

What's New In Minnesota Rule 1303



Presented by the Construction Codes and Licensing Division



Disclaimer



Information in this seminar may contain code language that has been paraphrased or summarized in order to provide more clarity for instruction purposes. When inquiries arise in the field, reference must be made to the actual code language contained in Rule Chapter 1303 of the Minnesota State Building Code.

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Housekeeping Items



- ❖ Color Coding
 - Existing language
 - New or modified language
 - Deleted language

MN Rule 1303.1600



Subp. 2 Soil under slab on grade construction for buildings.

When soil, natural or fill, is sand or pit run sand and gravel, and of depth in accordance with minimum footing depth requirements for each zone, slab on grade construction which is structurally designed to support all applied loads is permitted. Sand must contain less than 70 percent material that will pass through a U.S. Standard No. 40 sieve and less than five percent material that will pass through a No. 200 sieve (five percent fines), or be approved by an engineer competent in soil mechanics. Footings for interior bearing walls or columns may be constructed to be integral with the slab on grade for any height building. Footings for exterior bearing walls or columns may be similarly constructed for any height building when supporting soil is as described in this subpart.

MN Rule 1303.1600



Subp. 2 Soil under slab on grade construction for buildings.

Exception: Slab on grade construction may be placed on any soil except peat or muck for detached one story private garage, carport, and shed buildings not larger than ~~3000~~ 1,000 square feet.

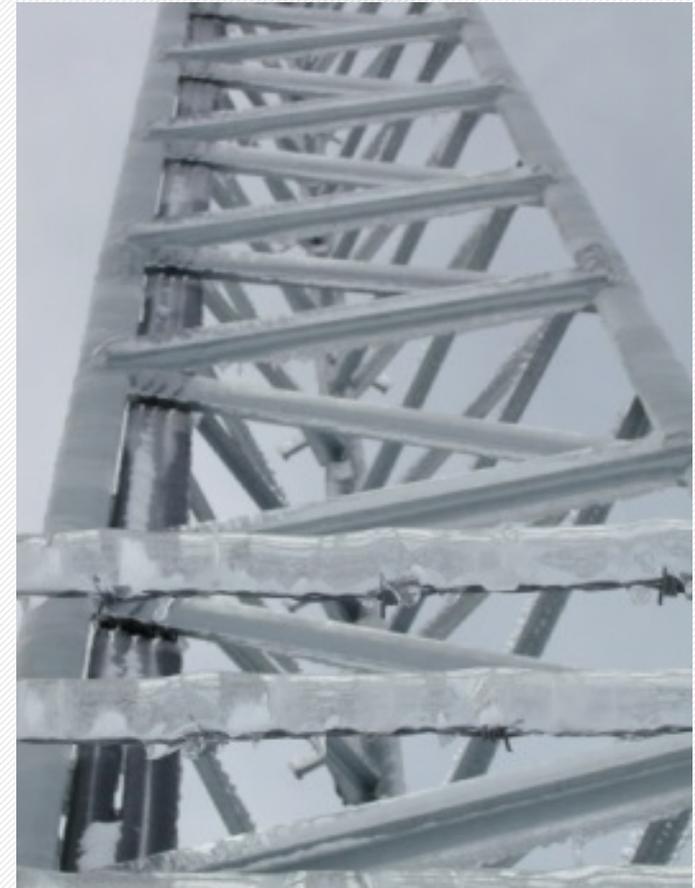
MN Rule 1303.1800



1303.1800 [REPEALED]

~~Radial ice on towers.~~

~~The effect of one-half inch of radial ice must be included in the design of towers including all supporting guys. This effect must include the weight of the ice and the increased profile of each such tower component so coated.~~



