

September 1, 2019

Mr. and Mrs.

On 8/27/2019, Cities' Inspection Service, Inc. completed a home inspection of the property located at XXXXX, XXXXXXXX, Minnesota for you. Doug Hastings did all the fieldwork related to this project. Doug used the national home inspection protocol; the American Society of Home Inspectors (ASHI) Standards of Practice.



The method used for this inspection was visual. There was no destructive analysis or technical testing of any building component. The project excluded all environmental health hazards, such as concealed mold, mildew and fungal growth; and any insect and vermin infestations.

The purpose of this inspection was to observe the physical condition of this building. The intent was to identify defects or conditions that adversely affected the structure and its components. This report contains the results of the inspection. Definitions that are used:

- ⦿ **Functional:** component was performing its intended function; installation and condition were appropriate for age and use.
- ✗ **Major Defect:** component was not performing its intended function and requires repair or replacement.
- ⦿ **Minor Defect:** component deficiency was insufficient to be major defect; but it requires repair, normal maintenance, or a safety improvement.
- ⚠ **Potential Concern:** component is old, nonexistent, not visible, or not viewed operating.

# Exterior

## Description of Exterior

|  |                         |                       |
|--|-------------------------|-----------------------|
| Building: split level single family      | Garage: 1 car tuckunder | Approx. age: 73years  |
| Wall covering: wood shakes               | Layers: 1               | Approx. age: 73 years |
| Windows: double hung                     | Glass: 2 pane           | Approx. age: 73 years |
| Steep roof: asphalt composition shingles | Layers: 1               | Approx. age: 8 years  |
| Low slope roof: modified bitumen         | Layers: 1               | Approx. age: 8 years  |

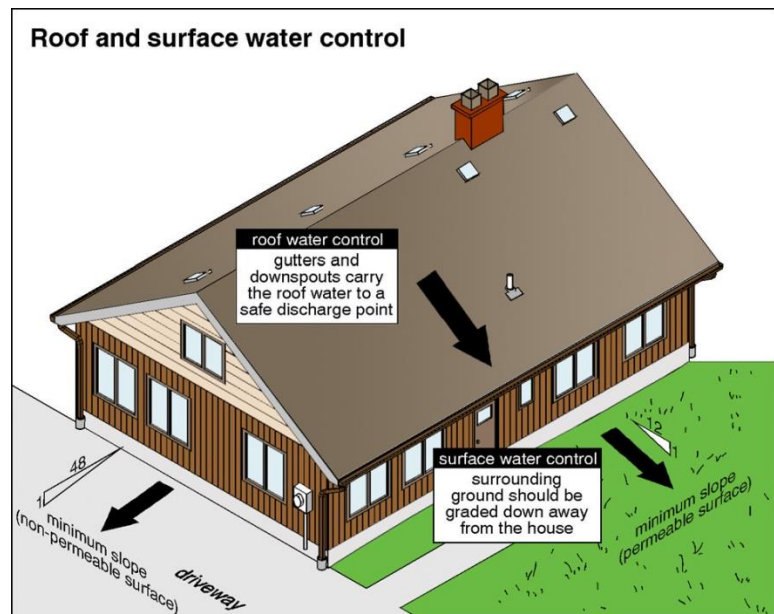
- Functional
- ⊗ Major Defect
- Minor Defect
- ⚠ Potential Concern

## Grounds Observations

### Explanation of Problems

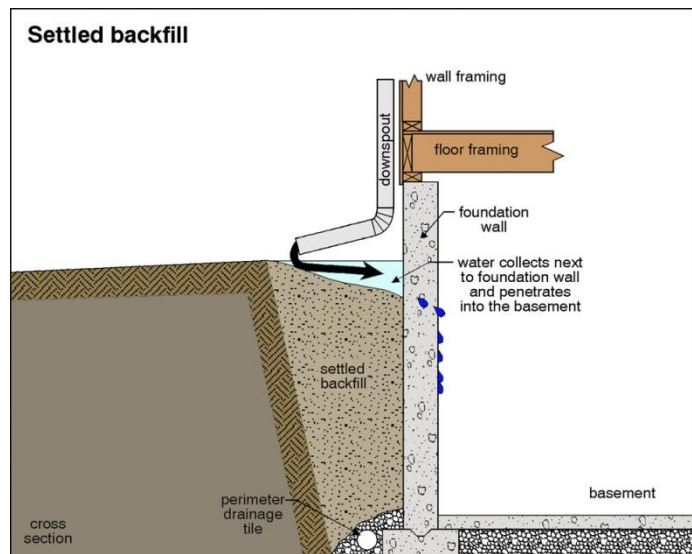
#### Landscape

- front \_\_\_\_\_ ●
- left side \_\_\_\_\_ ⊗ .... negative slope
- right side \_\_\_\_\_ ●
- rear \_\_\_\_\_ ⊗ .... ponding water on foundation





