

ADDRESS:

1234 Main Street Germantown, MD 20874

PREPARED FOR: JOHN DOE (SAMPLE REPORT)

INSPECTION DATE: Wednesday, May 15, 2019

PREPARED BY:

Felipe Machado, License: MD 33836, VA 3380001738



# Your Inspection Report

Essential Inspection Services PO Box 1306 Germantown, MD 20875

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1234 Main Street, Germantown, MD May 15, 2019

OVERVIEW	ROOFING	EXTERIOR	STRUCTURE	ELECTRICAL	HEATING	COOLING	INSULATION	PLUMBING	INTERIOR
APPLIANCES	FIREPLACES/	THERMAL IM	RADON	MAINTENAN	REFERENCE				

Navigation and Report Overview

#### Navigating the Report:

Use the colored tabs at the top of each page for easy navigation to different sections. The report starts with an overview and then covers each major system (heating, electrical, etc.) in separate sections.

#### Hyperlinks:

Blue underlined text indicates links to additional information about specific subjects or conditions. Refer to the end of the report for further reference material (if desired).

#### Overview:

This Summary outlines potentially significant issues from a cost or safety standpoint. This section is provided as a courtesy and cannot be considered a substitute for reading the entire report. Please read the complete document.

# Roofing

#### **RECOMMENDATIONS \ Overview**

**Condition:** • I recommend that you collect documentation from the seller regarding the newer roof. The roof may also carry a warranty.

Location: Roof
Task: Inquire

Time: Informational or Advisory

## Exterior

## **ROOF DRAINAGE \ Downspouts**

**Condition:** • Downspout discharge too close: To prevent foundation leaks, improve downspouts to direct water at least 5 feet away from the house. Encourage stormwater to flow away from the building at the discharge point. Leaky foundations near downspouts indicate poor drainage. Consider installing downspout extensions where possible.

**Location**: Various locations: Exterior (See photo and Illustration)

Task: Improve / Repair

#### **GARAGE \ Vehicle door operators (openers)**

Condition: • Manual detachment device (safety cord/release handle) missing

**Location**: Garage **Task**: Repair / Install

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## Electrical

## **MAIN PANEL \ Breakers and Wiring**

Condition: • Arc Fault Circuit Interrupter (AFCI) test faulty

The breaker should be replaced.

**Location**: Electrical panel / Basement (See photo)

Task: Replace

Time: Safety Concern

#### **MAIN PANEL \ Panel wires**

Condition: • A loose branch wire was observed in the electrical panel. Immediate repair or removal by an electrical

professional is recommended. **Location**: Electrical panel

Task: Repair

Time: Safety Concern

# Heating

## **HEATING SYS \ Life expectancy**

Condition: • Near end-of-life expectancy;

Although the furnace is close to the end of its life, continue to use and maintain the system until it fails. Be prepared to replace the furnace at any time. I recommend the purchase of a warranty policy. Implication(s): Equipment failure | No heat for building

The System is 17 years old.

Location: Heating System - Furnace

Task: Service/Replace

Time: When Necessary - Be Prepared For The Need For Replacement In The Near Future

# Cooling & Heat Pump

## **HEAT PUMP AND AC \ Life expectancy**

**Condition:** • The heat pump or air conditioning system is near the end of its expected life. Although the system is close to the end of its life, continue to use and maintain the system until it fails. Be prepared to replace the system at any time. I recommend the purchase of a warranty policy. Implication(s): Equipment failure | Reduced comfort

The system is 17 years old. **Location**: A/C System

**Education**: 7 v o oystor

Task: Monitor

Time: When Necessary - Be Prepared For The Need For Replacement In The Near Future

## **HEAT PUMP AND AC \ Outdoor Unit (Compressor)**

Condition: • Excess noise or vibration

The air-conditioner compressor unit was excessively noisy during operation. This can indicate that the system is low on refrigerant and should be serviced by a qualified HVAC technician.

Location: Exterior

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**Task**: Further evaluation / Service

## **HEAT PUMP AND AC \ Condensate system**

**Condition:** • No Cleanout: While a trap is present in the A/C discharge pipe, there is no cleanout for maintenance. This lack of cleanout can make future maintenance and clearing of the trap difficult or impossible. I recommend the installation of a cleanout.

Location: Basement Utility Room

Task: Repair

# **Plumbing**

#### **WATER HEATER \ Life expectancy**

**Condition:** • The water heater is beyond its usable lifespan and shows general deterioration. While predicting an exact failure date is impossible, its age increases the risk of sudden malfunction. It would be wise to replace the unit before it fails. When replacing the water heater, I recommend the installation of a drain pan for added protection.

The water heater is 16 years old. **Location**: Basement, Water heater

Task: Replace / monitor

Time: Be Prepared For The Need For Replacement In The Near Future

## **WASTE PLUMBING \ Venting system**

**Condition:** • The plumbing vent (waste stack) viewed above the roof was too narrow (less than 3") and may be subject to blockage or may not allow adequate ventilation into the plumbing system. Repair of this setup by a plumbing professional is recommended.

**Location**: Roof **Task**: Repair

#### **FIXTURES AND FAUCETS \ Bathtub**

**Condition:** • Excessive flex and creaking in the bathtub floor indicate potential support issues. There was no evidence of any cracking or failure but monitor closely to prevent future cracks or leaks. It is impossible to predict how long the tub will continue to function properly.

**Location**: Primary bathroom (See photo) **Task**: Further Evaluation / Repair as Needed

#### Interior

#### **RECOMMENDATIONS \ Overview**

**Condition:** • Possible Mold Detected: During the inspection, evidence suggestive of mold was observed. Elevated moisture levels, which typically contribute to mold growth, were also noted. While a full investigation for hidden mold would require destructive testing, which isn't part of this inspection, mold sampling and analysis are strongly recommended to confirm or rule out its presence. If mold is confirmed, remediation is necessary.

It's important to note that the ANSI S520 standard for mold remediation discourages chemical treatments (spraying, fogging) or encapsulation methods (painting, sealing) as effective solutions. Instead, mold-affected materials are either removed or cleaned based on their composition. While other remediation methods exist, their effectiveness in controlling

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or eliminating mold is uncertain. Remember, any successful remediation effort should address the underlying source of moisture and be followed by independent testing to verify successful mold removal.

As per client's request, mold sampling was conducted during the inspection at the indicated locations.

Location: Primary Bathroom OSB Subfloor

Task: Remove mold

Time: Priority concern / Safety Concern

#### **WINDOWS \ General notes**

**Condition:** • The window won't stay open. The mechanism that holds the window up when opened may be defective. If the window falls, it can cause injury if your hands are below. The window and its glass can also be damaged. I recommend repairing or replacing the hardware, so that the window shuts, opens, locks and seals properly.

**Location**: Second floor bedroom (See photo)

**Task**: Repair or Replace **Time**: Safety Concern

#### **DOORS \ Exterior Doors**

**Condition:** • Evidence of leakage was observed at the threshold and/or trim of the exterior door. Efforts should be made to make the door watertight. It was noted that wood rot was around the base of the door (bottom left). When checking the moisture level with the moisture meter, it tested wet, so it is very likely that there is damage to the wood below it and there may also be mold.

