



RULE-MAKING ORDER
(RCW 34.05.360)

CR-103 (10/1/89)

Agency: State Building Code Council

Permanent Rule
 Emergency Rule

(1) Date of adoption: November 18, 1994

(2) Purpose: To adopt revised list of counties with a high risk of radon, revised references to the Uniform Codes and delete expired radon monitoring requirements.

(3) Citation of existing rules affected by this order:
 Repealed:
 Amended: WAC 51-13-106, 201, 302, 304, 402, 501 and 502
 Suspended:

(4) Authority for adoption:
 Statute: RCW 19.27.190
 Other Authority:

(5 1) **PERMANENT RULE ONLY**
 Pursuant to notice filed as WSR 94-16-117 on 8/2/94 (date).
 Describe any changes other than editing from proposed to adopted version: None

(5 2) **EMERGENCY RULE ONLY**
 Pursuant to RCW 34.05.350 the agency for good cause finds:
 (a) That immediate adoption, amendment, or repeal of a rule is necessary for the preservation of the public health, safety, or general welfare, and that observing the time requirements of notice and opportunity to comment upon adoption of a permanent rule would be contrary to the public interest.
 (b) That state or federal law or federal rule or a federal deadline for state receipt of federal funds requires immediate adoption of a rule.
 Reasons for this finding:

(5 3) Any other findings required by other provisions of law as precondition to adoption or effectiveness of rule?
 Yes No If yes, explain:

(6) Effective date of rule:
Permanent Rules
 31 days after filing
 Other (specify) 6/30/95 *
*(If less than 31 days after filing, specific finding in 5 3 under RCW 34.05.380(3) is required)
Emergency Rules
 Immediately
 Later (specify) _____

CODE REVISER USE ONLY

CODE REVISER'S OFFICE
STATE OF WASHINGTON
FILED

DEC 21 1994

TIME 11:35
 WSR 95-01-128

NAME (TYPE OR PRINT)
Gene Colin

SIGNATURE

TITLE
Chair

DATE
12/21/94

AMENDATORY SECTION (Amending WSR 91-01-102, filed 12/18/90, effective 7/1/91)

WAC 51-13-106 Conflicts with other codes.

106.1 Conflicts with Other Codes: In addition to the requirements of this Code, buildings must conform to the provisions of the State Building Code (Chapter 19.27 RCW and Chapters ~~((51-16 WAC))~~ 51-30, 51-32, 51-34 and 51-26 Washington Administrative Code). In case of conflicts between the Uniform Building, Uniform Plumbing, Uniform Mechanical, and Uniform Fire Codes as adopted and amended in Chapters ~~((51-16))~~ 51-30, 51-32, 51-34 and 51-26 Washington Administrative Code, the provisions of Chapter 51-13 shall govern. This Code is not intended to abridge any safety or health requirements under any other applicable codes or ordinances.

Where, in any specific case, different sections of this Code specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

Wherever in this Code reference is made to the appendix, the provisions of the appendix shall not apply unless specifically adopted.

106.2 Authority: Local legislative authorities are authorized and directed to enforce this Code. Local legislative authorities are authorized to promulgate, adopt, and issue those rules and regulations necessary for the effective and efficient administration of this Code.

AMENDATORY SECTION (Amending WSR 91-01-102, filed 12/18/90, effective 7/1/91)

WAC 51-13-201 General.

201.1 General: For the purposes of this Code, certain terms, phrases, words, and their derivatives shall be construed as specified in this section. Words used in the singular include the plural and the plural, the singular. Words used in the masculine gender include the feminine and feminine, the masculine.

Where terms are not defined in this section, the definitions shall be taken from Chapter ~~((4))~~ 2 of the Uniform Building Code.

Where terms are not defined in either this section or Chapter ~~((4))~~ 2 of the Uniform Building Code, they shall have their ordinary accepted meanings within the context with which they are used. Webster's Third International Dictionary of the English Language, Unabridged, copyrighted ~~((1981))~~ 1986, shall be considered as providing ordinarily accepted meanings.

WAC 51-13-302 Minimum ventilation criteria for all Group R occupancies four stories and less.

302.1 General: This section shall apply to all Group R occupancies ((4)) four (4) stories ((~~or~~)) and less as defined by the Washington State Building Code. Residential structures greater than ((4)) four (4) stories in height shall comply with Section 304, for outdoor air supply requirements. For source specific ventilation requirements, see Section 302.2.1. Compliance with this section shall be demonstrated through engineering calculations or performance testing. Documentation of calculations shall be submitted to the building official where required. Performance testing shall be conducted in accordance with recognized test methods.