MN Rule 1303.2200



SIMPLIFIED WIND LOADS

$$P_s = K_{zt} I_w (V_{alt}^2 / 115^2) P_{alt}$$

Current Equation Today

$$P_s = K_{zt} (V_{alt}^2 / 115^2) P_{alt}$$

Correct Equation

Intended by Committee

$$P_s = K_{zt} (V_{alt}^2 \cdot V_{alt}^2 / 115 \cdot 115) P_{alt}$$

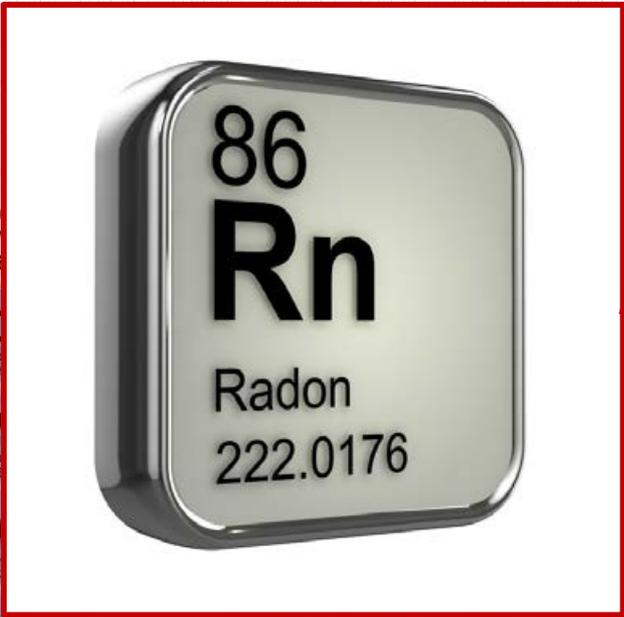
Equation as printed with typos

MN Rule 1303.2400



Periodic Table of the Elements

1 11A 11A	2 IIA 2A											13 IIIA 3A	14 IVA 4A	15 VA 5A	16 VIA 6A	17 VIIA 7A	18 VIIIA 8A												
1 H Hydrogen 1.0079	2 He Helium 4.00260											5 B Boron 10.811	6 C Carbon 12.011	7 N Nitrogen 14.00674	8 O Oxygen 15.9994	9 F Fluorine 18.998403	10 Ne Neon 20.1797												
3 Li Lithium 6.941	4 Be Beryllium 9.01218											11 Na Sodium 22.989768	12 Mg Magnesium 24.305											13 Al Aluminum 26.981539	14 Si Silicon 28.0855	15 P Phosphorus 30.973762	16 S Sulfur 32.066	17 Cl Chlorine 35.4527	18 Ar Argon 39.948
11 Na Sodium 22.989768	12 Mg Magnesium 24.305	3 IIIB 3B	4 IVB 4B	5 VB 5B	6 VIB 6B	7 VIIB 7B	8 VIII 8	9 VIII 9	10 VIII 10	11 VIII 11	12 IIB 2B	13 Al Aluminum 26.981539	14 Si Silicon 28.0855	15 P Phosphorus 30.973762	16 S Sulfur 32.066	17 Cl Chlorine 35.4527	18 Ar Argon 39.948												
19 K Potassium 39.0983	20 Ca Calcium 40.078	21 Sc Scandium 44.95591	22 Ti Titanium 47.88	23 V Vanadium 50.9415	24 Cr Chromium 51.9961	25 Mn Manganese 54.938045	26 Fe Iron 55.845	27 Co Cobalt 58.933195	28 Ni Nickel 58.6934	29 Cu Copper 63.546	30 Zn Zinc 65.39	31 Ga Gallium 69.723	32 Ge Germanium 72.64	33 As Arsenic 74.92159	34 Se Selenium 78.96	35 Br Bromine 79.904	36 Kr Krypton 83.80												
37 Rb Rubidium 85.4678	38 Sr Strontium 87.62	39 Y Yttrium 88.90585	40 Zr Zirconium 91.224	41 Nb Niobium 92.90638	42 Mo Molybdenum 95.94	43 Tc Technetium [98]	44 Ru Ruthenium 101.07	45 Rh Rhodium 102.9055	46 Pd Palladium 106.42	47 Ag Silver 107.8682	48 Cd Cadmium 112.411	49 In Indium 114.818	50 Sn Tin 118.71	51 Sb Antimony 121.760	52 Te Tellurium 127.6	53 I Iodine 126.90447	54 Xe Xenon 131.29												
55 Cs Cesium 132.90543	56 Ba Barium 137.327	57-71 Lanthanide Series	72 Hf Hafnium 178.49	73 Ta Tantalum 180.9479	74 W Tungsten 183.84	75 Re Rhenium 186.207	76 Os Osmium 190.23	77 Ir Iridium 192.222	78 Pt Platinum 195.084	79 Au Gold 196.96657	80 Hg Mercury 200.59	81 Tl Thallium 204.3833	82 Pb Lead 207.2	83 Bi Bismuth 208.98037	84 Po Polonium [209]	85 At Astatine 209	86 Rn Radon 222.0176												
87 Fr Francium 223.0197	88 Ra Radium 226.0254	89-103 Actinide Series	104 Rf Rutherfordium [261]	105 Db Dubnium [262]	106 Sg Seaborgium [266]	107 Bh Bohrium [264]	108 Hs Hassium [269]	109 Mt Meitnerium [268]	110 Ds Darmstadtium [269]	111 Rg Roentgenium [272]	112 Cn Copernicium [277]	113 Uut Ununtrium unknown	114 Uuq Ununquadium [289]	115 Uup Ununpentium unknown	116 Uuh Ununhexium [298]	117 Uus Ununseptium unknown	118 Uuo Ununoctium unknown												
		57 La Lanthanum 138.9055	58 Ce Cerium 140.115	59 Pr Praseodymium 140.90765	60 Nd Neodymium 144.24	61 Pm Promethium 144.9127	62 Sm Samarium 150.36	63 Eu Europium 151.9655	64 Gd Gadolinium 157.25	65 Tb Terbium 158.92534	66 Dy Dysprosium 162.50	67 Ho Holmium 164.93032	68 Er Erbium 167.26	69 Tm Thulium 168.93421	70 Yb Ytterbium 173.04	71 Lu Lutetium 174.967													
		89 Ac Actinium 227.0278	90 Th Thorium 232.0381	91 Pa Protactinium 231.03688	92 U Uranium 238.0289	93 Np Neptunium 237.0482	94 Pu Plutonium 244.0642	95 Am Americium 243.0614	96 Cm Curium 247.0703	97 Bk Berkelium 247.0703	98 Cf Californium 251.0798	99 Es Einsteinium [254]	100 Fm Fermium 257.0951	101 Md Mendelevium 258.1	102 No Nobelium 259.1009	103 Lr Lawrencium [262]													
		Alkali Metal	Alkaline Earth	Transition Metal	Basic Metal	Semimetals	Nonmetals	Halogens	Noble Gas	Lanthanides	Actinides																		



1303.2400 Purpose and Scope



Subp. 1. Applicability; residential structures.

The purpose of 1303.2400 to 1303.2402 is to establish minimum requirements for passive radon control systems that apply to all new residential structures listed in items A to H:

- A. One-family dwellings;
- B. Two-family dwellings;
- C. Townhouses;
- D. Apartment buildings;
- E. Condominiums;

1303.2400 Purpose and Scope



Subp. 1. Applicability; residential structures. (cont)

The purpose of 1303.2400 to 1303.2402 is to establish minimum requirements for passive radon control systems that apply to all new residential structures listed in items A to H:

- F. Multistory buildings that include any residential occupancy;
- G. Mixed-occupancy buildings that include any residential occupancy; and
- H. Any addition to an existing dwelling that currently has a radon control system incorporated into the existing building.

1303.2400 Purpose and Scope



Subp. 1. Applicability; residential structures. (cont)

The purpose of 1303.2400 to 1303.2402 is to establish minimum requirements for passive radon control systems that apply to all new residential structures listed in items A to H:

If a fan is installed in a passive radon control system, this creates an active radon control system that must comply with the requirements of parts 1303.2400 to 1303.2403.

1303.2400 Purpose and Scope



A) One-family dwellings;



1303.2400 Purpose and Scope



B) Two-family dwellings;



1303.2400 Purpose and Scope



C) Townhouses;



1303.2400 Purpose and Scope



D) Apartment buildings;



1303.2400 Purpose and Scope



E) Condominiums;