Be advised that repair may require the replacement of the door. The door and/or frame should be repaired or replaced as needed.

Informational: Many times, this type of problem is caused by the incorrect installation of flashing. The ultimate goal is to create a series of overlapping layers of flashing material so that any water that gets behind the door trim from above the door or along the sides is captured and redirected back out to the front face of the house below the door threshold.

**Location**: First floor - Door to rear deck **Task**: Further evaluation / Repair or replace

Time: Possible Major Concern based on cost to replace and/or repair

# **Appliances**

## **CLOTHES DRYER \ Dryer venting**

**Condition:** • The dryer exhaust duct was kinked and/or crushed where it exited the back of the dryer. This condition creates a restriction in dryer exhaust that can result in lint accumulation or duct blockage. A restricted exhaust can also cause dryer overheating, which can shorten the expected long-term service life of the dryer and even increase the risk of fire

Location: Laundry area Task: Repair or Replace Time: Safety concern

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# Thermal Imaging

#### **RECOMMENDATIONS \ General**

**Condition:** • Evidence of prior moisture issues was noted through interior finish stains and/or repairs in the second-floor primary bedroom (see photos). While no active leaks were detected during the inspection with a moisture meter, thermal imaging revealed temperature variations in the same area, suggesting potential moisture intrusion within the built-up roof system. Thermal imaging, which visualizes temperature differences, can sometimes indicate hidden moisture issues. To fully assess this, I recommend:

- Inquiring the owner about any previous leaks or water-related concerns and whether they were addressed.
- If the owner is unaware of any previous repairs or if the underlying source of the moisture remains unaddressed, further evaluation should be undertaken by a qualified contractor before the Inspection Objection Deadline to further evaluate this condition and determine any necessary repairs.

**Location**: Second floor primary bedroom (See photos) **Task**: Inquire / Further evaluation, repair as needed **Time**: Priority Concern Informational or Advisory

This concludes the Summary section.

The remainder of the report describes each of the home's systems and also details any recommendations we have for improvements. Limitations that restricted our inspection are included as well.

The suggested time frames for completing recommendations are based on the limited information available during a pre-purchase home inspection. These may have to be adjusted based on the findings of specialists.

**InterNACHI Standards of Practice** 

ROOFING Report No. 1013, v.2

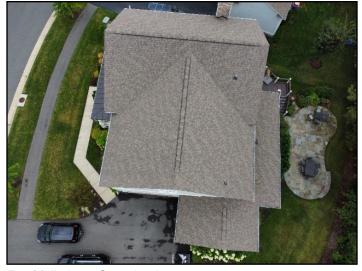
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# Description

#### General:

• Reference roofing pictures



Roof full view - Sample photo



Roof Rear View - Sample photo



Metal roof sample photo



Shingles Wear detail - Sample photo

- The Description section provides a list of the components. This may be useful in answering questions from an insurance company about the house construction, for example.
- Our inspection of the roof system included a visual examination to determine installation issues, damage, or deterioration. We look for evidence of leaks on the roof surface and from the attic below. We walk on the roof when it is safe to do so and is not likely to damage the roof materials. No one can accurately predict when a roof will leak.

## Sloped roofing material:

- Asphalt shingles
- Metal

Front Porch

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APPLIANCES FIREPLACES/ THERMAL IM RADON MAINTENAN REFERENCE

Layers of shingles: 1

Sloped roof flashing material: • Metal

Approximate age: • 0-5 years

Typical life expectancy: • Projected life is based on typical maintenance being performed. • 25-30 years

# Limitations

Inspection performed: • With a drone

# Recommendations

## **RECOMMENDATIONS \ Overview**

**1. Condition:** • I recommend that you collect documentation from the seller regarding the newer roof. The roof may also carry a warranty.

Location: Roof Task: Inquire

Time: Informational or Advisory

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APPLIANCES FIREPLACES/ THERMAL IM RADON MAINTENAN REFERENCE

# Description

#### General:

• Reference Exterior pictures



eference Exterior pictures

- The inspection of the exterior of the home is conducted from grade level, evaluating weather tightness, condition, installation, and safety. A representative sampling approach is applied to the inspection.
- Gutters and downspouts must carry water off the roof away from the building to prevent basement or crawl space leakage.

Ground that slopes toward the house can funnel surface water from rain and melting snow against the foundation walls. This can lead to basement or crawl space leakage. The ground around the house should slope down away from the building at a rate of at least 1 inch per foot for the first 6 feet out from the building.

Gutter & downspout material: • Aluminum

Gutter & downspout discharge: • Below grade • Above grade

Lot slope: • Away from building

Trim - doors, windows, soffits and fascias: • Vinyl and/or Aluminum Fascias and Soffits

Wall surfaces - masonry: • Artificial stone

Retaining wall: • Concrete

**Driveway:** • Asphalt

Walkway: • Concrete • Flagstone

Deck: • Raised • Pressure-treated wood

Porches & Patios: • Flagstone

Garage: • Attached

Garage vehicle door operator (opener): • Present • Operated automatic opener

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# Limitations

**Inspection limited/prevented by:** • Significant amounts of storage in the garage prohibited access to most of the perimeter. It would be good to have the garage inspected once the storage has been removed.

**Not included as part of a building inspection:** • Fences and boundary walls • Outbuildings other than garages and carports

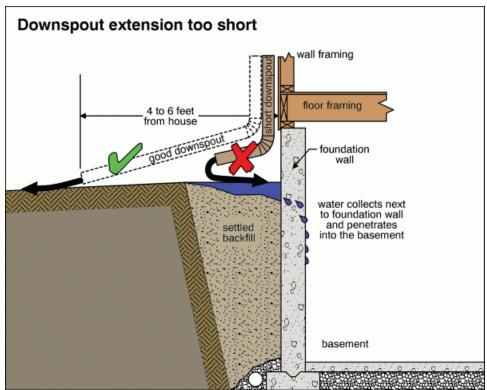
# Recommendations

## **ROOF DRAINAGE \ Downspouts**

2. Condition: • Downspout discharge too close: To prevent foundation leaks, improve downspouts to direct water at least 5 feet away from the house. Encourage stormwater to flow away from the building at the discharge point. Leaky foundations near downspouts indicate poor drainage. Consider installing downspout extensions where possible.

