

# Home Inspection Report

**Inspection Address:**  
1234 Lovely Lane, Knoxville, TN

**Inspection Date:**  
January 1, 2010

**Report Number:**  
01-10

**Prepared For:**  
John & Mary Homebuyer



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# Report Overview

## THE HOUSE IN PERSPECTIVE

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This is an average quality, 25 year-old home that has been lacking maintenance somewhat. Apart from the short-term need to deal with this deferred maintenance, the repairs, maintenance, and improvements recommended in this report are common for a home of this age and type of construction. Please keep in mind that all homes require maintenance, occasional repairs and system improvements.

## LOCATION OF HOUSE COMPONENTS

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For the purpose of this report, it is assumed that we are standing in front of the house facing the front entrance. From this perspective we may indicate locations as "front" "rear" "left side" "right side".

## WEATHER CONDITIONS

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### PRESENT WEATHER CONDITIONS

Dry weather conditions prevailed at the time of the inspection. The estimated outside temperature was 35° F.

### RECENT WEATHER CONDITIONS

Occasional rain has been experienced in the days leading up to the inspection.

## CONVENTIONS USED IN THIS REPORT

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

**Unsatisfactory:** *denotes items that could require costly repairs; create further serious damage if not immediately repaired; or no longer serve their intended function.*

**Safety Issue:** *denotes items that are unsafe and in need of prompt attention.*

**General Concerns:** *denotes repairable items that could be expected in a home of similar age and quality.*

**Improve:** *denotes improvements that are recommended but not required.*

**Monitor:** *denotes a system or component needing further professional evaluation and/or monitoring in order to determine the present condition.*

## SUMMARY

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**\* The following is a synopsis of the potentially significant conditions that were discovered during this inspection. Other significant conditions outside the scope of this inspection (as stated in the pre-inspection agreement) may also be present.**

**Please refer to the individual sections of this report for further details on these and other concerns.**

### UNSATISFACTORY:

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*The following are items that could require costly repairs; could create further damage if not immediately repaired; or no longer serve their intended function:*

#### Floors

- 1) Three floor joists have been excessively notched to allow passage of the plumbing drains below both main floor bathrooms. Repairs will be required to return the joists to the original design strength. Please refer to the photo in the Structural Section of this report for further information.

### SAFETY ISSUE:

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*The following are items that are considered unsafe and in need of prompt attention:*

#### Porch

- 2) A guardrail should be installed along the right side of the front entry porch, to provide safety. Minimum, nationally accepted safety standards require guardrails along all platforms over 30 inches above grade. Please refer to the photo in the Exterior Section of this report for further information.

#### Garage

- 3) The garage door opener did not automatically stop and reverse the garage door when it was tested by placing a 2x4 on the floor in front of the door when closing, as per the manufacturers' requirement. Check the sensitivity setting on the controls and adjust to provide adequate safety. The sensor lights were also tested and proper operation was provided. Both safety features should remain functional and should be tested regularly. (ref. chapter #6 Garage Doors)

#### Distribution Wiring

- 4) There is an exposed, spliced electric wire connection in the front left corner of the attic floor. All spliced wire connections should be properly installed inside a covered junction box to provide adequate electrical safety. Please refer to the photo in the Electrical Section of this report for further information.

#### Smoke Detectors

- 5) The smoke detector has been removed from the ceiling in the hallway. This should be installed at this location to provide adequate fire safety. (ref. chapter #1 Safety)

#### Water Heater

- 6) The control on the water heater has been turned up too high causing the water temperature to be excessive at 140°. This can cause severe burns and should be considered as a serious safety hazard. The temperature should be reduced to a more moderate temperature. Please refer to the chart in the Plumbing Section of this report for further information. (ref. chapter #5 Water Heater)

#### Electric Range

- 7) The electric range has not been installed as per the manufacturers' installation requirements. The anti-tip device is missing. This device usually is attached to the rear leg of the range and secured to the floor to prevent the appliance from tipping over onto a small child. Please refer to the label on the oven door and to the installation manual for further information.

