

Building Inspection Report

7571 S. Anywhere St. Littleton, CO

Inspection Date:

7/7/2017

Prepared For:

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Report Overview

THE HOUSE IN PERSPECTIVE

This is an average quality production built home. Some immediate repairs are needed and as with most homes ongoing maintenance will be 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.

RECENT WEATHER CONDITIONS

Weather conditions leading up to the inspection have been relatively dry. The estimated outside temperature at the time of the inspection was 55 degrees F.

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.

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.

Structure/Crawl Space

Repair: The central beam is not properly supported at one or more of the concrete support columns. Columns are typically designed to be concentrically loaded. The column and beam connection closest to the access hatch is not concentrically loaded. We suggest a review by a qualified expert, typically a Professional Engineer specializing in forensics, and the condition be modified as necessary. See the photograph below in the structure section of the report.

Asphalt/Composition Roofing

Major Concern: Crazeing or small cracks were observed in the roof surface. See the photographs below. Crazeing of the roof surface can be attributed to several factors. Whatever the specific reason for this crazeing is, it does indicate a shortened service life of the product. Further review by a qualified roofing expert is suggested. Minimally we suggest that you request a five roof certification from the seller. In the long term you should budget for eventual roof replacement. See the photographs below in the roofing section.

Exterior Eaves

Major Concern: Repair: The soffit and fascia at the south side has pulled from the home. This is very likely the result of last year's severe winter and extreme amount of snow. The damage to this area requires immediate repair. See the two photographs below in the exterior section of the report.

Fixtures

Repair: The tile surround for the second floor hall bathtub is in need of major repair. There are several loose and or missing tiles. The condition of the substrate is damaged based on the limited accessibility and will likely require substantial repairs depending on what conditions exist once the major repairs are in process. We suggest consultation with a contractor to determine the extent and cost of repairs required. See the photographs below in the plumbing section.

Environmental Issues

Repair: Safety Issue: 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 was undertaken utilizing a Femto-tech CRM 510 continuous reading monitor. **The monitor was placed in the bedroom in the basement. The short term test was performed according to the guidelines established by the E.P.A. At this location our device indicated an average Radon Gas concentration of 22.5 pCi/l with an accuracy of +/- of 10%. This value falls at or above the threshold level of 4.0 pCi/l, the EPA recommends mitigation at this level.** For more information and free publications consult the Environmental Protection Agency (E.P.A.) web site at <http://www.epa.gov/iaq/> “ The following publications are available for download, “*Homebuyers and Sellers Guide to Radon*” and the “*Consumer’s Guide to Radon Reduction*”. These publications will help you interpret the results and assist you in making an informed decisions about your future course of action.

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 also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection. For a copy of the Standards of Practice for the American Society of Home Inspectors go to www.ashi.org.

Structure

DESCRIPTION OF STRUCTURE

Foundation:	•Poured Concrete •Basement and Sub-Basement Crawl Space Configuration
Columns:	•Steel
Floor Structure:	•Wood Joist
Wall Structure:	•Wood Frame
Roof Structure:	•Trusses •Waferboard Sheathing

STRUCTURE OBSERVATIONS

General Comments

No major defects were observed in the accessible structural components of the house, with one exception indicated below. The construction of the house is of average production quality with typical liberties taken with good building practice and with the quality of materials employed. The inspection did not disclose significant deficiencies in the structure.