1303.2400 Purpose and Scope



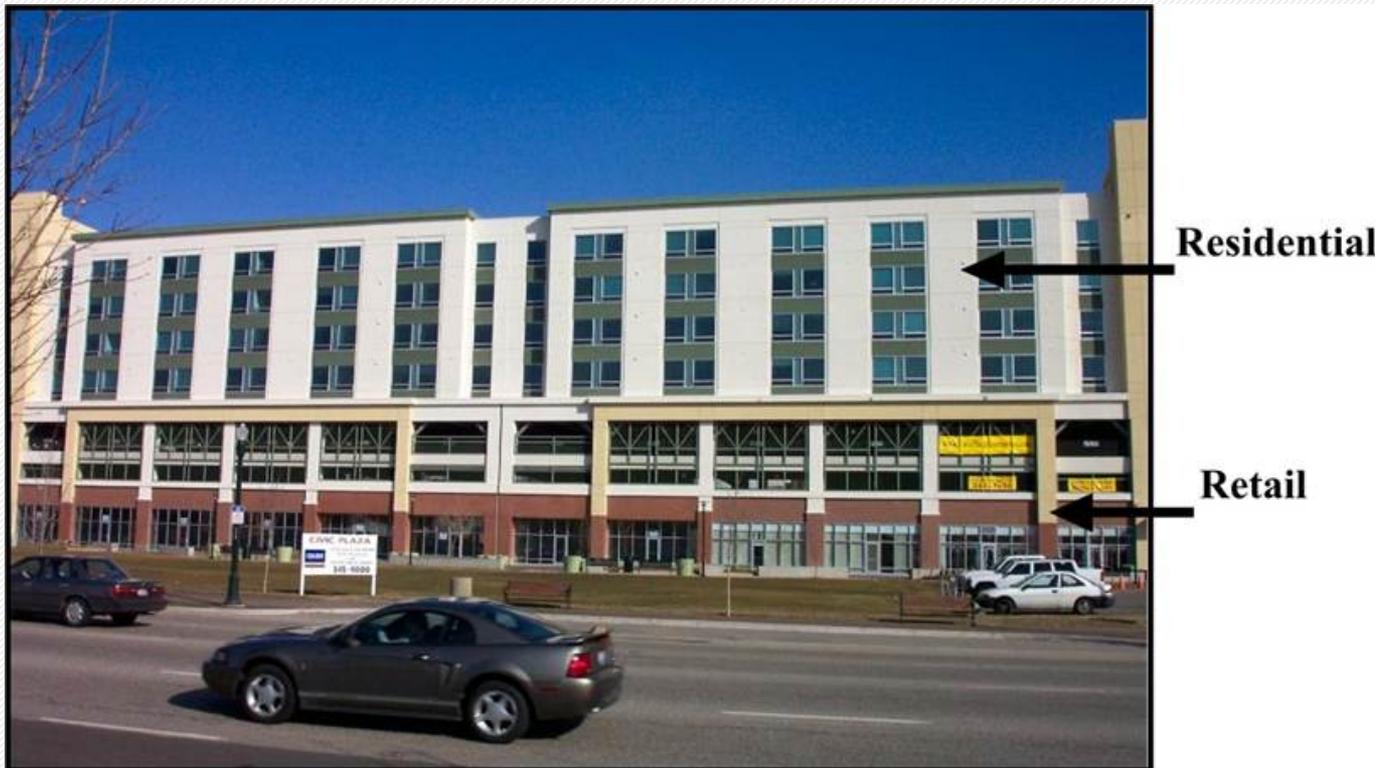
- F) Multistory buildings that include residential occupancy;



1303.2400 Purpose and Scope



G) Multistory Buildings which include Residential occupancy;



1303.2400 Purpose and Scope



H) Any addition to an existing dwelling that currently has a radon control system incorporated into the existing building.



1303.2400 Purpose and Scope



Subp. 2. Applicability; design features.

The requirements in parts 1303.2400 to 1303.2402 shall apply to any structure identified in subpart 1, items A to H (previous slides), if the structure is designed with any of the following features identified in items A to F:

1303.2400 Purpose and Scope



Subp. 2. Applicability; design features. (cont)

A. A basement concrete slab in contact with the earth;



1303.2400 Purpose and Scope



Subp. 2. Applicability; design features. (cont)

B. A crawl space within the building's conditioned space that has a concrete or earth floor;



1303.2400 Purpose and Scope



Subp. 2. Applicability; design features. (cont)

C. A wood foundation floor constructed on or directly above the earth;



1303.2400 Purpose and Scope



Subp. 2. Applicability; design features. (cont)

D. Slab on grade construction designs;



1303.2400 Purpose and Scope



Subp. 2. Applicability; design features. (cont)

E. Attached or tuck-under garages, unless the floor, wall, and ceiling assemblies separating the garage from the dwellings are sealed: and



1303.2400 Purpose and Scope



Subp. 2. Applicability; design features. (cont)

F. Any building configuration that allows radon gas to enter the residential dwelling.



1303.2400 Purpose and Scope



Subp. 2. Applicability; design features. (cont)

Exceptions:

1. Crawl spaces outside the conditioned space of the residential dwelling, when the crawl space is ventilated directly to the outside atmosphere according to the IRC, IBC, Code of Federal Regulations, and Minnesota Rules, chapter 1350



1303.2400 Purpose and Scope



Subp. 2. Applicability; design features. (cont)

Exceptions:

2. Hotels and motels.



1303.2400 Purpose and Scope



Subp. 2. Applicability; design features. (cont)

Exceptions:

3. Additions to existing dwellings that do not currently have a radon control system incorporated into the existing dwelling.



1303.2400 Purpose and Scope



Subp. 3. Mixed occupancy or multistory mixed occupancy buildings.

When the nonresidential occupancy is in contact with the earth, all assemblies that separate the occupancies must be sealed to prevent the movement of air and airborne gases between the nonresidential and residential occupancies

When the residential occupancy is in contact with the earth and adjacent to a nonresidential occupancy, the residential occupancy shall incorporate a radon control system and all assemblies that separate the nonresidential and residential occupancy shall be sealed to prevent the movement of air or airborne gases.

