



**HUD Multifamily Radon Testing and Mitigation Policy
Frequently Asked Questions
HUD Personnel, Lenders, Underwriters**

The following information is not intended to supersede existing information as presented by HUD or other authoritative body. It is a brief overview of some pertinent radon testing and mitigation guidance for HUD- financed multifamily dwellings. The radon professional should always seek final guidance from a qualified HUD representative. (For HUD multifamily Hub contact information, see:

http://portal.hud.gov/hudportal/HUD?src=/program_offices/housing/mfh/hsgmfbus/abouthubspcs)

1. What are the mortgage types and the identifying numbers of those types that require radon testing?

Both Multifamily Accelerated Processing (MAP) and Traditional Application Processing applications for funding will require radon testing and mitigation if elevated levels (4 pCi/L or above) are found.

Housing Act (Mortgage Type)	Description
Section 220	2 or more units located in an urban renewal area
Section 221(d)(4)	New construction or substantial rehabilitation of multifamily rental or cooperative housing for moderate-income families, elderly, and the handicapped by profit-motivated sponsors
Section 223(f)	Purchase or refinance of existing multifamily rental housing that does not require substantial repairs
Section 231	Construction and substantial rehabilitation of rental housing for the elderly or disabled
Section 223(a)(7)NOT INCLUDED	Refinance of original HUD-insured mortgages

<http://portal.hud.gov/hudportal/documents/huddoc?id=4430GHSGG.pdf>

2. How many units comprise a HUD multi-family dwelling?

In general, 5 or more units comprise a HUD multi-family dwelling. They are characterized as detached, semidetached, row, walkup, or elevator-type rental or cooperative housing with complete kitchens and baths.

http://portal.hud.gov/hudportal/HUD?src=/program_offices/housing/mfh/progdesc/rentcoopsg221d3n4

<http://portal.hud.gov/hudportal/documents/huddoc?id=4430GHSGG.pdf>

In addition, HUD defines a Multifamily Sales Project as a project using a blanket mortgage, covering a group of not less than eight single-family dwellings built for eventual sale to individual purchasers. It is unclear whether HUD's radon requirements apply to this type of building.

A less common HUD loan program is covered in Section 220 which specifies construction or rehabilitation of detached, semi-detached, row, walk-up, or elevator type rental housing or to finance the purchase of properties which have been rehabilitated by a local public agency. Properties must consist of two or more units and must be located in an urban renewal area, in an urban development project, code enforcement program area, urban area receiving rehabilitation assistance as a result of natural disaster, or area where concentrated housing, physical development, or public service activities are being carried out in a coordinated manner. It is also unclear whether the radon requirements are being extended to these properties.

<http://www.hud.gov/offices/hsg/mfh/progdesc/renturbanhsg220.cfm>

3. If the property is in a regulated state, are the state standards to be followed or the HUD guidance?

The state guidance must be followed. If there appears to be a conflict between State requirements and HUD requirements, the Lender should consult with HUD early on.

4. Where can radon professionals be found? How should one be selected?

The HUD Radon Policy defines a Radon Professional as having certification through:

1. American Association of Radon Scientists and Technologists (AARST) National Radon Proficiency Program (NRPP)

www.NRPP.info

OR

The National Radon Safety Board (NRSB)

www.NRSB.org

AND

2. Certification/license from the state in which the testing or mitigation will be performed if the state has that requirement.

The following states have certification/licensure requirements:

States with Certification/Licensure Laws	
Florida	Maine
Illinois	Nebraska
Indiana	New Jersey
Iowa	Ohio
Kansas	Pennsylvania
Kentucky	Rhode Island
Virginia	California
West Virginia	

Radon professionals with the appropriate credentials are listed on the individual state radon websites and on the websites of the national certifying organizations.

The process of selecting a radon testing or mitigation professional is the same as choosing any other qualified contractor. The basic credentials are required and available publicly. In addition, some professionals have furthered their preparation for testing or mitigating large buildings through classes and additional training. Professionals should supply information on their additional preparation which can be verified through their professional licensure organizations. All radon testing organizations are required to have and operate under a written Quality Assurance document and perform the stated Quality Control measurements. Stakeholders may wish to view copies of these documents or procure written documentation that the measurement professional is working within these confines.

