

Building Inspection Report

1234 Home Drive

Inspection Date:

02/11/2004

Prepared For:

Don Buyer

Prepared By:

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Report Number:

20040211

Inspector:

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Report Overview

THE HOUSE IN PERSPECTIVE

This is a well built home. As with all homes, ongoing maintenance is required and improvements to the systems of the home will be needed over time. *The improvements that are recommended in this report are not considered unusual for a home of this age and location.* Please remember that there is no such thing as a perfect home.



CONVENTIONS USED IN THIS REPORT

For your convenience, the following conventions have been used in this report.

Major Concern: a system or component which is considered significantly deficient or is unsafe. Significant deficiencies need to be corrected and, except for some safety items, are likely to involve significant expense.

Safety Issue: denotes a condition that is unsafe and in need of prompt attention.

Repair: denotes a system or component which is missing or which needs corrective action to assure proper and reliable function.

Improve: denotes improvements which are recommended but not required.

Monitor: denotes a system or component needing further investigation and/or monitoring in order to determine if repairs are necessary.

Please note that those observations listed under “Discretionary Improvements” are not essential repairs, but represent logical long term improvements.

- For the purpose of this report, it is assumed that the house faces west.

IMPROVEMENT RECOMMENDATION HIGHLIGHTS / SUMMARY

The following is a synopsis of the potentially significant improvements that should be budgeted for over the short term. Other significant improvements, outside the scope of this inspection, may also be necessary. Please refer to the body of this report for further details on these and other recommendations.

THE SCOPE OF THE INSPECTION

All components designated for inspection in the ASHI® Standards of Practice are inspected, except as may be noted in the “Limitations of Inspection” sections within this report.

It is the goal of the inspection to put a home buyer in a better position to make a buying decision. Not all improvements will be identified during this inspection. Unexpected repairs should still be anticipated. The inspection should not be considered a guarantee or warranty of any kind.

Please refer to the pre-inspection contract for a full explanation of the scope of the inspection.

Structure

DESCRIPTION OF STRUCTURE

Foundation:	•Poured Concrete •Basement Configuration
Floor Structure:	•Trusses
Wall Structure:	•Wood Frame, Brick Veneer
Ceiling Structure:	•Joist
Roof Structure:	•Trusses •Plywood Sheathing



STRUCTURE OBSERVATIONS

Positive Attributes

The construction of the home is high quality. The materials and workmanship, where visible, are above average.

General Comments

No major defects were observed in the accessible structural components of the house.

RECOMMENDATIONS / OBSERVATIONS

Foundation

- **Monitor:** Common minor settlement cracks were observed in the foundation walls at the rear of the house. This implies that some structural movement of the building has occurred. Cracks of this type should be watched for any sign of additional movement. In the absence of any sign of ongoing movement, repair should not be necessary.

LIMITATIONS OF STRUCTURE INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Structural components concealed behind finished surfaces could not be inspected.
- Only a representative sampling of visible structural components were inspected.
- Furniture and/or storage restricted access to some structural components.
- Engineering or architectural services such as calculation of structural capacities, adequacy, or integrity are not part of a home inspection.
- The roof space/attic was viewed from the access hatch only.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Roofing

DESCRIPTION OF ROOFING

Roof Covering:	•Asphalt Shingle
Roof Flashings:	•Metal
Chimneys:	•Masonry
Roof Drainage System:	•Aluminum •Downspouts discharge above & below grade
Skylights:	•Curb-Type
Method of Inspection:	•Walked on roof

ROOFING OBSERVATIONS

Positive Attributes

The roof coverings are to be in generally good condition. The installation of the roofing materials has been performed in a professional manner. The quality of the installation is above average. Better than average quality materials have been employed as roof coverings. Roof flashing details appear to be in good order. Gutter coverings (Gutter Helmet) recently installed, adding to cleanliness of gutters and value of house.

RECOMMENDATIONS / OBSERVATIONS

Sloped Roofing

- **Monitor:** The roofing is in fair condition. The roofing shows evidence of moss and organic build up in shaded areas. This condition may reduce the life expectancy of the roofing. Trimming or removing trees could improve this condition.

Chimneys

- **Monitor:** The masonry chimney shows evidence of spalling (surface deterioration of the masonry). Rebuilding of this chimney will ultimately be necessary but can be deferred.
- **Repair:** A rain cap and vermin screen should be installed on the masonry chimney and the chimney flue should be checked for damage. Damaged flues can be unsafe.

