



**GOLD STANDARD**

**RADON RESISTANT BUILDER**



Building to protect  
your family and your investment

Over 20,000  
lung deaths  
per year  
are from  
exposure to

# radon

That's why  
it's important  
your builder  
has the

**GOLD STANDARD**

Radon Resistant  
designation



When choosing  
a contractor, you want to  
be assured that your  
builder has the experience  
and knowledge to build  
you a **healthy** and  
**safe** home.

One way to distinguish this  
is to be sure your builder  
has received the  
**Gold Standard**  
designation for radon  
resistance building.



## What is radon?

Radon is a naturally occurring radioactive gas found in the air and soil. You don't know it is there because it is colorless, odorless and tasteless.

## Why is radon dangerous?

Radon gas is drawn into a home from the soil and converts to decayed, carcinogenic particles. When you breathe, these particles get trapped in your lungs. Over time, the damage can lead to lung cancer.

## How do you know if your home will have radon?

All homes have radon entry points— through basements, small holes, cracks, and plumbing. Unfortunately, soil testing prior to building cannot predict what the radon exposure level will be once the house is built.

High radon levels are  
found in every state,

but in Minnesota,  
nearly 80%  
of Minnesota's  
counties are rated  
High Radon zones and  
one in three existing  
homes have radon levels  
that can pose a major  
health risk.



**ZONE 1:** >4pCi/L  
**ZONE 2:** >2 <4pCi/L

## What is a safe level of radon exposure?

It is recommended that radon levels be below 4pCi/L, but even this level can pose some risk. No exposure to radon is safe.



## How can you keep your home safe from radon?

Fortunately, radon is a preventable health threat. Existing homes with high radon levels can be fixed. More importantly, when building a new home, it is much safer and far more cost effective to prevent a radon problem by building to keep radon out.

## Are there other benefits to building radon resistant?

Yes! Building to the Gold Standard can be **healthier**, more **cost efficient** and offer you an **added value**.

- Health Benefits:** Radon reduction techniques have been found to decrease moisture as well as reduce other soil gases from entering the home. This results in reducing mold and mildew, methane and pesticide gases, as well as volatile organic compounds and other indoor air problems.
- Cost Savings:** Building to the Gold Standard can also result in energy savings, thus lowering utility bills.
- Added Value:** When you plan to resell your home, potential buyers will view the Gold Standard building designation as a positive feature, reassuring them that your home was built radon resistant safe.

## what will this cost



Average cost to build radon resistant:  
\$100 - 200

Average cost to fix an existing home:  
\$800 - \$2,500



Average yearly cost to operate a radon resistant fan:  
\$12.24

Average yearly cost to run a computer:  
\$78.90



Average monthly cost to operate a radon resistant fan:  
\$1.02

Average monthly cost to operate a radon mitigation fan:  
\$4.87

## What does it cost to build a radon resistant home?

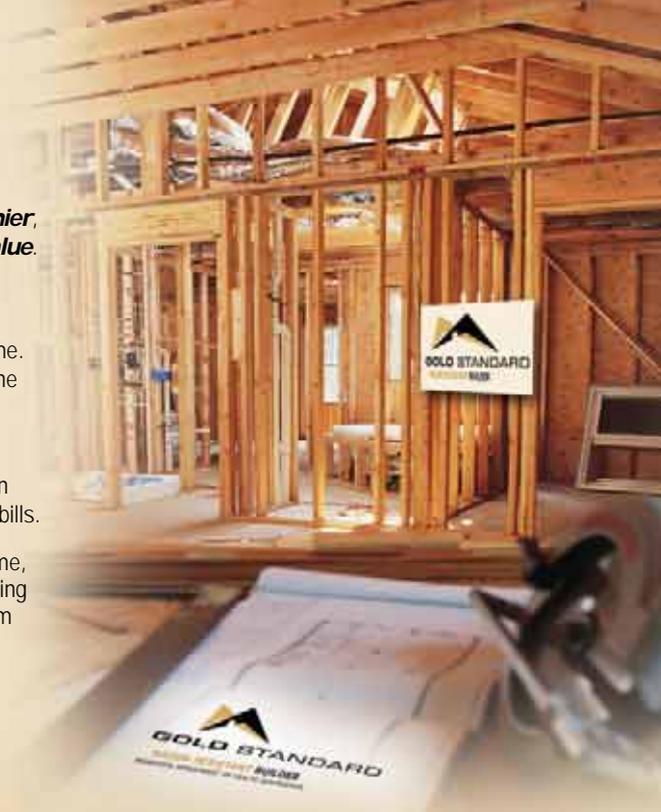
The cost to build a radon resistant home is minimal. In fact, it costs much less to install a radon reduction system during construction of a new home than it will cost to fix a radon problem found at a later date.

## What is the annual expense to operate a radon resistant home?

On the average, the cost to operate a radon reduction system averages slightly more than \$12 per year. That is just a fraction of what it cost to run a computer – a small price to pay for your family's health.

## What if I choose to put in a radon resistant unit at a later time?

First and foremost, by waiting, you risk your family's health. In terms of dollars, not only is it more expensive to fix a radon problem after a home is built, the cost to operate a mitigation system put in at a later date averages nearly four times the annual cost as compared to a system installed at the time of construction.





# GOLD STANDARD

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## How can I be sure my builder knows proper radon resistant standards?

Only the builders that have proven to meet radon-resistant safe standards receive the **Gold Standard** designation.

To further ensure your home was built radon safe, the builder should also supply you with a radon test kit to confirm the radon levels of your new home.

## How will I know my home is built to the radon resistant Gold Standard?

Homes that meet the Gold Standard radon reduction guidelines will have the following features:

A **Gold Standard Check List** should be affixed to the vent pipe verifying that the components were correctly installed and all the services properly followed. Every Gold Standard builder should be able to explain each of the components on this check list.

The radon system's **fan size** will be listed on or near the warning monitor label and should include the fan's estimated energy usage.

A Gold Standard building will have a **3" to 4" Schedule 40 pipe** installed that does not go through any exterior walls.

The **sump basket** of a Gold Standard home will be **properly sealed**, with any penetrations through the cover caulked so it is air tight.



In a Gold Standard building, the joint where the basement floor meets the **foundation wall** will be **properly sealed** with caulk.

## How do I find a Gold Standard builder?

Only designated **Gold Standard Builders** are authorized to distribute this brochure, including the builder listed below:



### Indoor Air Unit

625 Robert St N  
PO Box 64975  
St. Paul, MN 55164-0975

**651-201-4601**

[www.health.state.mn.us/GoldStandard](http://www.health.state.mn.us/GoldStandard)

To verify that your builder has met the **Gold Standards** for radon, check the online builder list at the Minnesota Department of Health:

**[www.health.state.mn.us/GoldStandard](http://www.health.state.mn.us/GoldStandard)**

