



# Home Inspection Report

**Report Number: 231-2015**

**For The Property Located On:**

1976 Pilgrims Way  
Boone , North Carolina



**Prepared For Exclusive Use By:**

John Sample

Report Prepared By: Dwayne Harris; License No.: 3184

**Inspector Signature:**

A handwritten signature in black ink, appearing to read "Dwayne Harris".

Date of Inspection: Friday, April 1, 2016

This report was prepared for the exclusive use of the client named above. This report remains the property of the inspector and or inspection company and can not be transferred or sold. Acceptance and or use of the inspection report binds the client to the terms of the Home Inspection Contract.

## Report Sections

### Summary

- A Structural
- B Exterior
- C Roofing
- D Plumbing
- E Electrical
- F Heating
- G Cooling
- H Interiors
- I Insulation and Ventilation
- J Appliances

### Report Introduction

### Weather Conditions

### Inspection Report Body

- A Structural
- B Exterior
- C Roofing
- D Plumbing
- E Electrical
- F Heating
- G Cooling
- H Interiors
- I Insulation and Ventilation
- J Appliances

Summary
"This summary page is not the entire report. The complete report may include additional information of interest or concern to you. It is strongly recommended that you promptly read the complete report. For information regarding the negotiability of any item in this report under the real estate purchase contract, contact your North Carolina real estate agent or an attorney."
<b>(A1 - 1 ) Summary - Structural: Foundation (Defects, Comments, and Concerns):</b>
<b>(A1 - 1.1 ) Main House</b>
The foundation wall located on the left side the home has cracked in the horizontal direction and is trying to buckle into the foundation area. Horizontal cracks are the most serious cracks in foundations that are earth retaining because the walls can buckle without warning and jeopardize the structure of the home. An engineer should be consulted for a complete evaluation, to determine the significance of the concern and outline necessary repairs.
<b>(A3 - 1 ) Summary - Structural: Floor Structure (Defects, Comments, and Concerns):</b>
<b>(A3 - 1.1 ) All Accessible Areas</b>
Engineered hangers used to support the ends of (I-Joist) floor joist are not attached properly. Several of the hangers were found to have nails that were bent over or attachments had missing nails. The metal hangers used to support the floor joists of the floor structure were installed without web stiffeners to fill the gap between the joist and hanger and to provide proper bearing for the hanger. Proper bearing/proper nailing is crucial to the function of the hanger, without proper installation the hanger attachment could weaken the floor system or cause it to fail. Web stiffeners fill in the gap between the hanger and the web and provide support for the I-joist along the vertical axis. It is beyond the scope of the home inspection to determine the type or brand of the I-Joist or if web stiffeners were required on this installation. Also, it was observed that the steel post do not have any nails or screws at the top securing them to the girder. A licensed general contractor should be consulted for complete evaluation of the floor system and to make necessary repairs.
<b>(A6 - 1 ) Summary - Structural: Roof Structure (Defects, Comments, and Concerns):</b>
<b>(A6 - 1.1 ) Main House</b>
From the attic of the home, the roof ridge board is not sized to provide a full contact bearing for the rafters. When the ridge board is not full depth to the rafter cuts, the rafter is not supported at the heel and can crack or split. Also, some of the cuts show a gap between the rafter and the ridge board. When the heel of the rafter is not supported by the ridge board the load is concentrated on the toe of the rafter cut. This same condition was observed on engineered (LVL) beams used for valley rafters. A licensed general contractor should be consulted for a full evaluation of the roof system and to make the necessary repairs.
<b>(C1 - 1 ) Summary - Roofing: Coverings (Defects, Comments, and Concerns):</b>
<b>(C1 - 1.1 ) All Accessible Areas</b>
Several shingles on the roof surface were noted to be damaged. The damage appears to be from construction traffic. When the shingle's surface protective ballast is damaged, they can prematurely age, split and crack. A licensed roofing contractor should be consulted for a complete evaluation of the roof covering to replace damage shingles to ensure the durability of the roof covering system.
<b>(C1 - 1.16 ) All Accessible Areas</b>
The brick mortar joint for the brick veneer is in contact with the shingle surface. There is no visible flashing observed where the brick veneer contacts the shingles. Owner disclosure is needed to determine the flashing method used at these locations. If no information is available you should consult with a licensed roofing contractor to determine how the shingles are flashed at the end walls. There is no visible weep system at the bottom of brick veneer that contacts the roof. The weep system prevents water and condensation buildup behind the brick veneer. A licensed general contractor should be consulted for complete evaluation to determine the significance of this concern and repair as necessary.
<b>(C2 - 1 ) Summary - Roofing: Drainage Systems (Defects, Comments, and Concerns):</b>

