

# Building Inspection Report

-----, VT

**Inspection Date:**  
08/07/2013

**Prepared For:**  
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**Prepared By:**  
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**Report Number:**  
-----0813

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# Report Overview / Summary

## THE HOUSE IN PERSPECTIVE

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This is a well built 31+- year old 3 level provincial style that has been reasonably well maintained. It has lacked updating in major systems with exception of roofing. Although major improvement is needed at the rear addition, the house can be considered in good, general, up to date condition. The lakeside setting is pleasant and it is in a well kept section. With recommendations followed, this should remain a comfortable, relatively easily maintained home. Apart from the short term need to deal with some lacking maintenance, the improvements that are recommended in this report are not considered unusual for a home of this age and location.

## CONVENTIONS USED IN THIS REPORT

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

**Major Concern:** a system or component that 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 that are recommended but not required right away.

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

**Deferred Cost:** denotes significant improvements that are imminent – likely in the short term.

**Links:** URL links (colored in blue) will bring you to a helpful web page by using **Ctrl + click**



A qualified professional will be recommended to effect repairs/replacement in many of the recommendations in this report. Where not specifically stated, this recommendation should be assumed as noted at the beginning of each section.

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

### Adobe Acrobat Reader Tips:



<http://www.adobe.com/products/reader/>

1. Use the ‘zoom tool’ for the photos.
2. You can use the *pages (or thumbnails)* found on the left hand Navigation Pane to skip around this report quickly.

## SUMMARY OF DEFECTS / OBSERVATIONS

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The following is a synopsis of the potentially significant improvements that should be budgeted for over the short term along with other selected observations. 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 you may consider significant and/or necessary.

Any professionals consulted or contracted for the following should read the pages of the report that are relative to the concern.

### Major Item/Concern(s):

- **Major Concern:** Substantial foundation settlement cracking was observed in the rear addition. **Page 7**
- **Possible Major Concern:** It appears that an underground oil storage tank may exist on the property. **Page 19**

### Safety Concern(s):

- **Safety Issue:** The garage door opener automatically reversed but only under stiff under resistance **Page 13**
- **Safety Issue:** The deck should be cleaned of algae **Page 14**
- **Safety Issue:** An improved railing should be provided for the steps at the rear wall. **Page 14**
- **Safety Issue:** Bee nests were noted in various locations. **Page 15**
- **Safety Issue:** The electric system revealed the need for improvements and repairs. **Page 16**
- **Safety Issue:** *The current PRV Valve arrangement is a safety concern.* **Page 23**
- **Safety Issue:** It is recommended that a handrail be provided for the third level stairway. **Page 26**

### Repair Item(s):

- **Repair:** The chimney flashing on the south slope is damaged **Page 10**
- **Repair:** The masonry chimney(s) should be swept and inspected **Page 10**
- **Repair:** The support posts for the deck are poor. **Page 14**
- **Repair:** A proper flashing should be provided at the intersection of the exterior wall of the house and the deck **Page 14**
- **Repair:** Damaged brickwork should be repaired after foundation repairs are complete **Page 14**
- **Repair:** The fascia (trim around the roofline) is loose at the front slope. **Page 15**
- **Repair:** A leak was observed at the circulation pump. **Page 18**
- **Repair:** No heat issued to the basement zone. **Page 19**
- **Repair:** Insulation improvements are needed in the west crawl space floor. **Page 21**

### Improve:

- **Improve:** The roof vents are rusting. **Page 10**
- **Improve:** The driveway slopes towards the house at the front wall. **Page 13**

### Monitor:

### Deferred Cost:

- **Deferred Cost:** The furnace was determined to be old. It would be wise to budget for new. **Page 18**

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## END OF SUMMARY

## THE SCOPE OF THE INSPECTION

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All components designated for inspection in the NAHI® Standards of Practice are inspected, except as may be noted in the “Limitations of Inspection” sections within this report. A copy is available upon request. These can also be accessed on the NAHI website: : [National Association of Home Inspectors](http://NationalAssociationofHomeInspectors) or my website: <http://burlingtonhomeinspection.net>.



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.

This inspection is visual only. Representative samples of building components are viewed in areas that are accessible at the time of the inspection. No destructive testing or dismantling of building components is performed.

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

### **WEATHER CONDITIONS**

Dry weather conditions prevailed at the time of the inspection.  
The estimated outside temperature was 75+- degrees F.

### **RECENT WEATHER CONDITIONS**

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

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



# Structure/Basement

## DESCRIPTION OF STRUCTURE/BASEMENT

<b>Foundation Material:</b>	•Poured Concrete •Concrete Block under the addition
<b>Foundation Design:</b>	•Basement and Crawl Space Configuration •Crawl Space Viewed From Entry Opening – NAHI Standards of Practice
<b>Basement Floor:</b>	•Concrete Floor
<b>Crawl Space Floor:</b>	•Dirt Floor
<b>Columns:</b>	•Steel Column – 3 inch
<b>Floor Carrying Beams:</b>	•Wood: - Size: Triple 2x10 inch •Glue lam Beam (laminated Lumber) in the garage
<b>Floor Structure:</b>	•Wood Joist - Size: 2x10 inch @ 16 inches oc •Plywood Sheathing
<b>Wall Structure:</b>	•Wood Frame •Wood Frame, Brick Veneer
<b>Attic Access:</b>	•In the 2nd Floor Bedroom Closet •No Access to South Overhead Area
<b>Ceiling Structure:</b>	•Bottom Chord of Trusses
<b>Roof Structure:</b>	•Trusses •Plywood Sheathing

## STRUCTURE/BASEMENT ATTRIBUTES AND COMMENTS

*A qualified technician or professional should effect any recommendations resulting from the following observations that include consulting, repair and/or replacement.*



### Positive Attributes

With exception of the addition, the inspection did not discover evidence of substantial structural movement. The construction of the home is considered to be good quality. The materials and workmanship, where visible, appear to employ average to above average characteristics. The wood frame exterior walls of the home appear to be at least 6 inches thick. This typically provides for extra exterior wall insulation. When sighted down their length they were observed to be straight and flat.

The spans of all observed joists and rafters appear to be within acceptable limits and no appreciable movement was noted when floors were 'bounced upon'. They were observed to be clean and free of rot with only minor, typical cracks. The carrying beams and support columns were reasonably straight and in good condition with no significant rust or rot. The exterior plane of the roof was even and flat.



With exception of the rear addition, the foundation walls were straight and even. No severe cracks or bulges were noted in the observed walls. Ample ground clearance from the wood structure and trim was noted. The basement floor slab observed is in good condition – flat and even. It has typical cracks usually the result of shrinkage and/or settling of the slab.

**General Comments**

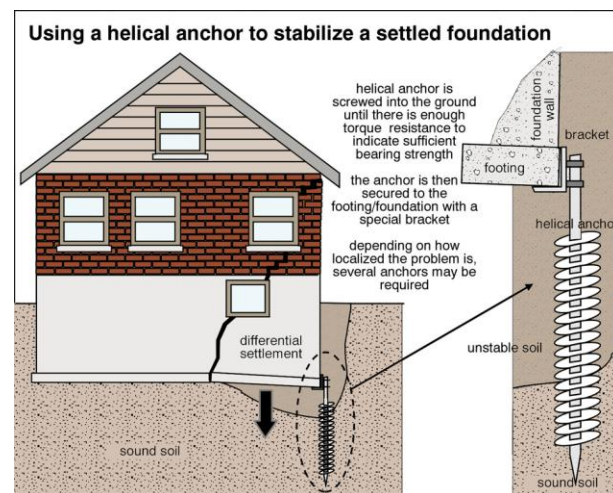
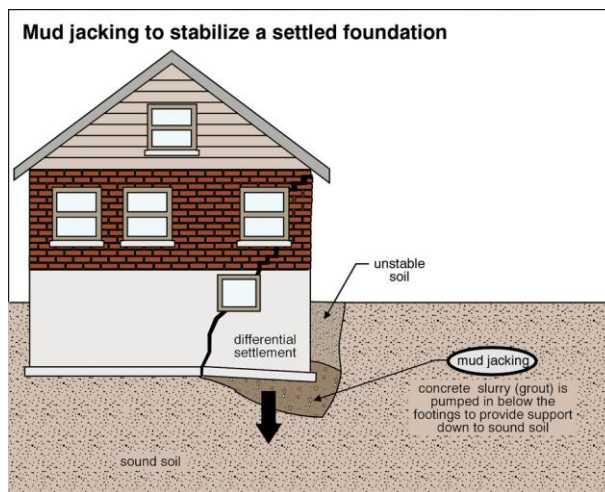
The construction of the west addition is of average quality with typical liberties taken with good building practice and with the quality of materials employed. The inspection did disclose significant deficiencies in the structure. Repairs/improvements are needed.

