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## INSPECTION REPORT SUMMARY

Date: 01/11/2007  
Summary information for: Mary Homeowner  
For the property located at: XXX Lawson Way Erie, CO

**In the opinion of the inspector, the following items should be corrected prior to the end of the home warranty period:**

### HOUSE STRUCTURE

#### KITCHEN AREA:

A 5/16" wide x 8" long gap was observed at the wall/ceiling intersection in the kitchen area. Other inconsistencies were also observed on the ceiling. The floor below this area was sloping very slightly as confirmed by placing a steel ball on the floor and watching it roll across the floor. These are indications of structural movement in this area of the house and is significant for a house that is only 1 year old. I recommend further inspection by a licensed structural engineer and repairs made as necessary.

#### SUB-FLOOR CRAWL SPACE:

As observed in the sub-floor crawl space, the short metal support posts were not attached at the top plate as is typically required. The top plates were dishing and the wood beam appeared to be crushed at the center of the column. I recommend further inspection by a licensed structural engineer and repairs made as necessary.



## STRUCTURAL FLOOR CRAWL SPACE:

### MOLD:

Small gray, black and white spots were observed on many of the wood joists in the right rear area of the sub-floor crawl space. This material appears to be mold. Testing to confirm if this is truly mold is beyond the scope of this inspection. Spores from the mold can enter the living area and, depending on the type of mold, may adversely affect the health of the people living in the house.

I recommend further inspection by an environmental engineer or industrial hygienist and cleaning and repairs performed as recommended.



### SUMP PIT AND PUMP:

Two sump pits were observed in the structural floor crawl space. The purpose of this system is to capture the drainage water from the foundation perimeter "french" drain system. The sump pit is your "window" to see what is happening with the drainage around the house. Frequent inspection of the sump pit to look for inconsistencies in the amount of water in the pit is recommended. More water might indicate a drainage problem around the house.

A significant amount of water was observed in the rear sump pit at the time of the inspection. This water was above the level of the perimeter drain pipe. This is typically an indication that a sump pump system should be installed.

A dead mouse was floating in the water of the rear sump pit. The water in this pit is darkened and may be a health hazard. I recommend that the water



be professionally removed and the sump pit cleaned.

## EXTERIOR

### SIDEWALKS & WALKWAYS:

The homeowner described a significant void under the front sidewalk/step at the front of the porch. This area was covered with snow at the time of the inspection. This condition may be the result of improper compaction of the soil prior to installation. I recommend further inspection after the snow has cleared and agreeing on a course of action with the builder.

### FRONT PORCH:

#### COVERING:

Water staining and some water damage was observed on the ceiling of the front porch area. The homeowner explained that water was dripping from this area when snow was melting on the roof. I recommend further investigation and repair as necessary.

### FENCES:

A 3" x 5" chunk was missing out of the top of a fence post at the rear of the property. Correction will require replacement of the post.



## EXTERIOR

### SIDING:

#### FIBER CEMENT SIDING:

The following deficiencies were observed on the fiber cement siding:

- A 4" x 3" broken section was observed on the siding above the basement rear door.
- A 3" long crack was observed at the bottom corner of the window at the rear right of the house.
- A 4" long crack was observed at the bottom corner of the window at the right side of the house.

Proper repair will require replacement of the siding boards in these areas.

### PLUMBING:

#### FAUCETS:

A thin stream of water was coming out of the hose bib (faucet) at the rear of the house when the handle was in the "off" position. This is a waste of water. I recommend immediate repair.



**GARAGE**

**CEILING CONDITION:**

A 3" x 3" hole was observed in the drywall above the large garage door on the garage ceiling.

**KITCHEN**

**DISHWASHER:**

The dishwasher was not securely attached to the underside of the countertop at the top front of the dishwasher. This will allow the dishwasher to tip forward if the door is open and dishes are being loaded. I recommend it be attached according to the manufacturer's installation instructions.

**ENTRYWAY:**

**CLOSET:**

The entryway closet door closes properly but does not latch.

**MASTER BEDROOM:**

**CLOSET:**

The fluorescent light in the master closet was not working properly. This may be due to a bad bulb.

**MASTER BATHROOM:**

**TUB/SHOWER FAUCETS:**

The trim ring on the hot side bathtub control was observed to be loose.

**RIGHT FRONT BATHROOM:**

**TOILET:**

The toilet seat was found to be loose where it is attached to the toilet bowl.



## **MAINTENANCE LIST:**

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**This is a convenience list of minor items that exhibit normal wear-and-tear or neglect and are in need of maintenance or repair. Often these items are cosmetic in nature and do not affect the habitability of the property.**

### EXTERIOR

#### DECK:

The wood deck railings and stair stringers do not appear to be sealed. Many builders do not seal the wood on decks. I recommend that this wood be sealed to protect the wood and maximize its life.

### GARAGE

#### GFCI OUTLETS:

A refrigerator/freezer was observed to be plugged into a GFCI protected outlet. It is possible that the GFCI outlet will trip off without knowing it. If this happens, the refrigerator/freezer could thaw and ruin the contents. I recommend plugging the refrigerator/freezer into a non-GFCI protected outlet.

### FURNACE:

#### GENERAL CONDITION:

The furnace compartment, blower, filter and the bottom of the heat exchanger were dusty, probably due to running the system while constructing the house and basement. If the furnace is this dirty, the AC coil (not visible) is likely to be coated with dust as well. It is proper practice to have a furnace and AC unit cleaned and tuned every 1-3 years. Although the furnace and AC units did respond to normal operating controls, I recommend that the systems be inspected, cleaned, and tuned as necessary by a professional HVAC contractor after the basement construction is completed. Consideration should also be given to having the ducts cleaned.



# Real Estate Inspection Report and Additional Information

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**Inspection Date:**

**Prepared For:**

**Prepared By:**

HomeSpy Property Inspections, Inc.  
34 Amaranth Drive  
Littleton, CO 80127

Office: 303-978-1288

Fax: 303-978-0812

**Inspector:**

Chris Anderson



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# **INTRODUCTION - HOW TO READ THIS REPORT**

## **ORIENTATION OF THE DWELLING**

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For the purposes of direction, comments in this report are written as if the inspector were standing at the front door facing the property.

## **REPORT TERMINOLOGY DEFINITIONS**

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A Glossary of Terms is included in the "Additional Information" tab section of this report. Other descriptive terms that will be helpful when reading this report are as follows:

- **Deficient** - is unsafe or is not performing its intended function
- **Further Evaluation** - warrants additional examination by a specialist in the appropriate trade
- **Monitor** - regularly observing a system or component to see if a situation (usually a deficiency) has subsided or is progressing.

## **DOCUMENTATION IN THE REPORT**

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We realize that this report is a tool to learn specific details of the property, some positive and some negative, and use this information to make an informed decision regarding the purchase of this property, and be a valuable reference after you take possession. When writing the report, we choose to include important details and observed deficiencies that we feel would be beneficial to your buying decision, not a documentation of everything that we see. We vary the detail of the report in some areas depending on the financial impact than it may have. We try to be clear, concise and to the point rather than giving you insignificant information on everything that we observe.

## **SCOPE OF INSPECTION AND INSPECTION LIMITATIONS**

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This is detailed at the beginning of each section of the report, and on the Pre-Inspection Agreement.

## **AMERICAN SOCIETY OF HOME INSPECTORS**

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This inspection was performed in a manner consistent with the Standards of Practice of the American Society of Home Inspectors, a copy of which is available on request or can be viewed at [www.ashi.org](http://www.ashi.org).