**Location**: Various locations: Exterior (See photo and Illustration)

Task: Improve / Repair



# **EXTERIOR**

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APPLIANCES	FIREPLACES/	THERMAL IM	RADON	MAINTENAN	REFERENCE				

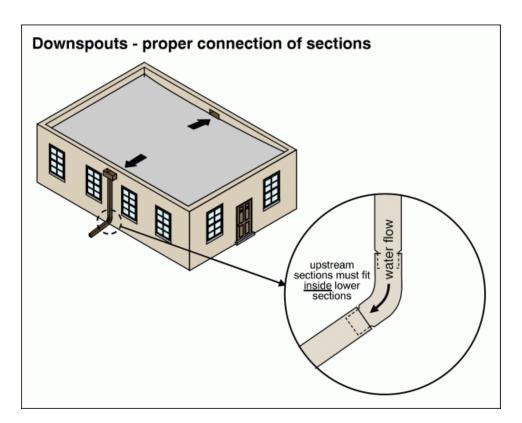


Sample

**3. Condition:** • Downspout connection: I recommend improving the connection between the downspout and the extension. Make sure all downspouts are connected and routed to discharge water away from the home foundation.

Location: Various locations: Exterior

Task: Repair



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APPLIANCES FIREPLACES/ THERMAL IM RADON MAINTENAN REFERENCE





Not properly connected. Repair Recommended

Not properly connected. Repair Recommended

## WALLS \ Trim

**4. Condition:** • The gap between the trim and the siding at the Front Right Side Exterior should be sealed.

Location: Front Right Side Exterior

Task: Repair



## **LANDSCAPING \ Lot grading**

**5. Condition:** • Evidence of ponding water in the yard. Ideally, water should run off the yard within 48 hours. Improve grading: The grading should be improved to promote the flow of storm water away from the house. This can often be accomplished by the addition or removal of soil. The ground should slope away from the house at a rate of one inch per foot for at least the first several feet.

**Location**: Rear Exterior See Photo(s)

Task: Repair / Monitor

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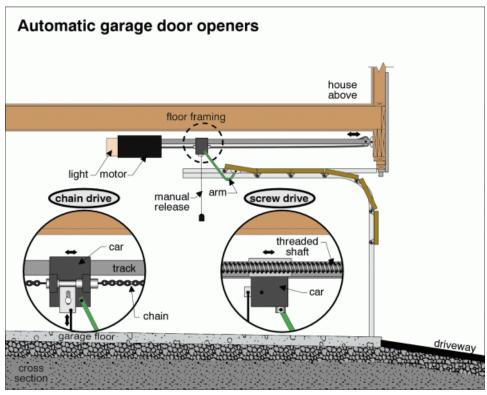
Ponding water, sample

Ponding water, sample

## **GARAGE \ Vehicle door operators (openers)**

6. Condition: • Manual detachment device (safety cord/release handle) missing

**Location**: Garage **Task**: Repair / Install



**7. Condition:** • I recommend that you inquire with the seller about garage door remotes and or the keypad access code prior to close.

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# **EXTERIOR**

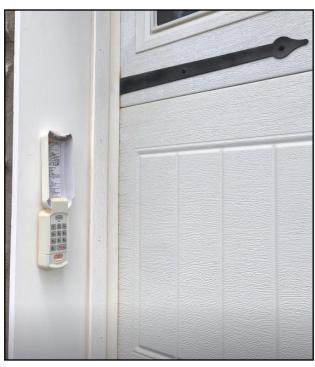
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Location: Garage Door

Task: Inquire

Time: Informational or Advisory



Keypad access code - Inquire

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APPLIANCES	FIREPLACES/	THERMAL IM	RADON	MAINTENAN	REFERENCE				

# Description

#### General:

• The structural inspection was performed from both the interior and exterior of the home. Our inspection of the exposed, readily accessible portions of the structure included an examination for visible defects, excessive wear, vulnerable conditions, and general condition. Many structural components are not visible during a professional home inspection. A home inspection typically includes deductive reasoning based on incomplete information. That is why a home inspection is considered a professional opinion.

Reference Structural Pictures



Main Attic - Sample photo



Main Attic - Sample photo

**Configuration:** • Basement

Foundation material: • Poured concrete

Floor construction: • Wood I-joists



Garage attic view, sample photo



Garage attic view, sample photo

STRUCTURE Report No. 1013, v.2

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OVERVIEW ROOFING EXTERIOR STRUCTURE ELECTRICAL HEATING COOLING INSULATION PLUMBING INTERIOR

APPLIANCES FIREPLACES/ THERMAL IM RADON MAINTENAN REFERENCE

Exterior wall construction: • Wood frame

Roof and ceiling framing: • Trusses • Oriented Strand Board (OSB) sheathing

# Limitations

**General:** • Installed insulation blocked much of the floor structure from view, including the subfloor, floor joists, rim joists, support girders, sillplate, and foundation bolts. This analysis is based on viewable elements only.

**Inspection limited/prevented by:** • The stored items in the basement currently obstruct access to certain sections of the unfinished areas. Inspection of these areas is recommended after the storage is cleared.



Storage sample photo

Storage sample photo

Attic/roof space: • Entered but access was limited

# Recommendations

#### **RECOMMENDATIONS \ Overview**

**8. Condition:** • No structure recommendations are offered as a result of this inspection. Refer to the REFERENCE section at the end of this report for additional useful information.

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# Description

#### General:

• Our visual examination of a random sampling of the readily accessible electrical components with a focus on safety problems, either electrical shock hazard or fire hazard. This includes an inspection for installation quality and condition of a representative sample of the system and devices.

• Reference Electrical Pictures



Reference Electrical Pictures

Service entrance cable: • <u>Underground aluminum</u>

Service size: • 200 Amps (240 Volts)

Main disconnect size: • 200 Amps

Main disconnect type and location:

• Breakers - basement



Main disconnect

System grounding material and type: • Copper - ground rods

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Distribution panel type and location: • Breakers - basement

Distribution wire (conductor) material and type: • Copper - non-metallic sheathed

Circuit interrupters: Ground Fault (GFCI) & Arc Fault (AFCI): • GFCI - Present • AFCI - Present

Smoke alarms (detectors): • Present

Carbon monoxide (CO) alarms (detectors): • Combination smoke/CO alarm(s) noted

# Recommendations

#### **MAIN PANEL \ Breakers and Wiring**

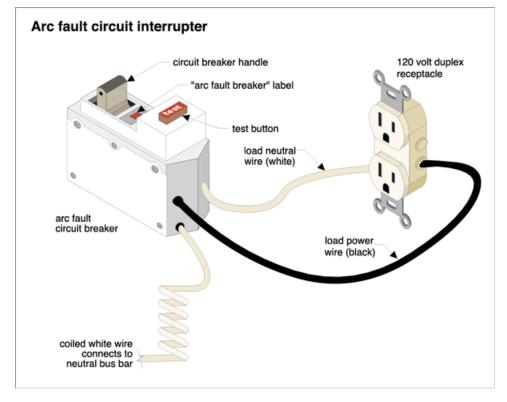
9. Condition: • Arc Fault Circuit Interrupter (AFCI) test faulty

The breaker should be replaced.

Location: Electrical panel / Basement (See photo)

Task: Replace

Time: Safety Concern



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OVERVIEW ROOFING EXTERIOR STRUCTURE ELECTRICAL HEATING COOLING INSULATION PLUMBING INTERIOR

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(AFCI) test faulty, sample

## **MAIN PANEL \ Panel wires**

**10. Condition:** • A loose branch wire was observed in the electrical panel. Immediate repair or removal by an electrical professional is recommended.