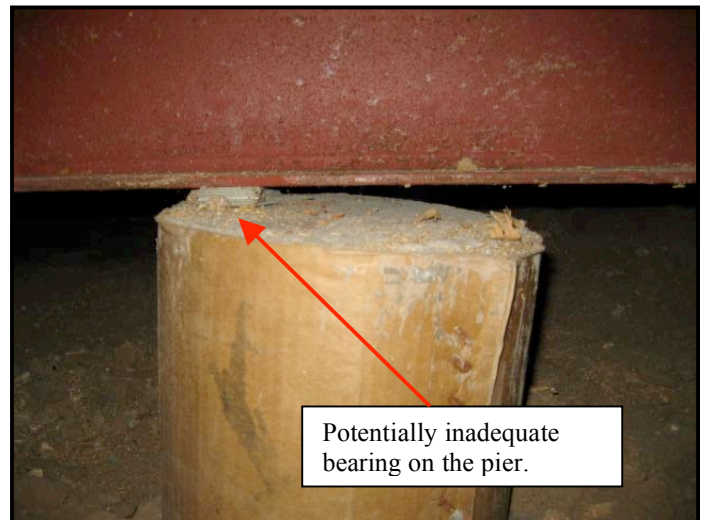
RECOMMENDATIONS / OBSERVATIONS

Foundation

The foundation was mostly concealed by finished or insulated surfaces. There were no obvious signs of significant structural concerns observed in other areas of the house. Further investigation is beyond the scope of a limited visual inspection.

Crawl Space

- **Repair:** The central beam is not properly supported at one or more of the concrete support columns. Columns are typically designed to be concentrically loaded. The column and beam connection closest to the access hatch is not concentrically loaded. We suggest a review by a qualified expert, typically a Professional Engineer specializing in forensics, and the condition be modified as necessary.
- **Monitor:** At the time of the inspection the sub-basement crawlspace was observed to be dry. All construction debris and/or trash should be removed from the crawl space ASAP. Organic debris in the crawlspace and around the property increases risk of insect or rot damage. Organic materials can be a food source for mold. See they comment below in the limitations section.



Roof

The attic area was observed from the access. Typically the attic is constructed in such a way that traversing the attic is very difficult for the inspector, if the inspector were to accidentally misstep damage to the finished area below would result. Additionally in older homes walking or stepping on the joist could cause enough flex in the ceiling joist to cause cracking in the older usually brittle plaster. As a result the inspection of the attic is limited to the view from the access.

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.
- **Mold testing is beyond the scope of the limited visual inspection. This type of testing is available and should be conducted by a Certified Industrial Hygienist or CIH. Testing of this nature will typically start at approximately \$300.00. If the presence of mold is a concern we strongly recommend additional investigation.**

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection. For a copy of the Standards of Practice for the American Society of Home Inspectors go to www.ashi.org.

Roofing

DESCRIPTION OF ROOFING

Roof Covering:	•Asphalt Shingle
Roof Flashings:	•Metal
Roof Drainage System:	•Galvanized Steel •Downspouts discharge above grade
Method of Inspection:	•Walked on roof

ROOFING OBSERVATIONS

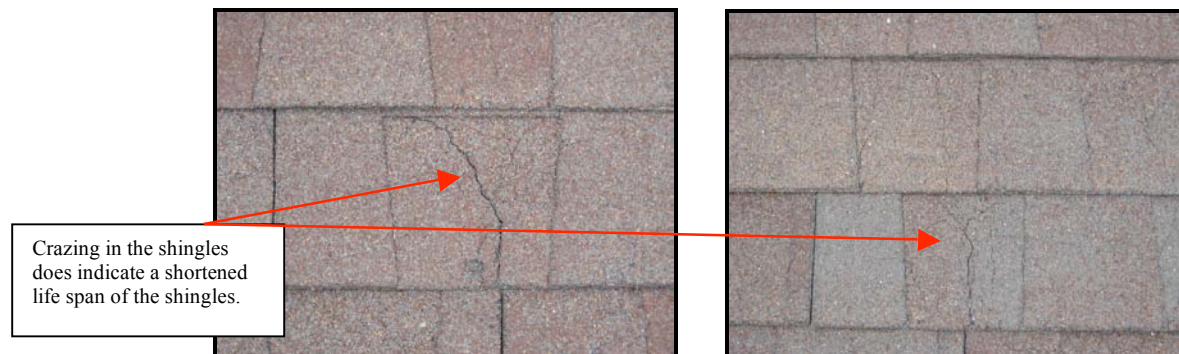
General Comments

The roof coverings are showing signs of deterioration, see the very important comments below. Minimally we suggest that you consider providing a roof certification to the buyer. In the long term a new roof will be required.