LIMITATIONS OF ROOFING INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Not all of the underside of the roof sheathing is inspected for evidence of leaks.
- Evidence of prior leaks may be disguised by interior finishes.
- Estimates of remaining roof life are approximations only and do not preclude the possibility of leakage. Leakage can develop at any time and may depend on rain intensity, wind direction, ice build up, and other factors.
- Antennae, chimney/flue interiors which are not readily accessible are not inspected and could require repair.
- Roof inspection may be limited by access, condition, weather, or other safety concerns.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Exterior

DESCRIPTION OF EXTERIOR

Wall Covering:	•Brick
Eaves, Soffits, And Fascias:	•Aluminum
Exterior Doors:	•Metal •Sliding Glass
Window/Door Frames and Trim:	•Vinyl-Covered
Entry Driveways:	•Concrete
Entry Walkways And Patios:	•Concrete
Porches, Decks, Steps, Railings:	•Treated Wood
Overhead Garage Door(s):	•Steel •Automatic Opener Installed
Surface Drainage:	•Graded Away From House
Retaining Walls:	•Brick



EXTERIOR OBSERVATIONS

Positive Attributes

The house has all brick constructed exterior walls. The aluminum soffits and fascia are a low-maintenance feature of the exterior of the home. There is no significant wood/soil contact around the perimeter of the house, thereby reducing the risk of insect infestation or rot. The auto reverse mechanism on the overhead garage door responded properly to testing. This safety feature should be tested regularly as a door that doesn't reverse can injure someone or fall from the ceiling. Refer to the owner's manual or contact the manufacturer for more information. The lot drainage was good, conducting surface water away from the building. The driveway and walkways are in good condition. The garage appears to be fully insulated and is completely finished. Freeze resistant hose bibs (exterior faucets) have been installed. The decking appears to be constructed from pressure treated wood or composite (Trex Decking). The Trex deck was added to top of retaining walls to stop their movement or possible collapse, and resulted in a large carport underneath.

General Comments

The exterior of the home is generally in good condition.

RECOMMENDATIONS / OBSERVATIONS

Exterior Walls

- **Monitor:** Common minor cracks were observed on the exterior walls of the house. This implies that structural movement has occurred. The location, size, shape of these cracks is common. The inspection did not find evidence of significant movement requiring immediate major repairs.
- **Repair:** Tree branches should be trimmed away from the house.
- **Repair:** The proximity of the tree could disrupt drainage pipes, cause mechanical damage to the exterior of the house, or influence the foundation over time. You should consider removal of the tree.

Porch

- **Possible Major Concern, Monitor:** The porch has settled relative to the house proper. This is a common condition that should be monitored. If the porch supports have not already been repaired, replacement may be needed.

Retaining Wall

- **Monitor:** The retaining wall shows evidence of movement. This condition should be monitored. It is impossible to determine the rate of movement during a one time visit to the house. Trex deck installed above retaining walls should halt any further movement.

Discretionary Improvements

It would be wise to install a smoke detector in the garage.

LIMITATIONS OF EXTERIOR INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- A representative sample of exterior components was inspected rather than every occurrence of components.
- The inspection does not include an assessment of geological, geotechnical, or hydrological conditions, or environmental hazards.
- Screening, shutters, awnings, or similar seasonal accessories, fences, recreational facilities, outbuildings, seawalls, break-walls, docks, erosion control and earth stabilization measures are not inspected unless specifically agreed-upon and documented in this report.
- Access below decks and/or porches was not possible.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.



Electrical

DESCRIPTION OF ELECTRICAL

Size of Electrical Service:	•120/240 Volt Main Service - Service Size: 200 Amp
Service Drop:	•Underground
Service Entrance Conductors:	•Copper
Service Equipment & Main Disconnects:	•Main Service Rating 200 Amps •Breakers •Located: Between garage and Laundry
Service Grounding:	•Ground Connection Not Visible
Service Panel & Overcurrent Protection:	•Panel Rating: 200 Amp •Breakers •Located: Basement east end
Sub-Panel(s):	•Panel Rating: 200 Amp •Breakers •Located: Next to main panel
Distribution Wiring:	•Copper
Wiring Method:	• Non-Metallic Cable "Romex"
Switches & Receptacles:	•Grounded
Ground Fault Circuit Interrupters:	•Bathroom(s) •Whirlpool •Exterior •Garage
	•Kitchen
Smoke Detectors:	•Present



ELECTRICAL OBSERVATIONS

Positive Attributes

The size of the electrical service is sufficient for typical single family needs. The electrical panel is well arranged and all fuses/breakers are properly sized. Generally speaking, the electrical system is in good order. All outlets and light fixtures that were tested operated satisfactorily. The distribution of electricity within the home is good. All 3-prong outlets that were tested were appropriately grounded. Ground fault circuit interrupter (GFCI) devices have been provided in some areas of the home. These devices are extremely valuable, as they offer an extra level of shock protection. All GFCI's that were tested responded properly. Dedicated 220 volt circuits have been provided for all 220 volt appliances within the home. All visible wiring within the home is copper. This is a good quality electrical conductor.