<b>(C2 - 1.1 ) All Accessible Areas; System Type: Gutter</b>
The strap is loose on the gutter downspout on the left rear corner of the home. This needs repair to properly secure the down spout. A maintenance or repair man is needed to reattach the strap.
<b>(D1 - 1 ) Summary - Plumbing: Water Distribution Systems (Defects, Comments, and Concerns):</b>
<b>(D1 - 1.1 ) All Accessible Areas</b>
Some of the visible plumbing lines in this home are plastic PEX with QPEX metal fittings manufactured by the Zurn Corporation. These plumbing fittings are the subject of a consumer class action lawsuit and settlement due to fitting failures related to dezincification. After years of consumer complaints, the Zurn Corporation has acknowledged that it has seen an increased number of premature failures and leaks in its QPex fittings. A licensed plumbing contractor should be consulted for a complete evaluation of the plumbing system to determine the general condition of the plumbing distribution and supply lines, the significance of this concern, and make necessary repairs. The client should visit the class action settlement website for more information, <a href="http://www.PlumbingFittingSettlement.com">www.PlumbingFittingSettlement.com</a> .
<b>(D3 - 1 ) Summary - Plumbing: Water Heating Equipment (Defects, Comments, and Concerns):</b>
<b>(D3 - 1.1 ) Unit #1 ,#2; Location: Basement</b>
The home has two hot water heaters installed. One is a holding tank and is connected to the working hot water heater. A Thermal expansion tank was not found. Thermal expansion tanks are safety devices designed to relieve pressure on the plumbing system when the home has a public water source that does not have a bladder tank. The hot water system for this home does not have an expansion tank. Expansion tanks have been recommended since 2002 and provide an added level of safety to the hot water system of a home. A licensed plumbing contractor should be consulted to evaluate the system and determine the need for a an expansion tank.
<b>(E4 - 1 ) Summary - Electrical: Branch Circuits and Wiring (Defects, Comments, and Concerns):</b>
<b>(E4 - 1.1 ) Exterior/Interior</b>
There is a disconnected wire noted under the deck. Disconnected wires should be removed or properly terminated. The disconnected wires leaves electrical conductors exposed and in a hazardous condition. Also, a wire in the crawlspace has the protective covering removed where it passes through the floor. Electrical concerns should be considered fire and safety issues and repaired as soon as possible. The electrical systems and components are in need of a complete evaluation and repair by a licensed electrical contractor.
<b>(E5 - 1 ) Summary - Electrical: Light Fixtures, Receptacles, &amp; Smoke Detectors (Defects, Comments, and Concerns):</b>
<b>(E5 - 1.1 ) interior</b>
The receptacle located in the upstairs exercise room tested as reversed polarity. Polarization provides an extra safety feature to prevent electrical shock hazards and property damage. A licensed electrical contractor should be consulted for a complete evaluation to determine the significance of this concern and make necessary repairs to correct defects and prevent safety hazards.
<b>(E5 - 1.2 ) interior</b>
One of the smoke detectors located in the basement was older than 7years old. A properly functioning smoke detector is vital to the safety of a home. Smoke detectors should be replaced or updated every 5 to 7 years and batteries changed annually. Testing/replacement prior to purchase is recommended.
<b>(E5 - 2 ) Summary - Electrical: Light Fixtures, Receptacles, &amp; Smoke Detectors (Defects, Comments, and Concerns):</b>
<b>(E5 - 2.1 ) interior</b>

As part of the our standard of practice, the inspector must report the absence or presence of a permanently installed carbon monoxide detector in all homes with garages or fueled appliances. Please note that your report reflects the absence of a permanently installed carbon monoxide detector. All homes with gas appliances, garages, or fireplace should have a carbon monoxide detector as protection to prevent possible carbon monoxide poisoning. A properly functioning CO detector is vital to the safety of a home with gas appliances. Installation is recommended.

**(G1 - 1 ) Summary - Cooling: Equipment  
(Defects, Comments, and Concerns):**

**(G1 - 1.1 ) Cooling Unit #1#2; Location: Exterior: Basement**

On the upstairs air handler in the attic the AC system drain pan does not have a drain pipe extended to exit condensate water if the pan fills up. Water stains on the floor at the pan suggest that at times condensation leaks out on the attic floored area. Improper drainage of the condensate water can result in system and property damage. A HVAC contractor should be consulted for a complete evaluation and to make necessary repairs to ensure safe, reliable, and proper operation of the HVAC system.

**(H3 - 1 ) Summary - Interiors: Bathrooms  
(Defects, Comments, and Concerns):**

**(H3 - 1.1 ) Bathroom #2**

One of the upstairs bathroom door knobs does not engage good with the strike plate The door/lock needs repair to ensure that the door latches properly. A general repair specialist should be consulted for evaluation and repair.

## Introduction

This report is a written evaluation that represents the results of a home inspection performed according to North Carolina Home Inspector Licensure Act Standard of Practice. The word "inspect" per the NCHILB SOP means the act of making a visual examination. Home Inspections are limited to visible and accessible areas and are not invasive. The report outlines inspection findings of any systems or components so inspected that did not function as intended and are in need of repair, require subsequent observation such as monitoring, or warrants further investigation by a specialist such as a contractor or an engineer. The report statements describe the component or system and how the condition is defective, explain the consequences of the condition, and direct the recipient to a course of action with regard to the condition or refer the client to a specialist. It is recommended that all items listed in the body and summary of the report be reviewed, repaired, or evaluated to determine the extent of the concern before purchasing the home. It is the client's responsibility to read the complete inspection report and follow-up with repairs and evaluations. THIS REPORT WAS INTENDED TO BE VIEWED IN COLOR. THE DIRECTIONAL REFERENCE OF LEFT AND RIGHT IS AS FACING THE FRONT OF THE HOME.