**DEFECTS / OBSERVATIONS / RECOMMENDATIONS**

**Foundations**

- **Major Concern:** Substantial foundation settlement cracking was observed in the rear addition. Structural movement of the building has occurred. Since repairs are needed to protect the building from more serious damage, a geotechnical engineer or a structural engineer who is familiar with foundation repair or a company specializing in foundation repairs should be consulted to evaluate the condition and to suggest corrective measures. The rate of movement cannot be predicted during a one-time inspection.

In this case, repairs have been attempted in the form of a concrete buttress poured next to the original wall but do not seem appropriate to this application where settling seems to be the main issue. Connection to the original building is a secondary issue. The floor has obviously pulled away and sagged as seen from the interior.



### Wood Boring Insects

- **Monitor:** Conditions that are attractive to wood boring insects should be avoided since they can damage the property. These conditions include the storage of wood in damp environments, wood rot or wood/soil contact around the perimeter of the home (decking, siding, etc.), damp soils, leaky roofs, and unventilated spaces (roofs, garages, crawl spaces, etc.).

### Basement Leakage

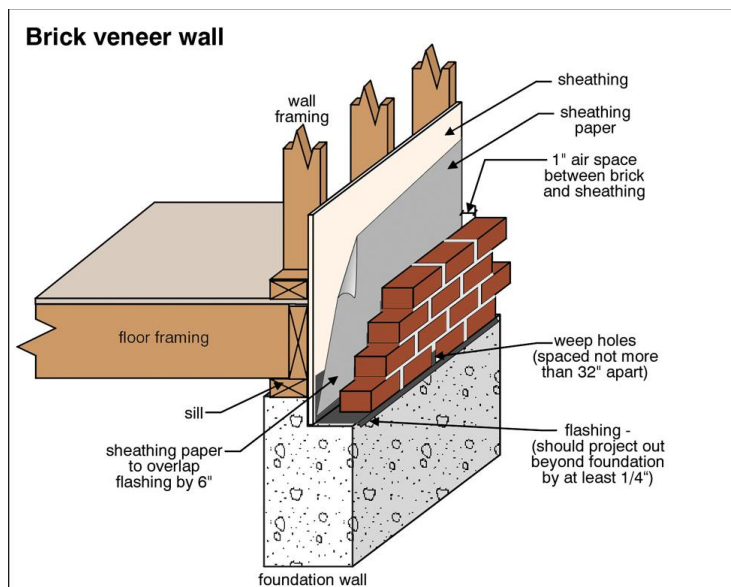
- **Monitor:** No evidence of moisture penetration was visible in the basement at the time of the inspection. *It should be understood that it is impossible to predict whether moisture penetration will pose a problem in the future.* The vast majority of basement leakage problems are the result of insufficient control of storm water at the surface. Think of the home as sitting on top of the Pitcher's mound in Baseball. The ground around the house should be sloped to encourage water to flow away from the foundation. Gutters and downspouts should act to collect roof water and drain the water at least five (5) feet from the foundation or into a functional storm sewer. Downspouts that are clogged or broken below grade level, or that discharge too close to the foundation are the most common source of basement leakage. Please refer to the Roofing and Exterior sections of the report for more information. In the event that basement leakage problems are experienced, lot and roof drainage improvements should be undertaken as a first step. An exterior 'Perimeter Drain' or 'Footing Drain' apparently exists. These are designed to carry away ground water and/or runoff water from the basement before it can get in. See **Lot Drainage** – page 13

## LIMITATIONS OF STRUCTURE/BASEMENT 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:

- Only a representative sampling of visible structural components were inspected.
- Engineering or architectural services such as calculation of structural capacities, adequacy, or integrity are not part of a home inspection.
- The roof space/attic was viewed from the access hatch only.
- Lack of access to the South attic prevented observations.
- No access was gained to the wall cavities of the home.
- The crawl space was viewed from the access hatch only.

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





# Roofing

## DESCRIPTION OF ROOFING

<b>Roof Covering:</b>	•# of Layers: 1 •Asphalt Composition Shingle
<b>Roof Flashings:</b>	•Galvanized Metal Dripedge •Lead Counter Flashing (Chimney and Brick Siding)
<b>Chimneys:</b>	•Two: •Brick: Located on the main slope
<b>Roof Drainage System:</b>	•Aluminum Fins•Partial Installation
<b>Skylights:</b>	•None
<b>Method of Inspection:</b>	•Walked on roof

## ROOFING ATTRIBUTES AND COMMENTS

*A qualified technician or professional should effect any recommendations resulting from the following observations that include consulting, repair and/or replacement.*



### Positive Attributes

The composition shingle roofing on the entire house is considered to be in good condition. The shingles are, for the most part, bright with even, square corners and laying flat. No missing or damaged shingles were noted. You should expect several years of performance from this roof covering. This material is estimated to be 10+- years old.

No active roof leaks were noted from the underside of the roof sheathing observed or from interior surfaces observed. Most roof flashing details appear to be in good order. The installation of the roofing materials has been performed in a professional manner. Installation details look neat and trim. The chimneys do not show signs of significant deterioration. Rain caps and vermin screens have been installed on the masonry chimney flues. A plumbing vent pipe was observed to penetrate the roof at normal height and in good condition.



### General Comments

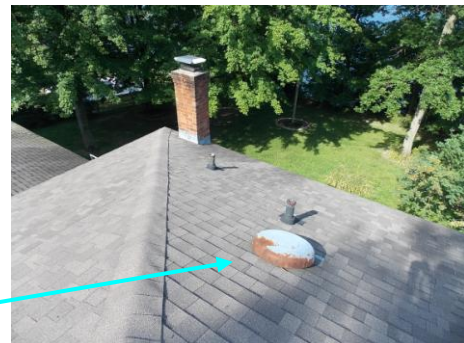
The configuration of the roofing system is susceptible to ice damming and related leaks. This should be watched for during the winter months. The potential for ice dams can vary with the severity of the winter. Ice dams often can result in roof

leakage, typically near the eaves. Solutions include better attic insulation and ventilation, eave protection below the roof coverings, even excess snow removal when needed (take care to not damage the roofing material). See also **Attic Ventilation** - page 21.

### DEFECTS / OBSERVATIONS / RECOMMENDATIONS

#### Flashings

- **Monitor:** The hip/ridge shingle is vulnerable in two locations, because it is sealed with caulk which will dry out and crack. It should be watched carefully for leaks.



- **Improve:** The roof vents are rusting. They should be painted to extend their life.
- **Repair:** The chimney flashing on the south slope is damaged and should be repaired to avoid leaks.