Rear – ponding water



Rear – ponding water

### Hardscape

- steps \_\_\_\_\_ (O).... no handrails
- walks \_\_\_\_\_ (X).... negative slope (left side)
- patio \_\_\_\_\_ (O)
- retaining walls \_\_\_\_\_ (X).... loose, tipped, & bowed stones
- driveway \_\_\_\_\_ (O).... cracked concrete apron





Walk – negative slope



Retaining wall – loose stones



Retaining wall – tipped stones



Retaining wall – bowed stones



Retaining wall – tipped stones



Cracked driveway apron

#### Other structures

- wood deck \_\_\_\_\_ ●
- portico \_\_\_\_\_ ●
- fence \_\_\_\_\_ ●.... decayed posts & boards
- shed \_\_\_\_\_ ✕.... deteriorated roof shingles

#### Exterior Observations

*weather: fair*

#### Wall surfaces

- covering \_\_\_\_\_ ●.... worn wood shakes / cracked paint (high maintenance)
- windows \_\_\_\_\_ ●
- doors \_\_\_\_\_ ●
- overhangs \_\_\_\_\_ ●.... dirty gutters





Weathered wood

## Roof surfaces

*viewed: walked on roof*

steep slope\_\_\_\_\_●

shingles\_\_\_\_\_●

low slope\_\_\_\_\_●

single ply\_\_\_\_\_●

flashing\_\_\_\_\_⚠️... restricted rear valley drainage

chimney/flue\_\_\_\_\_⚠️... flue tiles not visible



Low slope roof – no problems



Restricted drainage – ice dams

## Garage

ceiling/walls \_\_\_\_\_ ❌.... wall & floor water stains (patched blocks) / unprotected heat duct / wood walls not fire rated / water stained ceiling (below bath)

floor slab \_\_\_\_\_ ⦿.... spalled concrete

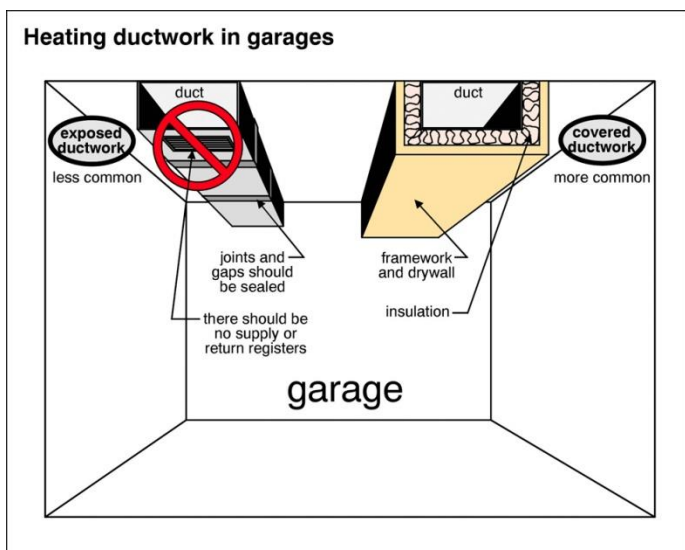
doors \_\_\_\_\_ ⦿



Patched blocks (water damaged)



Water stained ceiling





Unprotected duct

***Probability of Moisture Intrusion***

- ✓ grounds\_\_\_high (grading)
- ✓ walls\_\_\_low
- ✓ roof\_\_\_high (restricted drainage)

[Limitations to Exterior Observations](#)

- Fireplace chimney flue tiles are inaccessible and condition is not visible.



# Structure

## Description of Structure

|                            |                         |           |
|----------------------------|-------------------------|-----------|
| Foundation: concrete block | Insulation: fiberglass  | Inches: 3 |
| Floors: solid wood joists  | Insulation: fiberglass  | Inches: 3 |
| Walls: wood frame studs    | Insulation: not visible |           |
| Roof: solid wood rafters   | Insulation: not visible | Inches: 3 |