# INSPECTION CONDITIONS

## **CLIENT & SITE INFORMATION:**

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**FILE #:** Sample.  
**DATE & TIME OF INSPECTION:** 01/11/2007, 10:00 AM.  
**CLIENT NAME:** Mary Homeowner  
  
**INSPECTION LOCATION:** XXX Lawson Way, Erie, CO 80516.

## **WEATHER CONDITIONS:**

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**WEATHER:** Overcast.  
**OUTDOOR TEMPERATURE:** Between 20 and 30 degrees.  
**SOIL CONDITIONS:** Snow covered.

## **BUILDING CHARACTERISTICS:**

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**ORIENTATION:** Front of house faces North.  
**REPORTED AGE:** 1 year old.  
**BUILDING TYPE:** Single family home.

## **UTILITY SERVICES:**

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**UTILITIES STATUS:** All utilities on.

## **GENERAL INFORMATION:**

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**HOUSE OCCUPIED?** Yes.  
**PEOPLE PRESENT:** Homeowner.  
**COMMENTS:** This inspection is being performed just prior to the end of the one year builder's warranty period.



## GROUNDS

**SYSTEM DESCRIPTION:** The Grounds include the systems and components that are in the areas outside the building that extend from the building exterior to the boundary of the property. This area is typically used for building entrances for humans and automobiles, water drainage control, landscaping and fencing.

**INSPECTION DESCRIPTION:** Our visual examination of the grounds include sidewalks, driveways, porches, stairs, fences & gates, landscaping and retaining walls. These components are examined for proper function, excessive or unusual wear and general state of repair. We pay special attention to the roof drainage system and the "grading" of the soil and landscaping directly around the house to look for signs of past, current or possible future problems.

**LIMITATIONS:** This inspection is not intended to address or include any geological conditions or site stability information. For information concerning these conditions, a geologist or soils engineer should be consulted. Any reference to grade is limited to only areas around the exterior of the exposed areas of foundation or exterior walls. This inspection is visual in nature and does not attempt to determine drainage performance of the site or the condition of any underground piping, including municipal water and sewer service piping or septic systems. Decks and porches are often built close to the ground, where no viewing or access is possible. These areas as well as others too low to enter, or in some other manner not accessible, are excluded from the inspection and are not addressed in the report.

**NOTES & RECOMMENDATIONS:** Inadequate control of water around the grounds of the house can result in leaky basements and crawlspaces, and major (and expensive to repair) foundation problems. **It is recommended that downspouts be extended at least 5 feet from the structure and that the grading be sloped down, away from the house at least 1" per foot for at least the first 5 feet adjacent to the structure.** It is also recommended that areas within 5 feet of the foundation should not be watered and ideally they should be covered with decorative rock or other dry landscaping material. All concrete slabs (including sidewalks, driveways, porches and patios) experience some degree of normal cracking due to shrinkage in the drying process.

### CONDITIONS:

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**LIMITATIONS:** Heavy snow cover significantly limited my inspection of the grounds around the house. Walkways the the driveway were not completely cleared for inspection.

### SIDEWALKS & WALKWAYS:

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**CONDITION:** The homeowner described a significant void under the front sidewalk/step at the front of the porch. This area was covered with snow at the time of the inspection. This condition may be the result of improper compaction of the soil prior to installation. I recommend further inspection after the snow has cleared and agreeing on a course of action with the builder.



### **FRONT PORCH:**

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- PORCH CONDITION:** The concrete front porch was observed to be properly installed and in good overall condition. No significant deficiencies were found.
- COVERING:** Water staining and some water damage was observed on the ceiling of the front porch area. The homeowner explained that water was dripping from this area when snow was melting on the roof. I recommend further investigation and repair as necessary.

### **FENCES:**

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- FENCE CONDITION:** A 3" x 5" chunk was missing out of the top of a fence post at the rear of the property. Correction will require replacement of the post.

## **EXTERIOR**

**SYSTEM DESCRIPTION:** The exterior components of a building work together to provide a weathertight skin and provide protection against intruders. Good exterior systems are attractive, durable and require little maintenance.

**INSPECTION DESCRIPTION:** Our visual examination of the exterior of the building looks at wall surfaces, flashings, trim, paint & finishes, eaves, soffits & fascia, decks, balconies, doors, windows, plumbing, electrical and foundation walls. These items are inspected for proper function, excessive or unusual wear and general state of repair. Since windows and doors are common to both the exterior and interior of the building and we operate them during the interior inspection, we report on these items in the "Interior" sections. Electrical meters and panels are discussed in the "Electrical" section. Gutters and downspouts are discussed in the "Roofing" section.

**LIMITATIONS:** Areas hidden from view by stored items, deck systems or landscaping can not be judged and are not a part of this inspection. Testing of the lawn sprinkler system is beyond the scope of this inspection.

**NOTES AND RECOMMENDATIONS:** Exterior components are often the most neglected part of the building. Water entering the exterior walls, especially around windows and doors, can cause extensive damage. A regular maintenance regiment of examining the exterior components and re-caulking possible water entrances along with re-painting and re-finishing will extend the life of your exterior system.

### **SIDING:**

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**MATERIAL:** Fiber cement siding is a modern siding material composed mainly of cement and cellulose/wood fibers. This siding material can have a smooth, simulated wood grain or a simulated stucco texture. Fiber cement is considered to have a 50 year plus life expectancy. Its high durability, wearability and non combustible attributes make it a desired siding material. Caulking of the butt joints is normally optional. Although the products is brittle and can crack and chip, it can be repaired with cement patching compound and re-painted. Manufacturers claim that it holds paint very well for a span of approximately 7 to 15 years. Additional information on type of siding material can be found at [www.jameshardie.com](http://www.jameshardie.com)

**FIBER CEMENT SIDING:** The stone is a man-made product made to look like natural stone. This is a non-structural material which is commonly referred to as Cultured Stone.

The following deficiencies were observed on the fiber cement siding:

- A 4" x 3" broken section was observed on the siding above the



- basement rear door.
- A 3" long crack was observed at the bottom corner of the window at the rear right of the house.
- A 4" long crack was observed at the bottom corner of the window at the right side of the house.

Proper repair will require replacement of the siding boards in these areas.

**PAINT AND FINISHES:**

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**CONDITION:** The exterior finishes were observed to be in good general condition.

**DECK(S):**

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**CONDITION:** The deck was observed to be properly constructed, structurally sound and in good general condition . No significant deficiencies were observed.

The wood deck railings and stair stringers do not appear to be sealed. Many builders do not seal the wood on decks. I recommend that this wood be sealed to protect the wood and maximize its life.

**RAILINGS** The railings appear to be properly installed and are in good condition.

**DECK STAIRS:** The deck stairs appear to be properly constructed and are in good condition.

**PLUMBING:**

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**GAS METER LOCATION:** Outside at the right side towards the front of the house. The main gas supply shutoff valve is located on the vertical pipe between the ground and the meter. This valve should be turned 90 degrees (either way) in order to shut off the gas. A wrench is required to turn the shut off valve.

**METER CONDITION:** The gas meter was observed to be in good condition. I detected no odor of natural gas at the meter and at any of the exposed gas piping.

**FAUCETS:** A thin stream of water was coming out of the hose bib (faucet) at the rear of the house when the handle was in the "off" position. This is a waste of water. I recommend immediate repair.