General Comments

Inspection of the electrical system did not reveal the need for improvement.

RECOMMENDATIONS / OBSERVATIONS

Discretionary Improvements

The installation of ground fault circuit interrupter (GFCI) devices is advisable at circuit panel.

LIMITATIONS OF ELECTRICAL INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Electrical components concealed behind finished surfaces are not inspected.
- Only a representative sampling of outlets and light fixtures were tested.
- Furniture and/or storage restricted access to some electrical components which may not be inspected.
- The inspection does not include remote control devices, alarm systems and components, low voltage wiring, systems, and components, ancillary wiring, systems, and other components which are not part of the primary electrical power distribution system.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Heating

DESCRIPTION OF HEATING

Energy Source:	•Propane
Heating System Type:	•Forced Air Furnace
	•Manufacturer: International Model NTG9125FKA3
	•Serial Number: GNM125N20A3
Vents, Flues, Chimneys:	•Plastic
Heat Distribution Methods:	•Ductwork
Other Components:	•Humidifier



HEATING OBSERVATIONS

Positive Attributes

The heating system is in generally good condition. This is a high efficiency heating system. Adequate heating capacity is provided by the system. The heating system is controlled by a “set back” thermostat. This type of thermostat, if set up correctly, helps reduce heating costs.

General Comments

The heating system shows no visible evidence of major defects. No repairs to the heating system are necessary at this time.

RECOMMENDATIONS / OBSERVATIONS

Furnace

- **Repair:** The humidifier has lacked maintenance. Cleaning and repairs should be undertaken. Watch out for humidifier leaks into the furnace where costly (and hidden) damage can occur.

Return Air Ductwork

- **Repair, Safety Issue:** A return vent is situated relatively close to the furnace. This arrangement is a safety concern, as it could in some conditions send furnace exhaust into the living area, causing a carbon monoxide hazard. A simple repair is to seal off this particular return vent..

LIMITATIONS OF HEATING INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- The adequacy of heat supply or distribution balance is not inspected.
- The interior of flues or chimneys which are not readily accessible are not inspected.
- The furnace heat exchanger, humidifier, or dehumidifier, and electronic air filters are not inspected.
- Solar space heating equipment/systems are not inspected.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Cooling / Heat Pumps

DESCRIPTION OF COOLING / HEAT PUMPS

Energy Source:

•Electricity •240 Volt Power Supply

Central System Type:

•Air Cooled Central Air Conditioning •Manufacturer: ??? •Serial Number: ???

COOLING / HEAT PUMPS OBSERVATIONS

Positive Attributes

The capacity and configuration of the system should be sufficient for the home. This is a relatively new system that should have many years of useful life remaining. Regular maintenance will, of course, be necessary. The system responded properly to operating controls.

RECOMMENDATIONS / OBSERVATIONS

LIMITATIONS OF COOLING / HEAT PUMPS INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Window mounted air conditioning units are not inspected.
- The cooling supply adequacy or distribution balance are not inspected.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Insulation / Ventilation

DESCRIPTION OF INSULATION / VENTILATION

Attic Insulation:	•Blown in Main Attic
Roof Cavity Insulation:	•Unknown in Cathedral Roof
Exterior Wall Insulation:	•R12 Fiberglass in Original Walls
Roof Ventilation:	•Gable Vents •Soffit Vents
Exhaust Fan/vent Locations:	•Bathroom •Dryer •Cooktop Down Draft

INSULATION / VENTILATION OBSERVATIONS

Positive Attributes

This is a well insulated home.

RECOMMENDATIONS / ENERGY SAVING SUGGESTIONS

Attic / Roof

- **Repair:** The level of ventilation should be improved. It is generally recommended that one (1) square foot of free vent area be provided for every one hundred and fifty (150) square feet of ceiling area. Proper ventilation will help to keep the house cooler during warm weather and extend the life of roofing materials. In cold climates, it will help reduce the potential for ice dams on the roof and condensation within the attic.

Basement

- During any basement refinishing or renovation plans, it would be wise to add wall insulation. It is also recommended that a moisture barrier be provided between the finished walls and the foundation walls, and that an air/vapour barrier be installed on the warm air side of the insulation.