**GENERAL CONCERNS:**

*The following are repairable items that could be expected in a home of similar age and quality:*

**Crawl Space**

- 8) The block foundation wall is wet and standing water was present at the rear right corner of the crawl space. The vast majority of crawl space leakage problems are the result of improper grading and insufficient control of storm water at the surface. All yard grading should slope a minimum of 6 inches over the first 10 feet out away from the foundation wall. Gutters and downspouts should collect roof water and drain the water at least 5 feet from the foundation. A lead-off drain should be installed to the downspout above this corner to discharge roof drainage away from the foundation wall. Continue to monitor this area after improvements to the drainage to assure that dry conditions are restored and maintained. Refer to the photo on the Structural Section of this report for further information. (ref. chapter #19 Drainage Problems)

**Sloped Roofing**

- 9) Several nail heads have protruded through the asphalt shingles along the right and left sides of the roof above the garage. Several other shingles have slightly risen up from the roof surface. This is a common problem when nails back out of the roofing surface as the roof sheathing dries out after initial installation. All damaged shingles should be replaced and all raised shingles should be re-nailed and sealed. Please refer to the photo in the Roofing Section of this report for further information.

**Gutters & Downspouts**

- 10) Install a lead-off drain to the downspout at the rear right corner, to provide a positive discharge of roof drainage out away from the foundation wall. This may be directly contributing to the dampness in the crawl space below this corner. (ref. chapter #19 Drainage Problems)

**Windows**

- 11) Screens are missing from the windows. Verify with the present owner if screens are available to fit all window sizes.

**Exterior Door(s)**

- 12) The weather-stripping is damaged on the front entry door. Replacement will be required to improve interior energy efficiency. (ref. chapter #20 Weatherstripping & Caulking)

**Lights**

- 13) The light in the vent fan in the master bathroom did not function. Replacement of the bulb or repairs to the switch may be required.

**Central Air Conditioning**

- 14) The condensate drain line from the air conditioning unit is buried beneath the soil at the right side yard. The discharge end was not observed. The termination should be located and allowed to drain to daylight to assure that proper drainage is provided.

**Interior Ventilation**

- 15) The moisture exhaust vent fan in the hallway bathroom does not function. This should be repaired to provide adequate control of excess moisture in this windowless room. (ref. chapter #6 Ventilation)

**Supply Plumbing**

- 16) The hot and cold supply water connections are reversed on the master bathroom shower. This condition should be corrected to eliminate a potential scald hazard.

**Drainage / Venting**

- 17) The plumbing drain from the safety catch pan in the laundry room terminates in the crawl space. This drain should be extended to the exterior to provide proper drainage and allow observation in the event that a leak occurs. Please refer to the photo in the Plumbing Section of this report for further information.

### Stairways

- 18) The attic pull down stairs have not been properly installed according to the manufacturers' installation requirements. There are large gaps between the attic pull down stair framing and the ceiling joists. The manufacturer of these stairs require shims be installed fully along the entire length of the sides at all gaps over ¼ inches. Also, one nail is required at each metal bracket at the ends of the tension springs. These should be driven through to the ceiling framing to secure the stairway frame. This can be easily installed to assure future performance. Please refer to the photo in the Interior Section of this report for further information.

### Windows

- 19) The windows in the following locations have leaking vapor seals; the bottom sash in the master bedroom and the top and bottom sash in the front right bedroom. This is causing condensation to form between the insulated glass panes. This does not significantly affect the insulation value or function of the windows; however they may be visually unacceptable. Additional windows other than those observed today, may also show signs of a vapor seal leak in the future due to changes in the weather.

### MONITOR:

*The following are items that may require further professional evaluation or monitoring to determine their present condition:*

### Central Air Conditioning

- 20) The air conditioning systems can be permanently damaged if operated during temperatures of 65 ° or lower, therefore they are not tested for function if these temperatures exist during or within 12 hrs. prior to this inspection. A technical exhaustive inspection should be performed by a professional air conditioning technician to verify present operating conditions, if desired. (ref. chapter #3 Central Air Conditioning).