**ELECTRICAL:**

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**GFCI OUTLETS:** GFCI (ground fault circuit interrupter) protection is installed to protect the outdoor electrical outlets where this type of protection is presently required. I recommend testing these devices on a monthly basis. (See GFCI explanation in the electrical section)



## ROOF SYSTEM

**SYSTEM DESCRIPTION:** The roofing system protects the top of the building from rain, snow, sun, wind and intruders. Many different materials and qualities are available for roof coverings in Colorado, and, of course, some work better than others.

**INSPECTION DESCRIPTION:** Our visual examination of the roof includes the roof material itself, the underlayment that the roof is attached to (seen from the attic), roof flashings, the gutter and downspout system, the roof ventilation system, any penetrations through the roof surface (vent pipes, skylights...), and chimneys. We try to walk on roofs to see these systems up close, but often because of weather, steepness, potential damage to the roofing material or safety, we view the roof from the edge and/or with binoculars. We examine the roof for damage, leaks and conditions that suggest a limited remaining life.

**LIMITATIONS:** Roofs can look wonderful and still leak. Roofs can be old and worn and not leak at all. Roofs may leak only in certain conditions when the wind is blowing from a certain direction in a heavy, prolonged rain. Since these conditions are rarely found when the inspection is being performed, we look for clues that a roof is not performing its job, but we cannot be conclusive. We cannot and do not offer an opinion or warranty as to whether the roof leaks or may be subject to future leakage. Roofing life expectancies can vary depending on several factors. Any estimates of remaining life are approximations only.

**RECOMMENDATIONS:** Roofs in Colorado see a variety of weather conditions. To maximize the life of the roof, we recommend that you follow a regular maintenance program by either following the manufacturer's recommendations, or having a professional roofer service the roof once every 1-2 years.

### ROOF COVERING:

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**ROOF ACCESS:** Approximately 15% of the roof was covered with snow and could not be inspected. I inspected the roof by walking on the dry roof surface and observing it from the ground.

**ESTIMATED REMAINING LIFE:** At least 20 years based on the current condition and typical life guarantee of this type of material by the manufacturer.

**COMPOSITION ROOF:** Composition roof coverings are the most popular roof covering used in this area. There are various types and qualities of composition shingles. The lightest weight composition shingles used today have a life expectancy of approximately 12 to 15 years. Heavier composition shingles can have life expectancies of 15-25-40 years or more.

Composition shingle roofs are relatively maintenance free as long as a few precautions are taken and any local damage is repaired before getting worse. Trees touching roofs and leaves sitting on roofs trapping water beneath are two factors that will wear out a roof very quickly. Sunlight and wind can also damage a roof. It is recommended to inspect your roof at least once a year by walking on it or from the ground to see if any shingles are damaged or worn and have these areas repaired by a qualified roofer.

In most Denver metro counties it is allowed to put up to 2 layers of asphalt roofing on before prior layers have to be removed. Every time a layer is added it adds weight to the roofing structure, makes for hotter attics and reduces the life of the roofing material. It is always recommended to remove the old roofing material before adding a new one.



**CONDITION:** The shingle surface appears to have been properly installed and was observed to be in good overall condition. No significant deficiencies were observed.

**GUTTERS & DOWNSPOUTS:**

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**CONDITION:** The gutter and downspout system was observed to be properly installed and in good general condition. I recommend that the gutters be inspected on a regular basis and cleaned as necessary as part of regular home maintenance.

## ATTIC

**SYSTEM DESCRIPTION:** Attics are created because of the need to slope the roofing surface and create a structure for the ceiling of the living space below. It is generally accepted that the attic is part of the outdoor area and the insulation and interior of the home begin at the attic floor. The goal is to keep the temperature in the attic at or close to the outdoor temperature. Ventilation and insulation are key elements of the attic system and work together to make the living space more comfortable and maximize the life of the roofing materials.

**INSPECTION DESCRIPTION:** Our visual examination of the attic includes identifying the entry location(s), entering the attic, examining the roof framing and sheathing, examining the ventilation system, examining and determining the type and amount of insulation, looking for any past or present signs of water staining or damage, and visually examining any other building components in the attic space.

**LIMITATIONS:** Generally the inspector is limited to viewing the attic from the access door. There are usually no walking planks and the ceiling joists or trusses are covered with insulation. Stepping in the wrong location could cause damage to the ceiling.

**NOTES & RECOMMENDATIONS:** Modern building standards in Colorado require a minimum of R-30 insulation for roof and attic space insulation. Generally fiberglass, rock wool or cellulose insulation is used and a 10 inch depth equals R-30. Homes built before 1973 generally do not meet the current insulation standards unless they have been upgraded.

**ATTIC ACCESS & GENERAL OBSERVATIONS:**

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**ATTIC ENTRY LOCATION(S):** Bedroom ceiling.  
**ACCESSIBILITY:** The attic was viewed from the hatch access. The attic was not entered because insulation covered the structural members and there was nothing to walk on without risk of damaging the finished ceiling.

**ATTIC VENTILATION:**

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**VENTILATION:** Ventilation in an attic is an important factor for an added level of comfort in the living area, keeping the attic space dry and prolonging the life of the roof covering. Most experts would agree that "you can never have enough ventilation in the attic space". Attic ventilation in this attic is provided by roof and soffit vents. This is a very good combination of vents and will work as a system to keep the attic space well ventilated and the living space below more comfortable.



**ATTIC INSULATION:**

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- INSULATION TYPE:** Blown-in Fiberglass insulation.
  - INSULATION CONDITION:** In the areas where the attic insulation is visible, the insulation appears to be properly installed and in good condition.
  - DEPTH AND R-FACTOR:** 13" - 16" = R-45.

## **STRUCTURE**

The structure of a home is the skeleton, which includes the foundation system, floors, walls and roof. The structural inspection is performed on the exterior and interior of the home and consists of identification of materials, observation of proper original construction and deficiencies that have occurred since the house was built. Much of the structural inspection is spent identifying cracks and other signs of movement that have resulted from structural deficiencies. Since this is a visual inspection and much of the structure is hidden below the ground and behind the finished walls, floors and ceilings of the house, the structural inspection is limited.

**STRUCTURAL COMPONENTS**

- 
- FOUNDATION:** Poured concrete.
  - ROOF STRUCTURE:** Roof trusses support the roof sheathing and roof covering, transferring loads to the bearing walls. The bottom of the truss supports the finished ceiling. Trusses are usually engineered components assembled in a factory and delivered to the site.
  - WALL STRUCTURE:** Wood stud framing.
  - FLOOR STRUCTURE:** Solid wood floor joists.

**STRUCTURAL CONDITION**

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**OVERALL COMMENTS:** A 5/16" wide x 8" long gap was observed at the wall/ceiling intersection in the kitchen area. Other inconsistencies were also observed on the ceiling. The floor below this area was not perfectly flat as confirmed by placing a steel ball on the floor and watching it roll across the floor. These are indications of structural movement in this area of the house and is significant for a house that is only 1 year old. I recommend further inspection by a licensed structural engineer and repairs made as necessary.

As observed in the sub-floor crawl space, the short metal support posts were not attached at the top plate as is typically required. The top plates were dishing and the wood beam appeared to be crushed at the center of the column. I recommend further inspection by a licensed structural engineer and repairs made as necessary.



## GARAGE

**DESCRIPTION:** Although primarily designed for the storage of automobiles, the garage has a wide variety of uses. If attached to the house, it is important that the garage provide a fire barrier and, by today's standards, be partially sealed to prevent dangerous fumes from entering the home.