302.1.2 Testing: At the discretion of the building official, flow testing may be required to verify that the mechanical system(s) satisfies the requirements of this section. Flow testing may be performed using flow hoods measuring at the intake or exhaust points of the system, in-line pitot tube, or pitot-traverse type measurement systems in the duct, short term tracer gas measurements, or other means approved by the building official.

302.2 Minimum Ventilation Performance: Each dwelling unit or guest room shall be equipped with source specific and whole house ventilation systems designed and installed to satisfy the ventilation requirements of this chapter.

Exception: All public corridors shall meet the ventilation requirements in section ((1205-(e))) 1203.3 of the Uniform Building Code.

302.2.1 Source Specific Ventilation: Source specific exhaust ventilation shall be required in each kitchen, bathroom, water closet, laundry room, indoor swimming pool, spa, and other rooms where excess water vapor or cooking odor is produced.

The minimum source specific ventilation effective exhaust capacity shall be not less than levels specified in Table 3-1.

302.2.2 Whole House Ventilation Systems: Each dwelling unit shall be equipped with a whole house ventilation system which shall be capable of providing at least 0.35 air changes per hour, but not less than fifteen cubic feet per minute per bedroom plus an additional fifteen cubic feet per minute. Whole house ventilation systems shall be designed to limit ventilation to a level no greater than 0.5 air changes per hour under normal operation conditions. Whole house ventilation systems shall supply outdoor air to all habitable rooms through individual outdoor air inlets, forced-air heating system, ducting or equivalent means. Doors and operable lites in windows are deemed not to meet the outdoor air supply intake requirements.

Exception: For dwelling units of no more than 1,400 square feet, the maximum ventilation rate shall be 0.65 air changes per hour.

302.3 Controls: All ventilation system controls shall be readily accessible. Controls for whole house ventilation systems shall be capable of operating the ventilation system without energizing other energy-consuming appliances.

Exception: Continuously operated whole house ventilation systems switches shall not be readily accessible by the occupant.

302.3.1 Source Specific Ventilation Systems: Source specific ventilation systems shall be controlled by manual switches, dehumidistats, timers, or other approved means.

302.3.2 Intermittently Operated Whole House Ventilation Systems: The intermittently operated whole house ventilation systems shall be constructed to have the capability for continuous operation, and shall have a manual control and an automatic control, such as a clock timer. At the time of final inspection, the automatic control timer shall be set to operate the whole house fan for a minimum of eight hours a day.

302.4 Noise: Whole house fans located four feet or less from the interior grille shall have a sone rating of 1.5 or less measured at 0.1 inches water gauge. Remotely mounted fans shall be acoustically isolated from the structural elements of the building and from attached duct work using insulated flexible duct or other approved material.

Exception: Whole house ventilation systems which are integrated with forced-air heating systems or heat-recovery ventilation systems are exempt from the sone rating requirements of this section.

302.5 Ventilation Ducts: All ducts shall terminate outside the building. Exhaust ducts in systems which are designed to operate intermittently shall be equipped with back-draft dampers. All exhaust ducts in unconditioned spaces shall be insulated to a minimum of R-4. All supply ducts in the conditioned space shall be insulated to a minimum of R-4.

302.6 Outdoor Air: A mechanical system shall supply outdoor air as required in section 302.2.2. The mechanical system may consist of exhaust fans, supply fans, or both.

302.6.1 Outdoor Air Inlets: Inlets shall be screened or otherwise protected from entry by insects, leaves, or other material. Outdoor air inlets shall be located so as not to take air from the following areas:

- a) Closer than ten feet from an appliance vent outlet, unless such vent outlet is three feet above the outdoor air inlet.
- b) Where it will pick up objectionable odors, fumes, or flammable vapors.
- c) A hazardous or unsanitary location.
- d) A room or space having any fuel-burning appliances therein.
- e) Closer than ten feet from a vent opening of a plumbing drainage system unless the vent opening is at least three feet above the air inlet.
- f) Attic, crawl spaces, garages.

302.6.2 Individual Room Outdoor Air Inlets: Individual room outdoor air inlets shall:

- a) have controllable and secure openings;
- b) be sleeved or otherwise designed so as not to compromise the thermal properties of the wall or window in which they are placed;
- c) provide not less than four square inches of net free area of opening for each habitable space. Any inlet or combination of inlets which provide 10 ((CFM)) cfm at 10 Pascals as determined by

the Home Ventilating Institute Air Flow Test Standard are deemed equivalent to four square inches net free area.