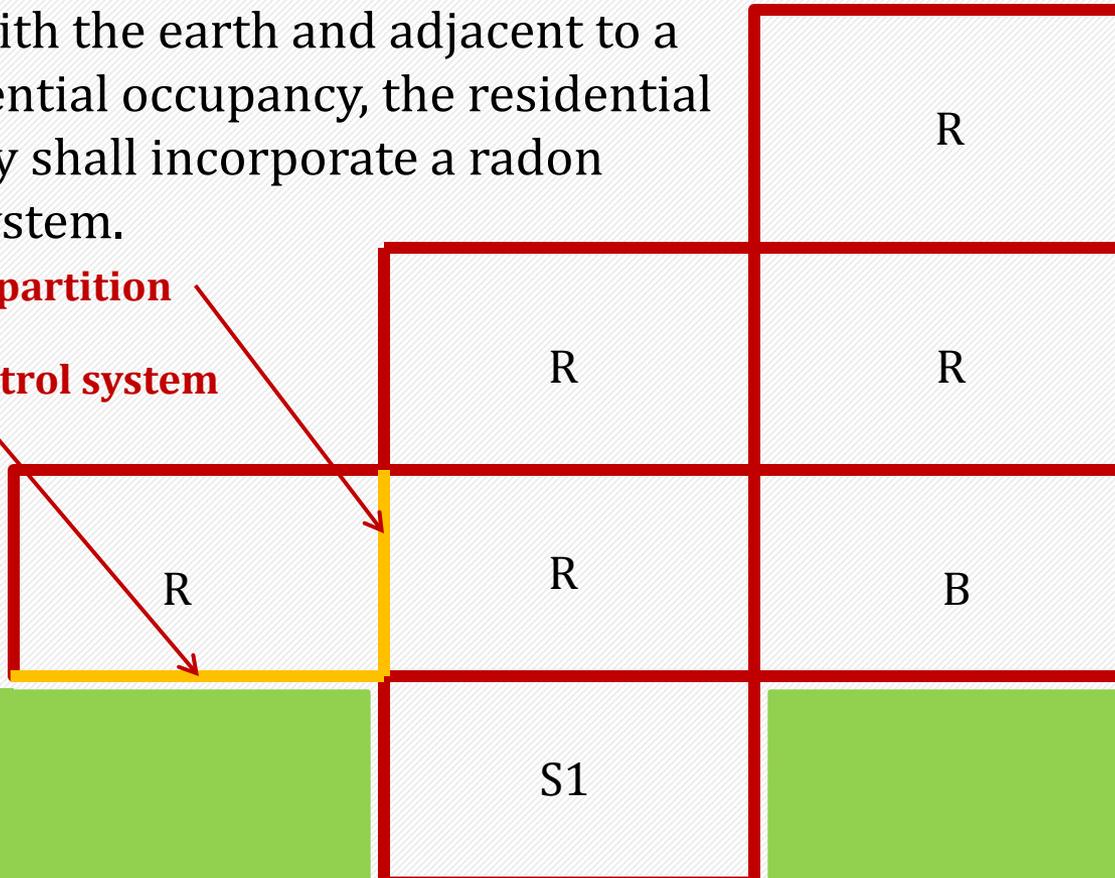
1303.2400 Purpose and Scope



When the residential occupancy is in contact with the earth and adjacent to a nonresidential occupancy, the residential occupancy shall incorporate a radon control system.