**INSPECTION DESCRIPTION:** Our visual examination of the garage includes all automobile and people doors, automatic door opening and closing systems, general structure, floor, walls, ceiling, windows, electrical and plumbing components. We examine the fire resistant factors, the dangerous fume factors and the insulation system.

**LIMITATIONS:** Since, as a general rule, we do not move items during our inspection, any automobiles and storage may conceal defects. Determining the heat resistance rating of firewalls is beyond the scope of this inspection. The garage door opener remote units are not tested. Exterior garage door opener keypads are also not tested. Check with the homeowner regarding the security codes for these items.

**RECOMMENDATIONS:** It is recommended that the garage door opener automatic return safety device(s) be frequently tested to insure proper operation. Current standards for new homes require an invisible light beam at each auto door entrance and a pressure sensor on the door itself each of which if activated, will stop and reverse the direction of the door. These safety features are designed to minimize possible injury to children and also help to prevent vehicle damage. Entrance doors from the garage to the house should be fire rated and have an automatic closure to keep fire and dangerous fumes out of the living area.

**INSPECTION CONDITIONS:** Due to vehicle(s), personal items and/or storage items, I was unable to see much of the garage floor and walls. My comments are based on what I was able to view at the time of the inspection. Hidden conditions may exist.

**FIRE BARRIER:** To prevent the spread of a garage fire and dangerous fumes into the house, standards for new homes require a fire resistant wall (drywall with seams taped) and a solid door with an automatic closer between the garage and the house. The fire resistive barrier between the garage and the house appears to be in good condition including a solid door with an automatic closer.

**AUTO DOOR CONDITION:** The automobile garage doors were operated and appear to be properly installed and in good condition.

**DOOR OPENER:** The garage door openers operated properly to raise and lower the doors including the auto-reverse mechanisms which stopped and reversed the direction of the doors when the invisible sensor beam across the bottom of the doors was interrupted.

**FLOOR CONDITION:** The visible areas of the garage floor appear to be in good condition.

**CEILING CONDITION:** A 3" x 3" hole was observed in the drywall above the large garage door on the garage ceiling.

**GFCI OUTLETS:** GFCI protection is installed in the tested outlets where this type of protection is presently required.

A refrigerator/freezer was observed to be plugged into a GFCI protected outlet. It is possible that the GFCI outlet will trip off without knowing it. If this happens, the refrigerator/freezer could thaw and ruin the contents. I recommend plugging the refrigerator/freezer into a non-GFCI protected outlet.



## BASEMENT / CRAWL SPACE

**DESCRIPTION:** The basement /crawl space areas include spaces below the main "ground" level of the house. Basements are common in Colorado because of the freezing temperatures require that the foundation footings be buried well beneath the surface of the soil when the house is constructed. When doing this, it is not much more difficult (or expensive) to remove the dirt within the foundation area and build a basement. Some houses are built directly on a slab of cement (slab on grade) and do not have a basement or a crawl space.

**INSPECTION DESCRIPTION:** Our visual examination of unfinished basements and/or crawl spaces includes concrete slab floors, foundation walls, columns, beams, the floor structure above, insulation, moisture conditions, sump pits, plumbing and electrical. Our visual examination of finished basements includes any and all of the above items if they are visible. Specific finished interior observations are reported in the "Interior General, Rooms, Bedrooms and Bathrooms" sections.

**LIMITATIONS:** Basements and crawl spaces are typically used for storage and these items can often limit the viewing area of our inspection. Some crawl spaces may not be entered due to wet conditions, inaccessibility, too short an area and/or other hazardous conditions.

**RECOMMENDATIONS:** A common complaint among homeowners is the musty smell, dampness and water damage that are signs of a wet basement or crawl space. 98% of all basements will leak at some point during their life. While structural damage is rare, water in the basement can be a major inconvenience. In most cases it is caused by surface water directly adjacent to the building soaking into the ground and moving through the basement walls. Keeping water away by sloping the adjacent ground away from the house and using extensions on the bottom of downspouts is the best way to insure a dry basement.

### BASEMENT DESCRIPTION:

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**TYPE:** This is a full size basement that is the same size as the main floor of the house.

**FINISH STATUS:** In process of being finished.

### BASEMENT OBSERVATIONS:

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**INSPECTION CONDITIONS:** Due to personal and storage items, I was unable to see some of the basement floor and walls. My comments are based on what I was able to view at the time of the inspection. Hidden conditions may exist.

**STAIRWAY:** The stairs and handrail leading into the basement were used during the inspection and found to be in good condition.

**FLOOR:** The visible areas of the structural wood basement floor was observed to be in good condition.

**FLOOR DRAINAGE:** One basement floor drain was observed. The drain was observed to be in working condition.

**WALLS:** The basement exterior walls are concealed by insulation. No outward indications of problems were noted, but reportable conditions could be concealed in this situation. Further investigation is optional and would require removing the insulation.



## **STRUCTURAL FLOOR CRAWL SPACE:**

### **DESCRIPTION:**

The Below-Grade Subfloor area is the crawl space located under the structural wood basement floor. The purpose of this space is to provide space between the potentially moving soil and the floor. This space also provides limited access to plumbing waste pipe systems.

Moisture control in this crawl space is an important part of the subfloor system. Excessive moisture in this crawl space area can lead to flooding and mold growth, both serious and expensive problems to repair. The building science related to subfloor crawl spaces continues to evolve as these floor systems are becoming more prevalent and problems with installed systems have surfaced, however, building codes are slow to recognize building science recommendations which has resulted in systems that were compliant to building codes at the time of construction but not to current recommended standards by building scientists. Current good building practice guidelines by building scientists in Metro denver include the following recommendations for new home construction and homeowner maintenance:

- Build and maintain landscaping, gutter and irrigation systems to properly drain surface water at least 5 feet away from the building. This includes recommendations not to overwater the landscaping.
- The installation of a perimeter drain system to capture drainage water around the foundation and direct it into a sump pit system. A sump pump should be installed and drained to the exterior at least 5 feet away from the house.
- The soil in the crawlspace should be graded towards the sump pit or to the perimeter drain pipe system to avoid any standing water in the area.
- All construction debris be should be removed from the crawlspace.
- A thick Polyethylene vapor retarder should be installed over the soil in the crawl space. The retarder should be sealed at seams and should extend and be sealed up the concrete walls and on the footings around posts.
- A properly engineered, fan assisted vent system should be installed to move indoor or outdoor air through the crawlspace.
- Metal joists be installed to prevent the opportunity of mold growth on the floor structure.

Depending on the moisture levels in the crawlspace, some or all of the above features may needed to be added to existing crawl spaces to control the moisture.

As a homeowner, regular inspection of the crawl space are and the sump and pump system is critical. I recommend inspecting these areas every month for standing water or other moisture problems.

### **ACCESS:**

I entered the crawl space at both hatch doors and was able to view the space with a strong flashlight. Due to the low clearance, I did not crawl in the entire space.

### **FLOOR STRUCTURE:**

A structural wood floor has been installed in this basement. The basement floor is a framed structure hung on the foundation walls and supported on beams. This type of floor system is found in newer structures and are installed to prevent floor movement caused by expansive soils. Typically structural floors are more expensive for the builder to install. A "Below Grade Sub-Floor" is the space between the soil and the subfloor.



**VAPOR BARRIER:** A high quality visqueen vapor barrier was installed in the subfloor crawl space. The vapor barrier was observed to be sealed at the seams and around the perimeter wall. This is a critical component to keep this area dry and mold free. The vapor barrier was observed to be properly installed and in good overall condition.