#### Chimneys

- **Repair:** The masonry chimney(s) should be swept and inspected by a C.S.I.A. certified chimney sweep before use. Have the Chimney Sweep check for any damaged flue tiles. Relining a chimney can be relatively expensive. No obvious cracks were seen when viewed with a mirror from the cleanout or the fireplace.
- **Monitor:** The chimney at the west slope is no longer in service. It could be removed.

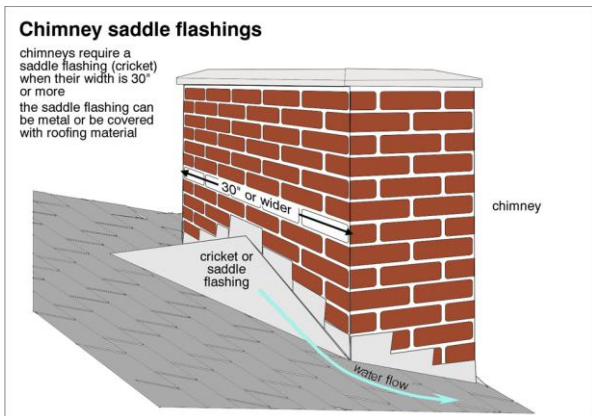


#### DISCRETIONARY IMPROVEMENTS

It is recommended that gutters and downspouts be installed where needed (usually along the drip edge) to avoid spilling roof runoff around the building – a potential source of water entry or water/splash damage. The downspout(s) should discharge water at least five (5) feet from the house. Storm water should

be encouraged to flow away from the building at the point of discharge.

A 'Cricket' or rain/water diverter could be installed on the upper side of the chimney. This will reduce the chances of a leak here.



The installation of a metal roof with vermin screen on large chimneys is a logical improvement.



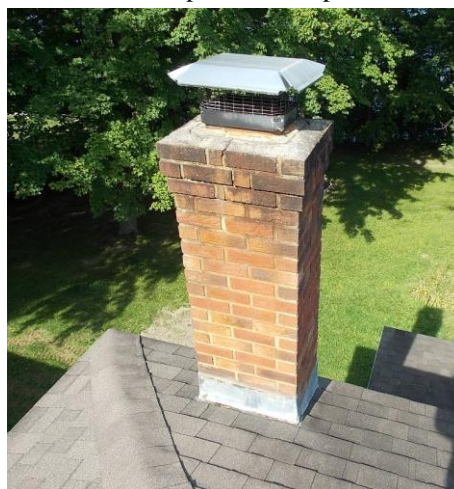
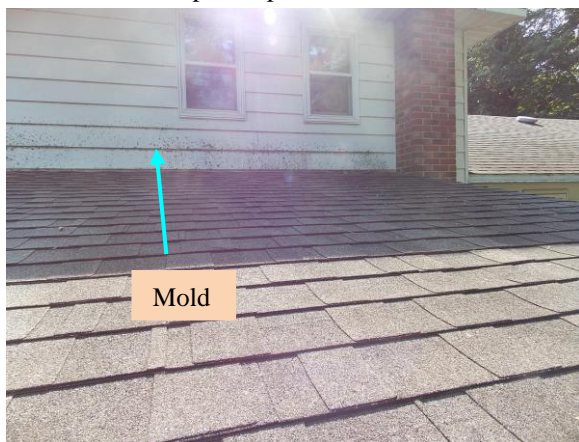
### LIMITATIONS OF ROOFING INSPECTION

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

- Not all of the underside of the roof sheathing is inspected for evidence of leaks.
- Interior finishes may disguise evidence of prior leaks.
- Estimates of remaining roof life are approximations only and do not preclude the possibility of leakage. Leakage can develop at any time and may depend on rain intensity, wind direction, ice build up, and other factors.
- Antennae, chimney/flue interiors which are not readily accessible are not inspected and could require repair.

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



West Chimney

# Exterior

## DESCRIPTION OF EXTERIOR

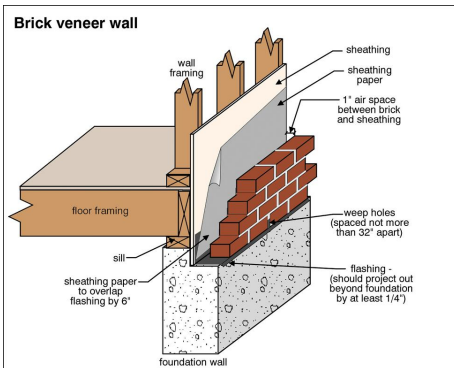
<b>Wall Covering:</b>	•Brick •Metal Siding (horizontal clapboard style)
<b>Eaves, Soffits, and Fascias:</b>	•Wood •Covered with Aluminum
<b>Exterior Doors:</b>	•Insulated Metal with Storm Doors •Metal Bulk Head Door at the west side of the home
<b>Window Frames and Trim:</b>	•Clad Wood Windows with Storms
<b>Entry Driveways and Parking:</b>	•Asphalt
<b>Entry Walkways and Patios:</b>	•Concrete Walk @ Front
<b>Porches, Decks, Steps, Railings:</b>	•Wood Entry Porch @ Front with Concrete landing and Metal Columns
<b>Overhead Garage Door(s):</b>	•Vinyl •Automatic Opener Installed (mechanical type)
<b>Surface Drainage:</b>	•Graded Towards House
<b>Retaining Walls:</b>	•None
<b>Fencing:</b>	•None

## EXTERIOR ATTRIBUTES AND COMMENTS

A qualified technician or professional should effect any recommendations resulting from the following observations that include consulting, repair and/or replacement.

### Positive Attributes

The overall lot drainage was good. It looks like it will conduct surface water away from the building and off the lot (see observations below). The walkway, driveway and parking area appeared in good general condition. There were no serious dips, cracks, ruts, or holes.



The **brick siding** is in good condition. With exception of the addition, cracking or loose mortar was not evident. The bricks lay flat on the wall and sit on a foundation shelf,

providing adequate support. The **metal siding** that has been installed on the house is relatively low maintenance. It was observed to be lying flat and in good condition with no

loose or damaged pieces.

The aluminum fascia and vinyl soffits are a low-maintenance feature of the exterior siding. There is no significant wood/soil contact around the perimeter of the house, thereby reducing the risk of insect infestation or rot. The wood window frames are in generally good condition. All doors were opened and they operated freely. The garage floor slab observed is in good condition – flat and even. It has typical cracks usually the result of shrinkage and/or settling of the slab.



### General Comments

The exterior of the home is generally in good condition.

## DEFECTS / OBSERVATIONS / RECOMMENDATIONS

### Windows & Doors

- **Repair:** The window frame requires repair to the caulking on the north wall.

### Garage

- **Safety Issue:** The garage door opener automatically reversed but only under stiff under resistance to closing. The opener should be adjusted and may need replacement. A qualified overhead garage door technician should perform this work.
- **Potential Safety Issue:** The walls and ceilings of the attached garages should be well sealed where they abut the interior of a house. This reduces the potential of toxic automobile gases entering the house. Openings should be sealed for your protection.
- **Potential Safety Issue:** Proper fire separation between the garage and house proper is recommended.