302.6.3 Ventilation Integrated with Forced-Air Systems: The outdoor air connection to the return air stream shall be located upstream of the forced-air system blower and shall not be connected directly into a furnace cabinet to prevent thermal shock to the heat exchanger.

302.6.4 Distribution: Outdoor air shall be distributed to each habitable room by individual inlets, separate duct systems, or a forced-air system. Where outdoor air supplies are separated from exhaust points by doors, provisions shall be made to ensure air flow by installation of distribution ducts, undercutting doors, installation of grilles, transoms, or similar means where permitted by the Uniform Building Code. Doors shall be undercut to a minimum of one-half inch above the surface of the finish floor covering.

AMENDATORY SECTION (Amending WSR 93-02-056, filed 1/6/93, effective 7/1/93)

WAC 51-13-304 Mechanical ventilation criteria and minimum ventilation performance for all other occupancies not covered in sections 302 and 303.

304.1 Ventilation: The minimum requirements for operable area to provide natural ventilation are specified in the Uniform Building Code (UBC) as adopted by the state of Washington.

Where a mechanical ventilation system is installed, the mechanical ventilation system shall be capable of supplying ventilation air to each zone with the minimum outdoor air quantities specified in Table 3-4.

Exception: Where occupancy density is known and documented in the plans, the outside air rate may be based on the design occupant density. Under no circumstance shall the occupancies used result in outside air less than one-half that resulting from application of Table 3-4 estimated maximum occupancy values.

The outdoor air shall be ducted in a fully enclosed path directly to every air handling unit in each zone not provided with sufficient operable area for natural ventilation.

Exception: Ducts may terminate within 12 inches of the intake to ~~((a))~~ an HVAC unit provided they are physically fastened so that the outside air duct is directed into the unit intake.

In all parking garages, other than open parking garages as defined in UBC ~~((709-(b)))~~ 311.9, used for storing or handling of automobiles operating under their own power and on all loading platforms in bus terminals, ventilation shall be provided at 1.5 cfm per square foot of gross floor area. The building official may approve an alternate ventilation system designed to exhaust a minimum fourteen thousand cfm for each operating vehicle. Such system shall be based on the anticipated instantaneous movement rate of vehicles but not less than 2.5 percent (or one vehicle) of the garage capacity. Automatic carbon monoxide sensing systems may be submitted for approval.

In all buildings used for the repair of automobiles, each repair stall shall be equipped with an exhaust extension duct,

extending to the outside of the building, which if over ten feet in length, shall mechanically exhaust three hundred cfm. Connecting offices and waiting rooms shall be supplied with conditioned air under positive pressure.

Combustion air requirements shall conform to the requirements of Chapter ((6)) 7 of the UMC.

Mechanical refrigerating equipment and rooms storing ((refrigerates)) refrigerants shall conform to the requirements of Chapter ((15)) 11 of the UMC.

~~((MINIMUM SOURCE SPECIFIC VENTILATION CAPACITY REQUIREMENTS~~

~~TABLE 3-1~~

	Bathrooms	Kitchens
Intermittently operating	50 cfm	100 cfm
Continuous operation	20 cfm	25 cfm

TABLE 3-1

Minimum Source Specific Ventilation Capacity Requirements

	Bathrooms	Kitchens
Intermittently operating	50 cfm	100 cfm
Continuous operation	20 cfm	25 cfm

TABLE 3-2

Whole House Ventilation Flow Requirements¹

Bedrooms	CFM	
	Minimum	Maximum
2 or less	50	75
3	80	120
4	100	150
5	120	180

1. This table shall not be used for dwelling units containing more than 5 bedrooms.

TABLE 3-3
Prescriptive Exhaust Duct Sizing

Fan Tested CFM @0.25 W.G.	Minimum Flex Diameter	Maximum Length Feet	Minimum Smooth Diameter	Maximum Length Feet	Maximum Elbows ¹
50	4 inch	25	4 inch	70	3
50	5 inch	90	5 inch	100	3
50	6 inch	No Limit	6 inch	No Limit	3
80	4 inch ²	NA	4 inch	20	3
80	5 inch	15	5 inch	100	3
80	6 inch	90	6 inch	No Limit	3
100	5 inch ²	NA	5 inch	50	3
100	6 inch	45	6 inch	No Limit	3
125	6 inch	15	6 inch	No Limit	3
125	7 inch	70	7 inch	No Limit	3

1. For each additional elbow subtract 10 feet from length.
2. Flex ducts of this diameter are not permitted with fans of this size.