Rated fire partition

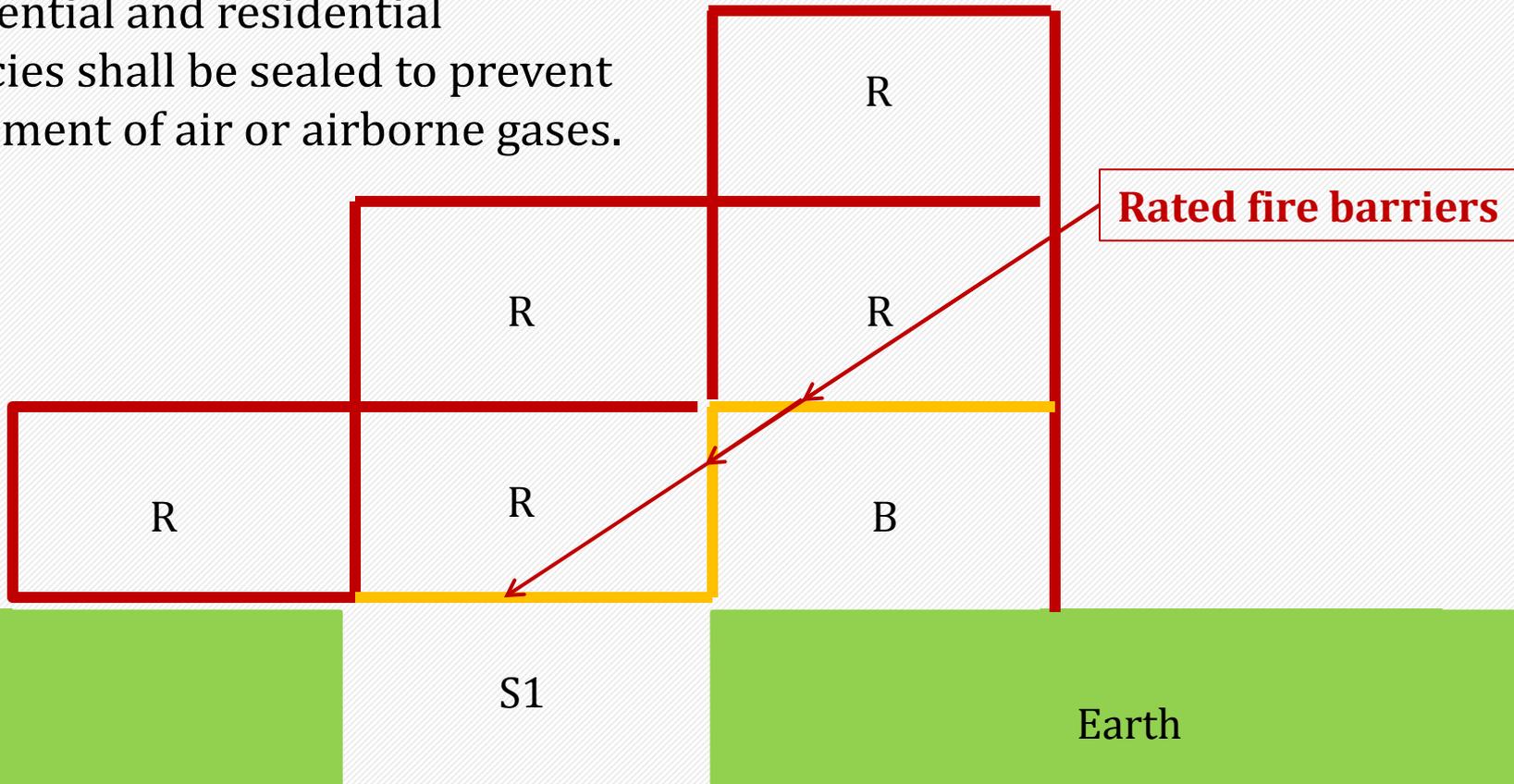
Radon control system required



1303.2400 Purpose and Scope



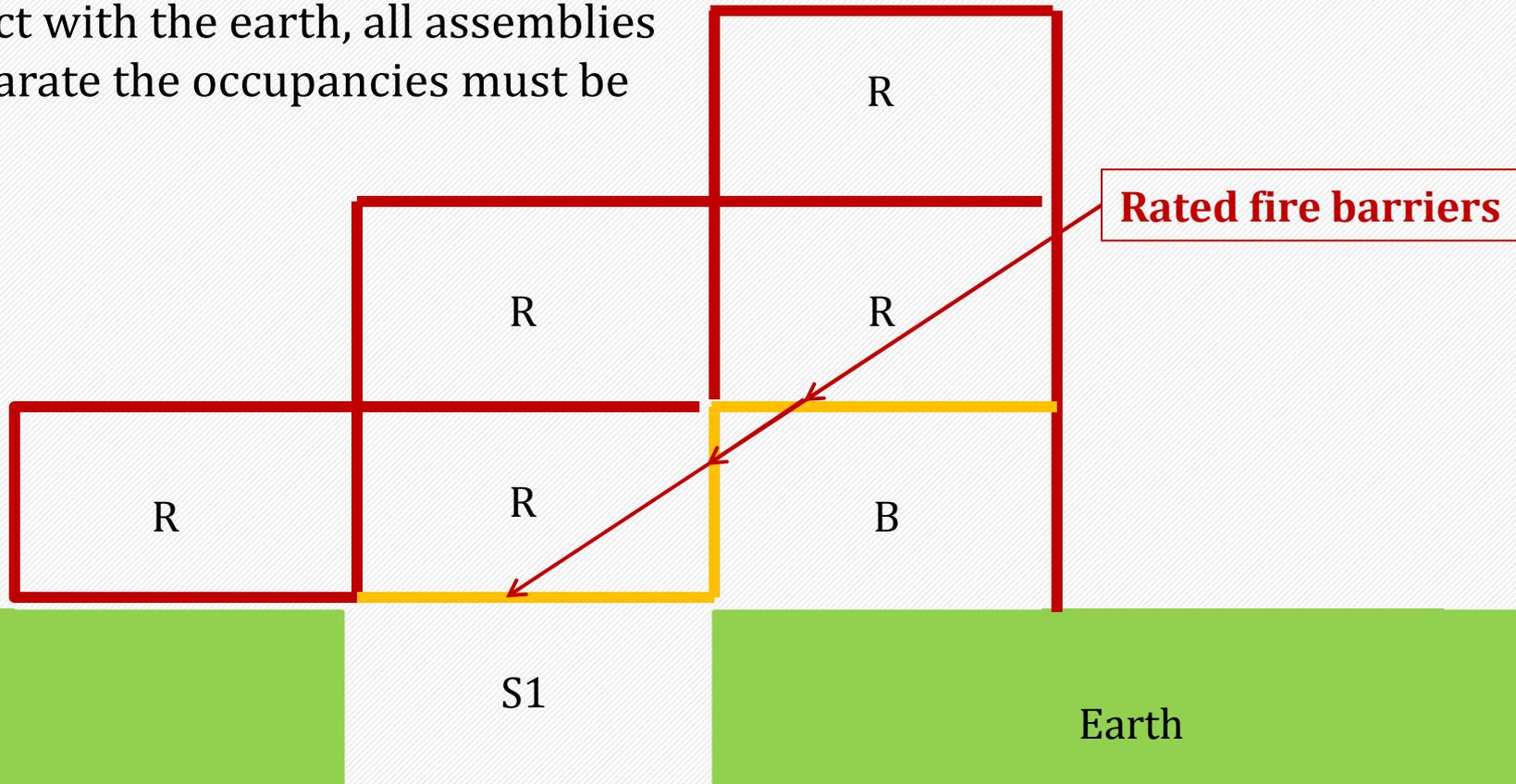
All assemblies that separate the nonresidential and residential occupancies shall be sealed to prevent the movement of air or airborne gases.



1303.2400 Purpose and Scope



When the nonresidential occupancy is in contact with the earth, all assemblies that separate the occupancies must be sealed.

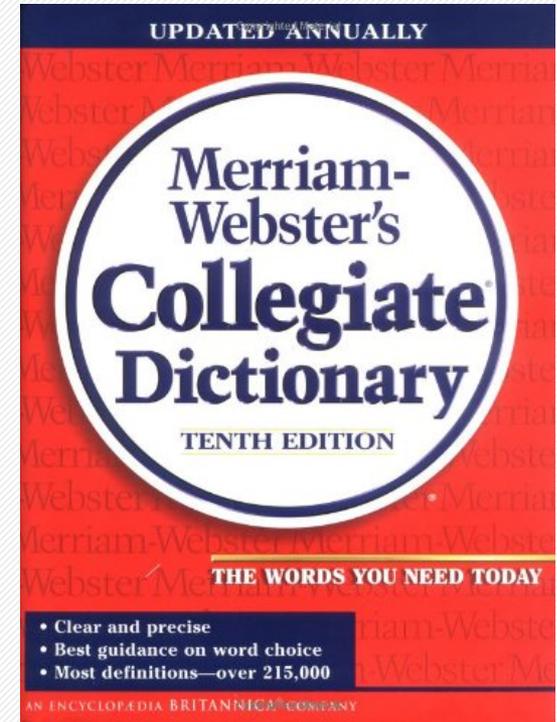


1303.2401 Definitions



Subpart 1. Terms not defined.

For the purposes of parts 1303.2400 to 1303.2403, where terms are not defined in parts this 1303.2400 to 1303.2403, Merriam–Webster’s Collegiate Dictionary, available at www.m-w.com shall be considered as providing ordinarily accepted meanings.



1303.2401 Definitions



Active Radon Control System:

Means a system designed to achieve lower air pressure below the soil-gas membrane relative to the indoor air pressure, by use of a fan that has been added to a passive radon control system.

Approved:

Means approval by the building official, according to the Minnesota State Building Code, by reason of inspection, investigation, or testing; accepted principals; computer simulations; research reports; or testing performed by either a licensed engineer or a local or nationally recognized laboratory.

1303.2401 Definitions



CFR:

Means the Code of Federal Regulations (CFR) Title 24
Chapter 3285

1303.2401 Definitions



Gas Permeable Material:

A “Gas Permeable Material” means any of the following:

- 1) A uniform layer of clean aggregate, a minimum of 4 inches thick. The aggregate material must pass through a 2 inch sieve but be retained by a $\frac{1}{4}$ inch sieve.



1303.2401 Definitions



Gas Permeable Material:

A “Gas Permeable Material” means any of the following:

- 2) A uniform layer of sand, native or fill, a minimum of 4 inches thick, overlain by a layer or strips of geotextile drainage matting to allow the lateral flow of soil gases.

1303.2401 Definitions



Gas Permeable Material:

A “Gas Permeable Material” means any of the following:

- 3) Other materials, systems, or floor designs, if the material, systems, or floor designs is professionally engineered to provide depressurization under the entire soil-gas membrane.

1303.2401 Definitions



IBC: Means the International Building Code incorporated by reference except as qualified and amended in Minnesota Rule chapter 1305.

IRC: Means the International Residential Code incorporated by reference except as qualified and amended in Minnesota Rule chapter 1309.