LIMITATIONS OF INSULATION / VENTILATION INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Insulation/ventilation type and levels in concealed areas are not inspected. Insulation and vapor barriers are not disturbed and no destructive tests (such as cutting openings in walls to look for insulation) are performed.
- Potentially hazardous materials such as Asbestos and Urea Formaldehyde Foam Insulation (UFFI) cannot be positively identified without a detailed inspection and laboratory analysis. This is beyond the scope of the inspection.
- An analysis of indoor air quality is not part of our inspection unless explicitly contracted-for and discussed in this or a separate report.
- Any estimates of insulation R values or depths are rough average values.
- The attic was viewed from the access hatch only.
- No access was gained to the roof cavity of the sloped ceilings.
- No access was gained to the wall cavities of the home.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Plumbing

DESCRIPTION OF PLUMBING

Water Supply Source:	•Public Water Supply
Service Pipe to House:	•Copper
Main Water Valve Location:	•South Side Wall of Basement
Interior Supply Piping:	•Copper
Waste System:	•Private Sewage System
Drain, Waste, & Vent Piping:	•Plastic
Water Heaters(2):	•Electric •Approximate Capacity (in gallons): 50 •Manufacturer: Ruud Model PE52-2C •Serial Number: RU 0999FO3493 & 98
Fuel Shut-Off Valves:	•LP Gas Main Valve At tank



PLUMBING OBSERVATIONS

Positive Attributes

The plumbing system is in generally good condition. The piping system within the home, for both supply and waste, is a good quality system. The water pressure supplied to the fixtures is above average. Only a slight drop in flow was experienced when two fixtures were operated simultaneously. The plumbing fixtures appear to have been well-maintained. The water heater is a relatively new unit. As the typical life expectancy of water heaters is 7 to 12 years, this unit should have several years of remaining life.

RECOMMENDATIONS / OBSERVATIONS

Fixtures

- **Repair:** The laundry tub in the basement should be properly secured.

LIMITATIONS OF PLUMBING INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Portions of the plumbing system concealed by finishes and/or storage (below sinks, etc.), below the structure, or beneath the ground surface are not inspected.
- Water quantity and water quality are not tested unless explicitly contracted-for and discussed in this or a separate report.
- Clothes washing machine connections are not inspected.
- Interiors of flues or chimneys which are not readily accessible are not inspected.
- Water conditioning systems, solar water heaters, fire and lawn sprinkler systems, and private waste disposal systems are not inspected unless explicitly contracted-for and discussed in this or a separate report.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Interior

DESCRIPTION OF INTERIOR

Wall And Ceiling Materials:	•Drywall
Floor Surfaces:	•Carpet •Vinyl/Resilient in Kitchen •Slate in Spa Room
Window Type(s) & Glazing:	•Casement •Double Glazed
Doors:	•Interior Wood-Solid Core •Storm Door on Front Door •French Doors Rear

INTERIOR OBSERVATIONS

General Condition of Interior Finishes

On the whole, the interior finishes of the home are in above average condition. Typical minor flaws were observed in some areas.

General Condition of Windows and Doors

The majority of the doors and windows are good quality. The windows have been lacking maintenance.

General Condition of Floors

The floors of the home are relatively level and walls are relatively plumb.

RECOMMENDATIONS / OBSERVATIONS

Basement Leakage

- **Monitor:** No evidence of moisture penetration was visible in the basement at the time of the inspection. *It should be understood that it is impossible to predict whether moisture penetration will pose a problem in the future.* The vast majority of basement leakage problems are the result of insufficient control of storm water at the surface. The ground around the house should be sloped to encourage water to flow away from the foundation. Gutters and downspouts should act to collect roof water and drain the water at least five (5) feet from the foundation or into a functional storm sewer. Downspouts that are clogged or broken below grade level, or that discharge too close to the foundation are the most common source of basement leakage. Please refer to the Roofing and Exterior sections of the report for more information.

In the event that basement leakage problems are experienced, lot and roof drainage improvements should be undertaken as a first step. Please beware of contractors who recommend expensive solutions. Excavation, damp-proofing and/or the installation of drainage tiles should be a last resort. In some cases, however, it is necessary. Your plans for using the basement may also influence the approach taken to curing any dampness that is experienced.

Environmental Issues

- **Monitor:** Radon gas is a naturally occurring gas that is invisible, odorless and tasteless. A danger exists when the gas percolates through the ground and enters a tightly enclosed structure (such as a home). Long term exposure to high levels of radon gas can cause cancer. *The Environmental Protection Agency (E.P.A.) states that a radon reading of more than 4.0 picocuries per liter of air represents a health hazard.* A radon evaluation is beyond the scope of this inspection (unless specifically requested). For more information, consult the Environmental Protection Agency (E.P.A.) for further guidance and a list of testing labs in your area.