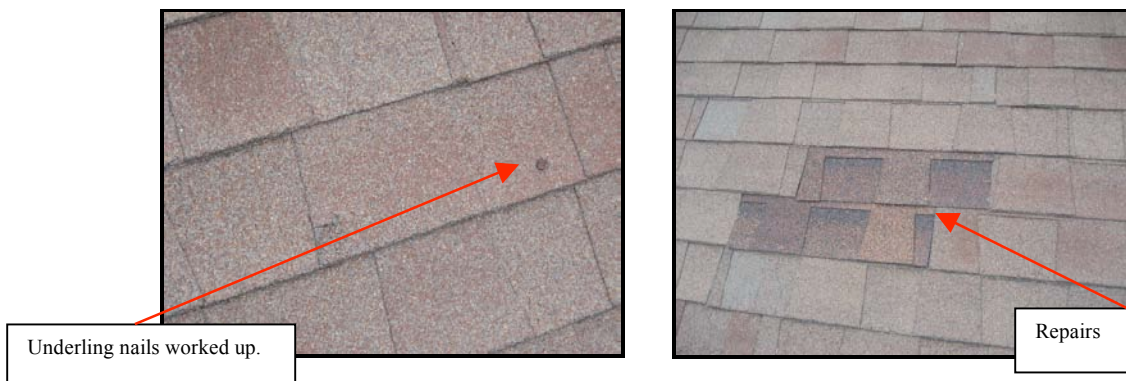
RECOMMENDATIONS / OBSERVATIONS

Asphalt/Composition Roofing

- **Major Concern:** Crazeing or small cracks were observed in the roof surface. See the photographs below. Crazeing of the roof surface can be attributed to several factors. Whatever the specific reason for this crazing is, it does indicate a shortened service life of the product. Further review by a qualified roofing expert is suggested. Minimally we suggest that you request a five roof certification from the seller. In the long term you should budget for eventual roof replacement.



- **Repair: Monitor:** Nails from the underlying layers of shingles and or flashings are working their way up through the top layer of shingles in isolated areas. See the photograph below on the left. Ideally the affected shingles should be repaired/replaced. As the exposed fasteners are minimal at this time it may be possible to simply seal the exposed nail heads with a high quality mastic. It will be necessary to periodically check these repairs and reseal them. For additional information we suggest that you consult with a roofing expert.



Exterior

DESCRIPTION OF EXTERIOR

Wall Covering:	•Hardboard & Stucco
Eaves, Soffits, And Fascias:	•Hardboard
Exterior Doors:	•Wood •French Doors
Window Type:	•Vinyl Frames
Entry Driveways:	•Concrete
Entry Walkways And Patios:	•Concrete
Porches, Decks, Steps, Railings:	•Concrete
Overhead Garage Door(s):	•Wood •Two Automatic Openers Installed
Surface Drainage:	•Generally Graded Away From House

EXTERIOR OBSERVATIONS

General Comments

The exterior of the home shows wear and tear for a home of this age, see the very important additional comments below. 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.

RECOMMENDATIONS / OBSERVATIONS

Exterior Eaves

- **Major Concern: Repair:** The soffit and fascia at the upper roof at the south side has pulled from the home. This is very likely the result of last year's severe winter and extreme amount of snow. The damage to this area requires immediate repair. See the two photographs below.

Entire fascia and soffit has pulled loose on the south side of the building



Exterior Walls

- **Repair:** The damaged trim below the rear patio door should be repaired or replaced as necessary. See the photograph to the right.
- **Monitor: Repair:** There is a vertical crack in the veneer brickwork at the masonry between the two garage doors. The exact cause of the cracking is not determinable based on this limited visual inspection. A possible cause is freeze thaw cycles. This does not appear to be a structural concern and repair other than for aesthetic is optional.

Garage

- **Safety Issue Monitor:** The overhead garage doors will be in need of routine annual maintenance. Loose hardware items, (nuts and bolts) will develop on the



Repair this piece of trim.

door over the time. Routine maintenance will involve tightening nuts and bolts. Lubricating the miscellaneous parts including the hinges, track and wheels. Additional maintenance of the door may be suggested by the doors manufacturer, check the owners manual.