## Home Inspection Report Body

### A - Structural Section

#### (General Limitations, Implications, and Directions):

All concerns related to structural items identified to be deficient in the following section are in need of further evaluation by a Licensed General Contractor or Engineer. Items in need of repair should be referred to a General Contractor. Items in need of design consideration, evaluation of significance / cause, and or determination of adequacy should be referred to an Engineer. All structural concerns should be evaluated and corrected as needed to ensure the durability and stability of the home. Repairs and evaluations should be made prior to closing to ensure that the buyer understands the full scope or extent of the concern. Where accessible foundations, piers, columns, roof and floor framing systems are inspected for visual defects such as broken, cracked, decayed, or damaged members; however, the evaluation of the system for design points such as correct span, load transfer, and or building code compliance is beyond the scope of the home inspection.

### A - Structural Section

#### (Foundation and Attic Inspection Methods):

When accessible and safe the inspector entered attic and crawl space inspection areas with small probe, camera, and a standard flash light. Where visible and accessible; floor and roof framing systems were inspected for visual defects such as broken, cracked, decayed, or damaged members; however, the evaluation of the system for design points such as correct span, load transfer, and or building code compliance is beyond the scope of the home inspection.

#### (A1 - 1 ) Main House

##### Structural: Foundation (Descriptions):

Foundation Type: Basement

Foundation Materials: Block: Brick

#### (A1 - 1 ) Structural: Foundation



##### (Defects, Comments, and Concerns):

#### (A1 - 1.1 ) Main House



The foundation wall located on the left side the home has cracked in the horizontal direction and is trying to buckle into the foundation area. Horizontal cracks are the most serious cracks in foundations that are earth retaining because the walls can buckle without warning and jeopardize the structure of the home. An engineer should be consulted for a complete evaluation, to determine the significance of the concern and outline necessary repairs.

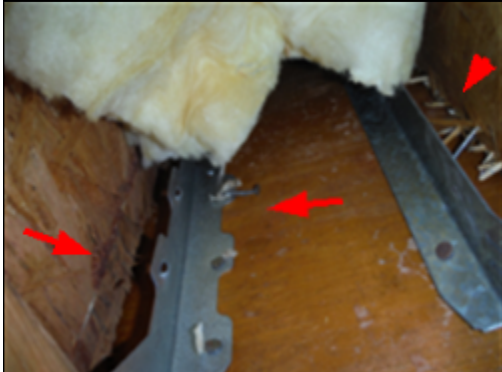


<b>(A2 - 1 ) Main House</b>	
<b>Structural: Columns and Piers (Descriptions):</b>	
Column/Pier Type:	Pier: Crawl Space/Basement steel post
Column/Pier Materials:	Steel
<b>(A3 - 1 ) All Accessible Areas</b>	
<b>Structural: Floor Structure (Descriptions):</b>	
Sub-Floor Type:	Plywood
Floor Joist Type:	Engineered System: I- Joists: Wood
Girder/Beam Type:	Engineered Lumber: LVL
<b>(A3 - 1 ) Structural: Floor Structure (Defects, Comments, and Concerns):</b>	
<b>(A3 - 1.1 ) All Accessible Areas</b>	
	Engineered hangers used to support the ends of (I-Joist) floor joist are not attached properly. Several of the hangers were found to have nails that were bent over or attachments had missing nails. The metal hangers used to support the floor joists of the floor structure were installed without web stiffeners to fill the gap between the joist and hanger and to provide proper bearing for the hanger. Proper bearing/proper nailing is crucial to the function of the hanger, without proper installation the hanger attachment could weaken the floor system or cause it to fail. Web stiffeners fill in the gap between the hanger and the web and provide support for the I-joist along the vertical axis. It is beyond the scope of the home inspection to determine the type or brand of the I-Joist or if web stiffeners were required on this installation. Also, it was observed that the steel post do not have any nails or screws at the top securing them to the girder. A licensed general contractor should be consulted for complete evaluation of the floor system and to make necessary repairs.
<b>(A3 - 1.2 ) All Accessible Areas</b>	
	-nails bent over not driven in completely or missing nails /no web stiffeners
<b>(A3 - 1.3 ) All Accessible Areas</b>	



-nails bent over not driven in completely or missing nails /no web stiffeners

**(A3 - 1.4 ) All Accessible Areas**



-nails bent over not driven in completely or missing nails /no web stiffeners

**(A3 - 1.5 ) All Accessible Areas**



-nails bent over not driven in completely or missing nails /no web stiffeners

**(A3 - 1.6 ) All Accessible Areas**





-nails bent over not driven in completely or missing nails /no web stiffeners

**(A3 - 1.7 ) All Accessible Areas**



-nails bent over not driven in completely or missing nails /no web stiffeners

**(A3 - 1.8 ) All Accessible Areas**



-nails bent over not driven in completely or missing nails /no web stiffeners/top of support post not nailed or screwed into girder