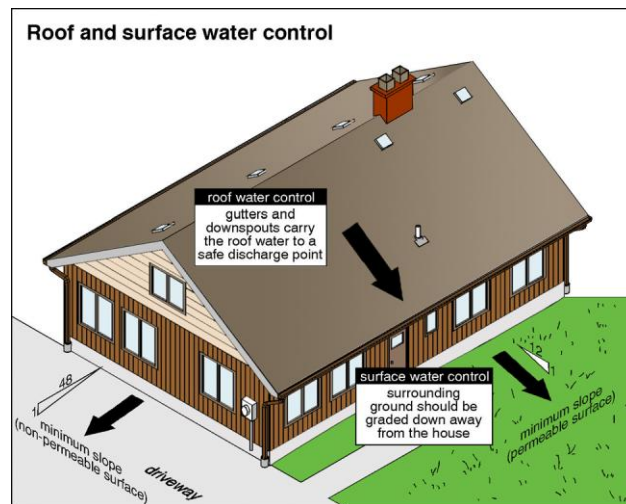
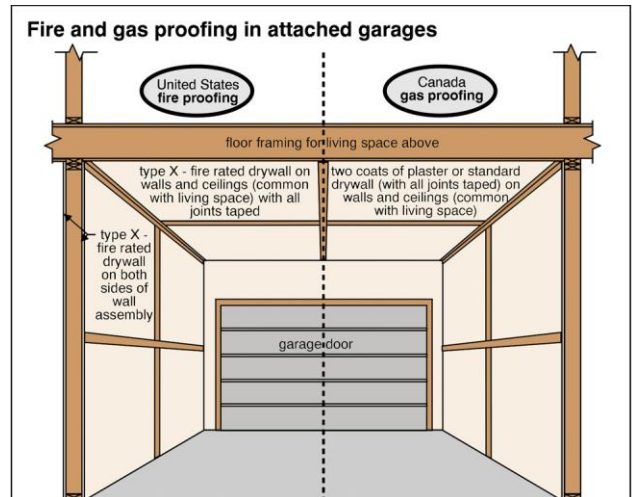
### Lot Drainage

- **Improve:** The grading at the front wall and in a few other locations should be improved to promote the flow of storm water away from the



foundation. This can usually be accomplished by the addition of topsoil. In some cases, grading is required to accomplish the required slope. The ground should slope away from the house. A rate of one inch per foot for at least the first ten feet is a good rule of thumb. Ideally, at least eight (8) inches of clearance should be maintained between soil level and the top of the foundation walls. Window wells are often needed around basement windows to allow proper grading. A qualified landscaping contractor or excavator can effect this work.

- **Improve:** The driveway slopes towards the house at the front wall. This condition can promote moisture seepage and/or icing in winter. Unfortunately, it is difficult to improve this situation without resurfacing the driveway adjacent to the foundation. A qualified mason, carpenter, or paving contractor can perform this work.
- **Monitor:** An exterior 'Perimeter Drain' or 'Footing Drain' apparently exists. This item carries water away from the base of the foundation. In this case, the pipe is unusually small and may prove to be for another purpose. Recommend maintaining the cap on top. The exit pipe (usually found at the low point on the lot) should have a vermin screen. Recommend periodic flushing with water and monitoring the end of this pipe.

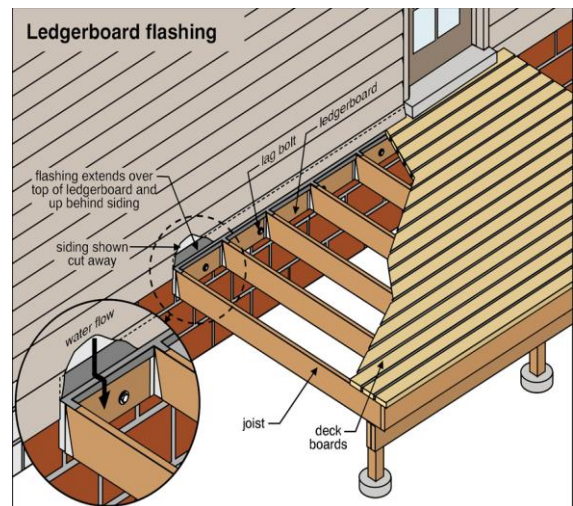


### Deck

- **Repair:** The support posts for the deck are poor. A footing extending at least 3-4 feet below grade level would be installed. Wood/soil contact should be avoided. A qualified carpenter should correct this.

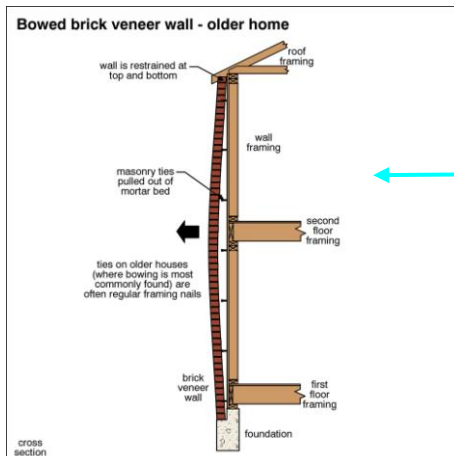


- **Safety Issue:** The deck should be cleaned of algae and painted or stained to improve durability. A deck with algae is very slippery when wet.
- **Safety Issue:** As there is a danger of falling, an improved railing should be provided for the steps at the rear wall. The openings in the deck railing are large enough to allow a child to fall through. It is recommended that this be corrected for improved child safety. A qualified experienced carpenter should perform this work.
- **Repair:** A proper flashing should be provided at the intersection of the exterior wall of the house and the deck at the rear wall. This will help avoid water penetration and eventual rot. A qualified carpenter or contractor can perform this work.



### Brick Siding

- **Repair:** Damaged brickwork should be repaired after foundation repairs are complete to preserve the wall. A qualified mason should perform this work.



### Exterior Eaves

- **Repair:** The fascia (trim around the roofline) is loose at the front slope. It should be secured. A qualified carpenter or siding contractor should perform this work.
- **Safety Issue:** Bee nests were noted in various locations. A qualified exterminator should be consulted.



### 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:

- The inspection does not include an assessment of geological, geotechnical, or hydrological conditions, or environmental hazards.
- Screening, shutters, awnings, or similar seasonal accessories, recreational facilities, outbuildings, seawalls, break-walls, docks, erosion control and earth stabilization measures are not inspected unless specifically agreed-upon and documented in this report.

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



# Electrical

## DESCRIPTION OF ELECTRICAL

<b>Size of Electrical Service:</b>	<ul style="list-style-type: none"> <li>•120/240 Volt Main Service - Service Size Approximated to be: 200 Amp, Entrance and Meter Located at the southwest side of the home</li> </ul>
<b>Service Drop:</b>	<ul style="list-style-type: none"> <li>•Underground</li> </ul>
<b>Service Entrance Conductors:</b>	<ul style="list-style-type: none"> <li>•Aluminum</li> </ul>
<b>Service Grounding:</b>	<ul style="list-style-type: none"> <li>•Copper •Ground Connection Not Visible</li> </ul>
<b>Main Disconnects:</b>	<ul style="list-style-type: none"> <li>•<b>Location:</b> in the main panel •Breakers •Main Service Rating 200 Amps</li> </ul>
<b>Service Panel:</b>	<ul style="list-style-type: none"> <li>•<b>Location:</b> in the basement •Breakers •Panel Rating: 200 Amp</li> </ul>
<b>Sub-Panel(s):</b>	<ul style="list-style-type: none"> <li>•<b>Location:</b> adjacent the main panel box •Breakers •Panel Rating: 125 Amp</li> <li>•Overcurrent Protection (Main Breaker) - 70 Amps - Located: in the main panel</li> </ul>
<b>Circuit Sizes:</b>	<ul style="list-style-type: none"> <li>•120V Circuits: 120 amps</li> <li>•240V Circuits: 30, 30, 40, and 40 amps</li> </ul>
<b>Distribution Wiring:</b>	<ul style="list-style-type: none"> <li>•Copper</li> </ul>
<b>Wiring Method:</b>	<ul style="list-style-type: none"> <li>•Non-Metallic Sheathed Cable "Romex" •Armored Cable "BX"</li> </ul>
<b>Switches &amp; Receptacles:</b>	<ul style="list-style-type: none"> <li>•Grounded</li> </ul>
<b>Ground Fault Circuit Interrupters:</b>	<ul style="list-style-type: none"> <li>•Bathroom(s) •Kitchen</li> </ul>
<b>Smoke Detectors:</b>	<ul style="list-style-type: none"> <li>•Present: - Ionization Type</li> </ul>
<b>Carbon Monoxide Detectors:</b>	<ul style="list-style-type: none"> <li>•Not Found</li> </ul>