### Fireplaces

- 21) The gas fireplace logs are a ventless model. Read and observe all manufacturers safety requirements before operating.

## THE SCOPE OF THE INSPECTION

The scope of this inspection is in accordance with the Standards of Practice of the American Society of Home Inspectors, ASHI®.

It is the goal of the inspection to put a home buyer in a better position to make a buying decision. This inspection is visual only. A representative sample of building components are viewed in areas that are accessible at the time of the inspection. No destructive testing or dismantling of building components is performed.

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 your pre-inspection contract for a full explanation of the scope of the inspection.

# Structural Components

## DESCRIPTION OF STRUCTURAL COMPONENTS

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<b>Foundation:</b>	•Concrete Block •Crawl Space
<b>Floor Structure:</b>	•Joists
<b>Wall Structure:</b>	•Wood Frame
<b>Roof Structure:</b>	•Trusses •Waferboard Sheathing

## OBSERVATIONS OF STRUCTURAL COMPONENTS

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### RECOMMENDATIONS / OBSERVATIONS

#### Crawl Space

- **General Concerns:** The block foundation wall is wet and standing water was present at the rear right corner of the crawl space. The vast majority of crawl space leakage problems are the result of improper grading and insufficient control of storm water at the surface. All yard grading should slope a minimum of 6 inches over the first 10 feet out away from the foundation wall. Gutters and downspouts should collect roof water and drain the water at least 5 feet from the foundation. A lead-off drain should be installed to the downspout above this corner to discharge roof drainage away from the foundation wall. Continue to monitor this area after improvements to the drainage to assure that dry conditions are restored and maintained. (ref. chapter #19 Drainage Problems)



#### Floors

- **General Concerns:** Three floor joists have been excessively notched to allow passage of the plumbing drains below both main floor bathrooms. Repairs will be required to return the joists to the original design strength.



## LIMITATIONS OF STRUCTURE INSPECTION

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As we have described in your inspection contract, this is a visual inspection only. Assessing the complete structural integrity of a building is beyond the scope of a home inspection. When there are significant structural concerns about the building, further evaluation by an experienced foundation or structural contractor or a professional structural engineer is recommended. Inspection of the Structural Components were limited 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 was 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.

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



# Roofing System

## DESCRIPTION OF ROOFING SYSTEM

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<b>Roof Covering:</b>	•Asphalt Shingle •Age: 7 years
	•Estimated Remaining Service Life: 8-12 years
<b>Roof Flashing:</b>	•Metal
<b>Roof Drainage System:</b>	•Aluminum •Downspouts discharge above & below grade
<b>Method of Inspection:</b>	•Walked on roof

## OBSERVATIONS OF ROOFING SYSTEM

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### RECOMMENDATIONS / OBSERVATIONS

#### Sloped Roofing

- **General Concerns:** Several nail heads have protruded through the asphalt shingles along the right and left sides of the roof above the garage. Several other shingles have slightly risen up from the roof surface. This is a common problem when nails back out of the roofing surface as the roof sheathing dries out after initial installation. All damaged shingles should be replaced and all raised shingles should be re-nailed and sealed.



#### Gutters & Downspouts

- **General Concerns:** Install a lead-off drain to the downspout at the rear right corner, to provide a positive discharge of roof drainage out away from the foundation wall. This may be directly contributing to the dampness in the crawl space below this corner. (ref. chapter #19 Drainage Problems)

## LIMITATIONS OF ROOFING INSPECTION

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As we have described in your inspection contract, this is a visual inspection only. The inspection of the Roofing System was limited by (but not restricted to) the following conditions:

- 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.
- 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 Components

## DESCRIPTION OF EXTERIOR COMPONENTS

<b>Wall Covering:</b>	•Brick Veneer •Vinyl Siding
<b>Soffits, Fascias &amp; Eaves:</b>	•Vinyl
<b>Exterior Doors:</b>	•Metal •Sliding Glass
<b>Window/Door Frames &amp; Trim:</b>	•Vinyl-Covered
<b>Entry Driveways:</b>	•Concrete
<b>Entry Walkways &amp; Patios:</b>	•Concrete
<b>Porches, Decks, Steps, Railings:</b>	•Concrete
<b>Overhead Garage Door(s):</b>	•Metal / Automatic Opener Installed

## OBSERVATIONS OF EXTERIOR COMPONENTS

### RECOMMENDATIONS / OBSERVATIONS

#### Porch

- **Safety Issue:** A guardrail should be installed along the right side of the front entry porch, to provide safety. Minimum, nationally accepted safety standards require guardrails along all platforms over 30 inches above grade.