**(A4 - 1 ) All Interior Areas**

**Structural: Wall Structure**

**(Confirmation of Limitations, Reasons for Not Inspecting, Descriptions):**

Wall Structure Type: Standard Construction: Dimensional Lumber: Wood

**(A5 - 1 ) All Accessible Interior Areas**




**Structural: Ceiling Structure (Descriptions):**

Ceiling Joist Type: Dimensional Lumber: Standard Construction: Wood

Beam/Girder Type: Dimensional Lumber: Standard Construction: Wood

**(A6 - 1 ) Main House**

**Structural: Roof Structure (Descriptions):**

Roof Style/Type:	Gable/ Hip
Roof Sheathing Type:	OSB
Rafter & Beam Types:	Dimensional Lumber: Standard Construction
<b>(A6 - 1 ) Structural: Roof Structure (Defects, Comments, and Concerns):</b>	
<b>(A6 - 1.1 ) Main House</b>	
	From the attic of the home, the roof ridge board is not sized to provide a full contact bearing for the rafters. When the ridge board is not full depth to the rafter cuts, the rafter is not supported at the heel and can crack or split. Also, some of the cuts show a gap between the rafter and the ridge board. When the heel of the rafter is not supported by the ridge board the load is concentrated on the toe of the rafter cut. This same condition was observed on engineered (LVL) beams used for valley rafters. A licensed general contractor should be consulted for a full evaluation of the roof system and to make the necessary repairs.
<b>(A6 - 1.2 ) Main House</b>	
	-ridge board not full depth/ Engineered LVL beam (valley rafter) not bearing on ridge board properly
<b>(A6 - 1.3 ) Main House</b>	
	-ridge board not full depth
<b>(A6 - 1.4 ) Main House</b>	



-ridge board not full depth/gap at rafter cut

**(A6 - 1.5 ) Main House**



-ridge board not full depth

**(A6 - 1.6 ) Main House**



-ridge board not full depth/gap at rafter cut

**B - Exterior Section**

**(General Limitations, Implications, and Directions):**

All concerns related to exterior items listed below or identified to be deficient are in need of further evaluation and or repair by a Licensed General Contractor. It is important to correct deficiencies on the exterior of the home to prevent direct water penetration into the building envelope which can result in structural damage and or undesirable environmental conditions. Repairs and evaluations should be made prior to closing to ensure that the buyer understands the full scope or extent of the concern. Exterior systems and components should be inspected and maintained annually.

**(B1 - 1 ) Main House**

**Exterior: Wall Cladding (Descriptions):**

Wall Cladding Type:	Brick Veneer
Trim Type:	Wood Clad: Aluminum

**(B2 - 1 )**

**Exterior: Windows and Doors (Descriptions):**

Window/Door Type:	
Location:	

**(B3 - 1 ) Deck****Exterior: Decks, Porches, Stoops, and Balconies (Descriptions):**

Structure Type: Wood (Wood Surface)

Location: Main House Rear

**(B3 - 1 ) Exterior: Decks, Porches, Stoops, and Balconies  
(Defects, Comments, and Concerns):****(B3 - 1.1 ) Deck**

At the section of deck attached to the bay window the deck anchor bolts are not visible and could not be verified. There are post attached under this deck band that may be being used instead of an anchor /thru bolt. However one of the post is loose at the top and not securely attached to the bottom of the deck. Also, it should be noted that there are no angled bracing on this deck at the post, that would prevent lateral movement. All decks require seasonal maintenance and annual inspections, this is especially important for cantilevered or elevated decks. The buyer should consult a general contractor for further evaluation and repair.

**(B3 - 1.2 ) Deck**

-post is loose at the top under bay window section

**C - Roofing Section****(General Limitations, Implications, and Directions):**



The roof covering, flashings, and roof drainage items listed or identified below were found to be of concern and in need of further evaluation and repair by Licensed Roofing or General Contractor. It is important to correct roofing deficiencies to prevent direct water penetration into the building envelope which can result in structural damage and or undesirable environmental conditions. The verification of fastener type and count for the roofing covering system is beyond the scope of the home inspection. The home inspection is limited to visible surfaces and systems only, hidden or underlying system details such as flashings are beyond the scope of the home inspection. Determining the age or remaining service life of the roof covering systems is beyond the scope of the home inspection, if the buyer would like to budget for replacement a roofing contractor should be consulted to answer questions related to the life expectancy. Flashings and Roof gutters system inspections are limited to evidence of past problems unless the inspection is performed on during a heavy rain. All roof drainage and flashing systems should be monitored over the first year of ownership to identify problems areas or areas that may need adjustment or corrections.

**C - Roofing Section****(Roof Covering Inspection Methods):**

The roof covering was inspected using a zoom camera and from a ladder at the roof eaves. Walking on the roof surface is beyond the scope of the home inspection. If an invasive or complete surface inspection of the roof covering is desired, the buyer should consult a licensed roofing contractor prior to purchase.

**(C1 - 1 ) All Accessible Areas****Roofing: Coverings (Descriptions):**



Roof Covering Type:	Shingles/Composite/Fiberglass
<b>(C1 - 1 ) Roofing: Coverings (Defects, Comments, and Concerns):</b>	
<b>(C1 - 1.1 ) All Accessible Areas</b>	
	Several shingles on the roof surface were noted to be damaged. The damage appears to be from construction traffic. When the shingle's surface protective ballast is damaged, they can prematurely age, split and crack. A licensed roofing contractor should be consulted for a complete evaluation of the roof covering to replace damage shingles to ensure the durability of the roof covering system.
<b>(C1 - 1.2 ) All Accessible Areas</b>	
	-damaged shingles
<b>(C1 - 1.3 ) All Accessible Areas</b>	
	-damaged shingles
<b>(C1 - 1.4 ) All Accessible Areas</b>	
	-damaged shingles

