

What Apartment Owners Need to Know about Radon

As California raises the bar on radon testing in HUD-funded housing, owners have fresh reason to treat the odorless gas as an emerging operational and liability concern.

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Professional organizations have significantly expanded radon testing requirements for multifamily housing. The American National Standards Institute and the American Association of Radon Scientists and Technologists (ANSI-AARST) now call for testing in 100 percent of ground-contact residential units and at least 10 percent of upper-floor units in multi-story buildings. This applies to new construction and rehabilitation projects receiving HUD or other federal funding.

The new standard represents a clear departure from the historical approach, which typically relied on a sampling of only 10 percent of ground-floor or ground-contact units.

These expanded mandates rely on updated testing methodologies developed by AARST and incorporated into ANSI/AARST standards. In California, certified radon professionals must now follow these standards when conducting testing.

Not all states require this level of testing. In addition to California, states that require 100 percent of ground-floor units to be tested include Colorado, Illinois, Iowa, Florida, New Jersey, Rhode Island, Utah and Ohio. Loans for multifamily housing often call for this testing protocol. For the vast majority of multifamily building sizes, all ground-floor units should be tested for radon.

While HUD-funded affordable housing projects most commonly trigger these obligations, lender policies, investor standards, local ordinances or internal risk management practices may also impose similar requirements. As a result, radon testing has become a standard consideration for both affordable and market-rate multifamily developments.

Why Radon Matters

Radon is a naturally occurring radioactive gas released from the breakdown of uranium in soil and rock. It enters buildings through cracks in foundations, slab joints, utility penetrations and crawl spaces and can accumulate indoors, particularly in ground-contact units. Because radon is colorless and odorless, occupants cannot detect elevated levels without testing.

From a public health perspective, radon exposure is significant. According to the U.S. EPA, radon is the second leading cause of lung cancer in the United States and the leading cause

among non-smokers. Long-term exposure, even at moderate levels, increases cancer risk, making radon a growing concern for residential properties, especially multifamily housing, where exposure can affect large populations. Approximately 21,000 people a year die from radon-induced lung cancer, according to the American Lung Association.

California law reinforces the expanded radon testing requirements by strictly regulating who may perform radon services. Under the California Health and Safety Code, individuals who conduct radon testing or mitigation for the public must hold certification through either the National Radon Proficiency Program or the National Radon Safety Board and must register that certification with the California Department of Public Health (CDPH).

The state prohibits unlicensed radon services and classifies violations as misdemeanors subject to financial penalties. For property owners and developers, radon compliance is not simply a technical issue. It is a regulated activity with legal and project-level consequences.

What Happens When Elevated Radon Is Found?

When testing identifies radon concentrations above recommended action levels, mitigation is required. The most common mitigation approach in multifamily buildings is active soil depressurization, which uses vent piping and fans to redirect radon gas from beneath the building and release it safely above the roofline.

Other mitigation measures may include sealing foundation penetrations, improving sub-slab ventilation or incorporating radon-resistant construction techniques in new buildings. In California, mitigation work must follow ANSI/AARST mitigation standards and may intersect with the California Residential Code, including Appendix F, which addresses radon-resistant construction in new residential projects.

The mitigation is not a one-time event. Post-mitigation testing is required to confirm effectiveness, and long-term system monitoring is often recommended as part of ongoing building operations.

Although California is not typically categorized as a high-radon state, geographic risk varies across the state. The EPA's Radon Zone Map identifies several California counties as having

moderate to elevated indoor radon potential, particularly in parts of Northern California, the Sierra Nevada foothills and select Central Coast regions.

Both the EPA and the California Geological Survey emphasize that elevated radon levels can occur in any zone and that testing is the only reliable way to determine a building's radon concentration.

As a result, regulators and funding agencies increasingly discourage reliance on geographic exemptions. For multifamily housing, especially developments with shared structural systems, standardized testing protocols are becoming the norm regardless of location.

Public health agencies continue to promote radon awareness and testing as key tools for reducing radon-related risks. CDPH provides guidance, mapping resources and referrals to certified professionals, while the EPA promotes national awareness campaigns and recommends testing for all residential buildings.

California has also expanded access to radon monitoring through a CDPH-supported public library program that offers free, short-term loans of digital radon monitors manufactured by Ecosense EcoBlu.

Looking Ahead

California's evolving radon framework reflects a broader emphasis on environmental health in housing. With stricter testing protocols now in place and certified professionals required at every stage, radon safety is becoming a baseline expectation rather than a niche concern. For HUD or federally funded projects within the multifamily housing industry, understanding where radon comes from, why it matters and how it is addressed is no longer optional. As standards continue to tighten, proactive compliance will be key to protecting both residents and long-term asset value. ●



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