Location: Electrical panel

Task: Repair

Time: Safety Concern

## **WIRING \ Outlets (receptacles)**

**11. Condition:** • Electrical receptacles/outlets in the basement were improperly wired and should be evaluated and corrected by a qualified electrician as needed.

Location: Basement See Photo(s)

**Task**: Repair or replace **Time**: Safety Concern



Improperly wired outlet, Location sample



Improperly wired outlet, sample photo

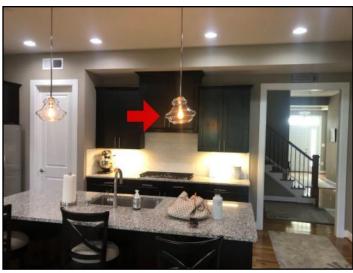
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## WIRING \ Lights and Fans

12. Condition: • A lighting fixture is slightly cockeyed and could be adjusted if desired so that it is square in and lined up.

**Location**: Kitchen (See photo) **Task**: Improve/ Repair as desired



Lighting fixture is slightly cockeyed

Report No. 1013, v.2 **HEATING** 

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ROOFING STRUCTURE HEATING APPLIANCES FIREPLACES/ REFERENCE THERMAL IM

# Description

#### General:

- Our inspection of the heating system included a visual examination of the main components to determine age, condition, and performance. Weather permitting, we operate the system using the thermostat and check system performance.
- VIDEO: Changing your furnace filter
- Reference Heating System Pictures



MFG. NO. NTG3050FBG1 INDOOR FORCED AIR FURNACE FOR BUILDING CON GENERATEUR D'AIR CHAUD ENCASTRE POUR BÂTIE

Furnace sample photo

2002 - Furnace data tag sample photo



Furnace running, flame pattern sample

## Heating system type:

- Furnace
- Zone 1
- Furnace

Zone 2

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Fuel/energy source: • Gas

Heat distribution: • Ducts and registers

## Approximate capacity:

• 65,000 BTU/hr

Zone 1

• 45,000 BTU/hr

Zone 2

Efficiency: • Conventional

Exhaust venting method: • Direct vent - sealed combustion

Approximate age: • 17 years

Typical life expectancy: • Furnace (conventional or mid-efficiency) 18 to 25 years

Main fuel shut off at: • Meter

**Exhaust pipe (vent connector):** • Type B • PVC plastic **Chimney/vent:** • <u>Wood over metal</u> • Sidewall venting

Carbon monoxide test: • 5 parts per million - approximate

#### Location of the thermostat for the HVAC system:

Dining Room

Zone 1

Second Floor

Primary bedroom - Zone 2

## Limitations

**General:** • The heat exchanger and the interiors of ductwork, vents, and chimneys are not inspected as part of this inspection. A home inspection does not include heat loss calculations, flow measurements, or verification of system adequacy.

# Recommendations

#### **RECOMMENDATIONS \ General**

**13. Condition:** • A maintenance contract is recommended for all heating and cooling equipment to help ensure the systems operate efficiently and safely, and to help maximize the service life.

Task: Service

Time: Routine Maintenance

#### **HEATING SYS \ Life expectancy**

14. Condition: • Near end-of-life expectancy;

Although the furnace is close to the end of its life, continue to use and maintain the system until it fails. Be prepared to replace the furnace at any time. I recommend the purchase of a warranty policy. Implication(s): Equipment failure | No heat for building

The System is 17 years old.

# **HEATING**

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1234 Main Street, Germantown, MD May 15, 2019 PLUMBING EXTERIOR STRUCTURE ELECTRICAL HEATING APPLIANCES THERMAL IM RADON REFERENCE FIREPLACES/ MAINTENAN

Location: Heating System - Furnace

Task: Service/Replace

Time: When Necessary - Be Prepared For The Need For Replacement In The Near Future

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# **COOLING & HEAT PUMP**

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# Description

**General:** • Our inspection of the heating system included a visual examination of the main components to determine age, condition, and performance. Weather permitting, we operate the system using the thermostat and check system performance. A home inspection does not include heat gain or loss calculations, flow measurements, or verification of system adequacy.

Air conditioning type: • Air cooled

Cooling capacity:

• <u>2 Tons</u>

Zone 2

• 2.5 Tons

Zone 1

Compressor approximate age: • 17 years

Typical life expectancy: • 12 to 15 years

Temperature difference across cooling coil:

• 17°



A/C Tested; Temperature difference sample

- Acceptable temperature difference: 14° to 22°
- This suggests good performance.

Air filter: • 16" x 25" • 16" x 25" • 1" thick

Refrigerant type: • R-410A

## Location of the thermostat for the HVAC system:

Dining Room

Zone 1

- First Floor
- Second Floor

Primary bedroom - Zone 2

# **COOLING & HEAT PUMP**

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Condensate system: • Discharges into floor drain

Ancillary components: • UV lighting

# Recommendations

#### **HEAT PUMP AND AC \ Life expectancy**

**15. Condition:** • The heat pump or air conditioning system is near the end of its expected life. Although the system is close to the end of its life, continue to use and maintain the system until it fails. Be prepared to replace the system at any time. I recommend the purchase of a warranty policy. Implication(s): Equipment failure | Reduced comfort

The system is 17 years old. **Location**: A/C System

Task: Monitor

Time: When Necessary - Be Prepared For The Need For Replacement In The Near Future

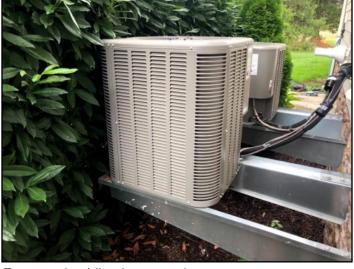
#### **HEAT PUMP AND AC \ Outdoor Unit (Compressor)**

16. Condition: • Excess noise or vibration

The air-conditioner compressor unit was excessively noisy during operation. This can indicate that the system is low on refrigerant and should be serviced by a qualified HVAC technician.

Location: Exterior

Task: Further evaluation / Service



Excess noise /vibration - sample

## **HEAT PUMP AND AC \ Condensate system**

**17. Condition:** • No Cleanout: While a trap is present in the A/C discharge pipe, there is no cleanout for maintenance. This lack of cleanout can make future maintenance and clearing of the trap difficult or impossible. I recommend the installation of a cleanout.