**(C1 - 1.5 ) All Accessible Areas**



-damaged shingle

**(C1 - 1.6 ) All Accessible Areas**



-damaged shingle

**(C1 - 1.7 ) All Accessible Areas**



-damaged shingle

**(C1 - 1.8 ) All Accessible Areas**



-damaged shingle

**(C1 - 1.9 ) All Accessible Areas**





-damaged shingle

**(C1 - 1.10 ) All Accessible Areas**



-damaged shingle

**(C1 - 1.11 ) All Accessible Areas**



-damaged shingle

**(C1 - 1.12 ) All Accessible Areas**



-damaged shingle

**(C1 - 1.13 ) All Accessible Areas**



-damaged shingle

**(C1 - 1.14 ) All Accessible Areas**



-damaged shingles

**(C1 - 1.15 ) All Accessible Areas**



-damaged shingles

**(C1 - 1.16 ) All Accessible Areas**



The brick mortar joint for the brick veneer is in contact with the shingle surface. There is no visible flashing observed where the brick veneer contacts the shingles. Owner disclosure is needed to determine the flashing method used at these locations. If no information is available you should consult with a licensed roofing contractor to determine how the shingles are flashed at the end walls. There is no visible weep system at the bottom of brick veneer that contacts the roof. The weep system prevents water and condensation buildup behind the brick veneer. A licensed general contractor should be consulted for complete evaluation to determine the significance of this concern and repair as necessary.

**(C1 - 1.17 ) All Accessible Areas**



-flashing not visible at gable end wall

**(C1 - 1.18 ) All Accessible Areas**



Several shingles on the roof surface were noted to be scuffed or damaged. The damage appears to be from construction traffic. When the shingle's surface protective ballast is damaged, they can prematurely age, split and crack. A licensed roofing contractor should be consulted for a complete evaluation of the roof covering to replace damage shingles to ensure the durability of the roof covering system.

**(C2 - 1 ) All Accessible Areas**

**Roofing: Drainage Systems (Descriptions):**

System Type:	Gutter
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**(C2 - 1 ) Roofing: Drainage Systems  
(Defects, Comments, and Concerns):**

**(C2 - 1.1 ) All Accessible Areas**





The strap is loose on the gutter downspout on the left rear corner of the home. This needs repair to properly secure the down spout. A maintenance or repair man is needed to reattach the strap.

## D - Plumbing Section

### (General Limitations, Implications, and Directions):

All plumbing and water heating items listed or identified below were found to be of concern and in need of further evaluation and repair by a Licensed Plumbing or General Contractor. If additional concerns are discovered during the process of evaluation and repair, a general contractor should be consulted to contact specialist in each trade as needed. Repairs are needed to prevent leaks and ensure proper sanitation. The majority of the water supply and the waste lines are concealed from visual inspection and the general condition cannot be determined. The plumbing was inspected for functional flow and drainage; however, it is not possible to fully evaluate the plumbing system to determine proper venting, sizing, or functional design during a home inspection when the system cannot be put under the same load as presented by a family. The inspection of the water heater does not include evaluating the unit capacity for functional use based on the number bathrooms or fixtures. The hot water requirement for daily use varies with each family and the home inspector has not developed an opinion whether or not the hot water system for this home is adequate. The inspection does not include verification of anti-scald fixtures. The inspection does not assure that the plumbing systems and components of the home will meet the demands of your family. Determining the quality and quantity of the water supply is beyond the scope of the home inspection, this includes determining if water supply is acidic or has high mineral content. Fixtures are not identified as defective as the result of hard water or mineral stains. The effectiveness of the toilet flush and the verification of the drain for the washing machine are beyond the scope of the home inspection. The main water turn off valve location is identified if located, but not operated. The functional flow of the water supply at each accessible fixture was tested. Functional flow is not found and reported as defective unless water flow drops below 50% when two fixtures are operated simultaneously. Waste and supply lines are evaluated by running water inside the home, the condition of the inside of the plumbing pipes cannot be determined. Verification of the surface defects on plumbing fixtures such as shower/tubs/sinks is beyond the scope of the inspection. Backflow protection is not a requirement for all homes, and determining the presence or absence of backflow protection is beyond the scope of the inspection. Annual service and inspection of the main waste line will prevent system clogging and backup. The plumbing inspection is a limited functional evaluation made under little to no system load. If the buyer would like to know the condition of the interior of the plumbing lines, the buyer should consult a licensed plumbing contractor prior to purchase.

## D - Plumbing Section

### (Main Water Shut-Off Location, Water Supply Type, and Water Supply Piping Materials):

Main Shut-Off Location:	Crawl Space	Water Supply Type:	Public
Supply Piping Materials:	[PEX]		

## (D1 - 1 ) All Accessible Areas

### Plumbing: Water Distribution Systems (Descriptions):

Piping Materials:	[PEX]
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## (D1 - 1 ) Plumbing: Water Distribution Systems

### (Defects, Comments, and Concerns):

## (D1 - 1.1 ) All Accessible Areas



Some of the visible plumbing lines in this home are plastic PEX with QPEX metal fittings manufactured by the Zurn Corporation. These plumbing fittings are the subject of a consumer class action lawsuit and settlement due to fitting failures related to dezincification. After years of consumer complaints, the Zurn Corporation has acknowledged that it has seen an increased number of premature failures and leaks in its QPex fittings. A licensed plumbing contractor should be consulted for a complete evaluation of the plumbing system to determine the general condition of the plumbing distribution and supply lines, the significance of this concern, and make necessary repairs. The client should visit the class action settlement website for more information, [www.PlumbingFittingSettlement.com](http://www.PlumbingFittingSettlement.com).