## ELECTRICAL ATTRIBUTES AND COMMENTS

*A qualified licensed electrician should effect any recommendations resulting from the following observations that include consulting, repair and/or replacement.*

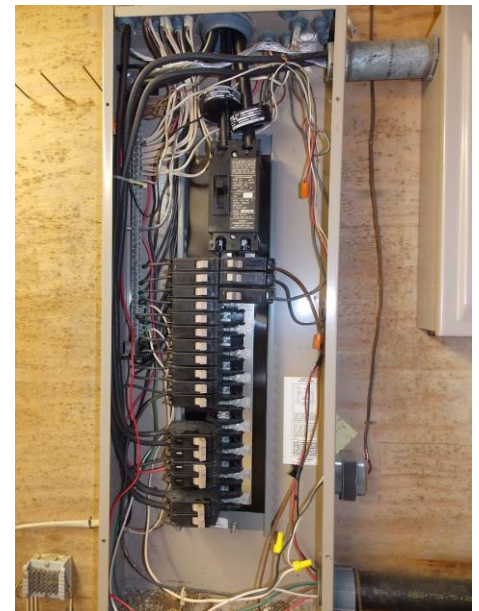
### Positive Attributes

The size of the electrical service is sufficient for typical single family needs. Generally speaking, the electrical system is in good order. The electrical panels are well arranged and rated for both copper and aluminum. Three prong outlets were tested randomly with a plug in circuit analyzer. All 3-prong outlets that were tested were appropriately grounded and light fixtures that were tested operated satisfactorily. The distribution of electricity within the home is good. The observed wiring within the home is copper, with exception of the larger aluminum wires. These are good quality electrical conductors.

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.

### General Comments

The electric system revealed the need for improvements and repairs. These improvements should be considered high priority for safety reasons. ***Unsafe electrical conditions represent a shock and/or fire hazard.*** A licensed electrician should be consulted to undertake the improvements recommended below and further review the system.



## DEFECTS / OBSERVATIONS / RECOMMENDATIONS

### Main Panel

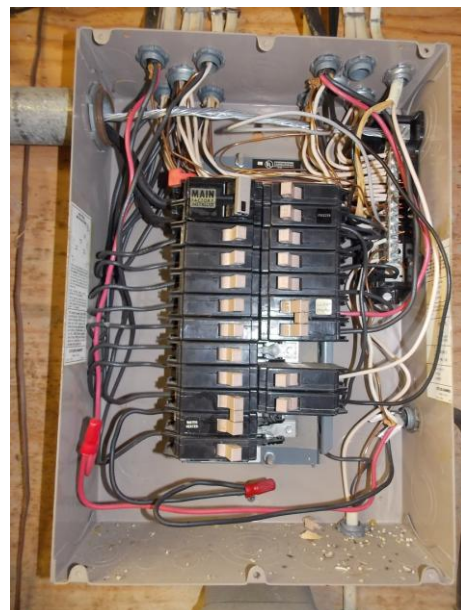
- **Repair:** Any openings in the main panel should be covered.
- **Improve:** The panel circuits should all be clearly and accurately marked by an electrician.



- **Repair:** Circuits within the main distribution panel that are doubled up (referred to as “double taps”) should be separated. A separate fuse or breaker should serve each circuit.
- **Monitor:** Evidence of mice living in the panel was noted. This should be cleaned up. Any openings in the panel should be covered.

#### Auxiliary Panel(s)

- **Improve:** The panel circuits should all be clearly and accurately marked by an electrician.
- **Repair:** Any openings in the auxiliary panel should be covered.
- **Safety Issue:** Neutral and ground wires within the auxiliary distribution panel that are doubled up should be separated. A separate bus connection should serve each.
- **Monitor:** Evidence of mice living in the panel was noted. This should be cleaned up. Any openings in the panel should be covered.
- **Repair:** Circuits within the distribution panel that are doubled up (referred to as “double taps”) should be separated. A separate fuse or breaker should serve each circuit.



#### Smoke and Carbon Monoxide Detectors

- **Safety Issue:** The installation of carbon monoxide detectors outside all sleeping areas and one on each floor is recommended. **See also Environmental Issues – page 26.**
- **Repair:** The smoke detector(s) are required be replaced with photo electric type detectors. [VT Fire and Safety Information](#)

#### Outlets

- **Safety Issue:** The installation of ground fault circuit interrupter (GFCI) devices is advisable on all exterior, garage, bathroom, basement (bare floor), and kitchen counter outlets. Any whirlpool or swimming pool equipment should also be fitted with GFCI’s. A ground fault circuit interrupter (GFCI) offers protection from shock or electrocution.
- **Safety Issue:** A makeshift outlet was noted in the garage. This outlet should be replaced.

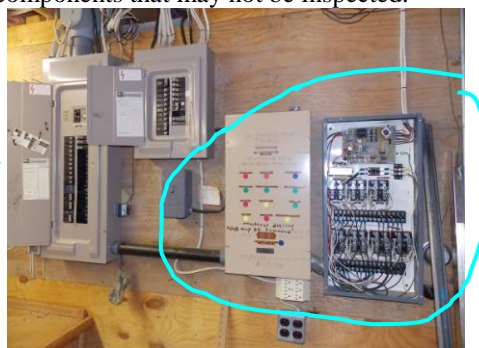
#### Lights

- **Repair:** The damaged yard light fixture should be repaired or replaced.

## 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:

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



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

# Heating

## DESCRIPTION OF HEATING

<b>Energy Source:</b>	•Oil •Fill Pipes Located at the north side of the home •Heating Oil Tank - Buried At North wall
<b>Heating System Type:</b>	•Hot Water Boiler
<b>Heating Unit:</b>	•Boiler Manufacturer: Slant Fin •Approximate Age: 20 •Serial Number: L43031525 •BTU output: 151,000 •# of Zones: 6
<b>Heat Distribution Methods:</b>	•Baseboard Heaters
<b>Vents, Flues, Chimneys:</b>	•Metal-Single Wall Flue into Masonry-Lined Chimney

## HEATING ATTRIBUTES AND COMMENTS

A qualified technician or professional should effect any recommendations resulting from the following observations that include consulting, repair and/or replacement.

### Positive Attributes

The central heating system appears in generally good condition. Heat distribution within the home appears adequate. It operated quietly, heated up, and distributed hot water throughout the kitchen area zone as expected. No leaks were detected in the baseboard heaters.

The distribution of heat is divided into “zones,” allowing for greater ease of balancing heat flow. An automatic shut off device was noted for electricity to the unit. A manual emergency shut off switch was noted at the top of the basement stair. Upward pitch was noted on the flue pipe. The flue connections were secure and the clearances as observed seemed reasonable.

### General Comments

The heating system not been maintained. The boiler requires service by a qualified, professional heating technician before use and every year thereafter. This should be a regular maintenance item to assure safe, reliable heat.

The heating system shows no visible evidence of major defects. Minor repairs to the heating system are necessary.

The furnace was determined to be old as read on the information plate and may be approaching the end of its life. The expected lifespan for this type of unit is 25+- years. It would be wise to budget for new.



## OBSERVATIONS / DEFECTS / RECOMMENDATIONS

### Boiler

- **Repair, Safety Issue:** For safety reasons, it is recommended that the Temperature and Pressure Relief (TPR) Valve extension be conventionally installed for the water heater. *The current arrangement is a safety concern. The pipe is combined with the water heater PRV valve and travels an unusual distance to a floor drain. This configuration would likely not contain the temperatures and pressure involved in a pressure relief event. In addition the pipe is disconnected near the tank in a dangerous location should it need to go off. See also Water Heater – page 23*
- **Repair:** A leak was observed at the circulation pump. Leaks at heating equipment should be repaired promptly to avoid damage to the equipment or to the building and to assure reliable system operation.



