

Specifying Non-Powered Foundation Vents

Automatic Foundation Vents (non-powered) open and close automatically using a heat/cold sensitive coil. The louvers open completely at approximately 70°F and completely close at approximately 40°F. These vents self-adjust all year.

To Specify:

Whenever possible, foundation vents should be placed on all sides of the foundation. This will create an intake/exhaust system that delivers a steady flow of air. One vent should be installed for each 8 to 10 feet of foundation wall.

Most building codes require 1 square foot of open ventilation area for every 150 square feet of crawlspace. Generally, Automatic Foundation Vents have 50 inches of net free area per vent. Therefore, install one vent for every 50 square feet of crawlspace.

For crawlspaces with polyethylene installed on 80-90% of the floor, the ventilation requirement changes to 1 square foot of ventilation for every 500 square feet of crawlspace with a minimum of 4 vents installed to provide cross ventilation. For crawlspaces with polyethylene, install at least one vent for every 500 square feet of crawlspace.

Specifying Powered Foundation Vents

Powered foundation vents are designed for foundations that require a higher rate of airflow and for areas that are difficult to vent. Depending on the fan model the vent can move large amounts of air per hour. Designed to run continuously on low speed, they draw minimal electricity. Air Vent recommends power foundation vents be fitted with a thermostat and a humidistat to control the operation of the vent.

To Specify:

To determine the correct number of powered foundation vents use the following formula:

- 1) Multiply the square feet of crawlspace by the height in feet. This gives the number of cubic feet in the crawlspace.
- 2) Multiply the cubic feet in the crawlspace by the number of air changes per hour desired (4 to 6 is the recommendation). This gives the total number of cubic feet of air that has to be moved per hour to produce the desired number of air changes.
- 3) Divide this number by 7,200 or 11,160 (depending on which model foundation vent is being used) to obtain the number of powered foundation vents needed.
- 4) Install non-powered foundation vents on one side of the crawlspace to provide intake air for the powered foundation vents.