TABLE 3-4
Outdoor Air Requirements for Ventilation¹
Occupancies not Subject to Sections 302 and 303

Application	Estimated Maximum ² Occupancy P/1000 ft ² or 100 m ²	Outdoor Air Requirements cfm/person
Dry Cleaners, Laundries³		
Commercial laundry	10	25
Commercial dry cleaner	30	30
Storage, pick up	30	35
Coin-operated laundries	20	15
Coin-operated dry cleaner	20	15
Dwelling Units In Buildings Greater Than Four Stories or Attached to I-Occupancy Facilities		
Bedrooms & living areas ²⁴		15
Food and Beverage Service		
Dinning rooms	70	20
Cafeteria, fast food	100	20
Bars, cocktail lounges ⁴	100	30
Kitchens(cooking) ²³	20	15
Garages, Repair, Service Stations		
Enclosed parking garage ⁵		1.50 cfm/ft.sq.
Auto repair rooms		1.50 cfm/ft.sq.
Hotels, Motels, Resorts, Congregate Residences with More Than Four Stories⁶		
Bedrooms		30 cfm/room
Living Rooms		30 cfm/room
Bath ⁷		35 cfm/room
Lobbies	30	15
Conference rooms	50	20
Assembly rooms	120	15
Gambling casinos ⁴	120	30
Offices		
Office space ⁹	7	20
Reception area	60	15
Telecommunication centers and data entry areas	60	20
Conference rooms	50	20
Public Spaces		
Corridors and utilities		0.05 cfm/ft.sq.
Public restroom, cfm/wc or urinal ¹⁰		50
Lockers and dressing rooms		0.50 cfm/ft.sq.
Smoking lounge ¹¹	70	60
Elevators ¹²		1.0 cfm/ft.sq.

TABLE 3-4 Cont.
Outdoor Air Requirements for Ventilation¹
Occupancies not Subject to Sections 302 and 303

Application	Estimated Maximum ² Occupancy P/1000 ft ² or 100 m ²	Outdoor Air Requirements cfm/person
Retail Stores, Sales Floors, and Show Room Floors		
Basement and street	30	0.30 cfm/ft.sq.
Upper floors	20	0.20 cfm/ft.sq.
Storage rooms	15	0.15 cfm/ft.sq.
Dressing rooms		0.20 cfm/ft.sq.
Malls and arcades	20	0.20 cfm/ft.sq.
Shipping and receiving	10	0.15 cfm/ft.sq.
Smoking lounge ¹¹	70	60
Warehouses	5	0.05 cfm/ft.sq.
Specialty Shops		
Barber	25	15
Beauty	25	25
Reducing salons	20	15
Florists ¹³	8	15
Clothiers, furniture		0.30 cfm/ft.sq.
Hardware, drugs, fabric	8	15
Supermarkets	8	15
Pet shops		1.00 cfm/ft.sq.
Sports and Amusement¹⁴		
Spectator areas	150	15
Game rooms	70	25
Ice arenas(playing areas)		0.50 cfm/ft.sq.
Swimming Pools(pool and deck area) ¹⁵		0.50 cfm/ft.sq.
Playing floor(gymnasium)	30	20
Ballrooms and discos	100	25
Bowling alleys(seating areas)	70	25
Theaters¹⁶		
Ticket booths	60	20
Lobbies	150	20
Auditorium	150	15
Stages, studios	70	15
Transportation¹⁷		
Waiting rooms	100	15
Platforms	100	15
Vehicles	150	15
Workrooms		
Meat processing ¹⁸	10	15
Photo studios	10	15
Darkrooms	10	0.50 cfm/ft.sq.
Pharmacy	20	15
Bank vaults	5	15
Duplicating, printing ¹⁹		0.50 cfm/ft.sq.