Location: Basement Utility Room

Task: Repair

# **INSULATION AND VENTILATION**

1234 Main Street, Germantown, MD May 15, 2019

OVERVIEW ROOFING EXTERIOR STRUCTURE ELECTRICAL HEATING COOLING INSULATION PLUMBING INTERIOR

APPLIANCES FIREPLACES/ THERMAL IM RADON MAINTENAN REFERENCE

# Description

#### General:

- The visible and readily accessible insulation, vapor retarders, and ventilation were inspected to identify the presence, material type, and quantity.
- Reference Insulation Pictures



Attic - Insulation sample photo



Attic - Insulation sample photo

Attic/roof insulation material: • Glass fiber
Attic/roof insulation amount/value: • R-38
Attic/roof air/vapor barrier: • Not visible

Attic/roof ventilation: • Soffit vent • Ridge vent

Wall insulation material: • Not determined • Not visible



Attic - Insulation sample photo



Basement - Insulation sample photo

# INSULATION AND VENTILATION

1234 Main Street, Germantown, MD May 15, 2019

OVERVIEW	ROOFING	EXTERIOR	STRUCTURE	ELECTRICAL	HEATING	COOLING	INSULATION	PLUMBING	INTERIOR
APPLIANCES	FIREPLACES/	THERMAL IM	RADON	MAINTENAN	REFERENCE				

Floor above basement/crawlspace insulation material: • Glass fiber • Rigid Foam

# Limitations

Attic inspection performed: • By entering attic, but access was limited

# Recommendations

## ATTIC/ROOF \ Hatch/Door

**18. Condition:** • It was noted that the access panel or door to the attic was marred. This is an aesthetic issue which can be repaired or replaced if desired.

**Location**: Attic hatch (See photo)

Task: For Information / Improve as desired



Sample

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OVERVIEW ROOFING EXTERIOR STRUCTURE ELECTRICAL HEATING COOLING INSULATION PLUMBING INTERIOR

APPLIANCES FIREPLACES/ THERMAL IM RADON MAINTENAN REFERENCE

# Description

#### General:

• Our visual inspection was performed to identify installation defects, damage or deterioration, and leakage. All plumbing fixtures were operated unless otherwise noted. Intermittent plumbing leaks may not be evident during a home inspection. A video scan to determine the condition of underground sewer lines is beyond the scope of a home inspection and can be performed by a specialist.

• Reference Plumbing System Pictures





Water Heater sample

(2003) Water heater data tag sample

Water supply source (based on observed evidence): • Public

Service piping into building: • PE (polyethylene)

**Supply piping in building:** • Copper • CPVC (Chlorinated PolyVinylChloride)

Main water shut off valve at the:

Basement

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OVERVIEW ROOFING EXTERIOR STRUCTURE ELECTRICAL HEATING COOLING INSULATION PLUMBING INTERIOR

APPLIANCES FIREPLACES/ THERMAL IM RADON MAINTENAN REFERENCE



Main water shut off

Water flow and pressure: • Functional

Water heater type: • Tank

Water heater location: • Basement

Water heater fuel/energy source: • Gas

Water heater exhaust venting method: • Natural draft

Water heater tank capacity: • 50 gallons
Water heater approximate age: • 16 years

Water heater typical life expectancy: • 10 to 15 years

Hot water temperature (Generally accepted safe temp. is 120° F): • More than 145° F

Waste disposal system: • Not determined

Waste and vent piping in building: • PVC plastic

Pumps and Tanks: • Sump pump • Sump pump - Typical life expectancy 10 to 12 years

Gas meter location: • Exterior
Gas piping material: • Steel

Main gas shut off valve location:

· Gas meter

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OVERVIEW ROOFING EXTERIOR STRUCTURE ELECTRICAL HEATING COOLING INSULATION PLUMBING INTERIOR

APPLIANCES FIREPLACES/ THERMAL IM RADON MAINTENAN REFERENCE



Main gas shut off valve

## Exterior hose bibb (outdoor faucet):

- Present
- Isolation Valve Location(s)
   Basement



Exterior hose bibb - shut off valves

# Limitations

**Items excluded from a building inspection:** • Water quality • Concealed plumbing • Underground waste or sanitary sewer pipes within and beyond the footprint of the building

**Not included as part of a building inspection:** • Fire extinguishers and sprinkler systems • Landscape irrigation systems

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APPLIANCES	FIREPLACES/	THERMAL IM	RADON	MAINTENAN	REFERENCE				

## Recommendations

## **WATER HEATER \ Life expectancy**

**19. Condition:** • The water heater is beyond its usable lifespan and shows general deterioration. While predicting an exact failure date is impossible, its age increases the risk of sudden malfunction. It would be wise to replace the unit before it fails. When replacing the water heater, I recommend the installation of a drain pan for added protection.

The water heater is 16 years old. **Location**: Basement, Water heater

Task: Replace / monitor

Time: Be Prepared For The Need For Replacement In The Near Future

#### **WASTE PLUMBING \ Venting system**

**20. Condition:** • The plumbing vent (waste stack) viewed above the roof was too narrow (less than 3") and may be subject to blockage or may not allow adequate ventilation into the plumbing system. Repair of this setup by a plumbing professional is recommended.

Location: Roof Task: Repair

## **WASTE PLUMBING \ Sump pump**

**21. Condition:** • Sump pump; The estimated useful life for most sump pumps is 10-12 years (oftentimes it may last longer). To find out the sump pump's estimated age, I advise you to ask the seller. If the sump pump age is unknown, older or near the end of its service life, I recommend considering replacement before it fails.

Location: Sump pump

Task: Inquire

Time: Informational or Advisory



Sump pump sample photo

#### **FIXTURES AND FAUCETS \ Bathtub**

**22. Condition:** • Excessive flex and creaking in the bathtub floor indicate potential support issues. There was no evidence of any cracking or failure but monitor closely to prevent future cracks or leaks. It is impossible to predict how long the tub will continue to function properly.

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APPLIANCES	FIREPLACES/	THERMAL IM	RADON	MAINTENAN	REFERENCE				

**Location**: Primary bathroom (See photo) **Task**: Further Evaluation / Repair as Needed



Excessive flex and creaking, sample

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OVERVIEW	ROOFING	EXTERIOR	STRUCTURE	ELECTRICAL	HEATING	COOLING	INSULATION	PLUMBING	INTERIOR
APPLIANCES	FIREPLACES/	THERMAL IM	RADON	MAINTENAN	REFERENCE				

# Description

**General:** • The inspection of the interior of the home includes a visual examination of a representative sample of the readily accessible features to identify functional performance issues. Cosmetic issues are beyond the scope of a home inspection.

Major floor finishes: • Carpet • Hardwood • Ceramic • Concrete • Vinyl

Major wall and ceiling finishes: • Plaster/drywall

Windows: • Single/double hung

Glazing: • Double

Exterior doors - type/material: • Hinged

Evidence of basement leakage: • None Noted

## Limitations

Not included as part of a building inspection: • Paint, wallpaper, and other finishes • Window treatments

# Recommendations

#### **RECOMMENDATIONS \ Overview**

**23. Condition:** • Possible Mold Detected: During the inspection, evidence suggestive of mold was observed. Elevated moisture levels, which typically contribute to mold growth, were also noted. While a full investigation for hidden mold would require destructive testing, which isn't part of this inspection, mold sampling and analysis are strongly recommended to confirm or rule out its presence. If mold is confirmed, remediation is necessary.