- Functional
- ✗ Major Defect
- Minor Defect
- △ Potential Concern

## Structure Observations

### Explanation of Problems

#### Foundation

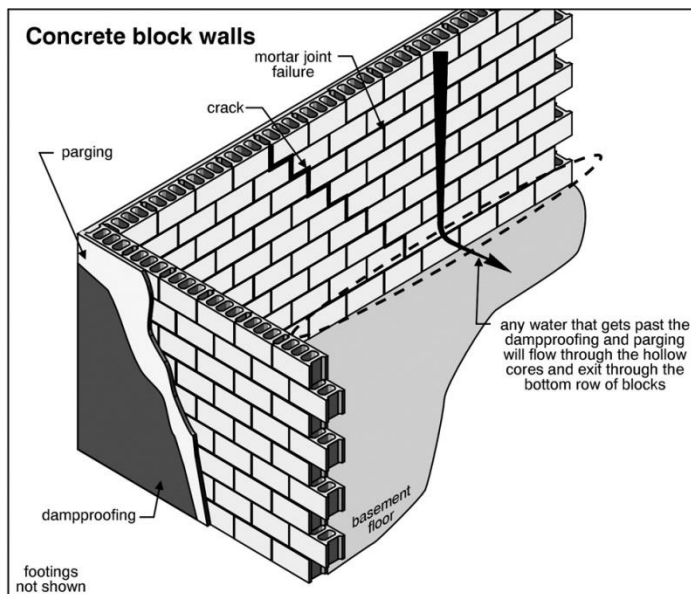
*crawl space viewed: none*

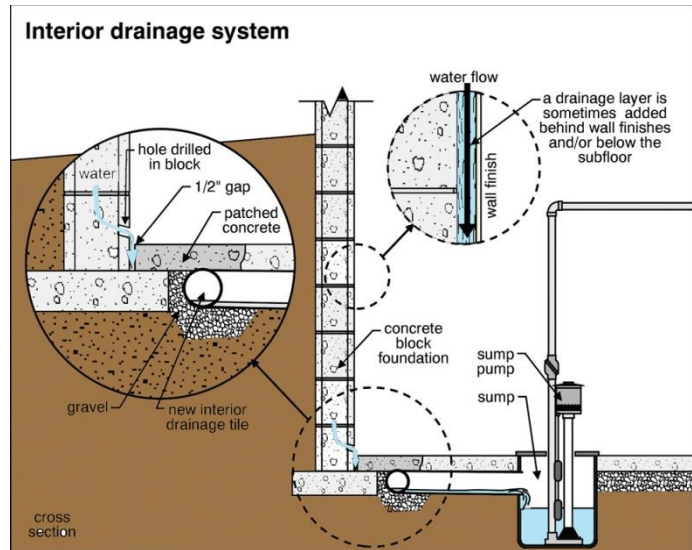
walls \_\_\_\_\_ ○ .... water damaged blocks / wall & floor stains

floor slab \_\_\_\_\_ ●

sump/drain tile \_\_\_\_\_ △ .... sump pump not viewed operating / no battery backup pump / lower level bedroom not drain tiled / installed by Standard Water Control

radon mitigation \_\_\_\_\_ △ .... none / test in process





## Floors

joists \_\_\_\_\_ ●

posts and beam \_\_\_\_\_ ●

## Walls

wood framing \_\_\_\_\_ ⚠ not visible

beams \_\_\_\_\_ ●

## Roof

*attic viewed: viewed from access opening*

rafters \_\_\_\_\_ ⚠ restricted access & limited view

exhaust fans \_\_\_\_\_ ●

## Insulation

basement \_\_\_\_\_ ●

floor \_\_\_\_\_ ●

wall \_\_\_\_\_ ⚠ not visible

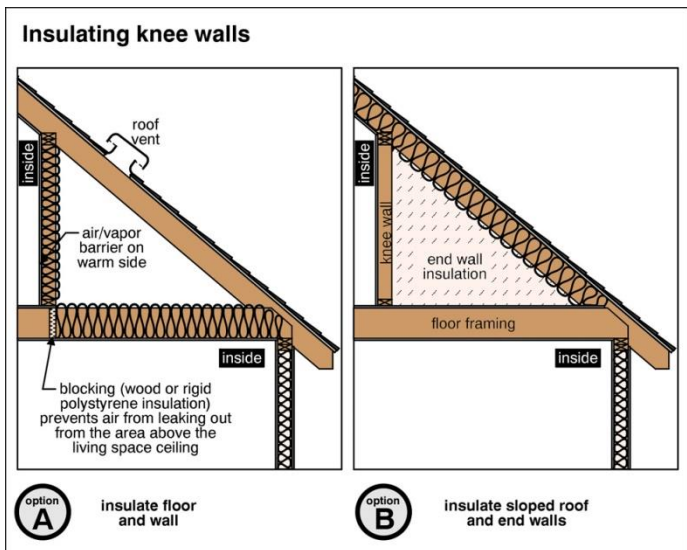
attic \_\_\_\_\_ ✖ inadequate amount insulation & ventilation / restricted access to improve insulation / poorly installed insulation improvement / ice dams