**(D1 - 1.2 ) All Accessible Areas**



-Q-pex fitting

**(D1 - 1.3 ) All Accessible Areas**



-Q-pex fitting

**(D1 - 1.4 ) All Accessible Areas**




-Q-pex fitting

**(D2 - 1 ) All Accessible Areas**

**Plumbing: Drain, Waste, and Vent Systems (Descriptions):**

Piping Materials:	[PVC]
Trap Materials:	[Plastic]

<b>(D3 - 1 ) Unit #1 ,#2</b>			
<b>Plumbing: Water Heating Equipment (Descriptions):</b>			
<i>Location:</i>	Basement		
<i>Capacity:</i>	40 Gallons	<i>Energy Source:</i>	Electric
<b>(D3 - 1 ) Plumbing: Water Heating Equipment (Defects, Comments, and Concerns):</b>			
<b>(D3 - 1.1 ) Unit #1 ,#2</b>			
		<p>The home has two hot water heaters installed. One is a holding tank and is connected to the working hot water heater. A Thermal expansion tank was not found. Thermal expansion tanks are safety devices designed to relieve pressure on the plumbing system when the home has a public water source that does not have a bladder tank. The hot water system for this home does not have an expansion tank. Expansion tanks have been recommended since 2002 and provide an added level of safety to the hot water system of a home. A licensed plumbing contractor should be consulted to evaluate the system and determine the need for a an expansion tank.</p>	
<b>E - Electrical Section (General Limitations, Implications, and Directions):</b>			
<p>All Electrical items listed below that were found to be of concern and in need of further evaluation and repair by a Licensed Electrical Contractor. When repairs are made the complete electrical system should be evaluated. Electrical issues are safety concerns and should be repaired immediately. During a home inspection, it is not possible to place a home under a full loading condition that would evaluate the capacity of the electrical system. The electrical system was evaluated based on current systems and components and no consideration was made to future expansion or modernizations. As with any system, the addition of new systems and appliances may require electrical system replacement, modifications, and or upgrades.</p>			
<b>E - Electrical Section (Presence or Absence of Smoke Detectors and Carbon Monoxide Detectors):</b>			
Smoke Detectors are Present in this Home		Carbon Monoxide Detectors are Not Present in this Home	
<b>(E1 - 1 ) Type: Underground</b>			
<b>Electrical: Main Service (Descriptions):</b>			
<i>Grounding Electrode:</i>	Undetermined		
<b>(E2 - 1 ) Main Panel #1/ #2</b>			
<b>Electrical: Main Panels (Descriptions):</b>			
<i>Location:</i>	Basement	<i>Amperage Rating:</i>	200 Amps
<i>Service Cable Material:</i>	Aluminum	<i>Voltage Rating:</i>	120/240 Volts, 1 Phase
<b>(E4 - 1 ) Exterior/Interior</b>			
<b>Electrical: Branch Circuits and Wiring (Descriptions):</b>			
<i>Observed Wiring Materials:</i>			
<b>(E4 - 1 ) Electrical: Branch Circuits and Wiring (Defects, Comments, and Concerns):</b>			
<b>(E4 - 1.1 ) Exterior/Interior</b>			





There is a disconnected wire noted under the deck. Disconnected wires should be removed or properly terminated. The disconnected wires leaves electrical conductors exposed and in a hazardous condition. Also, a wire in the crawlspace has the protective covering removed where it passes through the floor. Electrical concerns should be considered fire and safety issues and repaired as soon as possible. The electrical systems and components are in need of a complete evaluation and repair by a licensed electrical contractor.

**(E4 - 1.2 ) Exterior/Interior**



-cover off of wire where it passes through the floor

**(E5 - 1 ) interior**  
**Electrical: Light Fixtures, Receptacles, Smoke Detectors**  
**(Confirmation of Limitations, Reasons for Not Inspecting):**

A properly functioning smoke detector is vital to the safety of a home. Smoke detectors should be replaced or updated every 5 to 7 years and batteries changed annually. Testing prior to purchase is recommended.

**(E5 - 1 ) Electrical: Light Fixtures, Receptacles, Smoke Detectors**  
**(Defects, Comments, and Concerns):**

**(E5 - 1.1 ) interior**



The receptacle located in the upstairs exercise room tested as reversed polarity. Polarization provides an extra safety feature to prevent electrical shock hazards and property damage. A licensed electrical contractor should be consulted for a complete evaluation to determine the significance of this concern and make necessary repairs to correct defects and prevent safety hazards.

**(E5 - 1.2 ) interior**



One of the smoke detectors located in the basement was older than 7years old. A properly functioning smoke detector is vital to the safety of a home. Smoke detectors should be replaced or updated every 5 to 7 years and batteries changed annually. Testing/replacement prior to purchase is recommended.