- **Improve:** A low water cut off control was not found. This item helps safeguard the boiler in event of a boiler leak.
- **Monitor:** Heat piping is located in the garage. This creates an opportunity for frozen pipes. Keeping this area heated would be wise.
- **Monitor:** Corrosion was observed on various valves and joints. This condition should be carefully monitored and if active leaking is noted, it should be repaired promptly to avoid damage to the equipment or to the building.
- **Repair:** A cover plate is needed at the wire connections at the boiler.

### Baseboard and Unitary Heaters

- **Repair:** No heat issued to the basement zone. A qualified licensed heating technician should be consulted.

### Fuel Tank

- **Monitor, Possible Major Concern:** It appears that an underground oil storage tank may exist on the property. Buried tanks should, ideally, be removed. The Vermont Agency of Natural Resources can provide guidance. A qualified Oil Company under direction of an engineer should perform any necessary work. [Underground Oil Tank Program](#)
- **Monitor:** The oil tank copper supply line to the burner should not be buried in concrete. This can cause deterioration and leaking. It should be relocated and protected from mechanical damage. Oil leak cleanup, if extensive, could be costly.



### DISCRETIONARY IMPROVEMENTS

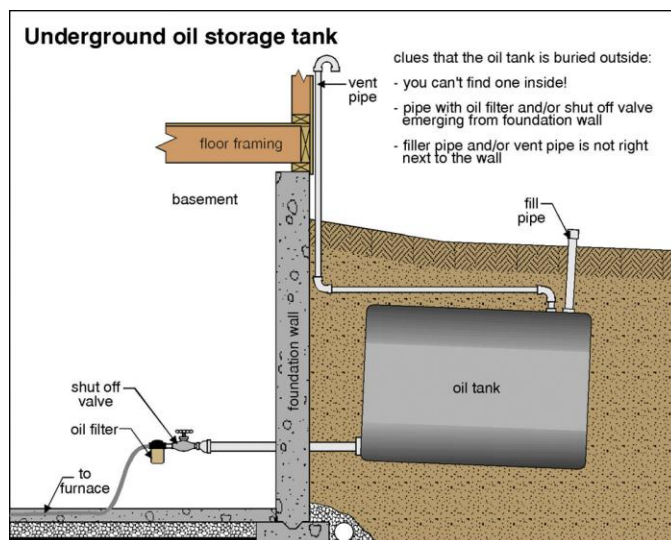
The installation of “programmable” thermostats may help to reduce heating costs.

## LIMITATIONS OF HEATING INSPECTION

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

- The adequacy of heat supply or distribution balance is not inspected.
- The interiors of flues or chimneys, which are not readily accessible, are not inspected.
- Although the heating system was operated, there are significant testing limitations at this time of year.
- The clean out at the base of the chimney was not opened.
- The oil tank was concealed.
- Not all of the electric heaters were tested at the time of the inspection.
- The thermostat was activated but did not respond.

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



# Insulation / Ventilation

## DESCRIPTION OF INSULATION / VENTILATION

---

- |                                    |  |
|------------------------------------|--|
| <b>Attic Insulation:</b>           | •6+- inches of Blown Cellulose over Fiberglass Batts in the North Attic Floor<br>•Unknown in the South Attic |
| <b>Exterior Wall Insulation:</b>   | •Unknown in the finished walls   |
| <b>Basement Wall Insulation:</b>   | •Unknown in the plywood finished walls   |
| <b>Rim Joist Insulation:</b>       | •Yes   |
| <b>Crawl Space Insulation:</b>     | •None Visible on the Unfinished Walls  |
| <b>Crawl Space Ventilation:</b>    | •No Ventilation Found  |
| <b>Floor Cavity Insulation:</b>    | •3+- inches of Fiberglass over the Garage •Unknown Amount of Fiberglass over the West Crawl Space            |
| <b>Exhaust Fan/vent Locations:</b> | •Bathroom •Dryer   |
| <b>Roof Ventilation:</b>           | •Soffit Vents with Attic Baffles (Partial) •Roof Vents   |

## INSULATION / VENTILATION ATTRIBUTES AND COMMENTS

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*A qualified technician or professional should effect any recommendations resulting from the following observations that include consulting, repair and/or replacement.*



### Positive Attributes

Insulation levels are typical for a home of this age and construction. No mildew or rot was noted on the underside of the roof sheathing. Based on the insulation seen and the evidence of insulation seen, this can be considered a moderately well insulated home.

### General Comments

Getting an energy audit would be helpful in determining what measures you might want to take to increase your comfort level and energy savings. This will also help prevent plumbing from freezing. An Energy Management Consultant can perform this task.

Upgrading insulation levels in a home is an improvement worth consideration. Uninsulated crawl spaces tend to be cooler than other areas during winter months.

## DEFECTS / RECOMMENDATIONS / ENERGY SAVING SUGGESTIONS

### Attic / Roof

- **Improve:** Attic insulation improvements to R-38 are recommended. This should help to reduce heating costs and help keep the home cooler during warm weather. Recommend a qualified builder or insulation specialist design and perform this work.

### Attic Ventilation

- **Improve:** The passage of air between the soffit and the roof cavity appears to be obstructed in some locations. “Baffles” should be provided to hold back insulation and vents installed to allow for free movement of air within the roof space. These items help reduce the potential for ice dams on the roof and condensation within the attic. This area should be further investigated and improved where necessary.

### Attic Mechanicals

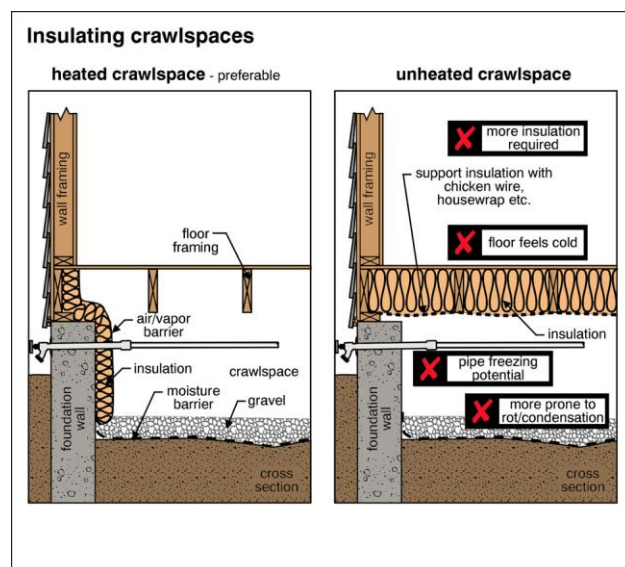
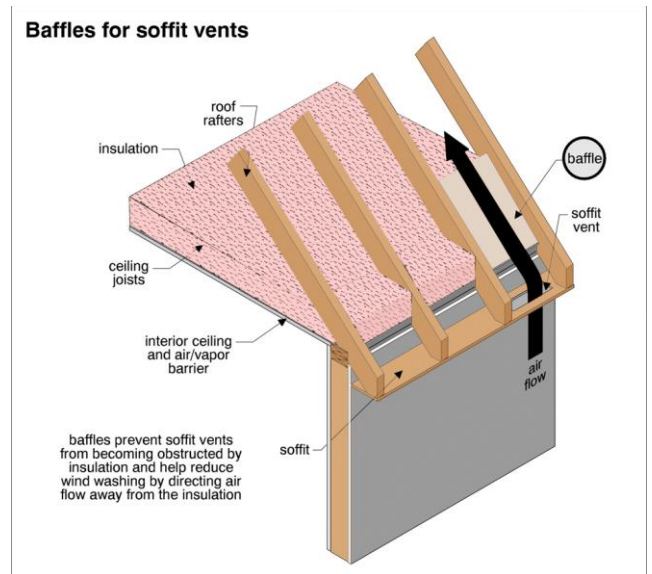
- **Repair:** Ideally, the attic access hatch should contain a “well” to hold back insulation and be better insulated and weather-stripped. A fair amount of heat is lost through this type of opening.