It's important to note that the ANSI S520 standard for mold remediation discourages chemical treatments (spraying, fogging) or encapsulation methods (painting, sealing) as effective solutions. Instead, mold-affected materials are either removed or cleaned based on their composition. While other remediation methods exist, their effectiveness in controlling or eliminating mold is uncertain. Remember, any successful remediation effort should address the underlying source of moisture and be followed by independent testing to verify successful mold removal.

As per client's request, mold sampling was conducted during the inspection at the indicated locations.

Location: Primary Bathroom OSB Subfloor

Task: Remove mold

Time: Priority concern / Safety Concern

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APPLIANCES FIREPLACES/ THERMAL IM RADON MAINTENAN REFERENCE





Primary Bathroom OSB Subfloor, sample

Primary Bathroom OSB Subfloor, sample



Location sample photo

## **WALLS AND CEILINGS \ General notes**

**24. Condition:** • It was noted during the inspection that some finishes were less than professional-grade. Cosmetic - Paint/finishing improvement can be corrected or improved as desired to acquire the desired finish.

**Location**: Various **Task**: Improve

Time: For Information

25. Condition: • A hole, opening, or a damaged area in the wall was observed. Repair is recommended.

Location: Garage ceiling

Task: Repair

## FLOORS \ Carpet on floors

**26. Condition:** • Stained carpet: Cleaning may work, but replacement might be needed.

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APPLIANCES	FIREPLACES/	THERMAL IM	RADON	MAINTENAN	REFERENCE				

Location: First floor - Hallway

Task: Improve;



Stained carpet, sample

## **WINDOWS \ General notes**

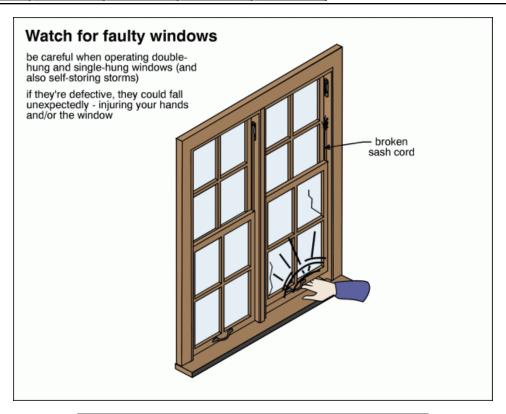
**27. Condition:** • The window won't stay open. The mechanism that holds the window up when opened may be defective. If the window falls, it can cause injury if your hands are below. The window and its glass can also be damaged. I recommend repairing or replacing the hardware, so that the window shuts, opens, locks and seals properly.

**Location**: Second floor bedroom (See photo)

**Task**: Repair or Replace **Time**: Safety Concern

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APPLIANCES	FIREPLACES/	THERMAL IM	RADON	MAINTENAN	REFERENCE				





The window won't stay open

## **DOORS \ Interior Doors**

28. Condition: • Does not latch properly

The doorknob latch bolt did not align with the hole in the strike plate and did not hold the door closed. The hardware should be adjusted so that the door shuts and latches.

Location: Second floor bedroom (See photo)

Task: Improve / Repair

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OVERVIEW ROOFING EXTERIOR STRUCTURE ELECTRICAL HEATING COOLING INSULATION PLUMBING INTERIOR

APPLIANCES FIREPLACES/ THERMAL IM RADON MAINTENAN REFERENCE



Does not latch properly

29. Condition: • It was noted that one or more doors were not equipped with locking hardware.

**Location**: Second Floor **Task**: Improve / Repair

#### **DOORS \ Exterior Doors**

**30. Condition:** • Evidence of leakage was observed at the threshold and/or trim of the exterior door. Efforts should be made to make the door watertight. It was noted that wood rot was around the base of the door (bottom left). When checking the moisture level with the moisture meter, it tested wet, so it is very likely that there is damage to the wood below it and there may also be mold.

Be advised that repair may require the replacement of the door. The door and/or frame should be repaired or replaced as needed.

Informational: Many times, this type of problem is caused by the incorrect installation of flashing. The ultimate goal is to create a series of overlapping layers of flashing material so that any water that gets behind the door trim from above the door or along the sides is captured and redirected back out to the front face of the house below the door threshold.

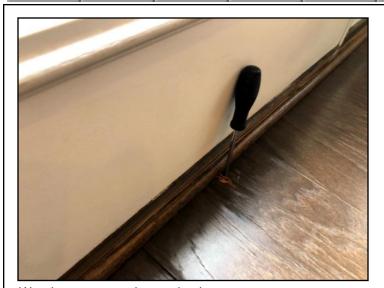
**Location**: First floor - Door to rear deck **Task**: Further evaluation / Repair or replace

Time: Possible Major Concern based on cost to replace and/or repair

INTERIOR Report No. 1013, v.2

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APPLIANCES	FIREPLACES/	THERMAL IM	RADON	MAINTENAN	REFERENCE				



Wood rot was noted, sample photo



Tested wet (100%) checked with moisture meter



Evidence of leakage - Locatioin sample photo



Evidence of leakage - Locatioin sample photo

#### **BASEMENT \ Leakage**

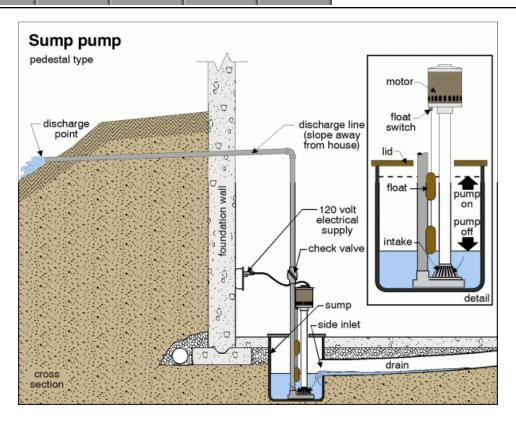
**31. Condition:** • A functioning sump pump is crucial for keeping your basement dry. It pumps away stormwater collected by the perimeter foundation drains. Malfunction, a damaged discharge line, or an improper discharge line slope can all lead to basement leaks. Therefore, carefully monitor your sump pump's operation. If it runs frequently, consider installing a backup pump or a battery power supply for outages. Refer to the Plumbing section for further details, or click on the blue link in the first sentence for additional information.

**Location**: Basement **Task**: For Information

**INTERIOR** 

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1234 Main Street, Germantown, MD May 15, 2019 ROOFING STRUCTURE INTERIOR THERMAL IM MAINTENAN



APPLIANCES Report No. 1013, v.2

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1	APPLIANCES	FIREPLACES/	THERMAL IM	RADON	MAINTENAN	REFERENCE				

# Description

#### General:

- The inspection includes a visual inspection and operational testing of built-in ranges, ovens, surface cooking appliances, microwave ovens, dishwashing machines, and food waste grinders. The inspection verifies basic operation but does not determine full functional performance. Other appliances are not included in a home inspection.
- Appliances and exhaust fans have life expectancies in the range of 10 to 15 years, although there is considerable variability based on a number of factors.
- Reference Appliances Pictures



Reference Appliances Pictures - Tested sample



Reference Appliances Pictures - Tested sample

Range: • Gas • Electronic ignition

Exhaust fan/range hood: • Discharge to exterior

Oven: • Conventional and convection • Wall oven • Double oven

Refrigerator: • Freezer on bottom • Side-by-side • Ice maker • Ice dispenser • Water dispenser

Dishwasher: • Built-in

Microwave oven: • Over-the-range

Waste disposal: • Continuous feed • Disposal Tested

**Washer and dryer:** • Top-loading washer • Waste standpipe for washer • Electric dryer • Dryer - There is a 240V electrical receptacle for the dryer; there is no gasline. • Dryer - The laundry space includes a 4-wire plug; check your dryer to ensure that connection is compatible.

