

# Inspection Report





## Towne Inspections

**Darrin R. Towne 16000065488**  
**New York State Licensed & Insured Home Inspector**  
**InterNACHI Certified Professional Inspector**  
**Lic. 16000065488**  
**P: 347.678.0683**  
**E: [darrin@towneinspections.com](mailto:darrin@towneinspections.com)**  
**W: <https://towneinspections.com>**








# Table of Contents

<a href="#">Cover Page.....</a>	<a href="#">1</a>
<a href="#">Table of Contents.....</a>	<a href="#">3</a>
<a href="#">Intro Page.....</a>	<a href="#">4</a>
<a href="#">1 Roofing.....</a>	<a href="#">6</a>
<a href="#">2 Exterior.....</a>	<a href="#">24</a>
<a href="#">4 Interiors.....</a>	<a href="#">31</a>
<a href="#">5 Structural Components.....</a>	<a href="#">46</a>
<a href="#">6 Plumbing System.....</a>	<a href="#">48</a>
<a href="#">7 Electrical System.....</a>	<a href="#">66</a>
<a href="#">8 Heating / Central Air Conditioning.....</a>	<a href="#">101</a>
<a href="#">9 Insulation and Ventilation.....</a>	<a href="#">116</a>
<a href="#">10 Appliances.....</a>	<a href="#">118</a>
<a href="#">Back Page.....</a>	<a href="#">136</a>





<b>Date:</b> 8/16/2019	<b>Time:</b> 09:00 AM	<b>Report ID:</b> 001093
<b>Property:</b> 	<b>Customer:</b> 	<b>Real Estate Professional:</b> 

**PLEASE READ CAREFULLY**

"ALL Parties"

An inspection is intended to assist in the evaluation of the overall condition of a building. The inspection is based on observations of the visible and apparent condition of the building and its components on the date of the inspection. This report is not valid without a signed PRE-INSPECTION AGREEMENT. The results of this home inspection are not intended to make any representation regarding latent or concealed defects that may exist and no warranty or guaranty is expressed or implied. If your home inspector is not a licensed structural engineer or other professional whose license authorizes the rendering of an opinion as to the structural integrity of a building or its component parts, you may be advised to seek a professional opinion as to any defects or concerns mentioned in this report.

This report is the exclusive property of Darrin R. Towne (The Inspector) and the client whose name appears herewith, and its use by any unauthorized persons is strictly prohibited. The observations and opinions expressed within this report are those of the inspector and supersede any alleged verbal comments. I inspect all of the systems, components, and conditions described in accordance with the standards of practice set forth by the International Association of Certified Home Inspectors (InterNACHI), and those that I do not inspect are clearly disclaimed in the PRE-INSPECTION AGREEMENT and/or in the aforementioned standards. Additional pages and hyperlinks (a highlighted word or picture in a document or web page that you can click on with a computer mouse to go to another place in the same or a different document or web page) may be attached to this report. This report may not be complete without the attachments. Furthermore, photographs have been included in the inspection report to help you to understand what was observed during the inspection. When describing defects, photos are intended to show an example of a defect, but may not show every occurrence of the defect.

This home is older than 50 years and the home inspector considers this while inspecting. It is common to have areas that no longer comply with current code. This is not a new home and this home cannot be expected to meet current code standards. While this inspection makes every effort to point out safety issues, it does not inspect for code. It is common that homes of any age will have had repairs performed and some repairs may not be in a workmanlike manner. Some areas may appear less than standard. This inspection looks for items that are not functioning as intended. It does not grade the repair. It is common to see old plumbing or mixed materials. Sometimes water signs in crawlspaces or basements could be years old from a problem that no longer exists. Or, it may still need further attention and repair. Determining this can be difficult on an older home. Sometimes in older homes there are signs of damage to wood from wood eating insects. Having this is typical and fairly common. If the home inspection reveals signs of damage you should have a pest control company inspect further for activity and possible hidden damage. The home inspection does not look for possible manufacturer re-calls on components that could be in this home. Always consider hiring the appropriate expert for any repairs or further inspection.

You are advised to seek at a minimum two professional opinions and acquire estimates of repair as to any defects, comments, improvements or recommendations mentioned in this report. I recommend that the professional making any repairs further investigate, in order to discover and repair related problems that were not identified in the report. I recommend that all repairs, corrections and cost estimates be completed and documented prior to closing or purchasing the property.

This general home inspection is not a building code-compliance inspection, but a visual inspection for safety and system defects. This report does not include positive identification of mold, lead, or asbestos since these need to be tested in a lab for positive identification; however, I do make an effort to identify visual evidence of the presence of these items which you can then have tested further. This report has been produced in accordance with the PRE-INSPECTION AGREEMENT and is subject to the terms and conditions agreed upon therein. If you are not my client, please request a copy of the agreement from my client before proceeding further.