### Basement

- **Monitor:** Insulation improvements, if needed, in the basement walls may be desirable.

### Crawl Space

- Insulation improvements to the crawl space may be desirable to save energy costs, increase comfort level and prevent plumbing from freezing:
  - **Repair:** Insulation improvements are needed in the west crawl space floor. The fiberglass is wet, hanging down, and ineffective, and an invitation to vermin. At the least it should be replaced.
  - **Improve:** It would be wise to better insulate around the perimeter of the crawl spaces in place of insulation in the floor.
  - **Improve:** A moisture barrier should be installed on the crawl space floor. Mildew, rot, and ineffective floor insulation can result from excess moisture in this space. Recommend an insulation specialist install one. It should be installed so that it covers all areas of exposed soil and sealed to the walls.



## **LIMITATIONS OF INSULATION / VENTILATION INSPECTION**

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

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

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

# Plumbing

## DESCRIPTION OF PLUMBING

<b>Water Supply Source:</b>	•Public Water Supply – Evidenced by Basement Meter and Exterior Meter Reading Device
<b>Service Pipe to House:</b>	•Copper
<b>Main Water Valve Location:</b>	•Basement - East Wall
<b>Interior Supply Piping:</b>	•Copper
<b>Waste System:</b>	•Private Sewage System (Reported by Seller) - Discharge Leaves the House at the Rear Wall
<b>Drain, Waste, &amp; Vent Piping:</b>	•Plastic
<b>Water Heater:</b>	•Electric •Manufacturer: Bradford White - Located next to the Boiler •TPRV Valve with Extension Going Toward the Floor •Approximate Capacity (in gallons): 50 / Read on the information Plate •Approximate Age: 3
<b>Other Components/Features:</b>	•Particulate Filter •Pressure Regulator on Main Water Line •Pressure Gage on Main Water Line •Static Pressure: 62 lbs

## PLUMBING ATTRIBUTES AND COMMENTS

*A qualified technician or professional should effect any recommendations resulting from the following observations that include consulting, repair and/or replacement.*

### Positive Attributes

The plumbing system is in generally good condition. The piping system within the home, for both supply and waste, seems a good system. All feeds and drains operated freely. No leaks or sewer odors were detected. The water pressure supplied to the fixtures is considered above average. Only a slight drop in flow was experienced when all fixtures in each bath were operated simultaneously. The plumbing fixtures appear to have been well-maintained.

### Hot Water

After turning on most available faucets, the water heater produced hot water today. It did not show serious corrosion or leaking. Water heaters have a typical life expectancy of 9 to 14 years. The unit is in this age range. One cannot predict with certainty when replacement will become necessary. It would be wise to budget for new.

The water heater temperature should be set such that accidental scalding is minimized. Families with small children should be especially aware of this.

## DEFECTS / OBSERVATIONS / RECOMMENDATIONS

### Water Heater

- **Repair, Safety Issue:** For safety reasons, it is recommended that the Temperature and Pressure Relief (TPR) Valve extension be conventionally installed for the water heater. ***The current arrangement is a safety concern. The pipe is combined with the boiler PRV valve and travels an unusual distance to a floor drain. This configuration would likely not contain the temperatures and pressure involved in a pressure relief event. In addition the pipe is disconnected near the tank in a dangerous location should it need to go off.***



## **LIMITATIONS OF PLUMBING INSPECTION**

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

- Portions of the plumbing system concealed by finishes and/or storage (below sinks, etc.), below the structure, or beneath the ground surface are not inspected.
- Water conditioning systems, solar water heaters, fire and lawn sprinkler systems, and private waste disposal systems are not inspected unless explicitly contracted-for and discussed in this or a separate report.
- An inspection of the sewage system is outside the scope of this inspection. It is reported by the owner that the septic tank has recently been serviced/pumped.

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



# Interior

## DESCRIPTION OF INTERIOR

---

<b>Wall and Ceiling Materials:</b>	•Drywall •Paneling
<b>Floor Surfaces:</b>	•Carpet •Vinyl/Resilient •Slate Tile
<b>Window Type(s) &amp; Glazing:</b>	•Double Glazed: •Double Hung with Tilt Feature •Casement with Storm Windows
<b>Doors:</b>	•Wood Panel Doors •Bi-Fold Closet Doors

## INTERIOR ATTRIBUTES AND COMMENTS

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*A qualified technician or professional should effect any recommendations resulting from the following observations that include consulting, repair and/or replacement.*



### 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

The majority of the doors and windows are good quality. The windows have, for the most part, been well maintained. A sample of windows and doors were opened and seemed to operate freely. No rotted parts or inoperable hardware was noted in the windows that were opened. No fogged glass was observed.

### General Condition of Floors

The floors of the home are relatively level and walls are relatively plumb. The ceramic tile was in good condition – no obvious cracks were observed. The flooring system of the addition exhibits signs of unusual movement. Refer also to the Structural Components section of this report.



## DEFECTS / OBSERVATIONS / RECOMMENDATIONS

### Wall / Ceiling Finishes

- **Monitor:** The ceiling in the front entrance hall shows evidence of water damage. This condition is suspected to be the result of a plumbing leak from the upstairs bathtub enclosure. The stains were dry today. Recommend sealing, painting and monitoring.
- **Monitor:** The ceilings in the vicinity of the main fireplace shows evidence of staining. This condition is suspected to be the result of leakage from the chimney. **See also Discretionary Improvements – page 10.** The stains were dry today. Recommend sealing, painting and monitoring.

### Stairways

- **Safety Issue:** For improved safety, it is recommended that a handrail be provided for the third level stairway. A qualified experienced carpenter should perform this work.

### Environmental Issues

- **Monitor:** There is the potential for lead content in the drinking water within the home. Lead in water may have two sources; the piping system of the utility delivering water to the house and/or the solder used on copper pipes prior to 1988. This can only be confirmed by laboratory analysis. An evaluation of lead in water is beyond the scope of this inspection. For more information, consult [http://healthvermont.gov/enviro/lead/lead\\_water.aspx](http://healthvermont.gov/enviro/lead/lead_water.aspx).
- **Monitor:** Carbon monoxide is a colorless, odorless gas that can result from a faulty fuel burning furnace, range, dryer, water heater, space heater, automobile, or wood stove. Proper maintenance of these appliances paired with installing Carbon Monoxide detectors within the home is one of the best ways to reduce the risk of carbon monoxide poisoning. <http://www.dps.state.vt.us/fire/co.htm>

### DISCRETIONARY IMPROVEMENTS

Install new exterior lock sets upon taking possession of the home.

## LIMITATIONS OF INTERIOR INSPECTION

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

- Furniture, storage, appliances and/or wall hangings are not moved to permit inspection and may block defects.
- Window treatments, 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.



# Fireplaces / Wood Stoves

## DESCRIPTION OF FIREPLACES / WOOD STOVES

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- |                                |  |
|--------------------------------|--|
| <b>Fireplaces:</b>             | •Masonry Firebox with Woodstove Insert |
| <b>Wood/Gas Stoves:</b>        | •Roughed-In (Hallway)                  |
| <b>Vents, Flues, Chimneys:</b> | •Masonry Chimneys -Lined               |

## FIREPLACES / WOOD STOVES ATTRIBUTES AND COMMENTS

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*A qualified technician or professional should effect any recommendations resulting from the following observations that include consulting, repair and/or replacement.*

### Positive Comments

On the whole, the fireplace and its components are in good condition. The wood surrounding mantelpiece was well attached and in good condition. The brick surrounding wall/mantelpiece was well attached and in good condition. The brick hearth and trim was good. Joints were reasonably tight. No cracks were noted. The woodstove insert looks neatly installed – the connection to the chimney is orderly and tight and the distance to unprotected surfaces seems reasonable.



