

International Residential 2006 Codes: Significant Changes to Crawl Space Ventilation

R408.2 & R408.3 Openings for Under-Floor Ventilation (R408.2) and Unvented Crawl Space (R408.3)

CHANGE SUMMARY: The criterion for reduction of ventilation openings has been deleted. The criteria for elimination of ventilation openings for crawl and under-floor spaces have been revised and relocated to new Section 408.3, but a new exception clarifying the location of ventilation openings in the perimeter of buildings has been added.

R408.2 Openings for under-floor ventilation. *The minimum net area of ventilation openings shall not be less than 1 square foot (0.0929m²) for each 150 square feet (14m²) of under-floor area. One ventilating opening shall be within 3 feet (914 mm) of each corner of the building. Ventilation openings shall be covered for their height and width with any of the following materials provided that the least dimension of the covering shall not exceed 1/4 inch (6.4 mm):*

1. Perforated sheet metal plates not less than 0.070 inch (1.8 mm) thick.
2. Expanded sheet metal plates not less than 0.047 inch (1.2 mm) thick.
3. Cast-iron grill or grating.
4. Extruded load-bearing brick vents.
5. Hardware cloth of 0.035 inch (0.89 mm) wire or heavier.
6. Corrosion-resistant wire mesh, with the least dimension being 1/8 inch (3.2 mm).

R408.3 Unvented crawl space. *Ventilation openings in under-floor spaces specified in Sections R408.1 and R408.2 shall not be required where:*

1. Exposed earth is covered with a continuous vapor retarder. Joints of the vapor retarder shall overlap by 6 inches (152 mm) and shall be sealed or taped. The edges of the vapor retarder shall extend at least 6 inches (152 mm) up the stem wall and shall be attached and sealed to the stem wall; and
2. One of the following is provided for the under-floor space:
 - 2.1. Continuously operated mechanical exhaust ventilation at a rate equal to 1 cfm (0.47 L/s) for each 50 ft² (4.7m²) of crawlspace floor area, including an air pathway to the common area (such as a duct or transfer grille), and perimeter walls insulated in accordance with Section N1102.2.8;
 - 2.2. Conditioned air supply sized to deliver at a rate equal to 1 cfm (0.47 L/s) for each 50 ft² (4.7 m²) of under-floor area, including a return air pathway to the common area (such as a duct or transfer grille), and perimeter walls insulated in accordance with Section N1102.2.8;
 - 2.3. Plenum complying with Section M1601.4, if under-floor space is used as a plenum.

R408.2 Illustration