**SUMP PIT AND PUMP:** Two sump pits were observed in the structural floor crawl space. The purpose of this system is to capture the drainage water from the foundation perimeter "french" drain system. The sump pit is your "window" to see what is happening with the drainage around the house. Frequent inspection of the sump pit to look for inconsistencies in the amount of water in the pit is recommended. More water might indicate a drainage problem around the house.

A significant amount of water was observed in the rear sump pit at the time of the inspection. This water was above the level of the perimeter drain pipe. This is typically an indication that a sump pump system should be installed.

A dead mouse was floating in the water of the rear sump pit. The water in this pit is darkened and may be a health hazard. I recommend that the water be professionally removed and the sump pit cleaned.

The front sump pit was dry at the time of the inspection.

**VENTILATION:** One intake vent pipe, one exhaust vent pipe an in-line fan and and a fan control were observed in the basement and crawl space area. The system was observed to be properly installed and was operating at the time of the inspection. The design and engineering of this system should be based on the size of the crawl space and several other factors. Calculating the adequacy of this system is beyond the scope of the home inspection. Typically crawl space areas over 1,400 square feet require 2 systems. For further information, I recommend the services of an Environmental Engineer.

**OBSERVATIONS:** Small gray, black and white spots were observed on many of the wood joists in the right rear area of the sub-floor crawl space. This material appears to be mold. Testing to confirm if this is truly mold is beyond the scope of this inspection. Spores from the mold can enter the living area and, depending on the type of mold, may adversely affect the heath of the people living in the house.

I recommend further inspection by an environmental engineer or industrial hygienist and cleaning and repairs performed as recommended.



## HEATING

**SYSTEM DESCRIPTION:** Heating systems generate bundles of heat and distribute them to the various parts of the house. Natural gas and electricity are the typical energy sources used. The heat is often generated centrally, in a furnace or boiler, and is distributed by using air through duct systems or water through pipes. Since staying warm in winter is so popular here in Colorado, there are many different types, brands, models, quality levels and energy efficiency levels of heating systems.

**INSPECTION DESCRIPTION:** Our visual examination of the heating systems includes identifying the type, brand, model, capacity, age and fuel of the system(s). It includes operating of the unit using the thermostat and visually inspecting the ignition, burners, heat exchanger, blower fan, combustion air, venting, filter and ducting or piping system. We test for fuel leaks and excess carbon monoxide levels. Humidifiers are observed but not disassembled.

**HEAT EXCHANGERS:** The heat exchanger is the most critical part of most heating units. It separates the flame and exhaust gasses from the air in the house. Heat exchangers can fail in one of two ways - it rusts through or it cracks. With either condition, the exhaust gasses can escape through the opening and get into the air supply to the house. Potentially deadly situations may occur when 2 things happen together; 1. The fuel (natural gas) is not being burned efficiently and is releasing CO carbon monoxide, and 2. The exhaust gasses enter the home through an opening in the heat exchanger. When this happens, a new heat exchanger is needed. Since the heat exchanger is the costliest part of a heating unit, in most situations the entire unit is replaced. Heat exchangers have an average life expectancy of 20-30 years.

During an industry standard home inspection examination of a heat exchanger, only 5-15% of the heat exchanger is visible using a flashlight and mirror. In some high efficiency units, the heat exchanger is not visible at all. To examine a heat exchanger in more detail, the heating unit must be disassembled. This is a job for a heating system specialist and is beyond the scope of a standard home inspection.

**CARBON MONOXIDE TESTING:** We do perform a non-destructive CO carbon monoxide test on furnaces and water heaters to identify high levels of this deadly gas. However, newer mid and high efficiency units do not allow access of our testing probe directly into the exhaust gasses.

**LIMITATIONS:** The inspector does not light pilot lights. Safety devices are not tested by the inspector. Thermostats are not checked for calibration or timed functions. Adequacy, efficiency or the even distribution of air throughout a building cannot be addressed by a visual inspection. Electronic air cleaners, humidifiers and dehumidifiers are beyond the scope of this inspection. Have these systems evaluated by a qualified individual. Subjective judgment of system capacity is not a part of the inspection. Asbestos materials have been commonly used in older heating systems. Determining the presence of asbestos can ONLY be preformed by laboratory testing and is beyond the scope of this inspection.

**RECOMMENDATIONS:** Many fuel systems on natural gas burning furnaces are delivered from the manufacturer adjusted to work at sea level and are not re-adjusted during installation. Here in the Mile High City it is very common for these appliance to be burning more fuel than is necessary for optimal efficiency. It is also common for furnaces to go many years without being properly serviced. We highly recommend that you have the furnace cleaned, serviced and adjusted prior to, or soon after, moving in. When arranging for service, make sure that the service company will remove the burners, remove the blower, do a thorough inspection of the heat exchanger, and adjust the gas valve for our altitude as part of their service. With the increased price of natural gas lately, often you will pay for the servicing within the first one to two winters of use.



**HEATING SYSTEM DESCRIPTION:**

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**SYSTEM TYPE:** Mid efficiency forced air furnace.  
**BRAND:** Bryant.  
**CAPACITY:** 132,000 BTU's.  
**AGE:** 1 year new based on the date code in the serial number.  
**FUEL TYPE:** Natural Gas.

**FURNACE:**

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**GAS SUPPLY:** The gas piping installation included a 90 degree shutoff valve for emergency use. The valve was not operated.

**IGNITION:** The heating unit is ignited with an electronic ignition.

**BURNERS:** The burners were observed and found to be burning clean with a consistent flame pattern.

**HEAT EXCHANGER:** The type of heat exchanger in this furnace is not easily accessible for a visual inspection. The heat exchanger is a series of tubing in which the burner flames are drawn through the tubing with the assistance of an inducer vent fan. Testing the heat exchanger for leaks is beyond the scope of this inspection. Some heating contractors have trained technicians, equipped with specialized equipment to perform a reliable test for this type of heat exchanger. The test is performed by filling the heat exchanger with a gas and a sensor is placed on the outside of the heat exchanger. The sensor will respond if the gas is leaking through the chamber. If this type of test is desired, a qualified heating contractor should be retained.

**BLOWER FAN:** The blower was observed to be in good condition and operated properly.

**COMBUSTION AIR:** Combustion air provides the oxygen for fuel burning appliances. Adequate ventilation around all fuel burning appliances is vital for their safe operation. The standards for the source of combustion has changed throughout the years. Current standards generally require that combustion air is provided from the exterior of the house - usually ducted to terminate in the area near the heating appliances. Older standards allowed for the combustion air to be provided from the interior, provided that there is enough volume or available air space for adequate and safe combustion.

**VENTING:** The combustion air for this heating unit is being supplied by sheet metal ducts bringing air from the exterior and terminating in the area of the heating unit. The heating system vent is properly installed and was observed to be in good condition and operating properly.

**AIR FILTER:** The filter was found to be installed incorrectly and was not filtering the air as intended. I was able to install the filter in the proper orientation. Please make a note of the proper position of the filter and install all new filters in this orientation.

**FILTER SIZE:** 20 x 25 x 1 inch.

**THERMOSTAT:** The thermostat appears to be properly installed and the unit responded to basic controls. This is a programmable device with many options for setback settings, timed events, etc. No attempt was made to test all functions of the thermostat.