TABLE 3-4
Outdoor Air Requirements for Ventilation¹
Occupancies not Subject to Sections 302 and 303

Application	Estimated Maximum ² Occupancy P/1000 ft ² or 100 m ²	Outdoor Air Requirements cfm/person
INSTITUTIONAL FACILITIES		
Education		
Classroom	50	15
Laboratories ²⁰	30	20
Training shop	30	20
Music rooms	50	15
Libraries	20	15
Locker rooms		0.50 cfm/ft.sq.
Corridors		0.10 cfm/ft.sq.
Auditoriums	150	15
Smoking lounges ¹¹	70	60
Hospitals, Nursing and Convalescent Homes		
Patient rooms ²¹	10	25
Medical procedure	20	15
Operating rooms	20	30
Recovery and ICU	20	15
Autopsy rooms ²²		0.50 cfm/ft.sq.
Physical Therapy	20	15
Correctional Facilities		
Cells	20	20
Dining halls	100	15
Guard station	40	15

Table 3-4 Cont.
Outdoor Air Requirements for Ventilation¹
Occupancies not Subject to Sections 302 and 303

1. Derived from ASHRAE Standard 62-1989.
2. Net occupiable space.
3. Dry-cleaning process may require more air.
4. Supplementary smoke-removal equipment may be required.
5. Distribution among people must consider worker location and concentration of running engine; stands where engines are run must incorporate systems for positive engine exhaust withdrawal. Contaminant sensors may be used to control ventilation.
6. Independent of room size.
7. Installed capacity for intermittent use.
8. See also food and beverage service, merchandising, barber and beauty shops, garages.
9. Some office equipment may require local exhaust.
10. Mechanical exhaust with no recirculation is recommended.
11. Normally supplied by transfer air, local mechanical exhaust; with no recirculation recommended.
12. Normally supplied by transfer air.
13. Ventilation to optimize plant growth may dictate requirements.
14. When internal combustion engines are operated for maintenance of playing surfaces, increased ventilation rates may be required.
15. Higher values may be required for humidity control.
16. Special ventilation will be needed to eliminate special stage effects.
17. Ventilation within vehicles may require special considerations.
18. Spaces maintained at low temperatures (-10°F. to +50°F.) are not covered by these requirements unless the occupancy is continuous. Ventilation from adjoining spaces is permissible. When the occupancy is intermittent, infiltration will normally exceed the ventilation requirements.
19. Installed equipment must incorporate positive exhaust and control of undesirable contaminants.
20. Special contamination control systems may be required for processes or functions including laboratory animal occupancy.
21. Special requirements or codes and pressure relationships may determine minimum ventilation rates and filter efficiency. Procedures generating contaminants may require higher rates.
22. Air shall not be recirculated into other spaces.
23. Makeup air for hood exhaust may require more ventilating air.
24. Occupant loading shall be based on the number of bedrooms as follows: first bedroom, two persons; each additional bedroom, one person. Where higher occupant loadings are known, they shall be used.

TABLE 3-5

Prescriptive Integrated Forced Air Supply Duct Sizing

Number of Bedrooms	Minimum Smooth Duct Diameter	Minimum Flexible Duct Diameter	Maximum Length ¹	Maximum Number of Elbows ²
2 or less	6"	7"	20'	3
3	7"	8"	20'	3
4 or more	8"	9"	20'	3

1. For lengths over 20 feet increase duct diameter 1 inch.
2. For elbows numbering more than 3 increase duct diameter 1 inch.

AMENDATORY SECTION (Amending WSR 93-02-056, filed 1/6/93, effective 7/1/93)

WAC 51-13-402 Solid fuel burning appliances and fireplaces.

402.1 General: Solid fuel burning appliances and fireplaces shall satisfy one of the following criteria.

402.2 Solid Fuel Burning Appliances: Solid fuel burning appliances shall be provided with the following:

a) Tight fitting metal or ceramic glass doors.

b) 1. A source from outside the structure of primary combustion air, connected to the appliance as per manufacturer's specification. The air inlet shall originate at a point below the fire box. The duct shall be 4 inches or greater in diameter, not exceed 20 feet in length, and be installed as per manufacturer's instructions;

or

2. The appliance and manufacturer's recommended combustion air supply, as an installed unit, shall be certified by an independent testing laboratory to have passed Test No. 11 - Negative Pressure Test, Section 12.3, of ULC S627-M1984 "Space Heaters for Use with Solid Fuels," modified as follows:

A) Negative pressure of 8 Pascal shall be initially established with the chamber sealed and the air supply, if not directly connected to the appliance, closed off.

B) The air supply, if not directly connected to the appliance, shall then be opened.

C) The maximum allowable air exchange rate from chamber leakage and intentional air supply for the unit (appliance with combustion air supply) in the test chamber is 3.5 air changes per hour, or 28 cfm (cubic feet of air per minute), whichever is less.