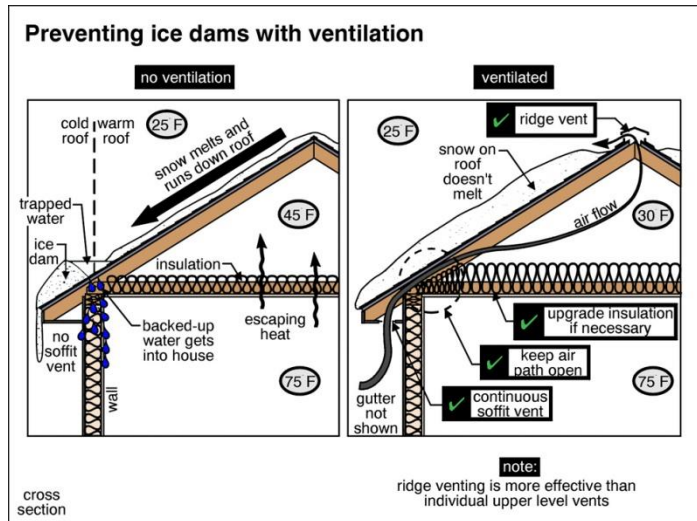
No ventilation



No ventilation







### ***Probability of Failure or Moisture Intrusion***

- ✓ foundation\_\_\_medium (no battery backup pump / no lower level drain tile)
- ✓ floors\_\_\_low
- ✓ walls\_\_\_low
- ✓ roof\_\_\_medium (water stained wood)

### Limitations to Structure Observations

- Foundation is 85% covered and condition not visible.
- Floors are 75% covered and condition not visible.
- Wall structure is 100% covered; wood decay and molds are not visible.
- Attic is 60% covered and condition not visible.

# Electrical

## Description of Electrical

|                                   |                            |
|-----------------------------------|----------------------------|
| Utility service: overhead         | Volts: 110/220             |
| Panel size: 100 amps              | Approx. age: 20 years      |
| Main disconnect: circuit breaker  | Service wires: copper      |
| Branch circuits: circuit breakers | Distribution wires: copper |

- Functional
- ✗ Major Defect
- Minor Defect
- ⚠ Potential Concern

## Electrical Observations

### Explanation of Problems

Utility service\_\_\_\_\_●

Main panel

*panel location: northwest lower level bedroom corner*

size\_\_\_\_\_●

condition\_\_\_\_\_●

wiring\_\_\_\_\_●

Outlets and fixtures

exterior\_\_\_\_\_●

garage\_\_\_\_\_●

basement\_\_\_\_\_○.... unsupported & unprotected wiring

finished walls\_\_\_\_\_⚠.... not visible

attic\_\_\_\_\_●

Detectors

smoke\_\_\_\_\_●

CO\_\_\_\_\_●

## Limitations to Electrical Observations

- None.

# Plumbing

## Description of Plumbing

|   |  |
|---|--|
| Main visible water supply pipe: copper  | Interior water pipes: copper               |
| Water heater: natural gas 40 gallons    | Approximate age: 1 years                   |
| Soil stack: cast iron, copper & plastic | Drain & vent pipes: iron, copper & plastic |

- Functional
- ✗ Major Defect
- Minor Defect
- ⚠ Potential Concern

## Plumbing Observations

### Explanation of Problems

#### Water pipes

*main water shutoff valve located: south basement wall*

- main pipe \_\_\_\_\_ ●
- private well \_\_\_\_\_ ⚠.... certify sealed
- interior pipes \_\_\_\_\_ ⚠.... located in unheated garage ceiling
- exterior spigots \_\_\_\_\_ ●