Testing and mitigating large buildings is significantly more complex than simple residences and employers should look for professionals with additional large building credentialing and experience.

5. What are the types of tests? What should be used?

Radon tests are classified as passive and continuous. Passive tests commonly include charcoal canisters, liquid scintillation devices, electret ion chambers, and alpha track (long term) detectors. Continuous monitors are operated by an electric source and must record and track hourly measurements as well as calculate the average radon during the test period. Some continuous monitors also record other variables such as temperature, barometric pressure, humidity, and tamper indications.

Because of cost considerations, passive devices are usually used for larger multifamily test courses. There are situations where a radon professional may suggest the use of a continuous monitor to help evaluate an unusual radon entry pattern or to evaluate weather patterns during the test.

6. What is the cost of the testing and mitigation?

Costs MAP Guide Section 5.5

A. Method of Estimation. The method should be similar to that used by general contractors. Data should be organized by trade division using the Construction Specification Index (CSI) Format, and adjusted to reflect cost differences due to time, location and price fluctuations. The cost estimate may be prepared using a quantity survey takeoff or a square-foot and per-unit cost approach using established data and making adjustments.

B. Data. The data source used to prepare the cost estimate must be documented. Acceptable cost data may come from completed comparable projects, benchmark amounts taken from actual project costs, and published data from construction cost data publishers.

<http://portal.hud.gov/hudportal/documents/huddoc?id=4430GHSGG.pdf>

Detailed Cost Estimates are required for construction contractors using specific HUD documents. The cost estimate is tabulated on Form HUD-92326, (http://portal.hud.gov/hudportal/documents/huddoc?id=DOC_20661.pdf) and totals are reported in Sections G, M, and O of Form HUD-92264 (http://portal.hud.gov/hudportal/documents/huddoc?id=DOC_20643.pdf).

Mitigators may find some information on Form HUD-92326 to be relevant to their work, and should employ the Method of Estimation (noted above) as much as possible. Davis-Bacon labor wage rates must be used. (It is the project architect's responsibility to obtain current Davis-Bacon wage rates from HUD. See Section 5.4).

Measurement professionals should supply details on the costs of the measurement devices, the analysis, and shipping, as well as costs of document preparation, field work, meeting time and any other costs projected to complete the project. Total costs per device should be supplied as well as total cost of the project.

The number of units to be addressed and their proximity to one another, ease of access to the properties, time needed to prepare communication plans and disseminate information, evaluate HVAC systems and other elements that will impact the sampling process will heavily impact costs and cause them to vary widely from project to project.

<http://portal.hud.gov/hudportal/documents/huddoc?id=4430GHSGG.pdf>

7. Can the soil be tested before building to see if special features must be incorporated?

Radon entry into a building is, in large part, caused by the "suction" of the building on the soil below. This negative pressure is due, primarily, to warm air rising and pulling air in from outside and from the soil under the building. Thus, testing soil to try to predict a potential radon concentration in a future building will not give good information on whether to install radon protective features.

8. What requires mitigation: the property, the building or the unit and what constitutes each of those?

This distinction is not clarified by HUD's Radon Policy. Radon professionals understand that radon entry is not uniform in buildings, and units other than those tested may be elevated.

Sound mitigation policy is to mitigate the building and perform further testing on entire properties to design an appropriate mitigation procedure.

9. What are the health risks of radon?

Radon is the number one cause of lung cancer in non-smokers and the seventh (7th) most common cause of all cancers in the United States. It is estimated to kill one person every 25 minutes. Roughly 21,000 people die from radon caused lung cancer in this country every year.

10. Where are the multi-family standards and guidelines available? Where can more information and other contacts be located?

<http://www.aarst.org/bookstore.shtml>

<http://www.astm.org/Standards/E2121.htm>

<http://www.astm.org/Standards/E1465>

More information on radon and radon professionals can be found at:

<http://www.aarst.org>

<http://www.nrpp.info>

<http://www.nrsb.org>

<http://www.epa.gov/radon>

12. What are the responsibilities of a:

HUD Reviewer:

- HUD is responsible for reviewing the information that the Borrower/Applicant submits to ensure that it meets the requirements of the HUD Radon Policy.

Lender:

- Work with the Borrower/Applicant to compile and submit information according to the requirements of the HUD Radon Policy and the standards its references.