#### Windows

- **General Concerns:** Screens are missing from the windows. Verify with the present owner if screens are available to fit all window sizes.
- **Improve:** Ideally, the brick ledge below the windows should have a minimal slope of 15 degrees. Since this has not been provided on the dining room window, the caulking joint will need to be maintained to provide a watertight seal along the bottom of the windows.



#### Exterior Walls

- **Improve:** Caulk the open gap between the exterior trim around the garage door and the brick veneer, to provide a watertight seal. (ref. chapter #20 Weatherstripping & Caulking)
- **Improve:** Seal around the hose faucet along the rear wall to provide adequate weather protection beneath the brick siding. (ref. chapter #20 Weatherstripping & Caulking)

#### Exterior Door(s)

- **General Concerns:** The weather-stripping is damaged on the front entry door. Replacement will be required to improve interior energy efficiency. (ref. chapter #20 Weatherstripping & Caulking)

#### Garage

- **Safety Issue:** The garage door opener did not automatically stop and reverse the garage door when it was tested by placing a 2x4 on the floor in front of the door when closing as per the manufacturers' requirement. Check the sensitivity setting on the controls and adjust to provide adequate safety. The sensor lights were also tested and proper operation was provided. Both safety features should remain functional and should be tested regularly. (ref. chapter #6 Garage Doors)

## LIMITATIONS OF EXTERIOR INSPECTION

As we have described in your inspection contract, this is a visual inspection only. The inspection of the Exterior Components was limited by (but not restricted to) the following conditions:

- The inspection does not include an assessment of geological, geo-technical, 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.

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

# Electrical System

## DESCRIPTION OF ELECTRICAL SYSTEM

<b>Size of Electrical Service:</b>	•120/240 Volt Main Service - Service Size: 200 Amp
<b>Service Drop:</b>	•Overhead
<b>Service Entrance Conductors:</b>	•Copper
<b>Service Equipment &amp; Main Disconnects:</b>	•Main Service Rating 200 Amps •Breaker •Located: Main Panel
<b>Service Grounding:</b>	•Ground Rod Connection
<b>Service Panel &amp; Over-current Protection:</b>	•Panel Rating: 200 Amp •Breakers •Located: Exterior Wall, Right Side
<b>Distribution Wiring:</b>	•Copper
<b>Wiring Method:</b>	•Non-Metallic Cable "Romex"
<b>Switches &amp; Receptacles:</b>	•Grounded
<b>Ground Fault Circuit Interrupters:</b>	•Kitchen •Bathroom(s) •Garage •Exterior
<b>Smoke Detectors:</b>	•Present

## OBSERVATIONS OF ELECTRICAL SYSTEM

### RECOMMENDATIONS / OBSERVATIONS

#### Distribution Wiring

- **Safety Issue:** There is an exposed, spliced electric wire connection in the front left corner of the attic floor. All spliced wire connections should be properly installed inside a covered junction box to provide adequate electrical safety.

#### Lights

- **General Concerns:** The light in the vent fan in the master bathroom did not function. Replacement of the bulb or repairs to the switch may be required.

#### Smoke Detectors

- **Safety Issue:** The smoke detector has been removed from the ceiling in the hallway. This should be installed at this location to provide adequate fire safety. (ref. chapter #1 Safety)

#### Carbon Monoxide Detectors

- **Improve:** A plug-in carbon monoxide detector is presently located in the family room. This should be replaced if it is not included with the sale of this home. (ref. chapter #2 Carbon Monoxide)



## LIMITATIONS OF ELECTRICAL INSPECTION

As we have described in your inspection contract, this is a visual inspection only. The inspection of the Electrical System was limited 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.
- We do not measure amperage, voltage or impedance as a part of the home inspection.