## **(E5 - 2 ) Electrical: Light Fixtures, Receptacles, Smoke Detectors (Defects, Comments, and Concerns):**

### **(E5 - 2.1 ) interior**



As part of the our standard of practice, the inspector must report the absence or presence of a permanently installed carbon monoxide detector in all homes with garages or fueled appliances. Please note that your report reflects the absence of a permanently installed carbon monoxide detector. All homes with gas appliances, garages, or fireplace should have a carbon monoxide detector as protection to prevent possible carbon monoxide poisoning. A properly functioning CO detector is vital to the safety of a home with gas appliances. Installation is recommended.

## **F - Heating Section (General Limitations, Implications, and Directions):**


The HVAC systems were visually inspected and operated in the cooling cycle. No immediate concerns or defects were located. The removal of the unit covers to view coils and fans provided for service by a qualified service technician is beyond the scope of the home inspection. The purpose of a home inspection is to determine if a system or component is functioning as intended. During a summer inspection when outside temperatures are above 60 degrees Fahrenheit (F), it is not possible to evaluate if the system will properly heat the home, therefore, the heat pump system is visually inspected but not operated in the heating mode. Unless otherwise noted the backup or emergency heat systems are operated. It is not possible for the home inspector to draw a conclusion regarding the functionality of the heat pump system in heating mode during a summer inspection. If the buyer would like more information concerning the functionality of the system, an invasive inspection by a HVAC technician should be requested prior to purchase. The homeowner should be asked for disclosure related to the performance, service, and maintenance history of the HVAC systems.

### **(F1 - 1 ) Heating Unit #1#2 Heating: Equipment (Descriptions):**

Location:	Exterior: Basement, Attic		
Equipment Type:	Heat Pump	Energy Source:	Electric

### **(F2 - 1 ) Heating Unit Served: Heating Unit #1 Heating: Distribution Systems (Descriptions):**

Location:	Basement/Crawlspace
System Type:	Forced Air: Metal Box: Flexible Branch

<b>(F3 - 1 ) basement /crawlspac</b>			
<b>Heating: Gas Piping and Fuel Storage Systems (Descriptions):</b>			
<i>Gas Piping Materials:</i>	Copper		
<i>Fuel Turn Off Location:</i>	At Propane Tank		
<i>Fuel Storage:</i>	[Propane Storage Tank Present]		
<b>G - Cooling Section</b>			
<b>(General Limitations, Implications, and Directions):</b>			
<p>All cooling system concerns listed or identified below were found to be of concern and in need of further evaluation and repair by a Licensed HVAC Contractor to ensure safe, proper, and reliable operation of the HVAC system. The removal of the unit covers to view coils and fans provided for service by a qualified service technician is beyond the scope of the home inspection. If an invasive inspection is desired, a HVAC service company should be consulted prior to closing. To keep your unit operating safely and efficiently, a qualified service technician should check the entire system seasonally. Unless otherwise noted, the air conditioning system was operated during the inspection. The system outputs are evaluated based on typical HVAC systems design specifications of 75 degree F interior temperatures on 90 degree F days. Determining system performance for extreme weather days or consumer desire for room temperature below 75 degree F is beyond the scope of the home inspection. Comfort levels vary from person to person and therefore are not the focus of a home inspection. The homeowner should be asked for disclosure related to the performance, service, and maintenance history of the HVAC systems.</p>			
<b>(G1 - 1 ) Cooling Unit #1#2</b>			
<b>Cooling: Equipment (Descriptions):</b>			
<i>Location:</i>	Exterior: Basement		
<i>Equipment Type:</i>	Heat Pump	<i>Energy Source:</i>	Electric
<b>(G1 - 1 ) Cooling: Equipment</b>			
<b>(Defects, Comments, and Concerns):</b>			
<b>(G1 - 1.1 ) Cooling Unit #1#2</b>			
		<p>On the upstairs air handler in the attic the AC system drain pan does not have a drain pipe extended to exit condensate water if the pan fills up. Water stains on the floor at the pan suggest that at times condensation leaks out on the attic floored area. Improper drainage of the condensate water can result in system and property damage. A HVAC contractor should be consulted for a complete evaluation and to make necessary repairs to ensure safe, reliable, and proper operation of the HVAC system.</p>	
<b>(G2 - 1 ) Cooling Unit Served: Cooling Unit #1#2</b>			
<b>Cooling: Distribution Systems (Descriptions):</b>			
<i>Location:</i>	Basement/Attic		
<i>System Type:</i>	Forced Air: Metal Box: Flexible Branch		

