ZONE MASTER™ AUTOMATED AIRFLOW CONTROL

MOTORIZED DAMPER FAQ's

Q: What is a Suncourt Motorized Damper?

A: Suncourt Motorized Dampers also known as Zone Dampers, Motorized Duct Dampers, or Automatic Dampers are mounted in ductwork to automatically shut off or open branches of the duct to airflow. They are available in normally open (power close) or normally closed (power open) configurations.

Q :What would I use a Motorized Damper for?

A: Zone Control - Do you have a spare bedroom that you don't want to fully heat or air condition because the room is rarely used? A Zone Damper will shut off air to that room's registers and only allow air to flow again when temperatures in that room exceed or drop below your preset temperature. Zone Dampers are typically controlled by a thermostat or some type of master controller. Likewise Zone Dampers can control airflow to whole sections of a home or building to regulate temperature in those specific areas at certain times of the day, evening or the time of your choosing, which saves on heating and cooling bills.

Ventilation - Zone Dampers can open to allow temporary ventilation of homes, garages, greenhouses, or other rooms where fresh air intake or stale air outtake is required.

Q: How does a Motorized Damper run?

A: Suncourt Automatic Dampers are 24-volt powered and require a transformer. Suncourt ZoneMaster™ Dampers are often installed by homeowners and have a transformer included in the box. Suncourt Pro Dampers are often installed by professionals and do not have a transformer included in the box. Automatic Dampers can be wired to 24-volt thermostats. Suncourt Automatic Dampers feature a soft-stop, freewheeling coupling between the motor and the damper shaft, which greatly improves life over other similar style dampers on the market. Suncourt Automatic Dampers feature a hysteresis motor that is designed to hold the damper closed or open with power indefinitely.

Q: What is Zone Control?

A: Zone Control refers to regulating the temperature in one single room in your home by means of shutting air supply to that room via the ductwork ON or OFF using a wall thermostat in that room combined with motorized damper in the duct supplying air to that room.

Q: Why do I want to control the temperature in a single room?

A:To save significantly on home heating and cooling cost.

Give me an example of how I would save money:

O.K. Let us say you have a room in your home that is used only occasionally, like a guest room.

Why heat that room to 70°F all winter long, or cool it to 76°F all summer. Keep it at 55°F in the winter and 85°F in the summer. Same story for a bedroom. Like to sleep in a 64°F bedroom and keep the rest of the house at 70°F? During the cooling season you may want the room for the baby a little bit warmer than the rest of the house. The possibilities are endless.

Q: What are we speaking of in dollars and cents?

A:Roughly speaking, if you control two rooms in your home during the winter heating season as follows:
The unused guest room you keep at 55°F.
The bedroom you keep at 64°F.
The square feet of those two rooms is about 15% of the total square feet of your home.
Expect to save between 4% and 8% on your utility bills during the heating season.
During the cooling season the savings will be even higher since cooling costs are greater than heating costs.

Q: How does it work?

A: A ZoneMaster system consists of several elements:
A motorized, low voltage, damper that installs in the duct supplying air to the room you want to 'zone'.
A safe, low voltage transformer to supply power for the damper electric motor.
A standard heat-cool wall thermostat you install in the room you want to 'zone'
(This thermostat is not supplied and must be obtained separately at your favorite home center).

Q: What wiring is required?

A:You will need to install the transformer on the cover of an existing electrical junction box in your home. The ZoneMaster™ damper installs in the target duct, similar to the installation of an Inductor® In-Line Duct Booster Fan.
The thermostat is mounted on the wall in the target room.
You run low voltage wires from the transformer to the thermostat and on to the ZoneMaster™ drive motor.
This is safe low voltage wiring. View ZoneMaster™ installation instructions.

Q: Is that room going to get stuffy if I shut off the air supply?

A:If you find the room getting stuffy, a small portion of the damper sealing gasket can be removed from the damper to allow some air supply or the damper can temporarily be opened.

Q: How many rooms can I 'zone' in my house?

A:Do not use more than two ZoneMaster™ dampers per 10 heat registers. If you use more, chances are that the furnace blower will build up too much pressure. This may upset the balance of heat delivery in your home and create noise from heat outlets because the air velocity will be higher. (Same amount of air coming out of fewer registers). Computerized whole house zone control systems are available, but they are rather expensive.

Q: Can dampers be used for other applications besides zoning?

A:Yes. Dampers are ideal for use in Make-up air systems as well as Fresh air intake systems.

Make-up air intake system - ventilation system component designed to supply fresh outdoor air into the home to compensate for the air being exhausted out through range hoods, bathroom fans, and clothes dryers, etc.

Fresh Air Intake System - component of an HVAC system designed to bring outdoor air into the system. That air is then conditioned within the HVAC system and mixed with the recirculated indoor air to maintain optimal temperature and air quality.

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