



# Radon Resistant New Construction

fact sheet from Green County Public Health

## Radon Prevalence in Green County

Radon levels vary across the state. In Green County, radon is common, with 59% of homes tested having elevated radon levels. In the 53566 zip code, 63% of homes had elevated levels, and in the 53520 zip code, 44% of homes tested had elevated radon. You can view additional data at [dhs.wisconsin.gov/radon](https://dhs.wisconsin.gov/radon).

## What is Radon?

Radon is a naturally occurring, radioactive gas. Radon is odorless, colorless, and tasteless, and the only way to know if it is present is to test for it. Radon gas comes from rocks and soil in the ground.

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<b>Rn</b>
Radon 222.0176

## Radon & Your Health

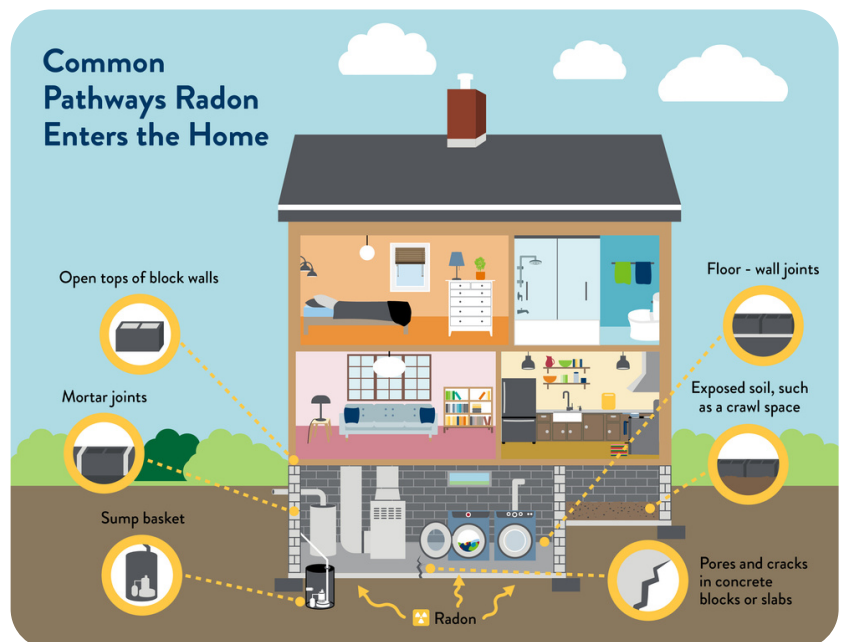
Radon is the second leading cause of lung cancer in the United States. The U.S. Environmental Protection Agency estimates that radon gas causes more than 21,000 lung cancer deaths each year.

## How Does Radon Enter a House?

Radon can enter a house from the soil as a result of air pressure differences through:

- Cracks in foundation
- Cavities inside walls
- Joints between floors and walls
- Gaps around service pipes and in suspended floors

As warm air rises, the “stack effect” causes unconditioned replacement air to enter lower portion of the house.



# Radon Resistant Construction Techniques

## Gravel

Use a 4-inch layer of clean, coarse gravel below the “slab” or foundation. The layer of gravel allows gases like radon to move freely under the house. This is called the “air flow layer” or the “gas permeable layer” because the gravel allows gases to circulate.

## Plastic Sheeting/Vapor Retarder

Cover the gravel layer with heavy-duty plastic sheeting (6 mil. polyethylene) or a vapor barrier. This will help prevent soil gases from entering the house.

## Vent Pipe

Run a 3-inch or 4-inch solid PVC pipe from the gravel layer (stubbed up when the slab is poured) through the house’s conditioned space and roof. This will vent radon and other soil gases outside of the house. The pipe should be labeled “Radon System” and can be installed by a plumber or certified radon professional.

## Sealing & Caulking

Seal openings, cracks, and crevices in the foundation floor and walls using polyurethane caulk. This can prevent radon from entering the home through those cracks.

## Junction Box

Install an electrical junction box in the house’s attic that can be used with a vent fan in case, after testing the house for radon, a more robust mitigation system is needed.

## Learn More

Scan the QR code below to learn more about radon-resistant construction.



## Testing for Radon

After completing construction, your home should be tested for radon. The results will tell you if you need to add a fan to your mitigation system.

Radon test kits are available at Green County Public Health or through the South Central Radon Information Center. Each test kit comes with instructions on how to use it.



### Green County Public Health

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### South Central Radon Information Center

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