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

# Heating System

## DESCRIPTION OF HEATING SYSTEM

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**Energy Source:** •Gas  
**Heating System Type / Statistics:** •Forced Air Furnace •Manufacturer: Rheem •Age: 10 years  
•Capacity: 50,000 b.t.u's.  
**Vents, Flues, Chimneys:** •Metal Double-Wall  
**Supply Air Distribution Methods:** •Ductwork

## OBSERVATIONS OF HEATING SYSTEM

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### General Comments

Carbon monoxide detectors should be considered outside of the bedrooms to provide adequate protection from dangerous levels of carbon monoxide. (ref. chapter #2 Carbon Monoxide)

### RECOMMENDATIONS / OBSERVATIONS

- No concerns were observed on the heating system therefore no further comments are necessary.

## LIMITATIONS OF HEATING INSPECTION

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As we have described in your inspection contract, this is a visual inspection only. The inspection of the Heating System is general and not technically exhaustive. A detailed evaluation of the furnace heat exchanger is beyond the scope of this inspection. The inspection of the Heating System was limited by (but not restricted to) the following conditions:

- The adequacy of heat supply or distribution balance is not inspected. (This would require heat loss calculations and an extensive building survey that is normally performed when the initial heating capacity is selected.)
- 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 Pump System

## DESCRIPTION OF COOLING / HEAT PUMP SYSTEM

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- |  |   |
|--|---|
| <b>Energy Source:</b>                    | •Electricity  |
| <b>Central System Type / Statistics:</b> | •Air Cooled Central Air Conditioning •Manufacturer: Rheem |
|  | •Estimated Age: 10 years •Capacity: 2 tons                |
| <b>Supply Air Distribution Methods:</b>  | •Ductwork   |

## OBSERVATION OF COOLING / HEAT PUMP SYSTEM

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### RECOMMENDATIONS / OBSERVATIONS

#### Central Air Conditioning

- **General Concerns:** The condensate drain line from the air conditioning unit is buried beneath the soil at the right side yard. The discharge end was not observed. The termination should be located and allowed to drain to daylight to assure that proper drainage is provided.
- **Monitor:** The air conditioning systems can be permanently damaged if operated during temperatures of 65 ° or lower, therefore they are not tested for function if these temperatures exist during or within 12 hrs. prior to this inspection. A technical exhaustive inspection should be performed by a professional air conditioning technician to verify present operating conditions, if desired. (ref. chapter #3 Central Air Conditioning).

## LIMITATIONS OF COOLING / HEAT PUMP INSPECTION

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As we have described in your inspection contract, this is a visual inspection only. The inspection of the Cooling /Heat Pump System was limited by (but not restricted to) the following conditions:

- Window mounted air conditioning units are not inspected.
- Electronic air filters are not inspected
- The adequacy and distribution of the cooling system is not determined.

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

# Insulation / Ventilation Components

## DESCRIPTION OF INSULATION / VENTILATION COMPONENTS

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<b>Attic Insulation:</b>	•10-14 Inches of Fiberglass Insulation
<b>Exterior Wall Insulation:</b>	•Not Visible
<b>Roof Ventilation:</b>	•Ridge Vents •Soffit Vents •Gable End Vents
<b>Exhaust Fan/Vent Locations:</b>	•Moisture Vent (bathroom(s)) •Range Hood (kitchen) •Dryer (laundry room)

## OBSERVATION OF INSULATION / VENTILATION COMPONENTS

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### Positive Attributes

The attic is well insulated. Insulation levels exceed local energy standards.

### RECOMMENDATIONS / OBSERVATIONS

#### Interior Ventilation

- **General Concerns:** The moisture exhaust vent fan in the hallway bathroom does not function. This should be repaired to provide adequate control of excess moisture in this windowless room. (ref. chapter #6 Ventilation)

## LIMITATIONS OF INSULATION / VENTILATION INSPECTION

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As we have described in your inspection contract, this is a visual inspection only. The inspection of the Insulation and Ventilation was limited 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.

