POLICY
Crawl Space Venting

Reference State Building Code Interpretation No. 06-Jan 01

Question: The Ventilation and Indoor Air Quality Code requires that a radon vent be installed when crawlspace ventilation is provided at less than 1 sq. ft. per 300 sq. ft. of crawlspace area, or if the vents are equipped with operable louvers. Both the IRC and the IBC allow the use of continuous mechanical ventilation in lieu of crawlspace vents. Would a mechanical ventilation system satisfy the requirements of the VIAQ?

Answer: Yes, as long as the fan does operate continuously and the vent does not communicate with the living space. The intent is that the crawlspace be ventilated to prevent the buildup of radon gas, and to prevent the radon gas from entering into the living space. The mechanical ventilation system must be independent from other mechanical systems to reduce potential contamination. There could also be a potential problem if the crawlspace ventilation system is capable of being shut off, allowing the gas to accumulate and penetrate into the living space.

Section 1203.3 of the 2003 International Building Code and Section 408.1 of the 2003 International Residential Code states that the minimum net area of ventilation openings shall not be less than 1 sq. ft. for each 150 sq. ft. of under floor space area.....

Exceptions in IBC 1203.3.2 exc. #3 and 408.2 exc. #4 states that; “Ventilation openings are not required where a continuously operated mechanical ventilation is provided at a rate of 1.0 cfm for each 50 sq. ft. of crawl space floor area and the ground surface is covered with an approved vapor retarder.

Mason County Requirements for Crawl Space Power Venting

Exceptions are allowed provided the requirements of the Washington State Ventilation and Indoor Air Quality Code (VIAQ), Section 502.1. The interpretation would allow a crawl space ventilation fan. A proposal shall be submitted to the Mason County Building Department for approval prior to installation. Mason County will allow the use of the exception provided the following steps are followed:

1. Submit a plan to the Mason County Building Department for review and approval prior to installation of the crawl space vent fan. The proposed plan shall conform to manufacturer design specifications and shall include calculations demonstrating that the proposed make-up air vent(s) is adequately sized for the fan selected. A design prepared by a Washington State licensed design professional with relevant expertise is an acceptable option. The proposed plan shall include the location of the crawl space fan, cfm rating, location of make-up air opening(s), and exhaust location(s).

2. Provide manufacturer specifications for the fan. The specifications must verify that the fan is rated for the proposed use, including continuous operation.

3. The crawl space fan shall be wired to an alarm that would signal the occupant in case the fan fails.

Signed by Barbara Robinson January 26, 2006
Approved Date