Porch/Walkway/Patio

- **Possible Major Concern, Monitor:** The front porch and walk way has settled relative to the house proper. This is a common condition normally attributed to inadequate compaction during original construction. At the time of the inspection a modest trip hazard exist. Ideally the front walk and stoop should be removed and repoured if only for aesthetic reasons. Mudjacking of the front walk and stoop could also be considered. Minimally the condition should be monitored and repaired if a significant trip hazard develops.
- **Repair, Safety Issue:** The rear patio is also cracked and has settled and has some potential trip hazards. This condition should also be monitored and repaired if the condition worsens. If the front porch is ever repaired/repoured it would be prudent to replace this patio at the same time.



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.
- Retaining walls that are not an integral portion of the structure may not be inspected.
- Screening, shutters, awnings, or similar seasonal accessories, fences, recreational facilities, outbuildings, 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. For a copy of the Standards of Practice for the American Society of Home Inspectors go to www.ashi.org.

Electrical

DESCRIPTION OF ELECTRICAL

Size of Electrical Service:	•The Main Service is 120/240 Volts 150 Amps
Service Drop:	•Underground
Service Entrance Conductors:	•Aluminum
Service Equipment & Main Disconnects:	•Located: At the Right Rear Corner of the Home
Service Grounding:	•Ground Rod Connection
Sub-Panel(s):	•Located: Adjacent to the Main
Distribution Wiring:	•Copper
Switches & Receptacles:	•Grounded
Ground Fault Circuit Interrupters:	•Bathroom(s) •Electrical Panel
Smoke Detectors:	•Present

ELECTRICAL OBSERVATIONS

General Comments

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 110 volt wiring within the home is copper. This is a good quality electrical conductor.

Inspection of the electrical system revealed the need for typical, minor repairs. Although these are not costly to repair, they should be a high priority for safety reasons. ***Unsafe electrical conditions represent a shock hazard.*** A licensed electrician should be consulted to undertake the repairs recommended below.

RECOMMENDATIONS / OBSERVATIONS

Outlets

- **Repair:** The ground fault circuit interrupter (GFCI) outlet in the main floor powder room is a redundant device. There is another GFRI device upstream on this circuit (located in the second floor hall bath) that is actually protecting the circuit. We suggest the circuit be modified so as to only have one GFI reset location. A licensed electrician should perform all repair work.
- **Advisory:** The ground fault circuit interrupters (GFCI) outlets that were tested were in good operating condition. These devices offer added protection against electrical shock or electrocution. These devices have been in use since the early 1970's. Two types of GFI devices are normally observed. The older GFCI device or circuit breaker device located in the electrical panel or more common in recent years are the GFCI receptacles most often seen in bathrooms, kitchens, exterior outlets and in unfinished basements as well as garages. Areas most often associated with wet conditions, outdoor receptacles, kitchen, garage unfinished basement and outlets located in bathrooms normally require GFI protection. When an outlet is replaced in a location that requires ground fault protection, the new outlets must be GFI protected, according to the NEC (National Electric Code). These devices when present should be tested on a monthly basis. Test by using the built in test circuitry or possible purchase a circuit test tester, designed just for this purpose, from the local hardware store for approximately \$15.00.
- **Repair:** Missing outlet cover plates should be replaced to avoid a shock hazard.

Switches

- **Repair:** The three-way switch at basement stairs is inoperative or not working as intended. Normally a three-way switch will operate independently at both switch locations regardless of the position of the opposite switch. For convenience reasons the switch should be repaired as necessary to function as designed.

Smoke Detectors

- **Monitor:** A sampling of the smoke detector(s) were tested. They responded to the internal test circuit. Batteries in smoke detectors should be changed annually. If one battery begins to chirp we suggest that all the detectors have new batteries installed.

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:

- Typically at least one outlet is checked utilizing a simple outlet tester and all accessible switches are operated in each room. Electrical components concealed behind finished surfaces are not inspected.
- 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. For a copy of the Standards of Practice for the American Society of Home Inspectors go to www.ashi.org.