LIMITATIONS OF INTERIOR INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions

- Furniture, storage, appliances and/or wall hangings are not moved to permit inspection and may block defects.
- Carpeting, window treatments, central vacuum systems, household appliances, recreational facilities, paint, wallpaper, and other finish treatments are not inspected.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Appliances

DESCRIPTION OF APPLIANCES

Appliances Tested:

•Electric Range •Built-in Electric Oven •Dishwasher •Waste Disposer

Laundry Facility:

•Refrigerator •Upright Freezer •Clothes Washer •Clothes Dryer
 •240 Volt Circuit for Dryer •Dryer Vented to Building Exterior •120 Volt
 Circuit for Washer •Hot and Cold Water Supply for Washer •Waste Standpipe
 for Washer •Cooktop Exhaust Vent/Fan •Central Vacuum

APPLIANCES OBSERVATIONS

Positive Attributes

Most of the major appliances in the home are newer. The appliances are to be in generally good condition. All appliances that were tested responded satisfactorily. The kitchen and laundry facilities are well organized. The kitchen cabinetry is above average quality. The appliances that have been installed in the kitchen are good quality. The fixtures employed in the kitchen are high quality.

RECOMMENDATIONS / OBSERVATIONS

LIMITATIONS OF APPLIANCES INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions

- Thermostats, timers and other specialized features and controls are not tested.
- The temperature calibration, functionality of timers, effectiveness, efficiency and overall performance of appliances is outside the scope of this inspection.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.



Fireplaces / Wood Stoves

DESCRIPTION OF FIREPLACES / WOOD STOVES

Fireplaces: •Masonry Firebox

FIREPLACES / WOOD STOVES OBSERVATIONS

General Comments

On the whole, the fireplace and it's components are in above average condition. Typical minor flaws were observed in some areas.

RECOMMENDATIONS / OBSERVATIONS

Fireplaces

- **Repair:** The fireplace chimney should be inspected and cleaned prior to operation.
- **Repair:** The glass doors on the fireplace should be improved.



LIMITATIONS OF FIREPLACES / WOOD STOVES INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions

- The interiors of flues or chimneys are not inspected.
- Firescreens, fireplace doors, appliance gaskets and seals, automatic fuel feed devices, mantles and fireplace surrounds, combustion make-up air devices, and heat distribution assists (gravity or fan-assisted) are not inspected.
- The inspection does not involve igniting or extinguishing fires nor the determination of draft.
- Fireplace inserts, stoves, or firebox contents are not moved.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Information About Carbon Monoxide

What is carbon monoxide (CO) and how is it produced in the home?

CO is a colorless, odorless, toxic gas. It is produced by the incomplete combustion of solid, liquid and gaseous fuels. Appliances fueled with gas, oil, kerosene, or wood may produce CO. If such appliances are not installed, maintained, and used properly, CO may accumulate to dangerous levels.

What are the symptoms of CO poisoning and why are these symptoms particularly dangerous?

Breathing CO causes symptoms such as headaches, dizziness, and weakness in healthy people. CO also causes sleepiness, nausea, vomiting, confusion and disorientation. At very high levels, it causes loss of consciousness and death.

This is particularly dangerous because CO effects often are not recognized. CO is odorless and some of the symptoms of CO poisoning are similar to the flu or other common illnesses.

Are some people more affected by exposure to CO than others?

CO exposures especially affect unborn babies, infants, and people with anemia or a history of heart disease. Breathing low levels of the chemical can cause fatigue and increase chest pain in people with chronic heart disease.

How many people die from CO poisoning each year?

In 1989, the most recent year for which statistics are available, there were about 220 deaths from CO poisoning associated with gas-fired appliances, about 30 CO deaths associated with solid-fueled appliances (including charcoal grills), and about 45 CO deaths associated with liquid-fueled heaters.

How many people are poisoned from CO each year?

Nearly 5,000 people in the United States are treated in hospital emergency rooms for CO poisoning; this number is believed to be an underestimate because many people with CO symptoms mistake the symptoms for the flu or are misdiagnosed and never get treated.

How can production of dangerous levels of CO be prevented?

Dangerous levels of CO can be prevented by proper appliance maintenance, installation, and use:

Maintenance:

- ✓ A qualified service technician should check your home's central and room heating appliances (including water heaters and gas dryers) annually. The technician should look at the electrical and mechanical components of appliances, such as thermostat controls and automatic safety devices.
- ✓ Chimneys and flues should be checked for blockages, corrosion, and loose connections.
- ✓ Individual appliances should be serviced regularly. Kerosene and gas space heaters (vented and unvented) should be cleaned and inspected to insure proper operation.
- ✓ CPSC recommends finding a reputable service company in the phone book or asking your utility company to suggest a qualified service technician.