#### Waste pipes

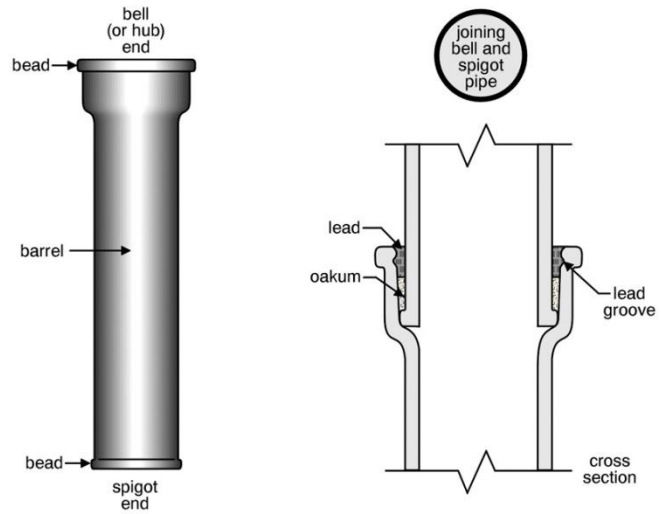
- public sewer \_\_\_\_\_ ⚠.... not visible / recommend contractor camera scope pipe to street
- soil stack \_\_\_\_\_ ✗.... loose garage soil stack lead connection / roof vent pipe too close to window / leaking copper basement pipe
- drain/vent pipes \_\_\_\_\_ ✗.... roof vent pipe too close to window / standpipe inlet too high & wet vented with kitchen sink / unapproved dishwasher connection / located in unheated garage
- laundry tub \_\_\_\_\_ ○.... missing floor drain cover



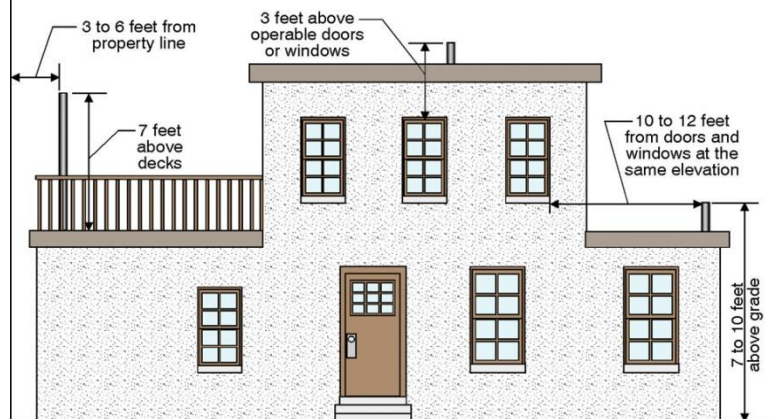
Loose lead connection



### Cast iron waste pipe - bell and spigot (sometimes called hub and spigot)



### Plumbing vent clearances



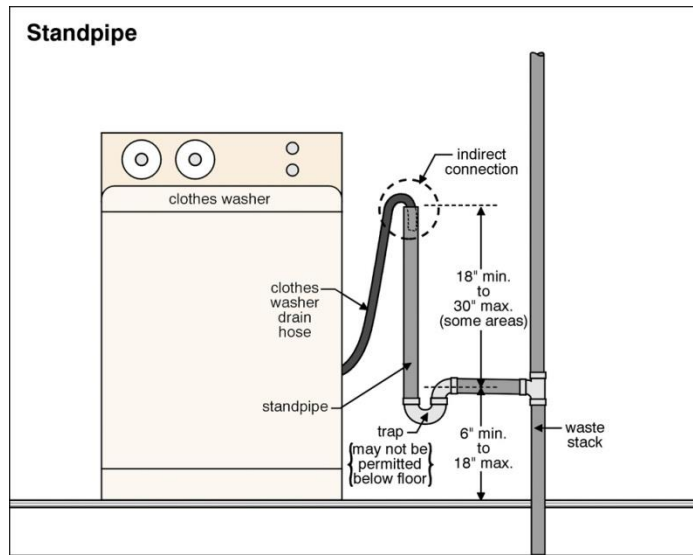
Too close to window



Leaking pipe



Standpipe too high



### Gas pipes

*main gas shutoff valve located: at furnace*

meter and pipes\_\_ ●

appliances\_\_\_\_\_ ●

### Appliances

water heater\_\_\_\_\_ ●

water softener\_\_ ✗.... inoperable or improperly operating

clothes washer\_\_ ●

clothes dryer\_\_\_\_\_ ●

### Probability of Failure

- ✓ water pressure\_\_\_\_\_low
- ✓ underground sewer\_\_unknown (not visible / camera scope recommended)
- ✓ water heater\_\_\_\_\_low

### Limitations to Plumbing Observations

- Condition of underground sewer pipe is not visible.