Heating

DESCRIPTION OF HEATING

Energy Source:	•Gas
Heating System Type:	•Forced Air Furnace •Manufacturer: Armstrong 100,000 BTU Unit
Vents, Flues, Chimneys:	•Metal-Multi Wall
Heat Distribution Methods:	•Ductwork
Other Components:	•Humidifier

HEATING OBSERVATIONS

General Comments

The heating system has not been adequately maintained. Some of the items needing attention may be identified below or in this paragraph but neither should be considered an exhaustive analysis of the system specific items needing repair. Any time servicing of the heating, ventilation and air conditioning is suggested it should include a full operational and safety check to assure safe, reliable heat. It is strongly suggested that servicing take place prior to close and documentation be provided at or before closing detailing the scope of the work provided. The heating system is approximately fourteen years old and may be approaching the end of its life. We can not predict with accuracy when the furnace will need replacing. We do suggest that as well as routine annual maintenance that you budget for eventual replacement.

RECOMMENDATIONS / OBSERVATIONS

Furnace

- **Repair:** The heating system requires service. The unit was short cycling during the time of the inspection. This indicates an out of adjustment condition. The blower was caked with dirt. The blower motor as well as the whole furnace should be serviced and cleaned. Parts of the cabinet were rusted. The rust likely was caused by the leaking humidifier. The cabinet should be cleaned of this rust. The system should be serviced as necessary. See the very important comments below in the limitations section of this section regarding “certifications”

Humidifier

- **Improve: Repair:** The humidifier did not respond to normal operating controls at the time of the inspection. If operation of the unit is desired it should be serviced or replaced as necessary prior to close or simply removed and the openings in the ductwork sealed. We suggest that you monitor the humidity level routinely. If there is condensation on the windowpanes the humidity level within the home is excessive. Too much humidity within a home could lead to the development of molds and mildew. Watch out for humidifier leaks into the furnace where costly (and hidden) damage can occur.

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 interior of furnace heat exchanger is not fully visible. Evaluation beyond a limited visual inspection of the heat exchanger would require a “tracer or inert gas test” as recommended by the AGA. This testing can be performed by the Appliance Repair Division of Xcel Energy or by a qualified HVAC contactor. This test is not be confused with a carbon monoxide test. The test cost approximately \$200.00- \$300.00.**
- 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.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection. For a copy of the Standards of Practice for the American Society of Home Inspectors go to www.ashi.org.

Cooling / Heat Pumps

DESCRIPTION OF COOLING / HEAT PUMPS

Energy Source:	•Electricity •240 Volt Power Supply
Central System Type:	•Manufacturer: Lennox
Other Components:	•Ceiling Fans

COOLING / HEAT PUMPS OBSERVATIONS

General Comments

The capacity, approximately four tons, and configuration of the system should be sufficient for the home.

RECOMMENDATIONS / OBSERVATIONS

Central Air Conditioning

- **Advisory:** The air conditioning system could not be tested as the outdoor temperature was below 65° degrees at the time of the inspection and for twelve hours prior to the inspection. Minimally we suggest that you verify proper cooling at the pre-closing walk through if the weather conditions permit. If that is not a possibility than an air conditioning specialist should evaluate the system utilizing the proper gauges, test of this nature is beyond that of a limited visual home inspection. If operation is not possible due to inclement weather or if the HVAC specialist is not utilized than it is strongly suggested that you add on Air Conditioning coverage to a third party home warranty program. See the comment above in the cover letter.

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. For a copy of the Standards of Practice for the American Society of Home Inspectors go to www.ashi.org.

Insulation / Ventilation

DESCRIPTION OF INSULATION / VENTILATION

Attic Insulation:	•Approximately R30 Insulation Main Attic
Exterior Wall Insulation:	•Not Visible
Basement Wall Insulation:	•Not Visible
Roof Ventilation:	•Roof Vents
Crawl Space Ventilation:	•No Ventilation Found

INSULATION / VENTILATION OBSERVATIONS

General Comments

The attic area was observed from the access. Typically the attic is constructed in such a way that traversing the attic is very difficult for the inspector, if the inspector were to accidentally misstep damage to the finished area below would result. Additionally in older homes walking or stepping on the joist could cause enough flex in the ceiling joist to cause cracking in the older usually brittle plaster. As a result the inspection of the attic is limited to the view from the access.