1303.2401 Definitions



Passive Radon Control System:

Means a system designed to achieve a lower air pressure below the soil-gas membrane relative to the indoor air pressure by use of a vent pipe that relies on stack effect to provide an upward flow of air from beneath the soil-gas membrane.

1303.2401 Definitions



Radon Gas:

Means a naturally occurring, chemically inert, radioactive gas.

Sealed:

Means to prevent the movement of air or airborne gasses through a floor, wall or ceiling assembly.

1303.2401 Definitions



Soil-gas membrane:

Means a continuous membrane of 6-mil polyethylene, or 3-mil cross-laminated polyethylene

Vent Pipe:

Means a 3 inch or 4 inch diameter ABS or PVC pipe used to vent subsoil gases that have collected under the soil-gas membrane to the exterior of the dwelling.

1303.2402 Requirements for Passive Radon Control Systems



Subpart 1. Gas permeable material preparation.

A gas permeable material shall be placed on the prepared subgrade under all floor systems.

Gas permeable material (Definition 1303.2401)

- 1) A uniform layer of clean aggregate, a minimum of 4 inches thick. The aggregate material must pass through a 2 inch sieve but be retained by a $\frac{1}{4}$ inch sieve.
- 2) A uniform layer of sand, native or fill, a minimum of 4 inches thick, overlain by a layer or strips of geotextile drainage matting to allow the lateral flow of soil gases.
- 3) Other materials, systems, or floor designs, if the material, systems, or floor designs is professionally engineered to provide depressurization under the entire soil-gas membrane.

1303.2402 Requirements for Passive Radon Control Systems



Subpart 2. Soil-gas membrane installation.

A soil-gas membrane shall be placed on top of the gas-permeable material prior to placing a floor on top of or above the soil.

The soil-gas membrane shall cover the entire floor area. Separate sections of membrane must be lapped at least 12 inches.

The membrane shall fit closely around any penetration of the membrane to reduce the leakage of soil gases.

1303.2402 Requirements for Passive Radon Control Systems



Subpart 2. Soil-gas membrane installation. (cont)

All punctures or tears in the soil-gas membrane shall be repaired by sealing and patching the soil-gas membrane with the same kind of material, maintaining a minimum 12-inch lap.



1303.2402 Requirements for Passive Radon Control Systems



Subpart 3. “T” fitting.

A “T” fitting shall be installed beneath the soil-gas membrane with a minimum of 10 feet of perforated pipe connected to any two openings of the “T” fitting, or by connecting the two openings to the interior drain tile system.



1303.2402 Requirements for Passive Radon Control Systems



Subpart 3. “T” fitting.

The third opening of the “T” fitting shall be connected to the vent pipe. The perforated pipe or drain tile shall be the same size as the “T” fitting and the vent pipe. All connections to the “T” fitting and the vent pipe shall be tight fitting.

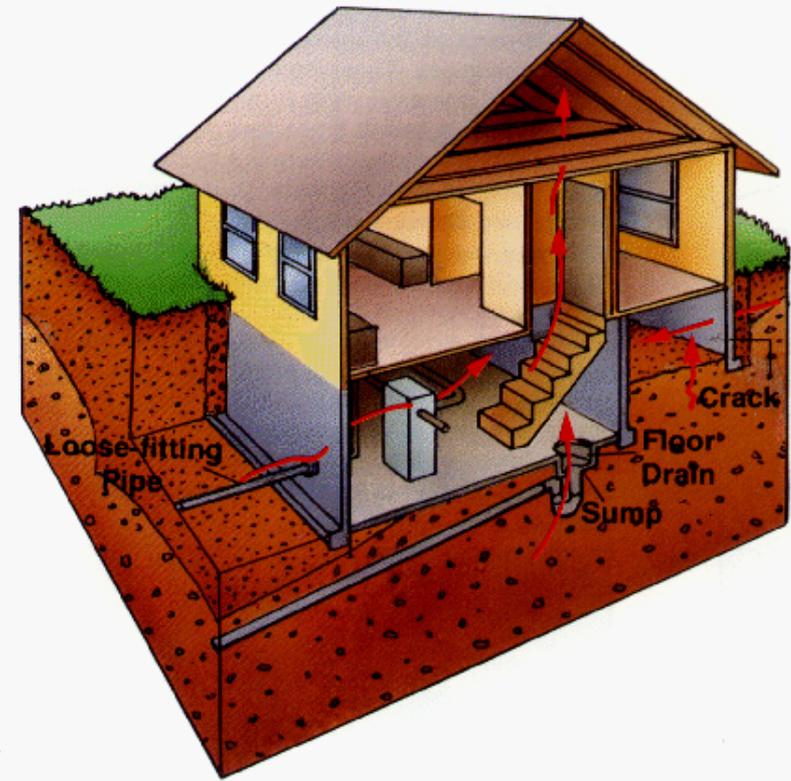


1303.2402 Requirements for Passive Radon Control Systems



Subpart 4. Potential entry points.

Potential entry points for radon gas shall be sealed according to this subpart, as applicable.



Radon can enter a house through many paths.

1303.2402 Requirements for Passive Radon Control Systems



Subpart 4. Potential entry points.

A. Floor openings.

Floor openings around bathtubs, showers, pipes, wires, or other objects that penetrate the soil-gas membrane and the concrete slab or other floor system.



1303.2402 Requirements for Passive Radon Control Systems



Subpart 4. Potential entry points.

B. Concrete joints.

All control joints, isolation joints, construction joints, or any other joints in the concrete slab, or other joint between the concrete slab and a foundation wall, shall be sealed. All gaps and joints shall be cleared of loose material prior to sealing.



1303.2402 Requirements for Passive Radon Control Systems



Subpart 4. Potential entry points.

C. Foundation walls.

Penetrations of all foundation wall types shall be sealed. Joints, cracks, or other openings around all penetrations of both exterior and interior surfaces of the foundation shall be sealed.



1303.2402 Requirements for Passive Radon Control Systems



Subpart 4. Potential entry points.

C. Foundation walls. (cont)

- (1) Hollow block masonry foundations walls shall be constructed with either:
 - (a) continuous course of solid masonry at or above the exterior ground surface;
 - (b) one course of masonry grouted solid at or above the exterior ground surface;
 - (c) a solid concrete beam at or above the finished exterior ground surface.

1303.2402 Requirements for Passive Radon Control Systems



Subpart 4. Potential entry points.

C. Foundation walls. (cont)

(1) Hollow block masonry foundations walls shall be constructed with either:

(a) continuous course of solid masonry at or above the exterior ground surface;



1303.2402 Requirements for Passive Radon Control Systems



Subpart 4. Potential entry points.