# Mechanical

## Description of Mechanical

|   |                           |
|---|---------------------------|
| Heating: natural gas forced air           | Approximate age: 9 years  |
| Cooling: electric central air conditioner | Approximate age: 27 years |

- ⦿ Functional
- ✗ Major Defect
- ⦿ Minor Defect
- ⚠ Potential Concern

## Mechanical Observations

### Explanation of Problems

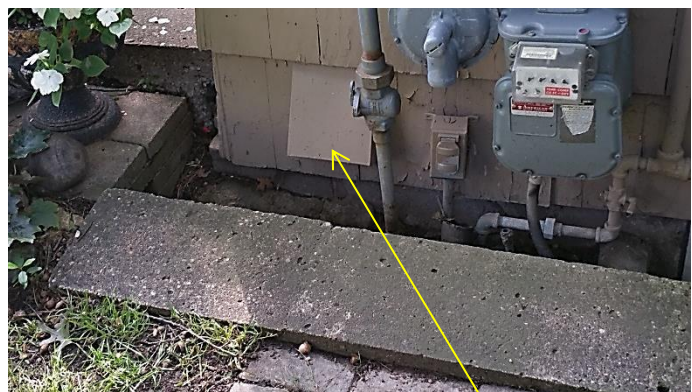
#### Furnace

jacket\_\_\_\_\_⦿

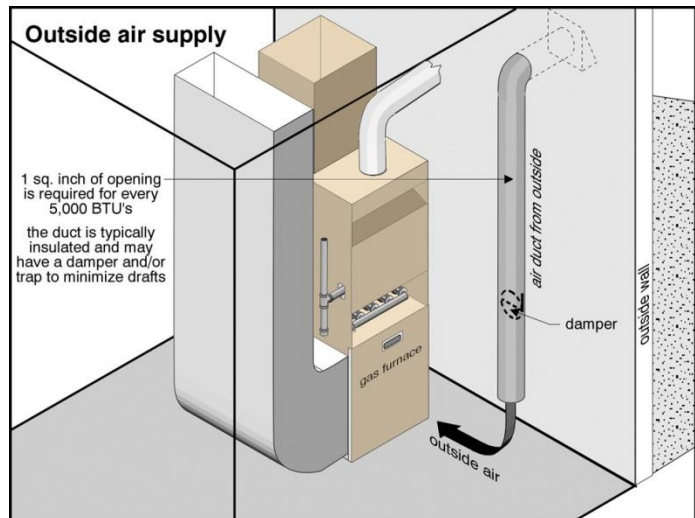
heat exchanger\_\_\_⦿

ducts\_\_\_\_\_✗.... buried outside air supply / 1 zone control for multiple levels / various rooms inadequate amount & no supply & return air registers

vent and flue\_\_\_\_\_⦿



Too close to ground



#### Air conditioner

condenser \_\_\_\_\_ ⚠️.... old / short useful life

compressor \_\_\_\_\_ ●

interior coil \_\_\_\_\_ ⚠️.... not visible

pipng \_\_\_\_\_ ●

wiring \_\_\_\_\_ ●

#### Probability of Failure

- ✓ heating \_\_\_\_\_ low
- ✓ cooling \_\_\_\_\_ high (old)

#### Limitations to Mechanical Observations

- System heater exchanger is 100% inaccessible and condition is not visible.

# Interior

## Description of Interior

|               |                |                |          |
|---------------|----------------|----------------|----------|
| LL bedroom: 1 | ML bedrooms: 0 | UL bedrooms: 3 | Baths: 3 |
|---------------|----------------|----------------|----------|

- Functional
- ✗ Major Defect
- Minor Defect
- ⚠ Potential Concern

## Interior Observations

### Explanation of Problems

#### Stairs

basement\_\_\_\_\_○.... high step rise  
 lower level\_\_\_\_\_●  
 main level\_\_\_\_\_●  
 upper level\_\_\_\_\_✗.... missing handrail

#### Basement rec room

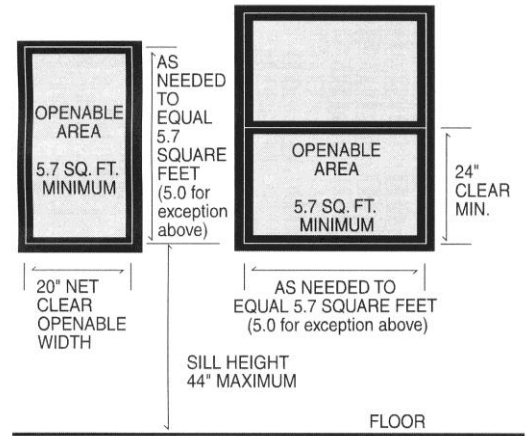
wall, ceiling, floor\_\_\_\_\_●  
 window and door\_\_\_\_\_○.... no egress window  
 outlet and fixture\_\_\_\_\_●  
 heat\_\_\_\_\_✗.... 1 supply register no air flow / no return register  
 electric baseboard\_\_\_\_\_●

#### Basement bath

wall, ceiling, floor\_\_\_\_\_✗.... wall & floor water stains / loose floor tiles  
 window and door\_\_\_\_\_●  
 outlet and fixture\_\_\_\_\_●  
 plumbing\_\_\_\_\_○.... leaking toilet fill valve  
 fan\_\_\_\_\_○.... none