RECOMMENDATIONS / ENERGY SAVING SUGGESTIONS

Attic / Roof

Insulation levels are typical for a home of this age and construction. We suggest you contact Xcel Energy (800.895.4999) or the local utility provider for information regarding the past years utility cost. Excel will be able to provide you with the monthly average bill as well as the high and low month for the past twelve months..

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.
- Attic areas are not typically entered, they are viewed from the access. The restricted spaces and the uncertainty of adequate footing could result in harm to the inspector and or potential damage to the structure or finish surfaces. Walkways are required to be present in order for the inspector to traverse the attic area.
- 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. For a copy of the Standards of Practice for the American Society of Home Inspectors go to www.ashi.org.

Plumbing

DESCRIPTION OF PLUMBING

Water Supply Source:	•Public Water Supply
Service Pipe to House:	•Copper
Main Water Valve Location:	•Front Wall of Basement
Interior Supply Piping:	•Copper
Waste System:	•Public Sewer System
Drain, Waste, & Vent Piping:	•Plastic
Water Heater:	•Gas •Approximate Capacity (in gallons): 50 •Manufacturer: Kenmore
Fuel Shut-Off Valves:	•Natural Gas Main Valve At The Right Side of the Home

PLUMBING OBSERVATIONS

General Comments

The water pressure supplied to the fixtures is reasonably good. A typical drop in flow was experienced when two fixtures were operated simultaneously. The plumbing fixtures are old. Upgrading fixtures would be a logical long term improvement. In the interim, a higher level of maintenance will likely be required.

RECOMMENDATIONS / OBSERVATIONS

Water Heater

- **Monitor:** Water heaters have a typical life expectancy of 7-12 years. This unit is at or approaching this age. One can not predict with any certainty when replacement will be need. We suggest that you budget for replacement. Ideally since the water heater is installed on a finished or wooden floor we suggest a drip pan be added for protection against potential leakage.

Fixtures

- **Repair:** The tile surround for the second floor hall bathtub is in need of major repair. There are several loose and or missing tiles. See the photograph to the right. The condition of the substrate is damaged based on the limited accessibility and will likely require substantial repairs depending on what conditions exist once the major repairs are in process. We suggest consultation with a contractor to determine the extent and cost of repairs required.
- **Monitor:** The majority of plumbing fixtures are at or approaching the age where they may require some routine maintenance and or repairs or eventual replacement. It would be typical to have to replace older washer or faucet cartridges to keep faucets from dripping.



Waste / Vent

- **Monitor: Improve:** The floor drain near the furnace and or water heater mounted in the structural wood floor deck should be carefully monitored. If a humidifier or an air conditioner are present this drain will be routinely used. Often times the wood surface around the floor drain becomes water logged due to water rolling off the top of the drain. This water will eventually drip into the crawlspace and the underside of the flooring will become wet. This source of moisture could lead to mold development. It may be necessary to change this drain to a larger floor basin. While not necessarily a do-it-yourself project it is not typically a major project.

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. Additional investigation of the sewer lines below ground is available. Video cameras can be snaked through the piping to look for breaks, tree roots intrusion or other deficiencies in the sewer line. Repairs to the hidden portions of the sewer can be significant, repairs could be as much as \$10,000. Older homes or heavily treed properties are especially vulnerable. The cost of the video investigation is approximately \$250.00.**
- 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 well systems or 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. For a copy of the Standards of Practice for the American Society of Home Inspectors go to www.ashi.org.

Interior

DESCRIPTION OF INTERIOR

Wall And Ceiling Materials:	•Drywall
Floor Surfaces:	•Carpet •Vinyl/Resilient •Wood
Window Type(s) & Glazing:	•Sliders •Double Glazed
Doors:	•Wood-Hollow Core •French Doors

INTERIOR OBSERVATIONS

General Condition of Interior Finishes

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

General Condition of Windows and Doors

On the whole, the windows and doors of the home are in average condition .Periodic routine maintenance is always necessary to ensure proper operation.