C. Foundation walls. (cont)

(1) Hollow block masonry foundations walls shall be constructed with either:

(b) one course of masonry grouted solid at or above the exterior ground surface;



1303.2402 Requirements for Passive Radon Control Systems



Subpart 4. Potential entry points.

C. Foundation walls. (cont)

(1) Hollow block masonry foundations walls shall be constructed with either:

(c) a solid concrete beam at or above the finished exterior ground surface.



1303.2402 Requirements for Passive Radon Control Systems



Subpart 4. Potential entry points.

C. Foundation walls. (cont)

- (2) When a brick veneer or other masonry ledge is installed, the masonry course immediately below the veneer or ledge shall be solid or filled.



1303.2402 Requirements for Passive Radon Control Systems



Subpart 4. Unconditioned crawl spaces.

All penetrations through floors or walls into unconditioned crawl spaces shall be sealed.

Access doors into unconditioned spaces shall be gasketed.

Crawl space ventilation shall be provided according to part 1303.2400.



1303.2402 Requirements for Passive Radon Control Systems



Subpart 4. Unconditioned crawl spaces.

Access doors into unconditioned spaces shall be gasketed.



1303.2402 Requirements for Passive Radon Control Systems



Subpart 4. Sumps.

A sump connected to interior drain tile may serve as the termination point for the vent pipe, if the sump cover is sealed or gasketed and designed to accommodate the vent pipe.

The sump pump water discharge pipe shall have a backflow preventer installed.



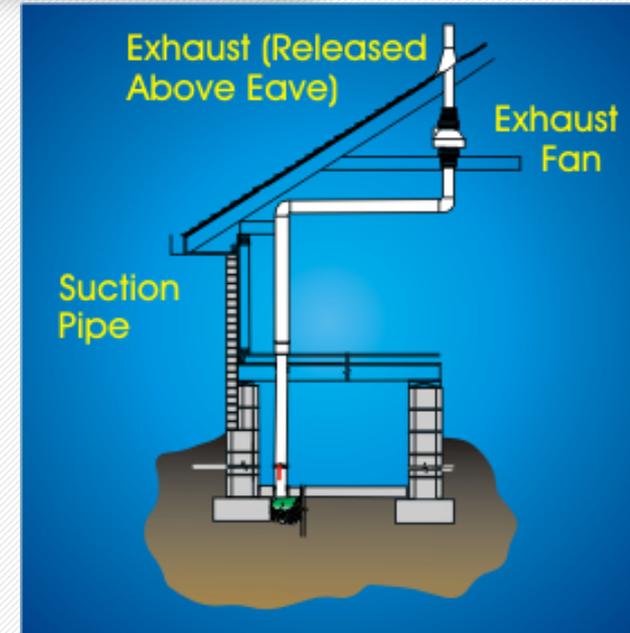
1303.2402 Requirements for Passive Radon Control Systems



Subpart 5. Vent pipes.

A. Single vent pipe.

The vent pipe shall be primed and glued at all fittings and shall extend up from the radon control system's collection point to a point terminating a minimum, of 12 inches above the roof.



1303.2402 Requirements for Passive Radon Control Systems



Subpart 5. Vent pipes. (cont)

A. Single vent pipe.

The vent pipe shall be located at least 10 feet away from any window or other opening into conditioned spaces of the building.



1303.2402 Requirements for Passive Radon Control Systems



Subpart 5. Vent pipes. (cont)

A. Single vent pipe.

Vent pipe routed through unconditioned spaces shall be insulated with a minimum R-4 insulation.



1303.2402 Requirements for Passive Radon Control Systems



Subpart 5. Vent pipes. (cont)

A. Single vent pipe.

Vent pipes within the conditioned envelope of the building shall not be insulated.



1303.2402 Requirements for Passive Radon Control Systems



Subpart 5. Vent pipes. (cont)

B. Multiple vent pipes.

In buildings where interior footings or other barriers separate the gas-permeable material into two or more areas, each area shall be fitted with an individual radon control system in accordance with item A, or connected to a single radon gas vent pipe terminating above the roof in accordance with item A.

1303.2402 Requirements for Passive Radon Control Systems



Subpart 5. Vent pipes. (cont)

C. Vent pipe drainage.

All components of the radon gas vent pipe system shall be installed to provide drainage to the ground beneath the soil-gas membrane.



1303.2402 Requirements for Passive Radon Control Systems



Subpart 5. Vent pipes. (cont)

D. Vent pipe accessibility.

Radon gas vent pipes shall be provided with space around the vent pipe for future installation of a fan.

The space required for the future fan installation shall be a minimum of 24 inches in diameter, centered on the axis of the vent pipe, and shall extend a minimum distance of 3 vertical feet.

Exception: Accessibility to the radon gas vent pipe is not required if the future fan installation is above the roof system and there is an approved rooftop electrical supply provided.

1303.2402 Requirements for Passive Radon Control Systems



Subpart 5. Vent pipes. (cont)

D. Vent pipe accessibility.

The space required for the future fan installation shall be a minimum of 24 inches in diameter, centered on the axis of the vent pipe, and shall extend a minimum distance of 3 vertical feet.



1303.2402 Requirements for Passive Radon Control Systems



Subpart 5. Vent pipes. (cont)

E. Vent pipe identification.

All radon gas vent pipes shall be identified with at least 1 label on each story and in attics and crawl spaces.

The label shall read:

“Radon Gas Vent System.”

**Radon
Gas
Vent
System**



1303.2402 Requirements for Passive Radon Control Systems



Subpart 5. Vent pipes. (cont)

F. Combination foundations.

Combination basement/crawl space or slab-on grade/crawl space foundations shall have separate radon gas vent pipes installed in each type of foundation area.

Each radon gas vent pipe shall terminate above the roof or shall be connected to a single vent pipe that terminates above the roof.

1303.2402 Requirements for Passive Radon Control Systems



Subpart 5. Vent pipes. (cont)

F. Combination foundations.

Combination basement/crawl space or slab-on grade/crawl space foundations shall have separate radon gas vent pipes installed in each type of foundation area.



1303.2402 Requirements for Passive Radon Control Systems



Subpart 6. Power source.

A power source consisting of an electrical circuit terminating in an approved electrical box shall be installed during construction in the anticipated location of the vent pipe fan to allow for future installation of a fan into a passive radon control system.

The power source shall not be installed in any conditioned space, basement, or crawl space.