## H - Interiors Section (General Limitations, Implications, and Directions):

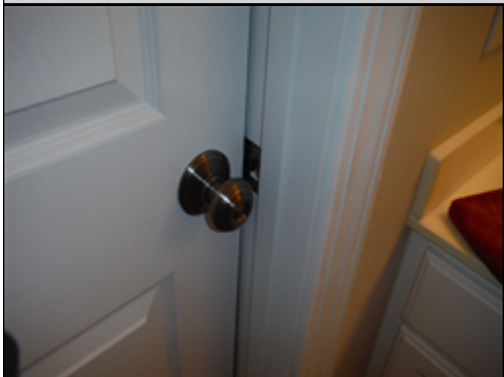
The interior rooms of the home were visually inspected. The inspection was not invasive and therefore was limited. One window and one receptacle were tested in each room unless furniture or storage blocked the access. Identifying cloudy windows is beyond the scope of the home inspection. The severity of the hazing varies with season and time of the day; therefore, damaged windows may not be visible at the time of the inspection. Light fixtures were operated from at least one switch. Unless labeled, multiple switch locations may not be identified. Confirmation of multiple position switches is only possible when all switches can be identified and this is not possible if switches are improperly installed. Every light fixture has specific bulb wattage limitations. During the home inspection it is not possible to verify bulb type and size. Homeowners should verify bulb type and wattage for each fixture to prevent fixture damage and ensure proper operation. Cosmetic concerns for example: worn carpets, poor floor finish, open seams in hardwoods, torn wallpaper, poor/damaged paint finish, worn cabinets, worn hinges, damaged window blinds/shades, evidence of pets, and evidence of smoking are beyond the scope of the home inspection. Personal property such as storage, refrigerators, washers, dryers, rugs, furniture, clothes, and wall hangings are not moved and therefore limit the inspection. The overall floor areas in most furnished rooms are not visible and therefore identifying slopes may not be possible. Furniture and personal items can conceal defects and change the overall feel of a home. The buyer should view the home when furnishing and personal items have been removed prior to the purchase. The inspection of the garage does not include moving personal property and or storage. The verification of fire separation systems between the house and the garage such as doors and ceilings is beyond the scope of the home inspection. The washing machine and dryer are considered personal property and the inspection of these appliances are beyond the scope of the home inspection. Washing machines often leak resulting in hidden damage to areas that are not visible to the home inspector and Household fires related to clothes dryers are very common. The presence of the washer and dryer greatly limit the inspection of the laundry area. After the washer and dryer have been removed and prior to the purchase of the home, the buyer should view the laundry room for damage or concerns. Before the installation of your washer and dryer, the installer should inspect and verify the washer drain, the dryer exhaust duct, and the electrical service receptacles.

### (H3 - 1 ) Bathroom #2 Interiors: Bathrooms (Descriptions):

<i>Electrical Receptacle:</i>	No Electrical Receptacle Found In Bathroom
<i>Bathroom Ventilation:</i>	

### (H3 - 1 ) Interiors: Bathrooms (Defects, Comments, and Concerns):

#### (H3 - 1.1 ) Bathroom #2



One of the upstairs bathroom door knobs does not engage good with the strike plate The door/lock needs repair to ensure that the door latches properly. A general repair specialist should be consulted for evaluation and repair.

### (H6 - 1 ) Fireplace: Pre-Manufactured: Metal: Box: Sided Exterior Interiors: Fireplaces and Stoves (Confirmation of Limitations, Reasons for Not Inspecting, Descriptions):

The pilot light for the gas logs was not lit during the home inspection and the logs were not operated. Gas systems require seasonal maintenance and upkeep. You should consult with the gas service provider to service and inspect the system prior to ownership and develop a plan for seasonal maintenance. All homes with gas appliance should have a carbon monoxide detector. A properly functioning CO detector was not located at the home. A carbon monoxide detector is vital to the safety of a home with gas appliances or attached garages.

<i>Location:</i>	Living Room
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<i>Energy Source:</i>	Propane
<i>Exhaust Flue Type:</i>	gas log unit

### **I - Insulation and Ventilation Section (General Limitations, Implications, and Directions):**

No immediate defects or concerns were noted. The insulation in accessible areas was inspected for indications of defects/damage only and not insulation effectiveness or R value. Determining the energy efficiency of the home is beyond the scope of the home inspection. The inspection or determination of the absence or presence of insulation in concealed areas such as wall cavities is not possible. Insulation is not moved in the attic areas. Insulation is moved in the crawl space or foundation areas where plumbing drain/waste pipes penetrate floors, adjacent to earth-filled stoops or porches and at exterior doors when conditions are not hazardous. The presence of insulation prevents the inspection of the ceiling, roofing, and floor components that are concealed or covered. Defects in the insulation system can lead to air infiltration, condensation, and elevated operational costs. The adequacy and proper function of ventilation systems depend on design specifications that cannot be verified during a home inspection. Inspection procedures related to ventilation involve identifying defects present on systems and components located in the ventilated areas. Active defects such as winter attic condensation will not be visible during the summer inspection unless the condensation has stained or corroded adjacent materials. Therefore the inspection of ventilated areas should be considered seasonally dependent, and the buyer should request a second inspection when the seasons change.

### **(I1 - 1 ) Attic Insulation and Ventilation: Areas (Descriptions):**

<i>Insulation Type:</i>	Loose: Fiberglass
<i>Ventilation Type:</i>	Soffit: Ridge

### **(I1 - 2 ) Basement /Crawlspace Insulation and Ventilation: Areas (Descriptions):**

<i>Insulation Type:</i>	Batt:
<i>Ventilation Type:</i>	Foundation Vents

### **J - Built In Appliance Section (General Limitations, Implications, and Directions):**

The appliances present in the home at time of the inspection were visually inspected and operated per the inspection SOP unless other wise noted. Built in appliances are operated to determine if the units respond and operate to normal operating controls. The determination of the effectiveness of the appliance settings or cycles, such cleaning ability of the dishwasher, grinding efficiency of the disposal, or calibration of the oven is beyond the scope of the home inspection. Refrigeration units and washing machines are beyond the scope of the home inspection.