General Condition of Floors

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

RECOMMENDATIONS / OBSERVATIONS

Wall / Ceiling Finishes

- **Monitor: Repair:** Water staining was noted at the ceiling in the dining room. A small approximately 4” long by approximately 2” water stain was observed at the intersection of the rear wall and ceiling. The homeowner had not noticed this staining. The exact cause of this staining could not be determined in a limited visual inspection. Repairs to the ceiling/wall are required once it is determined that the cause of the water staining has been rectified. The repairs should be professional and the surface once repaired should be indistinguishable from the surrounding areas.

Floors

- **Monitor: Repair:** The installation of the peel and stick vinyl flooring in the basement bath and upstairs bath is marginal. It appears that the tile have shifted exposing the substrate. Minimally the areas should be monitored and repaired if any water damage is noticed to the substrate. Ideally the floor coverings should be replaced with a higher quality material.

Windows

- **Monitor:** At least one window in each room was operated during the inspection where access was not obstructed by personnel belongings. The operated windows were in generally good condition and were operational. The most important factor is that the window exteriors are well maintained to avoid rot or water infiltration.
- **Monitor:** The stationary window in the northeast front bedroom appears to have lost its seal. This has resulted in condensation developing between the panes of glass. This “fogging” of the glass is primarily a cosmetic concern, and need only be improved for cosmetic reasons. It is often difficult to determine if a window is “fogged” weather conditions on any given day can affect the observable conditions.
- **Advisory:** Detection of fogged windows (windows that have condensation between the panes of glass in an insulated or multi-pane window) is often times difficult to detect on a one-day visit. The weather conditions at the time of the inspection effect what may be visible on the given day of the inspection. It is not unusual to observe moisture between the panes of glass one day and no evidence of moisture intrusion the next day. As the windows age and the moisture comes and goes repeatedly dirt deposits are more readily visible between the panes. However if the windows are soiled it obscure the telltale sign of trapped moisture and or dirt deposits. It is not an absolute ton any given day that all the fogged windows will be detectable. The older the window unit the more likely a broken seal will eventually develop. A budget figure for replacement of one normal shaped (rectangle or square) pane would be approximately \$150-\$200 per pane. The more windows requiring replacement will often times bring down the overall unit cost. One should always way the cost of repair of an individual pane vs. total unit replacement with a new modern energy efficient window unit that may qualify for tax credits.

Stairways

- **Monitor:** The stairway(s) were utilized multiple times during the course of the inspection. The stairway and railings were in acceptable condition.

Basement Leakage

- **Monitor:** No evidence of moisture penetration was visible in the basement and or crawlspace 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 and or crawlspace 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 and or crawlspace 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 and or crawlspace may also influence the approach taken to curing any dampness that is experienced.

Environmental Issues

- **Repair:** 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 was undertaken utilizing a Femto-tech CRM 510 continuous reading monitor. **The monitor was placed in the bedroom in the basement. The short term test was performed according to the guidelines established by the E.P.A. At this location our device indicated an average Radon Gas concentration of 22.5 pCi/l with an accuracy of +/- of 10%. This value falls at or above the threshold level of 4.0 pCi/l, the EPA recommends mitigation at this level.** For more information and free publications consult the Environmental Protection Agency (E.P.A.) web site at <http://www.epa.gov/iaq/> “ The following publications are available for download, “*Homebuyers and Sellers Guide to Radon*” and the “*Consumer’s Guide to Radon Reduction*”. These publications will help you interpret the results and assist you in making an informed decisions about your future course of action.
- **Monitor:** Carbon monoxide is a colorless, odorless gas that can result from a faulty fuel burning furnace, range, water heater, space heater or wood stove. Proper maintenance of these appliances is the best way to reduce the risk of carbon monoxide poisoning. For more information, consult the Consumer Product Safety Commission at 1-800-638-2772 (C.P.S.C.) for further guidance. It would be wise to install carbon monoxide detectors within the home. We suggest that detectors be installed on each level of the home.