**Comment Key or Definitions**

The following definitions of comment descriptions represent this inspection report. All comments by the inspector should be considered before purchasing this home. Any recommendations by the inspector to repair or replace suggests a second opinion or further inspection by a qualified contractor. All costs associated with further inspection fees and repair or replacement of item, component or unit should be considered before you purchase the property.



## Towne Inspections

**Inspected (IN)** = I visually observed the item, component or unit and if no other comments were made then it appeared to be functioning as intended allowing for normal wear and tear.

**Not Inspected (NI)** = I did not inspect this item, component or unit and made no representations of whether or not it was functioning as intended and will state a reason for not inspecting.

**Not Present (NP)** = This item, component or unit is not in this home or building.

**Maintain (M)** = Denotes recommendations for the proper operation and routine maintenance of the home.

**Repair or Replace (RR)** = The item, component or unit is not functioning as intended, or needs further inspection by a qualified contractor. Items, components or units that can be repaired to satisfactory condition may not need replacement.

**Standards of Practice:**

InterNACHI: International Association of  
Certified Home Inspectors

**In Attendance:**

Customer, seller, and both agents

**Type of building:**

One Family Attached (3 story)

**Style of Home:**

Row

**Built Approximately:**

1925

**Home Faces:**

NE

**Temperature:**

74-78 degrees fahrenheit

**Weather:**

Cloudy, Humid

**Ground/Soil surface condition:**

Damp

**Rain in last 3 days:**

Yes



# 1. Roofing

The roof inspection portion of the General Home Inspection will not be as comprehensive as an inspection performed by a qualified roofing contractor. This is especially true with large commercial roofs of multi-unit high-rise buildings where the roof is very large and maintained by the building - in these cases a full roof inspection is not possible. Because of variations in installation requirements of the huge number of different roof-covering materials installed over the years, the General Home Inspection does not include confirmation of proper installation. Home Inspectors are trained to identify common deficiencies and to recognize conditions that require evaluation by a specialist. Inspection of the roof typically includes visual evaluation of the roof structure, roof-covering materials, flashing, and roof penetrations like chimneys, mounting hardware for roof-mounted equipment, attic ventilation devices, ducts for evaporative coolers, and combustion and plumbing vents. The roof inspection does not include leak-testing and will not certify or warranty the roof against future leakage. Other limitations may apply and will be included in the comments as necessary.

## Styles & Materials

**Roof Covering:**

Roll roofing  
Slate

**Viewed roof covering from:**

Walked roof

**Sky Light(s):**

None

**Chimney (exterior):**

Brick

		IN	NI	NP	M	RR
1.0	Roof Coverings	•			•	
1.1	Flashings	•			•	
1.2	Skylights, Chimneys and Roof Penetrations	•				
1.3	Roof Drainage Systems	•				•
		IN	NI	NP	M	RR

IN= Inspected, NI= Not Inspected, NP= Not Present, M= Maintain, RR= Repair or Replace

## Comments:

### 1.0 Roof Coverings

The main roof of the home is a low sloped roof that appears to be clad with a modified bitumen roofing membrane. This membrane was installed prior to the current ownership so the exact age is unknown. The roof membrane has since been coated with a white silicone roof coating which was applied during the current ownership.

**Modified Bitumen:** Modified bitumen (modified asphalt) or "mod bit" roofing material is sold in rolls and applied usually on low-slope or flat roofs. Its seams are sealed using a torch to heat the under-side of the bituminous material that coats both sides of a polyester or fiberglass reinforced mat. Smooth modified bitumen does not have granules (as asphalt shingles do) and is usually painted over with a silver aluminum coating which helps keep heat down by reflecting the rays of the sun. Modified bitumen roofing can last between 12-20 years with regular maintenance.

According to the current owners, the roofing membrane was painted with a silver reflective paint when they took ownership. The primary reason for this type of coating it to protect the roof membrane from the damaging rays of the sun and to help keep heat down. The current owners claim that they then had the roof coated with a roofing tar or flashing cement. This may indicate that the roof was showing signs of age at the time. The roof was then coated with a white silicone roof coating. Silicone roof coatings are water resistant (not water proof). These coatings help the roof shed water and also help reflect the rays of the sun.



On the day of inspection, the roof appeared to be sealed well. No signs of a leak were noted from the inside of the home or from the roof. Because of the numerous coatings that have been applied to the roof the exact condition of the roofing membrane underneath is hard to ascertain. Some cracking can be seen underneath the silicone coating in some areas but it is hard to tell if this cracking is in the membrane itself or surface cracking in the roofing tar or flashing cement coating that the current owner claims to have applied prior to having the silicone coat applied.