**PERFORMANCE:** The heating system was turned on using normal controls and it was found to be operational.

**GENERAL CONDITION:** The furnace compartment, blower, filter and the bottom of the heat exchanger were dusty, probably due to running the system while constructing the house



and basement. If the furnace is this dirty, the AC coil (not visible) is likely to be coated with dust as well. It is proper practice to have a furnace and AC unit cleaned and tuned every 1-3 years. Although the furnace and AC units did respond to normal operating controls, I recommend that the systems be inspected, cleaned, and tuned as necessary by a professional HVAC contractor after the basement construction is completed. Consideration should also be given to having the ducts cleaned.

### **GAS FIREPLACE:**

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**CONDITION:** The direct vent gas fireplace was turned on with the normal operating controls and found to be functioning properly.

As with a fuel burning furnace, it is good practice to have gas fireplaces serviced every 3 years. When the time comes, I recommend contacting a gas fireplace service specialist.

## **COOLING**

**SYSTEM DESCRIPTION:** This section pertains to Central Air Conditioning systems, permanently mounted Window and Wall mounted non-central systems, Evaporative Cooler (Swamp Cooler) systems and Heat Pump systems.

**INSPECTION DESCRIPTION:** Our visual examination of Central Air Conditioning systems and Heat Pump systems includes identifying the brand, age, capacity and reporting on the condition of the Condenser unit, power source, refrigerant lines, condensation drain system and general system condition. We operate the system when the temperature is above 65 degrees with the normal operating controls for the unit.

We visually examine only permanently mounted window and wall AC units by operating the unit and reporting on its performance and condition.

**LIMITATIONS:** Central air conditioning units are complicated systems with many brands and models that require specialized tools and training to thoroughly inspect and test them properly. This type of testing is beyond the scope of a standard building inspection.

### **AIR CONDITIONING INFORMATION:**

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**TYPE:** Central air conditioning. This system distributes the cool air through the same ducting system as the heating system. The system consists of 2 main components, the condensing unit is located outside the house and the evaporator unit is built into the supply air plenum just above the furnace. Two refrigerant lines (pipes), one insulated and one uninsulated, run between the 2 units. Simply put, this system pulls the heat out of the inside of the house and dumps it outside.

**MANUFACTURER:** Bryant.

**AGE:** 1 year new based on the date code in the serial number.

**CAPACITY:** 4 Ton.

**LIFE EXPECTANCY:** A typical life expectancy of a central air conditioning unit here in Colorado is about 12-20 years. It is not unusual to see properly maintained units that are 25 to 35 years old.



## **AIR CONDITIONING SYSTEM:**

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- POWER SOURCE:** An electrical disconnect providing power to the condensing unit was present near and in sight of the unit.
- CONDENSING UNIT:** The outdoor "Condensing unit" was observed to be properly installed and in good overall condition. No significant deficiencies were observed.
- VISUAL CONDITION:** The air conditioning unit system was observed to be properly installed and in good overall condition.
- SYSTEM OPERATION:** Operating an air conditioning system in cold weather can damage the compressor. The outside air temperature was below 65 degrees and determined to be too low for the safe operation of the equipment. I recommend inspection of the system with the return of warmer weather.

### **CENTRAL A.C. MAINTENANCE TIPS:**

1. It is important for the outside condenser unit to sit level. Monitor this unit for levelness and re-level if off by more than 5 degrees.
2. Never run the AC system when the temperature is at or below 65 degrees. This may do permanent damage to the compressor.
3. Keep shrubbery or vegetation several feet away from the condenser unit for proper cooling.
4. Use care not to damage the soft cooling fins on the exterior of the condenser unit.
5. It is not necessary to cover the condenser unit in the winter. Operating the AC system with a cover installed can permanently damage the compressor.
6. Monitor the insulation on the larger refrigerant line and replace as needed.
7. Keep the evaporator coil unit within the furnace plenum clean by replacing or cleaning the furnace filter frequently - both in the heating and cooling seasons.
8. A properly operating AC system should be cool the air 15-25 degrees. This can be measured with a thermometer at the return and supply air ducts.
9. Have the entire central air conditioning system inspected and serviced every 2-3 years by a licensed HVAC contractor.

## **ELECTRICAL SYSTEM**

**SYSTEM DESCRIPTION:** The Electrical System brings electricity to the building and distributes it throughout the home. It consists of the cables bringing the electricity from the utility, a means of splitting this electricity into "branch circuits" and delivering it into the areas of the home, a system to enable lights and fixtures to be plugged into the system, and a safety system to prevent or minimize electrical shock to humans.

**INSPECTION DESCRIPTION:** Our inspection consists of a visual examination of the "service drop" from the utility to the house, identifying the voltage and amperage capacity to the house, a visual examination of the service panel system with the cover removed, identification of the main electrical shutoff system, an examination of any sub-panels, a visual examination of the grounding system, testing of a representative number (at least 1 per room) of electrical outlets with a testing device to confirm that the outlets are grounded and wired properly and the operation of light switches and fixed electrical appliances to confirm that they have electricity to them. We observe and test GFCI outlets.

**LIMITATIONS:** Virtually all branch circuit wiring is enclosed in walls and covered junction boxes and is not visible during a home inspection. Removal of outlet, switch or junction box covers is beyond the scope of this inspection. Testing of the main electrical shutoff, breaker switches and fuses is beyond the scope of this inspection. Furnishings and storage may limit us from testing electrical outlets. Inspection of low voltage systems, telephone wiring, intercoms, alarm systems, TV cable, timers are beyond the scope of this inspection.



**RECOMMENDATIONS:** In case of emergency, it is a good idea to make sure family members are familiar with where and how to shut off the electrical power to the house. Also, any electrical repairs should be approached with caution. The power to the branch circuit or the entire house should be turned off prior to beginning any repair efforts, no matter how trivial the repair may seem.

**DESCRIPTIVE INFORMATION:**

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**ENTRANCE:** The electricity is supplied to this house with wires buried underground.  
**VOLTAGE:** 120/240 volts. This is standard for modern homes.  
**AMPERAGE** 200 amps.

**ELECTRIC METER AND MAIN ELECTRICAL PANEL:**

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**MAIN PANEL & METER LOCATION:** Outside at the left side of the house.  
**METER CONDITION:** The meter appeared to be working and in good condition.  
**MAIN SHUT-OFF OPERATION:** All electrical power to the house can be shut off by flipping a single main breaker switch inside the main electrical panel.

**MAIN ELECTRICAL PANEL:**

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**SERVICE CAPACITY OBSERVATIONS:** The service capacity is normal for a house this size and age, and appears adequate for the present demand and minor additional loads.  
**GROUNDING:** The system and equipment grounding appears to be correct.  
**MAIN ELECTRICAL PANEL:** The internal cover was removed from the main electrical panel for inspection. The breakers and wiring inside the panel were observed to be properly installed and in good condition. No deficiencies were observed.

**BRANCH CIRCUITRY**

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**WIRE MATERIAL:** All copper wiring was observed. The branch circuit wiring, as observed from the main panel, was found to be properly installed and in good condition.

**ELECTRICAL OUTLETS:**

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**CONDITION:** A representative sampling of switches and outlets were tested. The tested outlets and switches throughout the house were found to be operational and wired correctly.

**GFCI (Ground Fault Circuit Interrupter)**

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**GFCI CONDITION:** GFCI protection is installed in the tested outlets where this type of protection is presently required.