### DEFECTS / OBSERVATIONS / RECOMMENDATIONS

#### Wood Stove

- **Repair:** The wood stove and chimney should be inspected and swept by a C.S.I.A. certified chimney sweep prior to operation. See also **Chimneys** – page 10

## LIMITATIONS OF FIREPLACES / WOOD STOVES INSPECTION

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

- The interiors of flues or chimneys are not inspected.
- Firescreens, automatic fuel feed devices, combustion make-up air devices, and heat distribution assists (gravity or fan-assisted) are not inspected.
- The inspection does not involve igniting or extinguishing wood fires nor the determination of draft.
- Fireplace inserts, stoves, or firebox contents are not moved.
- The adequacy of the fireplace draw is not determined during a visual inspection; for safety reasons, if no fire is burning we do not ignite fires nor light paper or other materials.

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

# Kitchen and Appliances

## DESCRIPTION OF KITCHEN AND APPLIANCES

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**Kitchen Sink:**

- Metal Sink

**Kitchen Countertops:**

- Plastic Laminate Countertops installed

**Tested Appliances:**

- older GE Electric Range
- older Kitchen Aid Dishwasher
- older GE Refrigerator
- older GE Microwave Oven

**Other Components Observed:**

- Wood Cabinets Installed
- Kitchen Exhaust Hood – Vented to the Interior

## KITCHEN AND APPLIANCES ATTRIBUTES AND COMMENTS

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*A qualified technician or professional should effect any recommendations resulting from the following observations that include consulting, repair and/or replacement.*

**General Comments**

Cabinets and counters were in good condition. No obvious damage, scratches or chips were observed. All cabinet hardware tested was firm and operated smoothly. The counters were secure. The cabinets were firmly attached. The appliances are showing signs of aging. As such, they are more prone to breakdowns. Given their age and being idle for some time, the appliances were not tested.



**DEFECTS / OBSERVATIONS / RECOMMENDATIONS**

**Kitchen Cabinets**

- **Repair:** Loose cabinet drawers in the kitchen should be repaired. A qualified experienced carpenter can accomplish this.

## LIMITATIONS OF KITCHEN AND 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

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



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

# Bathrooms and Laundry

## DESCRIPTION OF BATHROOMS AND LAUNDRY

- |                           |   |
|---------------------------|---|
| <b>Bathroom Location:</b> | •1 on the Second level: - Half bath, •2 on the Third Floor: - Common Bath (tub & shower), - Master Bath (full bath)   |
| <b>Floor Covering:</b>    | •Ceramic Tile   |
| <b>Laundry Facility:</b>  | •Located: in the First Level •Circuit for Dryer: 240 Volt •Dryer Vented to Building Exterior •120 Volt Circuit for Washer •Hot and Cold Water Supply for Washer •Waste Standpipe for Washer |
| <b>Tested Appliances:</b> | •older Maytag Clothes Washer •older Kenmore Clothes Dryer   |

## BATHROOMS AND LAUNDRY ATTRIBUTES AND COMMENTS

*A qualified technician or professional should effect any recommendations resulting from the following observations that include consulting, repair and/or replacement.*

### Positive Comments

The bathroom, and laundry facilities appear neat, clean, well organized and in good working condition. The laundry appliances were observed to be in generally good condition: Water came in the washer, splashed, pumped out and spun with no apparent leaks. The dryer turned and gave heat. It was hooked to an exterior vent.

The bathroom fixtures were in good working condition. The sinks drained as expected when the stoppers were pulled at every location. No leaks were noted under the sinks. Faucets were secure and gave water with no leaks. The sinks and toilets were firmly secured. The toilets flushed completely. The bathtub drain held an inch of water and then drained when released. The tub/shower surrounds were in good condition. Surfaces were bright with no serious damage/scratches or rot. No leaks under these fixtures were noted in the basement. The ceramic tile was in good condition – no obvious cracks were observed.



## DEFECTS / OBSERVATIONS / RECOMMENDATIONS

### Bathroom Components

- **Improve:** The toilet in the 1/2 bath runs on after flushing. Improvement to the tank mechanism is likely to be needed.

### Clothes Dryer

- **Improve:** The dryer outlet should, ideally, have a four prong outlet installed. Current wiring practices require that the neutral and equipment be separate on a 240 volt appliance.

### DISCRETIONARY IMPROVEMENTS

An exhaust fan could be installed in all locations discharging to the building exterior.

The clothes dryer exhaust vent pipe should be periodically cleaned of lint. If ignored, this can become a fire hazard.

'Flexible steel hoses' are recommended for the washing machine to reduce the possibility of a broken or burst hose. Washer hoses are under pressure (if not turned off) and can cause extensive damage when they burst.



A single 'flip' valve could be installed for the washing machine hot and cold water supply.

### LIMITATIONS OF BATHROOMS AND LAUNDRY INSPECTION

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As prescribed in the pre-inspection contract, this is a visual inspection only. The inspection was limited by (but not restricted to) the following conditions:

- Clothes washing machine connections are not inspected.
- Components concealed behind finished surfaces could not be inspected.
- The bathtub overflow drain(s) are not tested.

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

# Radon Test Report

## INSPECTION INFORMATION

**Device(s) Name:** •AccuStar Inc.  
**Device Serial Number(s):** •2206881, 2206882  
**Device Type(s):** •Activated Charcoal Adsorption Devices  
**Number Of Devices Used:** •2

## TEST CONDITIONS

**Foundation Type:** •Combination Basement / Crawl Space  
**Foundation Material:** •Poured Concrete and Masonry Block  
**Basement Living Area:** •No  
**Below Floor Ventilation:** •None  
**Test Area:** •Not Occupied  
**Test Location:** •in the front entrance hall  
**Test Area Closed Prior To Test?** •Yes  
**Time Test Area Closed:** •At Least 12 Hours  
**Smokers In Home:** •None



## WEATHER CONDITIONS AT TIME OF TEST:

**Wind:** •Light  
**Rain:** •Light  
**Humidity:** •Average

## TEST RESULTS

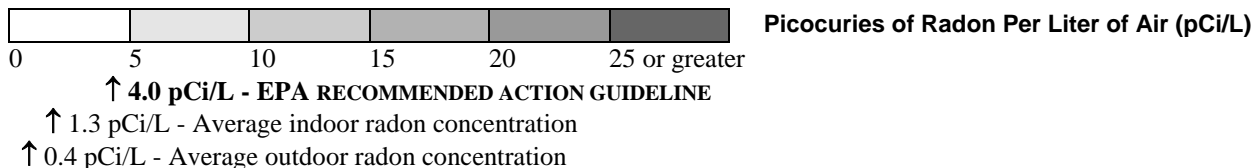
Date / Time Placed: **Date: 08/07/2013 Time: 12:00**      Date / Time Removed: **Date: 08/09/2013 Time: 16:00**  
 Time In Place: **48 - 60 Hours**

**RADON LEVEL: 1.5, 1.9 = an average of 1.7 pCi/L (Picocuries of Radon Per Liter of Air)**



## EPA RADON RISK INFORMATION

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 you 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 <b>4.0 pCi/L or Greater</b>
Single Short-Term Test	<b>Test Again*</b>
Average of Short-Term Tests	<b>Fix The Home</b>
One Long-Term Test	<b>Fix The Home</b>

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

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

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

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

### 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.**