEST ventilation product
- Damper opens automatically to replace the air being exhausted by ventilation fans or range hoods, and then closes tightly when ventilation fans are turned off
- Prevents excess air from entering the home during heating or cooling calls, reducing energy consumption
- Interlocked systems meet IRC code requirements for make-up with range hoods >400 CFM

Flexible Installation Options

MD6TU/8TU/10TU (Universal) New

Universal design works with any BEST® or Broan® range hood over 300 CFM to balance indoor air pressure by providing interlocked make-up air without requiring a direct wire connection between the range hood and the damper.

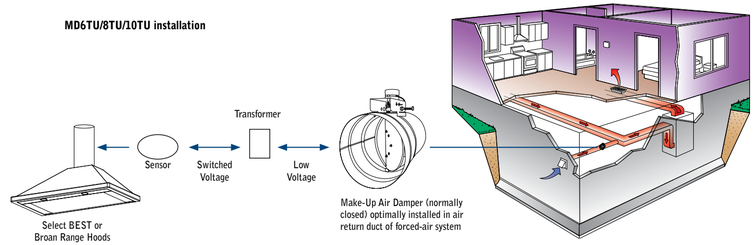
Features

- Heavy duty galvanized steel construction
- Includes air flow sensor assembly, low voltage switch and 24VAC transformer
- Sensor installs directly to exhaust duct from range hood
- Available sizes: 6-inch round (MD6TU), 8-inch round (MD8TU) and 10-inch round (MD10TU) normally closed

Installation (see adjacent)

- Insert within a 6-inch, 8-inch or 10-inch duct running from an exterior wall to the cold air return of a forced-air system
- If there is no forced air return, the make-up air duct can be run to a wall or ceiling register in a location that minimizes concerns about drafts and maintains a 5-foot separation from the cooking appliance or hood
- Damper assemblies can be "ganged" for high volume applications
- Ganged dampers open and close simultaneously
- Low-voltage sensor can be installed onto any exposed section of the exhaust duct while taking care not to interfere with backdraft damper
- Controls 24VAC transformer causing the damper to open or close as needed when air flows as a result of turning the range hood on or off

MD6TU/8TU/10TU installation



SMD6/8

Forms a complete balanced ventilation system by linking SmartSense® ventilation fans and/or select BEST range hoods using the LinkLogic® system.

Features

- Heavy duty galvanized steel construction
- Includes 24VAC transformer and LinkLogic® enabled make-up air damper control module
- Available sizes: 6-inch round (SMD6) and 8-inch round (SMD8) normally closed
- Link Logic® system uses existing AC wiring to communicate between damper control and ventilation devices and requires no added wiring

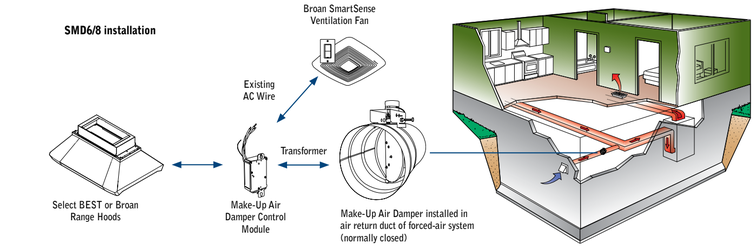
Installation (see adjacent)

- Insert within a 6-inch or 8-inch duct running from an exterior wall to the cold air return of a forced-air system
- If there is no forced air return, the make-up air duct can be run to a wall or ceiling register in a location that minimizes concerns about drafts and maintains a 5-foot separation from the cooking appliance or hood
- Damper assemblies can be "ganged" for high volume applications
- Ganged dampers open and close simultaneously
- Transformer and make-up air control are easily installed adjacent to the make-up air damper

LinkLogic® digital control module

- Installs in any electrical box and communicates over existing power lines in the home
- Controls 120VAC to the 24VAC transformer, causing the damper to open or close as needed when ventilation devices are turned on or off

SMD6/8 installation



MD6T/8T/10T

Balances indoor air pressure by providing make-up air for select BEST or Broan range hoods.

Features

- Heavy duty galvanized steel construction
- Includes 24VAC transformer
- Available sizes: 6-inch round (MD6T), 8-inch round (MD8T) and 10-inch round (MD10T)
- Designed for devices with a switched 120VAC output or dry contact

Installation (see adjacent)

- Insert within a 6-inch, 8-inch or 10-inch duct running from an exterior wall to the cold air return of a forced-air system
- If there is no forced air return, the make-up air duct can be run to a wall or ceiling register in a location that minimizes concerns about drafts and maintains a five-foot separation from the cooking appliance or hood
- Damper assemblies can be "ganged" for high volume applications
- Ganged dampers open and close simultaneously
- Low-voltage wiring transmits open/close signal to the make-up air damper

MD6T/8T/10T installation