GFCI's: Ground Fault Circuit Interrupters (GFCI's) are a potential life saving device that that can very quickly cut off the flow of electricity in the event of a shock situation. Modern standards require GFCI's for water hazard areas. Ground fault protection is currently required for receptacles in areas such as the exterior of the house, garage, pool & spa, basement, bathrooms and all receptacles in the kitchen area. Ground fault protection can be provided by a ground fault circuit breaker (at the electrical panel) or by a ground fault receptacle.



One ground fault receptacle can protect other receptacles which are connected to it. If there is no power in one of the receptacles in the area where ground fault protection is required, ground fault receptacles in other locations should be checked and reset if necessary. It is recommended that GFCI receptacles be tested, by pushing the "test" and "reset" buttons on the receptacle, on a monthly basis.

## PLUMBING

**SYSTEM DESCRIPTION:** The plumbing system consists of the "supply side" which provides water for drinking, washing, cooking and irrigation, and the "waste side" which gets rid of used water and waste. In this section we also include the water heating equipment.

**INSPECTION DESCRIPTION:** Our visual examination of the plumbing system includes identifying the water supply source, identifying the waste disposal system, identifying the main supply shut-off, identifying the supply and waste pipe materials, checking the static water pressure, viewing the venting system and looking for any problem areas with the system. We visually examine the water heater(s) for its type, size, age, fuel burned, burner flame appearance, venting, connections, identification of safety devices, availability of combustions air and any accessories it may have. We operate the plumbing system and water heater with normal operating faucets and controls, we do not test shut-off valves and safety devices.

**LIMITATIONS:** Most of the supply and waste plumbing pipes are hidden inside the walls, ceilings and floors of the building and are not visible during the inspection. Leakage, obstructions or other problems may exist but are hidden and impossible to see. Instead, we look for slow drains that may indicate clogged pipes and water damage to finish surfaces that may indicate leaking pipes. Examining the main waste pipe from the house to the sewer is beyond the scope of this inspection. This is a very expensive pipe to fix or replace and we suggest talking to the current owner to see if there is any history of problems. Services are available to inspect the inside of this pipe with a video "snake" camera if needed. Testing for water quality including radon-in-water and lead testing is beyond the scope of this inspection.

### PLUMBING INFORMATION:

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<b>WATER SUPPLY:</b>	<b>PUBLIC WATER SUPPLY:</b> The home has a public water supply pipe leading from the street main to the building plumbing system. Be advised that the buried pipe running from the street line to the home is the responsibility of the homeowner.
<b>WASTE DISPOSAL:</b>	<b>PUBLIC SEWER SYSTEM:</b> Waste from the home plumbing system flows by gravity into a municipal sewer system normally located under the street in front of the home. Be advised that the buried pipe running from the street line to the home is the responsibility of the homeowner.



**SUPPLY PLUMBING:**

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- MAIN WATER SHUT-OFF:** The main water supply shut-off valve is located in the basement at the front wall of the house. Testing the operation of this valve is not within the scope of this inspection. Testing a valve which has not been operated regularly often results in leaking around the handle. I recommend operation of the valve from time to time to keep it functional and maximize its useful life.
- MAIN WATER SUPPLY PIPE:** A 1" diameter copper water supply pipe was observed. This is the largest pipe size commonly used for residential service.
- WATER PRESSURE:** between 45 to 50 psi.
- WATER FLOW:** The water pressure is in the range which is considered normal, between 40 and 80 PSI. Functional flow of water at the various fixtures was judged to be adequate. Several fixtures were operated simultaneously. Minor changes in flow when other fixtures are turned on or turned off is considered normal.
- WATER SUPPLY PIPE MATERIAL:** The visible water supply piping material in this house was observed to be modern copper piping.
- WATER SUPPLY CONDITION:** The exposed and accessible supply piping appears to be properly installed and in good condition.

**WASTE PLUMBING:**

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- MAIN CLEAN-OUT LOCATION:** The main drain waste line "clean-out" is used by a plumber to clean any obstructions located in the main waste pipe extending from the house to the city sewer pipe (or septic tank). In this house the clean-out is located on the floor of the basement near the front of the house.
- DRAIN WASTE PIPE MATERIAL:** Plastic. This is generally considered to be the best material currently available for this use.
- DRAIN WASTE LINE CONDITION:** The visible drain piping appears to be properly installed and in good condition.

**WATER HEATER:**

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- FUEL TYPE:** Natural gas.
- SIZE:** Two 40 gallon water heaters are installed in series - the water travels through both water heaters.
- CONDITION:** The water heaters were observed to be operational, and the water at the plumbing fixtures was hot.
- GAS LINE NOTES:** The water heater has a standing pilot controlled by a thermocouple which ensures that the pilot gas valve will close if the pilot light is extinguished. This system appears to be in serviceable condition.
- BURNER:** The burners were observed and found to be burning clean with a consistent flame pattern.
- VENTING:** The water heater vent is properly installed and appears to be in good condition.
- WATER CONNECTIONS:** The hot and cold water connections are properly installed. A proper shut-off valve was observed on the cold water supply pipe.



- TPR VALVE:** The water heater installation included a temperature and pressure relief valve. This device is an important safety device and should not be altered or tampered with. No adverse conditions were observed. The device was not tested because there is a risk that it will not reseal properly if it has not been tested on a regular basis. However, regular testing (a few times a year) by the homeowner is recommended.
- COMBUSTION AIR:** It appears that adequate combustion air is available for the water heater.

## INTERIOR - GENERAL

*DESCRIPTION:* This section reports on the common components and general observations of the interior of the home. We will focus on individual rooms in the Kitchen, Laundry, Common Rooms, Bedrooms and Bathrooms sections to follow.

*INSPECTION DESCRIPTION:* Our visual examination of the Interior of the home includes floors, walls, ceilings, doors, windows, skylights, stairs & handrails, fireplaces, smoke detectors and fans. We check for functionality, general condition, excessive wear and visual defects. As a general rule, cosmetic deficiencies are considered normal wear and tear and are not reported.

*SMOKE DETECTORS:* Our inspection of smoke detectors includes making sure that they are present and in the proper locations. **We do not test smoke detectors.** Current standards require at least one smoke detector on each level and one in every bedroom. We recommend that you replace all smoke detector batteries and test all the units shortly after you have moved into the house and every year following.

*LIMITATIONS:* As a general rule, home inspectors do not move furniture, pull up carpet or other floor coverings, or do any kind of destructive testing (if we move one thing, we are expected to move everything...). Therefore, the condition of floors and walls under and behind any furniture or coverings cannot be judged. Damage to walls, stains on floors and the like may be not visible to the inspector.

*RECOMMENDATIONS:* Since many defects may be covered by furniture and not visible to the inspector, we highly recommend a thorough examination of the home after the furniture is moved out and prior to closing. We have included a "Pre-Closing Inspection Form" for your assistance during your final walk through.

*FIRE EXTINGUISHERS:* We highly recommend that all houses have at least 2 portable fire extinguishers installed, one near the kitchen and one in the garage near the entrance to the house. A third extinguisher, located near the bottom of the stairs in the basement, would be a smart idea as well. Some insurance policies offer discounts if fire extinguishers are installed.

*CARBON MONOXIDE:* Carbon Monoxide (CO) is a colorless, odorless gas that can be fatal to humans. This gas can come from Automobiles or any fuel burning appliance in the home. Modern technology has now made it inexpensive and easy to install (CO) Carbon Monoxide detectors. These detectors offer continuous measurement of CO levels and will sound an alarm if high levels are reached. Digital display models (recommended) can now be purchased for less than \$50. I recommend installing a CO continuous detector as a safety upgrade for you and your family.