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

# Plumbing System

## DESCRIPTION OF PLUMBING SYSTEM

<b>Water Supply Source:</b>	•Public Water Supply
<b>Service Pipe to House:</b>	•Copper
<b>Main Water Valve Location:</b>	•Beside Water Heater
<b>Interior Supply Piping:</b>	•Copper
<b>Waste System:</b>	•Public Sewer System
<b>Drain, Waste, &amp; Vent Piping:</b>	•Plastic
<b>Water Heater:</b>	•Gas •Manufacturer: Kenmore
	•Estimated Age: 7 years •Capacity: 40 gallons
<b>Fuel Shut-Off Valves:</b>	•Natural Gas Main Valve: Located at meter

## OBSERVATION OF PLUMBING SYSTEM

### Positive Attributes

The water pressure supplied to the fixtures is reasonably good. Only a moderate drop in flow was experienced when two fixtures were operated simultaneously.

### RECOMMENDATIONS / OBSERVATIONS

#### Water Heater

- **Safety Issue:** The control on the water heater has been turned up too high causing the water temperature to be excessive at 140°. This can cause severe burns and should be considered as a serious safety hazard. The temperature should be reduced to a more moderate temperature. (ref. chapter #5 Water Heater)

Temperature Setting	Time to Produce 2 <sup>nd</sup> & 3 <sup>rd</sup> Degree Burns on Adult Skin
170° F	Nearly instantaneous
160° F	About ½ second
150° F	About 1 ½ second
140° F	Less than 5 seconds
130° F	About 30 seconds
120° F	More than 5 minutes

#### Supply Plumbing

- **General Concerns:** The hot and cold supply water connections are reversed on the master bathroom shower. This condition should be corrected to eliminate a potential scald hazard.

#### Drainage / Venting

- **General Concerns:** The plumbing drain from the safety catch pan in the laundry room terminates in the crawl space. This drain should be extended to the exterior to provide proper drainage and allow observation in the event that a leak occurs.



## LIMITATIONS OF PLUMBING INSPECTION

As we have described in your inspection contract, this is a visual inspection only. The inspection of the Plumbing System was limited 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.
- Clothes washing machine connections are not inspected.
- Water conditioning systems, solar water heaters, fire and lawn sprinkler systems, and private waste disposal systems are not inspected.
- We do not operate safety valves or shut-off valves.

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



# Interior Components

## DESCRIPTION OF INTERIOR COMPONENTS

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<b>Wall / Ceiling Material:</b>	•Drywall
<b>Floor Surfaces:</b>	•Carpet •Vinyl/Resilient
<b>Window Type(s) &amp; Glazing:</b>	•Single Hung / Double Glazed
<b>Doors:</b>	•Wood, Hollow-Core

## OBSERVATIONS OF INTERIOR COMPONENTS

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### RECOMMENDATIONS / OBSERVATIONS

#### Stairways

- **General Concerns:** The attic pull down stairs have not been properly installed according to the manufacturers' installation requirements. There are large gaps between the attic pull down stair framing and the ceiling joists. The manufacturer of these stairs require shims be installed fully along the entire length of the sides at all gaps over 1/4 inches. Also, one nail is required at each metal bracket at the ends of the tension springs. These should be driven through to the ceiling framing to secure the stairway frame. This can be easily installed to assure future performance.

#### Windows

- **General Concerns:** The windows in the following locations have leaking vapor seals; the bottom sash in the master bedroom and the top and bottom sash in the front right bedroom. This is causing condensation to form between the insulated glass panes. This does not significantly affect the insulation value or function of the windows; however they may be visually unacceptable. Additional windows other than those observed today, may also show signs of a vapor seal leak in the future due to changes in the weather.

#### Doors

- **Improve:** The laundry room door does not securely close. Doors commonly settle over time causing the door strike to no longer align with the strike plate on the door frame. This usually requires a slight adjustment on the hinges or strike plate to provide normal operation.