#### LL bedroom

wall, ceiling, floor\_\_\_\_\_●  
 window and door\_\_\_\_\_✗.... no egress window  
 outlet and fixture\_\_\_\_\_●  
 heat\_\_\_\_\_✗.... no supply air register (no AC) / abandoned thermostat  
 electric baseboard\_\_\_\_\_●



### Kitchen

- wall, ceiling, floor ☒
- window and door ☒
- outlet and fixture ☒ .... unsupported & unprotected sink cabinet disposal wiring
- heat ☒
- plumbing ☒ .... improper dishwasher discharge into basement standpipe
- cabinet and top ☒

### Appliances

- refrigerator ☒ .... unsealed door / old (short useful life)
- stove ☒
- dishwasher ☒
- disposal ☒
- microwave ☒ .... old
- unvented fan ☒

### Living and dining room

- wall, ceiling, floor ☒ .... water stained ceiling (ice dam)
- window and door ☒ .... inoperable storm window cranks
- outlet and fixture ☒
- heat ☒ .... no supply register at patio door
- wood fireplace ☒ .... flue tiles not visible / gas log ignitor not viewed operating (no handle)

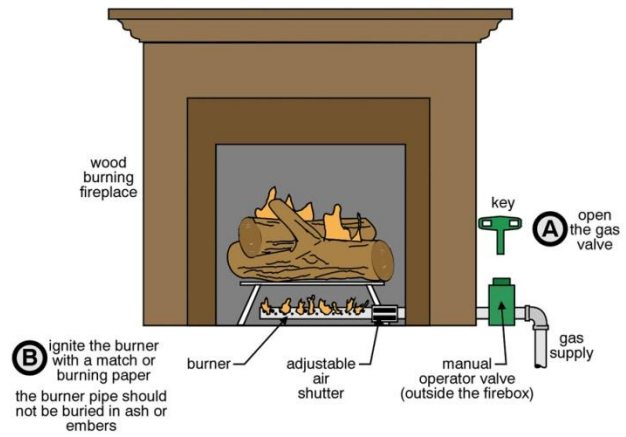




Water stained ceiling

### Gas igniters

most gas igniters have few safety features and may not be permitted in some areas - find out if they are allowed in your area



Fireplace gas shutoff

#### UL bedrooms

- wall, ceiling, floor\_\_\_ ⚠️.... uneven ceiling & wall plaster (below front & rear roof valleys) / ice dams
- window and door\_\_\_ ●
- outlet and fixture\_\_\_ ●
- sink\_\_\_ ●
- heat\_\_\_ ●



#### UL top bedroom & sitting room

- wall, ceiling, floor\_\_\_ ●
- window and door\_\_\_ ●
- outlet and fixture\_\_\_ ●
- heat\_\_\_ ❌.... inadequate amount supply registers / no return air register / abandoned thermostat
- electric baseboard\_\_\_ ●.... abandoned wall covers in sitting room
- window AC\_\_\_ ●

#### UL bath

- wall, ceiling, floor\_\_\_ ●
- window and door\_\_\_ ❌.... window does not hold open
- outlet and fixture\_\_\_ ●
- heat\_\_\_ ●
- plumbing\_\_\_ ●.... no bathtub drain plug
- cabinet and top\_\_\_ ●
- fan\_\_\_ ❌.... no rated for shower location & no GFI protected

#### UL top bath

wall, ceiling, floor\_\_\_●  
window and door\_\_\_●  
outlet and fixture\_\_\_●.... missing GFI outlet  
heat\_\_\_✗.... no heat source  
plumbing\_\_\_●.... minimal water flow / flexible sink drain pipe  
cabinet and top\_\_\_●  
fan\_\_\_●

#### Hallway and entry

wall, ceiling, floor\_\_\_●  
window and door\_\_\_●  
outlet and fixture\_\_\_●  
heat\_\_\_⚠.... no garage entry heat source

#### **Probability of Moisture Intrusion**

- ✓ ceiling\_\_\_medium (ice dams)
- ✓ walls\_\_\_medium (ice dams)
- ✓ floor\_\_\_low

#### Limitations to Interior Observations

- Kitchen and laundry appliances are tested using normal operating controls to activate the primary function only. Operating or confirming operation of all other controls and features are not part of the inspection.
- Fireplace chimney flue tiles are 100% inaccessible and condition is not visible.