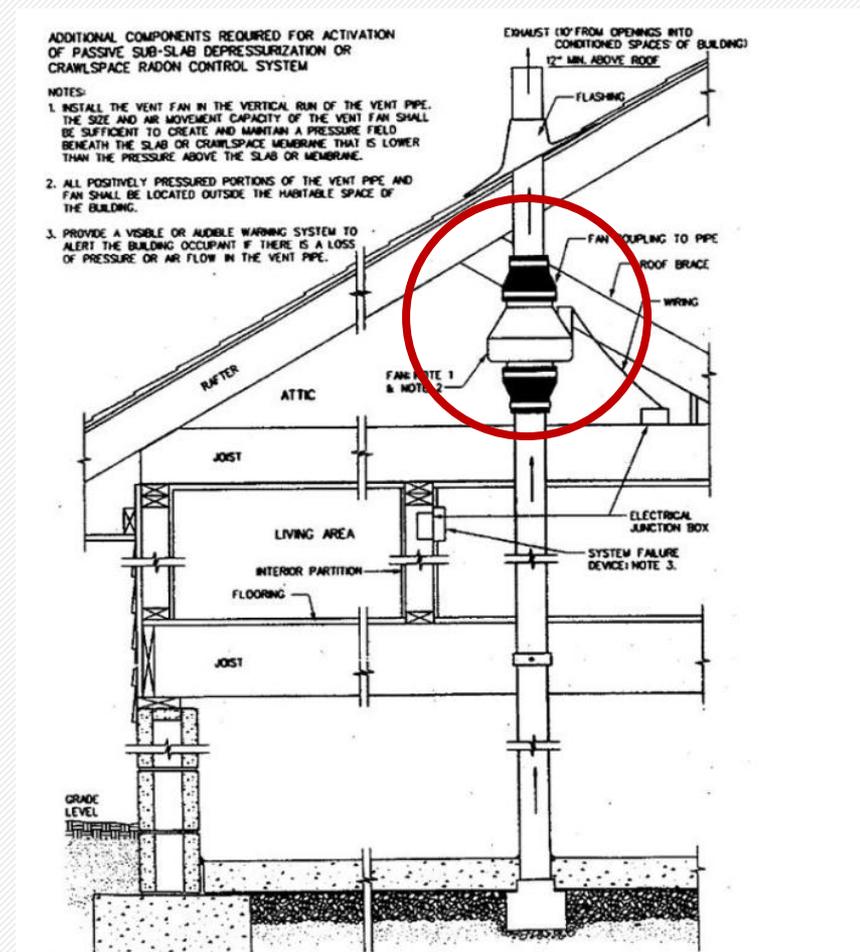


1303.2403 Requirements for Active Radon Control Systems



When an active radon control system is installed, all the requirements for the passive radon control system in parts 1303.2400 to 1303.2402 shall be met.

In addition, an active radon control system shall incorporate items A to C in this part.



1303.2402 Requirements for Passive Radon Control Systems



A. Radon gas vent pipe fan. (cont)

A radon gas vent pipe fan manufactured for radon control systems and rated for continuous operation that provides a minimum measurement of 50 cubic feet per minute at $\frac{1}{2}$ -inch water column shall be installed in the vertical vent pipe.



1303.2402 Requirements for Passive Radon Control Systems



A. Radon gas vent pipe fan. (cont)

The fan shall be attached to a radon gas vent pipe that connects the air below the soil-gas membrane with outdoor air and relies on the fan to provide upward air flow in the vent pipe.



1303.2402 Requirements for Passive Radon Control Systems



A. Radon gas vent pipe fan. (cont)

The radon gas vent pipe fan shall not installed in conditioned spaces of a building, basement, or crawl space.



MN Rule 1303.2403 (A)



1303.2402 Requirements for Passive Radon Control Systems



A. Radon gas vent pipe fan. (cont)

The radon gas vent pipe fan shall not be located where it positively pressurizes any portion of the vent pipe that is located inside conditioned space.

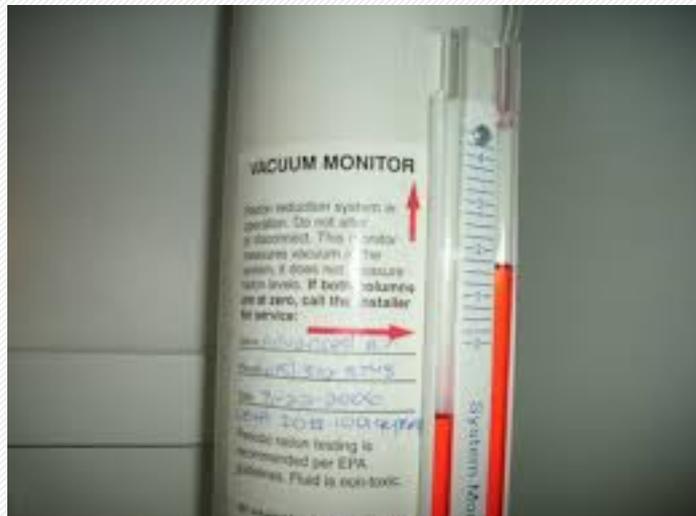


1303.2402 Requirements for Passive Radon Control Systems

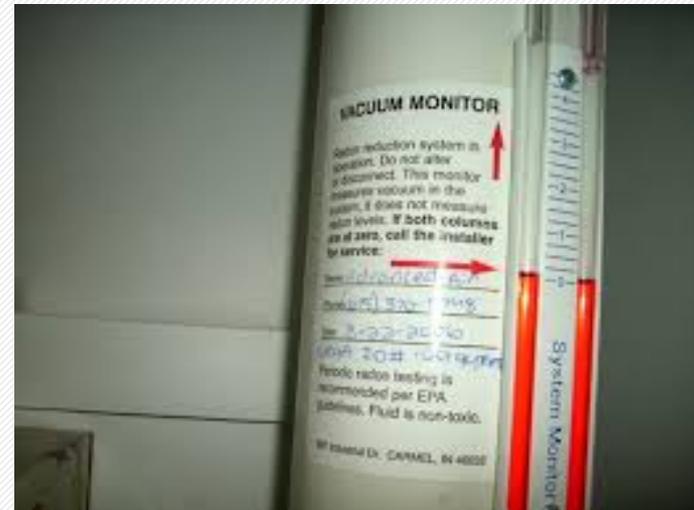


B. System monitoring device.

An audible alarm, a manometer, or other similar device shall be installed to indicate when the fan is not operating.



Fan on



Fan off

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C. Luminaire and receptacle outlet.

A switch-controlled luminaire and the receptacle outlet near the fan shall be installed according to the *Minnesota Electrical Code*.



1303.2402 Requirements for Passive Radon Control Systems



C. Luminaire and receptacle outlet.

The requirements of the *International Mechanical Code*, Section 306, do not apply





THE END