#### Cabinets / Countertops

- **Improve:** The kitchen sink is not adequately sealed along the countertop. This should remain tightly caulked to eliminate possible moisture damage.



## LIMITATIONS OF INTERIOR INSPECTION

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As we have described in your inspection contract, this is a visual inspection only. Inspection of the interior components was limited 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

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- Appliances Tested:** •Electric Range •Range Hood Exhaust (re-circulating)  
•Dishwasher •Refrigerator •Waste Disposer
- Laundry Facility:** •240 Volt Circuit for Dryer •Dryer Vent

## OBSERVATIONS OF APPLIANCES

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### RECOMMENDATIONS / OBSERVATIONS

#### Electric Range

- **Safety Issue:** The electric range has not been installed as per the manufacturers' installation requirements. The anti-tip device is missing. This device usually is attached to the rear leg of the range and secured to the floor to prevent the appliance from tipping over onto a small child. Refer to the label on the oven door and the installation manual for further information.

## LIMITATIONS OF APPLIANCES INSPECTION

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As we have described in your inspection contract, this is a visual inspection only. Inspection of the appliances were limited 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

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**Fireplaces:** •Steel Firebox •Gas Logs  
**Vents, Flues, Chimneys:** •No Vent Installed (vent free gas logs)

## OBSERVATIONS OF FIREPLACES / WOOD STOVES

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### General Comments

Carbon monoxide detectors should be considered outside of the bedrooms to provide adequate protection from dangerous levels of carbon monoxide. (ref. chapter #2 Carbon Monoxide)

### RECOMMENDATIONS / OBSERVATIONS

#### Fireplaces

- **Monitor:** The gas fireplace logs are a ventless model. Read and observe all manufacturers safety requirements before operating.

## LIMITATIONS OF FIREPLACES / WOOD STOVES INSPECTION

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As we have described in your inspection contract, this is a visual inspection only. Inspection of the Fireplace / Wood Burning Stove was limited by (but not restricted to) the following conditions:

- The interiors of flues or chimneys which are not readily accessible are not inspected.
- Fire-screens, 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.
- Wood burning and gas inserts are not moved to observe the condition of the fireplace.

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

# Information About Radon

## EPA RADON RISK INFORMATION

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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 at various levels. Scientists estimate that nearly one out of every 15 homes in this country has radon levels above the 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.

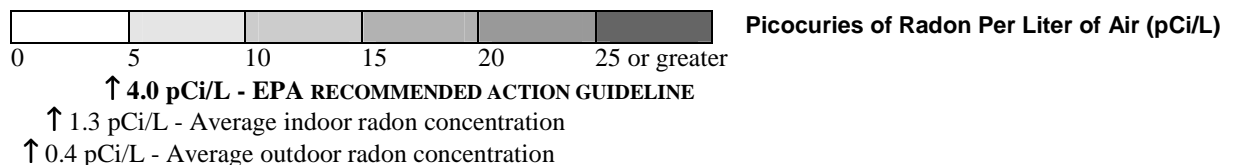
When you breathe air containing a large amount of radon, the radiation can damage your lungs and eventually cause lung cancer. Scientists believe that radon is the second leading cause of lung cancer in the United States. It is estimated that 7,000 to 30,000 Americans die each year from radon-induced 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.

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### Testing for Radon.

We perform radon testing with an E.P.A. approved Professional Continuous Monitor. This device is placed at the lowest potential livable space in the home and is left for a minimum of 48 hours. Results are collected at the end of the test period, downloaded to a computer, printed and sent out the same day as they are collected. Documentation provides a numeric and bar graph of radon concentrations for every hour that the monitor was in place.

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). 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.

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### 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**

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

\* 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)	<b>Fix The Home</b>
Average of 2 Passive Short-Term Tests* (these tests do not require machines)	<b>Fix The Home</b>
One Long-Term Test	<b>Fix The Home</b>

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

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**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.**

# Information About Carbon Monoxide

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## 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.

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## 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

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**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 (ODS 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>**

# Maintenance Advice

## UPON TAKING OWNERSHIP

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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

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### 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**

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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!