Doorbell: • Wireless type

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1	APPLIANCES	FIREPLACES/	THERMAL IM	RADON	MAINTENAN	REFERENCE				

### Recommendations

#### **DISHWASHER \ General**

32. Condition: • Backflow preventer missing

The improperly configured dishwasher drain line and absent anti-siphon device/method require correction by a qualified professional. An anti-siphon device prevents contaminated wastewater from flowing back into the dishwasher, which could pose a health risk. New dishwashers often have an integral anti-siphon device which is not visible. I recommend consulting the manufacturer's installation guidelines to see if this unit is installed properly.

Location: Dishwasher; See photo and Illustration

**Task**: Improve / Repair **Time**: Safety concern





See Illustration

### **CLOTHES DRYER \ Dryer venting**

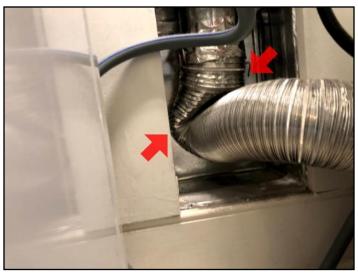
**33. Condition:** • The dryer exhaust duct was kinked and/or crushed where it exited the back of the dryer. This condition creates a restriction in dryer exhaust that can result in lint accumulation or duct blockage. A restricted exhaust can also cause dryer overheating, which can shorten the expected long-term service life of the dryer and even increase the risk of fire

Location: Laundry area Task: Repair or Replace Time: Safety concern APPLIANCES Report No. 1013, v.2

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APPLIANCES FIREPLACES/ THERMAL IM RADON MAINTENAN REFERENCE



The clothes dryer exhaust vent is crushed

# FIREPLACES/WOOD STOVES

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OVERVIEW ROOFING EXTERIOR STRUCTURE ELECTRICAL HEATING COOLING INSULATION PLUMBING INTERIOR

APPLIANCES FIREPLACES/ THERMAL IM RADON MAINTENAN REFERENCE

# **Description**

**Description of Appliance:** • Gas Fireplace **Vents, Flues, Chimneys:** • Direct Vent

# Limitations

**General:** • Vents, Flues & Chimneys: Disclaimer - There are a wide variety of chimneys and interrelated componen ts. However, there are three basic types, single-walled metal, masonry, and pre-fabricated metal ones that are commonly referred to as factory-built ones. Single-walled metal ones should not be confused with factory-built metal ones, and are rarely found in residential use, but masonry and factory-built ones are commonplace. Our inspection of them conforms to industry standards, and is that of a generalist and not a specialist. However, significant areas of chimney flues cannot be adequately viewed during a field inspection. Therefore, because our inspection of chimneys is limited to areas easily viewed and does not include the use of specialized equipment, we will not guarantee their integrity or drafting ability and recommend that they be more thoroughly evaluated by a specialist before the close of escrow.

### Recommendations

### FIREPLACE \ Pre-Fab/Gas Fireplace

**34. Condition:** • Always operate, maintain, and service the gas appliance in accordance with the manufacturer's instructions for safe and optimal performance.

Location: Fireplace
Task: For Information



Fireplace, tested - sample photo

# THERMAL IMAGING

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APPLIANCES	FIREPLACES/	THERMAL IM	RADON	MAINTENAN	REFERENCE				

# Description

#### General:

• The inspector utilizes infrared thermography to scan the interior of the house, including walls, ceilings, and floors; infrared identifies variances in temperature which may indicate a water penetration issue, e.g. roof leak, plumbing leak, exterior water intrusion, or an electrical concern.

These images demonstrate that the inspector performed the infrared scan. Infrared complements a home inspection and provides a more thorough review of the property; infrared increases confidence in the property's condition, minimizes guesswork, and provides more accurate diagnoses for identified issues.

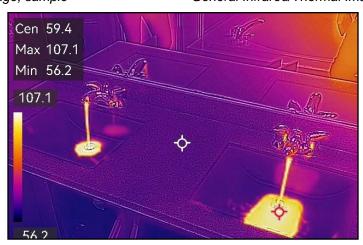
• General Infrared/Thermal Images



Cen 68.2 Max 73.7 Min 66.7 73.7

General Infrared/Thermal Image, sample

General Infrared/Thermal Images



Thermal Image - Hot Water sample photo

# THERMAL IMAGING

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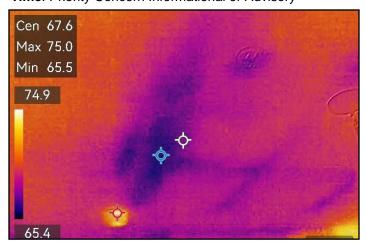
OVERVIEW	ROOFING	EXTERIOR	STRUCTURE	ELECTRICAL	HEATING	COOLING	INSULATION	PLUMBING	INTERIOR
APPLIANCES	FIREPLACES/	THERMAL IM	RADON	MAINTENAN	REFERENCE				

### Recommendations

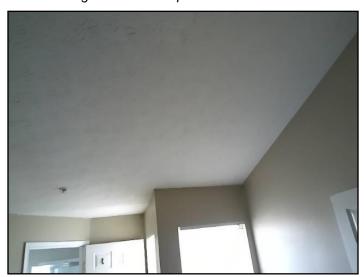
#### **RECOMMENDATIONS \ General**

- **35. Condition:** Evidence of prior moisture issues was noted through interior finish stains and/or repairs in the second-floor primary bedroom (see photos). While no active leaks were detected during the inspection with a moisture meter, thermal imaging revealed temperature variations in the same area, suggesting potential moisture intrusion within the built-up roof system. Thermal imaging, which visualizes temperature differences, can sometimes indicate hidden moisture issues. To fully assess this, I recommend:
- Inquiring the owner about any previous leaks or water-related concerns and whether they were addressed.
- If the owner is unaware of any previous repairs or if the underlying source of the moisture remains unaddressed, further evaluation should be undertaken by a qualified contractor before the Inspection Objection Deadline to further evaluate this condition and determine any necessary repairs.