**DOORS:**

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- MAIN ENTRY DOOR:** The front door was found to be correctly installed, working properly and in good overall condition.
- SLIDING GLASS DOORS:** The sliding door operates and latches properly and is in good condition.
- INTERIOR DOORS:** The interior doors appear to be properly installed and generally in good condition.

**WINDOWS:**

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- FRAME MATERIAL:** Vinyl.
- WINDOW CONDITION:** The windows tested appear to be properly installed and in good condition. I operated a representative sample of the windows, but did not open, close, and latch every window. Please see the "Rooms" section of this report to see any individual exceptions.
- WINDOW GLASS:** Double pane insulated glass.

**STAIRS & HANDRAILS:**

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- CONDITION:** The stairs were used several times during the inspection. The various components appear to be properly installed and no deficiencies were noted during use.

**SMOKE DETECTORS:**

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- COMMENTS:** At least one smoke detector was observed on each floor of the house and one in each bedroom. This meets the current requirements for smoke detectors in homes. Testing of the smoke detectors is beyond the scope of this inspection. I recommend changing the batteries and testing all smoke detectors after taking possession of the property.

## **KITCHEN**

**INSPECTION DESCRIPTION:** Our visual inspection of the kitchen area includes the sink, counters, cabinets, walls, ceilings, floors, windows, doors, plumbing, lighting, electrical and pantry. We visually examine all built-in appliances and confirm the function of the appliances by using the normal operating controls.

**LIMITATIONS:** We do not examine or report on any non-built-in appliances such as free-standing refrigerators and countertop microwave ovens. Although we normally run the dishwasher through an entire wash cycle, no opinion is offered as to the adequacy of dishwasher operation. The self or continuous cleaning operations, cooking functions, clocks, timing devices, lights and thermostat accuracy of ovens and ranges are not tested during this inspection.



### **KITCHEN - GENERAL:**

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**OVERALL CONDITION:** The kitchen was observed to be in good general condition.

### **APPLIANCES:**

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**GENERAL COMMENT:** As agreed with the owner, all of the appliances were not tested.

**DISHWASHER:** The dishwasher was not securely attached to the underside of the countertop at the top front of the dishwasher. This will allow the dishwasher to tip forward if the door is open and dishes are being loaded. I recommend it be attached according to the manufacturer's installation instructions.

### **PLUMBING:**

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**FAUCET:** The faucet was operated and appeared to be functioning properly.

**DRAIN:** The drain assembly under the kitchen sink was tested and observed to be in good condition with no deficiencies noted.

**DISHWASHER AIR GAP:** An "air gap" is required in the drain hose running from the dishwasher to the plumbing waste system. The purpose of the air gap is to eliminate the possibility of a "cross connection" where waste water could be drawn back into the supply water system. A separate stand pipe is installed in the plumbing under the sink to serve as an air gap for the dishwasher drain line. This is a proper installation in accordance with modern standards.

## **LAUNDRY AREA**

**INSPECTION DESCRIPTION:** Our visual examination of the laundry area includes the room finishes and function, and the identification and examination of the appliance energy sources, plumbing and venting systems.

**LIMITATIONS:** Washing machines and dryers are not moved, tested or inspected and the condition of any walls or flooring hidden by them cannot be judged. Drain lines and water supply valves serving washing machines are not operated.

**NOTES & RECOMMENDATIONS:** We highly recommend using stainless steel wire-mesh-reinforced washing machine hookup hoses. These hoses are much stronger and last longer than the regular hoses. Although slightly more expensive, this is inexpensive insurance to avoid a costly flood situation.

Dryers can be 240 volt electric or natural gas appliances. If you are moving a dryer into the house, make sure it matches the energy source that is available. In many cases, gas lines can be extended to the laundry room if necessary. Electric dryer standards recently changed from a 3 prong plug/receptacle to a 4 prong plug/receptacle. If the plug on your dryer doesn't match the new house receptacle, you have 2 options; 1. Have an electrician upgrade the receptacle to a 4 prong type, or 2. Purchase a 3 or 4 prong plug-and-cord kit for less than \$20 at the hardware store and change the cord and plug as you are moving the dryer. This is a fairly easy retrofit and will not affect the performance of the dryer.



**LAUNDRY:**

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**CONDITION:** The laundry room area appeared to be in good general condition.

**WASHER AND DRYER:**

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**WASHER:** The visible portions of the supply and drain plumbing for the washing machine were observed to be installed correctly and in good condition. The washing machine was not tested.

**DRYER:** A 240 volt electrical outlet was observed for the dryer. This outlet requires a 4 prong dryer plug.

**DRYER VENT:** A dryer vent is provided and the visible parts appear to be in good condition.

## COMMON ROOMS:

**GENERAL DESCRIPTION:** In this section we inspect and report on the common living spaces in the house like family rooms, living rooms, dining rooms... We include finished basement rooms but report on kitchens and laundry rooms in their own sections.

**INSPECTION DESCRIPTION:** Our 10+ point inspection of each room consists of a visual examination of doors, windows, ceilings, walls, floors, closets, light switches, receptacles, smoke/fire detectors, heating sources, fireplaces and ceiling fans. We check for functionality, general condition, excessive wear and visual defects. **In this section we report only on uncommon components (such as fireplaces) and observed deficiencies rather than a description of each and every component of every room.**

**LIMITATIONS:** Once again, defects hidden by furnishings and storage may not be visible to the inspector.

**RECOMMENDATIONS:** Most exterior door locks should be re-keyed to ensure personal safety and security. We highly recommend that a professional locksmith be hired to re-key the locksets shortly after transfer of ownership.

**ENTRYWAY:**

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**CLOSET:** The entryway closet door closes properly but does not latch.

## BEDROOMS

**INSPECTION DESCRIPTION:** As a continuation of the interior inspection, the bedrooms are inspected in the same fashion as the other common rooms in the house.



**MASTER BEDROOM:**

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**CLOSET:** The fluorescent light in the master closet was not working properly. This may be due to a bad bulb.

## BATHROOMS

**INSPECTION DESCRIPTION:** Our visual examination of bathrooms includes sinks, shower/tub surrounds, shower pans, faucets, drains, ventilation, cabinets, countertops, toilets, lighting, electrical, plumbing, walls, ceilings, floors, doors, windows, and heating source. We examine the bathroom for proper function of components, signs of water damage, active leakage, general condition and excessive wear. We do a subjective test of water flow by running multiple fixtures at one time. As in the "Interior Rooms" sections, **we report only on uncommon components and observed deficiencies rather than a description of each and every component of every bathroom.**

**LIMITATIONS:** Bathtub/shower surrounds and shower pans are visually checked for leakage, but leaks often do not show except when the shower is in actual use. We look for clues indicating water damage on floors, around bathtub/shower surrounds, at sink areas and around toilets, but concealed surfaces such as carpet and tile often do a good job of hiding any damage.

**RECOMMENDATIONS:** Bathrooms are often the highest maintenance rooms in the house. Very minor imperfections can allow water to get into the wall or floor areas and cause damage. Caulking joints with a high quality silicone caulk on an as-needed or yearly basis is recommended. Water will leak through grout joints in tile if not sealed properly. Sealing tile with a high quality liquid grout sealer on a yearly basis is recommended.

**MASTER BATHROOM:**

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**TUB/SHOWER FAUCETS:** The trim ring on the hot side bathtub control was observed to be loose.

**RIGHT FRONT BATHROOM:**

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**TOILET:** The toilet seat was found to be loose where it is attached to the toilet bowl.