Installation:

- ✓ Proper installation is critical to the safe operation of combustion appliances. All new appliances have installation instructions that should be followed exactly. Local building codes should be followed as well.
- ✓ Vented appliances should be vented properly, according to manufacturer's instructions.
- ✓ Adequate combustion air should be provided to assure complete combustion.
- ✓ All combustion appliances should be installed by professionals.

Appliance Use:

Follow manufacturer's directions for safe operation.

- ✓ Make sure the room where an unvented gas or kerosene space heater is used is well ventilated; doors leading to another room should be open to insure proper ventilation.
- ✓ Never use an unvented combustion heater overnight or in a room where you are sleeping.

Are there signs that might indicate improper appliance operation?

Yes, these are:

- ✓ Decreasing hot water supply
- ✓ Furnace unable to heat house or runs constantly
- ✓ Sooting, especially on appliances
- ✓ Unfamiliar or burning odor
- ✓ Increased condensation inside windows

Are there visible signs that might indicate a CO problem?

Yes, these are:

- Improper connections on vents and chimneys
- Visible rust or stains on vents and chimneys
- An appliance that makes unusual sounds or emits an unusual smell
- An appliance that keeps shutting off (Many new appliances have safety components attached that prevent operation if an unsafe condition exists. If an appliance stops operating, it may be because a safety device is preventing a dangerous condition. Therefore, don't try to operate an appliance that keeps shutting off; call a service person instead.)

Are there other ways to prevent CO poisoning?

Yes, these are:

- ✓ Never use a range or oven to heat the living areas of the home
- ✓ Never use a charcoal grill or hibachi in the home
- ✓ Never keep a car running in an attached garage

Can CO be detected?

Yes, CO can be detected with CO detectors that meet the requirements of Underwriters Laboratories (UL) standard 2034.

Since the toxic effect of CO is dependent upon both CO concentration and length of exposure, long-term exposure to a low concentration can produce effects similar to short term exposure to a high concentration.

Detectors should measure both high CO concentrations over short periods of time and low CO concentrations over long periods of time - the effects of CO can be cumulative over time. The detectors also sound an alarm before the level of CO in a person's blood would become crippling. CO detectors that meet the UL 2034 standard currently cost between \$35 and \$80.

Where should the detector be installed?

CO gases distribute evenly and fairly quickly throughout the house; therefore, a CO detector should be installed on the wall or ceiling in sleeping area/s but outside individual bedrooms to alert occupants who are sleeping.

Aren't there safety devices already on some appliances? And if so, why is a CO detector needed?

Vent safety shutoff systems have been required on furnaces and vented heaters since the late 1980s. They protect against blocked or disconnected vents or chimneys. Oxygen depletion sensors (ODS) have also been installed on unvented gas space heaters since the 1980s. ODS protect against the production of CO caused by insufficient oxygen for proper combustion. These devices (ODSs and vent safety shutoff systems) are not a substitute for regular professional servicing, and many older, potentially CO-producing appliances may not have such devices. Therefore, a CO detector is still important in any home as another line of defense.

Are there other CO detectors that are less expensive?

There are inexpensive cardboard or plastic detectors that change color and do not sound an alarm and have a limited useful life. They require the occupant to look at the device to determine if CO is present. CO concentrations can build up rapidly while occupants are asleep, and these devices would not sound an alarm to wake them.

For additional information, write to the U.S. Consumer Product Safety Commission, Washington, D.C., 20207, call the toll-free hotline at 1-800-638-2772, or visit the website <http://www.cpsc.gov>

Information About Radon



EPA RADON RISK INFORMATION

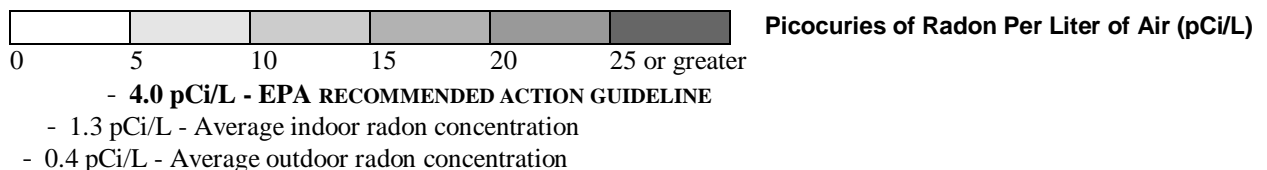
Fifty-five percent of our exposure to natural sources of radiation usually comes from radon. Radon is a colorless, tasteless, and odorless gas that comes from the decay of uranium found in nearly all soils. Levels of radon vary throughout the country. Radon is found all over the United States and scientists estimate that nearly one out of every 15 homes in this country has radon levels above recommended action levels.