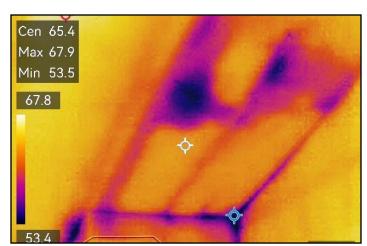
**Location**: Second floor primary bedroom (See photos) **Task**: Inquire / Further evaluation, repair as needed **Time**: Priority Concern Informational or Advisory



Thermal image revealed/temperature difference



Evidence of prior moisture, Location sample



Sample



Evidence of prior moisture, Location sample

Report No. 1013, v.2

**RADON** 

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APPLIANCES	FIREPLACES/	THERMAL IM	RADON	MAINTENAN	REFERENCE				

### Description

**General:** • A radon mitigation system is designed to reduce radon concentrations in the indoor air of your home. The radon mitigation system is a passive system, i.e., there is no system fan. If radon levels exceed EPA guidelines (4pCi/L),consider installing an active mitigation system with a continuously operating system fan.

### Recommendations

### **RECOMMENDATIONS \ General**

**36. Condition:** • Radon Risk Information: Radon is an invisible, odorless, tasteless radioactive gas, the origin of which is naturally occurring decaying uranium in the earth's soil. Radon causes lung cancer by means of the decay of its daughter products after breathing in air contaminated with higher levels of Radon. The World Health Organization (WHO) estimates that 15% of lung cancers worldwide are caused by exposure to elevated indoor levels of Radon. Overall, Radon is the second-leading cause of lung cancer, responsible for about 21,000 lung cancer deaths every year in the US alone.

Radon gas is the number one cause of lung cancer among non-smokers. The U.S. Environmental Protection Agency (EPA), the U.S. Surgeon General, and the Center for Disease Control and Prevention (CDC) strongly recommend that ALL homebuyers have an indoor radon test performed prior to purchase or taking occupancy and recommend having the radon levels professionally mitigated if elevated Radon concentrations are found.

Task: Further evaluation

Time: Safety Related Information

MAINTENANCE Report No. 1013, v.2

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APPLIANCES	FIREPLACES/	THERMAL IM	RADON	MAINTENAN	REFERENCE				

# Description

**OUR ADVICE FOR LOOKING AFTER YOUR HOME:** • Home maintenance is an important responsibility. It protects your investment, extends life expectancy and helps avoid significant expenses. This document is an integral part of the report, and will help you avoid many common problems and reduce costs.

**Roof - Annual Maintenance: •** Roofing nails at all roof flashings need to be sealed to prevent further corrosion of the nails and leaks that can damage roof sheathing. Nails on these flashings might need sealing every 5-10 years as the material degrades over time.

#### **Exterior - Annual Maintenance:**

- Annual inspection of the exterior is important to ensure weather-tightness and durability of exterior components. Grading around the home should slope to drain water away from the foundation to help keep the basement dry. Painting and caulking should be well maintained. Particular attention should be paid to horizontal surfaces where water may collect. Joints, intersections, penetrations and other places where water may enter the building assembly should be checked and maintained regularly
- Maintenance Tip: Clean gutters periodically, even with gutter guards installed. Keep gutters cleared of pine needles and of organic debris to prevent downspouts from being clogged causing overflow at gutters, ensure that all downspouts have extensions/splash blocks to carry water away from the foundation and ensure that sprinkler system does not spray siding or windows of house.





Time to clean the gutters!

Time to clean the gutters!

• I recommend that all exterior faucets are winterized and that hoses are disconnected throughout the colder months. Pipes are known to freeze and burst. Winterizing means that the interior shut-off to each exterior faucet is turned off and the exterior faucet is opened to allow water to drain.

**Exterior - Annual Maintenance: •** Exterior wall penetrations had gaps that should be sealed with an appropriate sealant to prevent moisture and insect entry.

# **MAINTENANCE**

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OVERVIEW	ROOFING	EXTERIOR	STRUCTURE	ELECTRICAL	HEATING	COOLING	INSULATION	PLUMBING	INTERIOR
APPLIANCES	FIREPLACES/	THERMAL IM	RADON	MAINTENAN	REFERENCE				



Penetrations should be sealed, sample

Garage Door Operators: • Garage door hardware - lubricate to ensure the door moves freely

**Heating and Cooling System - Annual Maintenance:** • Set up an annual maintenance agreement that covers parts and labour for all heating and cooling equipment. This includes gas fireplaces and heaters, as well as furnaces, boilers and air conditioners. Include humidifiers and electronic air cleaners in the service agreement. Arrange the first visit as soon as possible after taking possession • Check filters for furnaces and air conditioners monthly and change or clean as needed. Duct systems have to be balanced to maximize comfort and efficiency, and to minimize operating costs. Adjust the balancing for heating and cooling seasons, respectively.

**Bathtub and Shower Maintenance:** • Ensure all bathtub spigots are caulked at the tile surround to prevent water intrusion.

#### **Clothes Dryer Vents:**

- We recommend that vents for clothes dryers discharge outside the home. The vent material should be smooth walled (not corrugated) metal, and the run should be as short and straight as practical. This reduces energy consumption and cost, as well as drying time for clothes. It also minimizes the risk of a lint fire inside the vent.
- Dryer ducts should be inspected annually and cleaned as necessary to help reduce the risk of a fire, improve energy efficiency and reduce drying times.

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APPLIANCES	FIREPLACES/	THERMAL IM	RADON	MAINTENAN	REFERENCE				



Time to clean the dryer vent!

**Sump Pump:** • A sump pump collects storm water below the basement floor and discharges it safely to the exterior to prevent flooding. The discharge point should be at least 6 feet (2 m) away from the home. Best installations include: A GFCI outlet with an audible trip alert to the Sump Pump that sounds an alarm to let you know the GFCI has tripped, a high water alarm in the sump pump will notify you if the pump fails, a backup power for the sump pump, so it will work in the event of a power outage. Some installations include a backup pump.

#### **END OF REPORT**

### Report No. 1013, v.2

### REFERENCE LIBRARY

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	OVERVIEW	ROOFING	EXTERIOR	STRUCTURE	ELECTRICAL	HEATING	COOLING	INSULATION	PLUMBING	INTERIOR
ĺ	APPLIANCES	FIREPLACES/	THERMAL IM	RADON	MAINTENAN	REFERENCE				

The links below connect you to a series of documents that will help you understand your home and how it works. These are in addition to links attached to specific items in the report.

Click on any link to read about that system.

- 01. ROOFING, FLASHINGS AND CHIMNEYS
- 02. EXTERIOR
- 03. STRUCTURE
- 04. ELECTRICAL
- 05. HEATING
- 06. COOLING/HEAT PUMPS
- 07. INSULATION
- 08. PLUMBING
- 09. INTERIOR
- 10. APPLIANCES
- 11. LIFE CYCLES AND COSTS
- 12. SUPPLEMENTARY

**Asbestos** 

Radon

Urea Formaldehyde Foam Insulation (UFFI)

Lead

Carbon Monoxide

Mold

Household Pests

**Termites and Carpenter Ants** 

- 13. HOME SET-UP AND MAINTENANCE
- 14. MORE ABOUT HOME INSPECTIONS