# Conclusions

## ✗ Major Defects

### *Exterior*

- ✓ Earth grade does not slope away from and is ponding water on the foundation (basement, lower level, and garage moisture intrusion). Only the portions adjacent to the lower level bedroom and garage can be corrected.
- ✓ Loose, tipped and bowed retaining walls.

### *Structure*

- ✓ Inadequate amount attic insulation and ventilation (ice dams and moisture intrusion). The existing improvements are poor. A good portion of the attic is inaccessible and will be difficult to correct.

### *Plumbing*

- ✓ Loose garage soil stack cast iron lead connection.
- ✓ Roof vent stacks too close to windows.
- ✓ Leaking basement copper waste pipe connection.
- ✓ Basement standpipe is too tall and improperly wet vented.
- ✓ Main level dishwasher improperly discharges into basement standpipe.
- ✓ Inoperable water softener (water tested hard).

### *Mechanical*

- ✓ Furnace outside air supply exterior vent cover is too close to grade (snow will block).
- ✓ No lower level bedroom supply and return air registers. Inadequate amount upper top level supply registers and no return air register. No upper level top bath supply air register.
- ✓ One basement rec room supply register has no air flow. No rec room return air register.
- ✓ Old air conditioner; short useful life.

### *Interior*

- ✓ Undersized lower bedroom windows (not egress).
- ✓ Loose basement bath and hall floor tiles.
- ✓ Unsealed refrigerator door.
- ✓ Inoperable living room window cranks.
- ✓ Uneven ceiling and wall plaster below roof valleys (chronic ice dam damage).
- ✓ Upper bath window does not hold open.
- ✓ Upper bath exhaust fan not rated to be located in shower. It is also not GFI protected.



## ⦿ Minor Defects

### *Exterior*

- ✓ No front entry and garage step handrails.
- ✓ Cracked driveway apron.
- ✓ Decayed fence posts and boards.
- ✓ Deteriorated shed roof shingles.
- ✓ Cracked paint and weathered wood wall shakes and trim (high maintenance).
- ✓ Missing roof gutter guards; plugged gutters.
- ✓ Restricted rear roof valley drainage (ice dams); this is a built in design deficiency and cannot be corrected.

### *Garage*

- ✓ Water damaged foundation blocks and water stained wood paneling.
- ✓ Unprotected heat duct (not fire rated). Wood wall paneling is not fire rated.
- ✓ Water stained ceiling below upper bath.

### *Structure*

- ✓ Foundation drain tile, sump and pump must operate to keep the basement dry. Recommend a new primary sump pump and also adding a battery operating backup pump. Standard Water Control installed the system and you should inquire about a warranty.

### *Electrical*

- ✓ Unsupported and unprotected laundry wiring.
- ✓ Unsupported and unprotected kitchen sink cabinet wiring.
- ✓ Missing upper top bath GFI outlet.

### *Plumbing*

- ✓ Upper bath plumbing pipes located in unheated space (garage ceiling).
- ✓ Missing basement floor drain cover.
- ✓ Leaking basement toilet fill valve.
- ✓ No upper bathtub drain plug.
- ✓ Minimal upper top bath water flow. Unapproved flexible sink drain pipe.

### *Mechanical*

- ✓ No supply air register at patio door.
- ✓ No garage entry heat source.

### *Interior*

- ✓ High basement stair step rise.
- ✓ No upper top level stair handrail.
- ✓ No basement rec room egress window.
- ✓ Abandoned lower bedroom and upper top sitting room thermostats.
- ✓ Abandoned upper top sitting room baseboard heat covers.
- ✓ No basement bath exhaust fan.
- ✓ Water stained living room ceiling (ice dam).
- ✓ Fireplace gas log ignitor is unsafe.

## Potential Concerns

- ✓ Lower level bedroom is not drain tiled or connected to the basement system.
- ✓ One furnace and AC zone control for the basement, lower, main, upper, and upper top levels will make uneven air flow and poor comfort.

### *Certifications by a licensed contractor required (not part of the inspection):*

- ✓ Abandoned private well (seal or certify sealed)
- ✓ Underground sewer pipe (camera scope)
- ✓ Fireplace flue tiles (camera scope)

### *Old components; short useful life:*

- ✓ Air conditioner (less than 3 years)
- ✓ Refrigerator and microwave (anytime)
- ✓ Patio door glass air seals (anytime)

### *Not visible or limited view (not part of the inspection):*

- ✓ Fireplace flue tiles (concealed)
- ✓ Underground sewer pipe (below grade)

### *Not viewed operating (not part of inspection):*

- ✓ Fireplace igniter (gas off)
- ✓ Electronic equipment
  - Audio speakers and TV
  - Communication and internet
- ✓ Radon (test in process)