Exception: Combustion air may be supplied to the room in which the solid fuel burning appliance is located in lieu of direct ducting, provided that one of the following conditions is met:

1) The solid fuel burning appliance is part of a central heating plant and installed in an unconditioned space in conformance with the Uniform Mechanical Code; or

2) The solid fuel burning appliance is installed in existing construction directly on a concrete floor or surrounded by masonry materials as in a fireplace.

The combustion air terminus shall be located as close to the solid fuel burning appliance as possible and shall be provided with a barometric damper or equivalent. The combustion air source shall be specified by the manufacturer or no less than four (4) inches in diameter or the equivalent in area or as approved.

402.3 Fireplaces: Fireplaces shall be provided with each of the following:

a) Tightly fitting flue dampers, operated by a readily accessible manual or approved automatic control.

Exception: Fireplaces with gas logs shall be installed in accordance with the Uniform Mechanical Code ((Chapter-803)) section 901.

b) An outside source for combustion air ducted into the firebox. The duct shall be at least six (6) square inches, and shall be provided with an operable outside air duct damper.

c) Site built fireplaces shall have tight fitting glass or metal doors, or a flue draft induction fan, or as approved for minimizing back-drafting. Factory built fireplaces shall use doors listed for the installed appliance.

402.4 Masonry Heaters: Masonry heaters shall be approved by the department of ecology and shall contain both of the following:

a) Primary combustion air ducted from the outside of the structure to the appliance.

b) Tight fitting ceramic glass or metal doors. Flue damper, when provided, shall have an external control and when in the closed position shall have a net free area of not less than five percent of the flue cross sectional area.

AMENDATORY SECTION (Amending WSR 91-01-102, filed 12/18/90, effective 7/1/91)

WAC 51-13-501 Scope.

501.1 General: The criteria of this chapter establishes minimum radon resistive construction requirements for all Group R Occupancies. These requirements are adopted pursuant to the ventilation requirements of Section 7, of Chapter 2 of the Session Laws of 1990.

501.2 Application: The requirements of this chapter shall be adopted and enforced by all jurisdictions of the state according to the following subsections:

501.2.1: All jurisdictions of the state shall comply with section 502.

501.2.2: Ferry, (~~Grant~~) Okanogan, Pend Oreille, Skamania, Spokane, and Stevens (~~and Wahkiakum~~) counties shall also comply with section 503.

AMENDATORY SECTION (Amending WSR 93-02-056, filed 1/6/93, effective 7/1/93)

WAC 51-13-502 State-wide radon requirements.

502.1((+)) Crawlspaces:

502.1.1 General: All crawlspaces shall comply with the requirements of this section.

502.1.2 Ventilation: All crawlspaces shall be ventilated as specified in section ((2516(e))) 2317.7 of the Washington State Uniform Building Code (chapter ((51-16)) 51-30 WAC).

If the installed ventilation in a crawlspace is less than one square foot for each three hundred square feet of crawlspace area, or if the crawlspace vents are equipped with operable louvers, a radon vent shall be installed to originate from a point between the ground cover and soil. The radon vent shall be installed in accordance with sections 503.2.6 and 503.2.7.

502.1.3 Crawlspace Plenum Systems: In crawlspace plenum systems used for providing supply air for an HVAC system, aggregate, a permanently sealed soil gas retarder membrane and a radon vent pipe shall be installed in accordance with section 503.2. Crawlspaces shall not be used for return air plenums.

In addition, an operable radon vent fan shall be installed. The fan shall be located as specified in section 503.2.7. The fan shall be capable of providing at least one hundred cfm at one inch water column static pressure. The fan shall be controlled by a readily accessible manual switch. The switch shall be labeled "RADON VENT FAN."

~~((502.2 Radon monitoring~~

~~502.2.1 Three month etched track radon monitors: Beginning July 1, 1992, and ending June 30, 1995, at the time of final inspection, the building official shall deliver the following to each new Group R, Division 3 Occupancy and to all ground floor dwelling units in new Group R, Division 1 apartment houses:~~

~~a) A three month etched track radon device that is listed on a current federal EPA radon measurement proficiency list, and includes prepaid fees for postage, test analysis and notification of the test results to the owner; and~~

~~b) Manufacturer's instructions for the device; and~~

~~c) Instructions prepared by the state building code council, posted in a conspicuous place.~~

The building official is not responsible for returning the radon measurement device to the testing laboratory. The owner of a new Group R, Division 3 Occupancy or Group R, Division 1 apartment houses shall be responsible for returning the radon measurement device left by the building inspector to the

appropriate testing laboratory in accordance with the instructions provided.))