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

- **Mold testing is beyond the scope of the limited visual inspection. This type of testing is available and should be conducted by a Certified Industrial Hygienist or CIH. Testing of this nature will typically start at approximately \$300.00. If the presence of mold is a concern we strongly recommend additional investigation.**
- 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. For a copy of the Standards of Practice for the American Society of Home Inspectors go to www.ashi.org.

Appliances

DESCRIPTION OF APPLIANCES

- Laundry Facility:** •240 Volt Circuit for Dryer (3 Prong Plug)
Other Components Tested: •Gas Fireplace •Door Bell

APPLIANCES OBSERVATIONS

General Comments

Most of the major appliances in the home are newer however some modifications and or recommended repairs are noted below.

RECOMMENDATIONS / OBSERVATIONS

Gas Fireplace

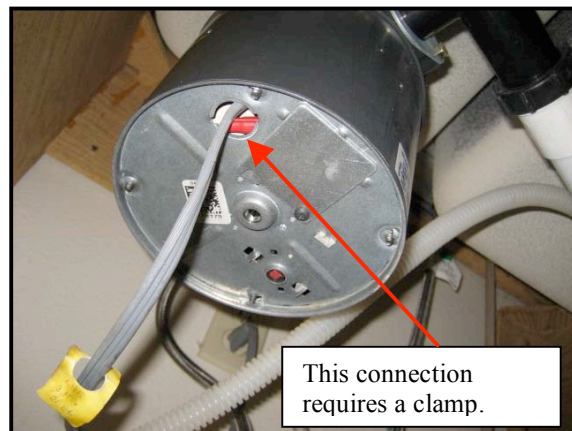
- **Repair:** The gas log fireplace is in need of service. The glass front is very dirty and may be etched. Cleaning of the unit and adjustments to the gas valve are needed. We suggest the unit be serviced by a qualified technician. One such company that performs this service is Quinlan Gas Fireplaces, for more information visit their web site at www.quinlangasfireplaces.com. We provide this a courtesy only and receive no compensation from Quinlan Gas Fireplaces, nor do we do not guarantee their work.

Waste Disposer

- **Repair: Safety Issue:** The wiring leading to the waste disposer is deficient. The wiring is not properly clamped at the bottom of the disposer exposing the wires to potential abrasion on the housing of the disposer. See the photograph to the right. This is potentially a dangerous condition that could be a shock or potentially an electrocution hazard. The wiring should be repaired as soon as possible.

Dishwasher

- **Repair:** The dishwasher was not attached to the underside of the counter top. This could potentially allow the dishwasher to “dance” and result in leaking at the connections. This is a relatively easy repair and should be addressed promptly to avoid any potential problems in the future.



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, self cleaning functions 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. For a copy of the Standards of Practice for the American Society of Home Inspectors go to www.ashi.org.

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

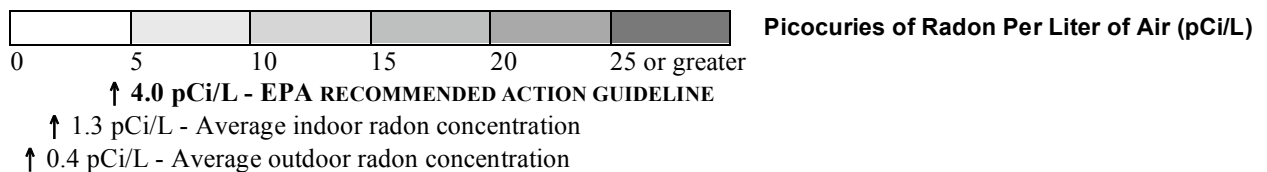
Fifty-five percent of our exposure to natural sources of radiation usually comes from radon. Radon is a colorless, tasteless, and odorless gas that comes from the decay of uranium found in nearly all soils. Levels of radon vary throughout the country. Radon is found all over the United States and scientists 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

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.
- 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!