Radon usually moves from the ground up and migrates into homes and other buildings through cracks and other holes in their foundations. The buildings trap radon inside, where it accumulates and may become a health hazard if the building is not properly ventilated.

When you breathe air containing a large amount of radon, the radiation can damage your lungs and eventually cause lung cancer. Scientists believe that radon is the second leading cause of lung cancer in the United States. It is estimated that 7,000 to 30,000 Americans die each year from radon-induced lung cancer. Only smoking causes more lung cancer deaths and smokers exposed to radon are at higher risk than nonsmokers. Testing your home is the only way to know if you and your family are at risk from radon.

Testing for Radon.

Should you have your home tested, use the chart below to compare your radon test results with the EPA guideline. The higher a home's radon level, the greater the health risk to you and your family.



The U.S. Environmental Protection Agency (EPA) and the Surgeon General Strongly recommend taking further action when the home's radon test results are 4.0 pCi/L or greater. The concentration of radon in the home is measured in picocuries per liter of air (pCi/L). Radon levels less than 4.0 pCi/L still pose some risk and in many cases may be reduced. If the radon level in your home is between 2.0 and 4.0 pCi/L, EPA recommends that you **consider** fixing your home. The national average indoor radon level is about 1.3 pCi/L. The higher a home's radon level, the greater the health risk to you and your family. Smokers and former smokers are at especially high risk. There are straightforward ways to fix a home's radon problem that are not too costly. Even homes with very high levels can be reduced to below 4.0 pCi/L. EPA recommends that you use an EPA or State-approved contractor trained to fix radon problems.

What do radon test results mean?

If your radon level is **below 4 pCi/L**, you do not need to take action.

If your radon level is **4 pCi/L or greater**, use the following charts to determine what your test results mean. Depending upon the type of test(s) you took, you will have to either test again or fix the home.

NOTE: All tests should meet EPA technical protocols.

Chart 1: Radon Test Conducted Outside Real Estate Transaction

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Type of Test(s)	If Radon Level Is 4.0 pCi/L or Greater
Single Short-Term Test	Test Again*
Average of Short-Term Tests	Fix The Home
One Long-Term Test	Fix The Home

* If your first short term test is several times greater than 4.0 pCi/L - for example, about 10.0 pCi/L or higher - you should take a second short-term test immediately.

Chart 1: Radon Test Conducted During a Real Estate Transaction (Buying or Selling a Home)

Type of Test(s)	If Radon Level Is 4.0 pCi/L or Greater
Single Active Short-Term Test (this test requires a machine)	Fix The Home
Average of 2 Passive Short-Term Tests* (these tests do not require machines)	Fix The Home
One Long-Term Test	Fix The Home

* Use two passive short-term tests and average the results.

What should I do after testing?

If your radon level is 4.0 pCi/L or greater, you can call your State radon office to obtain more information, including a list of EPA or State-approved radon contractors who can fix or can help you develop a plan for fixing the radon problem. Reduction methods can be as simple as sealing cracks in floors and walls or as complex as installing systems that use pipes and fans to draw radon out of the building.

EPA has a National Radon Program to inform the public about radon risks, train radon mitigation contractors, provide grants for state radon programs, and develop standards for radon-resistant buildings. EPA works with health organizations, state radon programs, and other federal agencies to make the program as effective as possible.

For more information about radon, its risks and what you can do to protect yourself, call 1-800-SOS-RADON and request a free copy of EPA's *A Citizen's Guide to Radon*. You may also call the Radon Fix-It Line at 1-800-644-6999 between noon and 8pm Monday through Friday, EST/EDT, for information and assistance. This toll-free line is operated by Consumer Federation of America, a nonprofit consumer organization.

Maintenance Advice

UPON TAKING OWNERSHIP

After taking possession of a new home, there are some maintenance and safety issues that should be addressed immediately. The following checklist should help you undertake these improvements:

- ❑ Change the locks on all exterior entrances, for improved security.
- ❑ Check that all windows and doors are secure. Improve window hardware as necessary. Security rods can be added to sliding windows and doors. Consideration could also be given to a security system.
- ❑ Install smoke detectors on each level of the home. Ensure that there is a smoke detector outside all sleeping areas. Replace batteries on any existing smoke detectors and test them. Make a note to replace batteries again in one year.
- ❑ Create a plan of action in the event of a fire in your home. Ensure that there is an operable window or door in every room of the house. Consult with your local fire department regarding fire safety issues and what to do in the event of fire.
- ❑ Examine driveways and walkways for trip hazards. Undertake repairs where necessary.
- ❑ Examine the interior of the home for trip hazards. Loose or torn carpeting and flooring should be repaired.
- ❑ Undertake improvements to all stairways, decks, porches and landings where there is a risk of falling or stumbling.
- ❑ Review your home inspection report for any items that require immediate improvement or further investigation. Address these areas as required.
- ❑ Install rain caps and vermin screens on all chimney flues, as necessary.
- ❑ Investigate the location of the main shut-offs for the plumbing, heating and electrical systems. If you attended the home inspection, these items would have been pointed out to you.

REGULAR MAINTENANCE

EVERY MONTH

- ❑ Check that fire extinguisher(s) are fully charged. Re-charge if necessary.
- ❑ Examine heating/cooling air filters and replace or clean as necessary.
- ❑ Inspect and clean humidifiers and electronic air cleaners.
- ❑ If the house has hot water heating, bleed radiator valves.
- ❑ Clean gutters and downspouts. Ensure that downspouts are secure, and that the discharge of the downspouts is appropriate. Remove debris from window wells.
- ❑ Carefully inspect the condition of shower enclosures. Repair or replace deteriorated grout and caulk. Ensure that water is not escaping the enclosure during showering. Check below all plumbing fixtures for evidence of leakage.
- ❑ Repair or replace leaking faucets or shower heads.
- ❑ Secure loose toilets, or repair flush mechanisms that become troublesome.

SPRING AND FALL

- ❑ Examine the roof for evidence of damage to roof coverings, flashings and chimneys.
- ❑ Look in the attic (if accessible) to ensure that roof vents are not obstructed. Check for evidence of leakage, condensation or vermin activity. Level out insulation if needed.
- ❑ Trim back tree branches and shrubs to ensure that they are not in contact with the house.
- ❑ Inspect the exterior walls and foundation for evidence of damage, cracking or movement. Watch for bird nests or other vermin or insect activity.
- ❑ Survey the basement and/or crawl space walls for evidence of moisture seepage.
- ❑ Look at overhead wires coming to the house. They should be secure and clear of trees or other obstructions.

- ❑ Ensure that the grade of the land around the house encourages water to flow away from the foundation.
- ❑ Inspect all driveways, walkways, decks, porches, and landscape components for evidence of deterioration, movement or safety hazards.
- ❑ Clean windows and test their operation. Improve caulking and weather-stripping as necessary. Watch for evidence of rot in wood window frames. Paint and repair window sills and frames as necessary.
- ❑ Test all ground fault circuit interrupter (GFCI) devices, as identified in the inspection report.
- ❑ Shut off isolating valves for exterior hose bibs in the fall, if below freezing temperatures are anticipated.
- ❑ Test the Temperature and Pressure Relief (TPR) Valve on water heaters.
- ❑ Inspect for evidence of wood boring insect activity. Eliminate any wood/soil contact around the perimeter of the home.
- ❑ Test the overhead garage door opener, to ensure that the auto-reverse mechanism is responding properly. Clean and lubricate hinges, rollers and tracks on overhead doors.
- ❑ Replace or clean exhaust hood filters.
- ❑ Clean, inspect and/or service all appliances as per the manufacturer's recommendations.

ANNUALLY

- ❑ Replace smoke detector batteries.
- ❑ Have the heating, cooling and water heater systems cleaned and serviced.
- ❑ Have chimneys inspected and cleaned. Ensure that rain caps and vermin screens are secure.
- ❑ Examine the electrical panels, wiring and electrical components for evidence of overheating. Ensure that all components are secure. Flip the breakers on and off to ensure that they are not sticky.
- ❑ If the house utilizes a well, check and service the pump and holding tank. Have the water quality tested. If the property has a septic system, have the tank inspected (and pumped as needed).
- ❑ If your home is in an area prone to wood destroying insects (termites, carpenter ants, etc.), have the home inspected by a licensed specialist. Preventative treatments may be recommended in some cases.

PREVENTION IS THE BEST APPROACH

Although we've heard it many times, nothing could be more true than the old cliché "an ounce of prevention is worth a pound of cure." Preventative maintenance is the best way to keep your house in great shape. It also reduces the risk of unexpected repairs and improves the odds of selling your house at fair market value, when the time comes.

Please feel free to contact our office should you have any questions regarding the operation or maintenance of your home. Enjoy your home!