One small area where the silicone coating has worn away was noted (see photo). This is located close to the roof hatch and may have been caused by the roof hatch rubbing against it or from the silicone coating not adhering well to this area.

**Slate Roof:** The home also has a slate roof at the front (street side). Slate roofs can last 125 years or more. At the time of inspection the slate shingles covering these roof surfaces appeared to be in good shape.

**Recommended:** Ideally roofs are expertly inspected annually, preferably in the autumn before the wind, rain and snow sets in. Otherwise, it's recommended to have a new roof inspected after the first five years, then at 10 years, 13, 15, 17, and every year after that. Handymen can be "handy" for small fixes and can save you a few dollars, but there's no substitute for a professional, licensed roofer who carries liability insurance and workers compensation on their employees.



1.0 Item 1(Picture) Roof (facing toward street).



1.0 Item 2(Picture) Roof (facing toward rear of home).







1.0 Item 3(Picture) A cracking pattern below the silicone coating was noted in some locations.





1.0 Item 4(Picture) Small spot near roof hatch where the silicone coating has worn away.





1.0 Item 5(Picture) Slate roof surfaces at front of home.





1.0 Item 6(Picture) Slate roof above front third floor windows.

### 1.1 (1) Flashing

"Flashing" is a general term typically used to describe sheet metal fabricated into shapes and used to protect areas of the roof from moisture intrusion.

At the back of the roof the roof cladding curls over the edge of the roof essentially acting like edge flashing. At the front of the roof there is metal flashing installed between the flat roof and slate roof. This flashing looked to be in decent shape.



There were some areas around the slate roof that have been sealed with flashing cement and other sealants that will likely require occasional maintenance which will be noted next in this report.



1.1 Item 1(Picture) At the rear of the home the roof cladding curls over the edge and acts as edge flashing.





1.1 Item 2(Picture) At the front of the home metal flashing is installed above the slate roof (to keep water from getting below the slate) and then the roll roofing of the main room curls over the top edge of this flashing to keep water from getting behind the flashing.





1.1 (2) Flashings

**Slate Roof Flashings - Maintain:** The slate roof of the home was observed to be flashed in some areas with flashing cement. Ideally, a slate roof should use metal flashings. When properly installed metal flashings will last much longer and require much less maintenance. The main thing to note here is that areas where flashing cement or other sealants have been used will eventually require maintenance or reapplication.



1.1 Item 3(Picture) Flashing cement used here appears to be holding its seal but will eventually need maintenance.





1.1 Item 4(Picture) Sealant at this location was applied very sloppy and does not appear to be doing much.







1.1 Item 5(Picture) Flashing cement used here appears to be holding its seal but will eventually need maintenance.

### 1.2 Skylights, Chimneys and Roof Penetrations

At the time of the inspection, the Inspector observed no deficiencies in the condition of roof penetrations.

### 1.3 Roof Drainage Systems





**Main Roof Drainage:** The main roof of the home slopes slightly toward the back of the home into a screened gutter. This gutter then slopes to a downspout which appears to connect into the home's below ground drain system.

**Slate Roof Drainage:** The slate roof at the front of the home slopes into a gutter attached to the front of the home. This gutter then has a downspout at each end to carry rain water away.

**Slate Roof Drainage - Right-hand downspout extension length:** The right-hand downspout at the front of the home should have a longer extension in order to direct water further away from the foundation (ideally 8-10 ft but even 3-6 ft would be better).



1.3 Item 1(Picture) Photo showing direction of drainage into screened gutter at back of home.





1.3 Item 2(Picture) Downspout from back of roof.





1.3 Item 3(Picture) Gutter serving slate roof at the font of the home.





1.3 Item 4(Picture) Downspouts from gutter at front of home.





1.3 Item 5(Picture) Left-hand downspout terminates a good distance away from home.



1.3 Item 6(Picture) Right-hand downspout terminates away from home but should extend further away from the foundation (ideally 8-10 ft but even 3-6 ft would be better).



## 2. Exterior

Inspection of the home exterior typically includes (where visible and accessible): exterior wall covering materials, window and door exteriors, adequate surface drainage, driveway and walkways, window wells, exterior electrical components, exterior plumbing components, potential tree problems, and retaining wall conditions that may affect the home structure. Note: The General Home Inspection does not include inspection of landscape irrigation systems, fencing, or swimming pools/spas. The General Home Inspection also does not include a complete inspection of the exterior when the property resides within a commercial high-rise building.

### Styles & Materials

**Siding Style:**

Brick  
Masonry  
Stucco

**Siding Material:**

Brick  
Cement stucco

**Exterior Entry Doors:**

Metal & Glass

**Driveway:**

Space for parking in rear yard

		IN	NI	NP	M	RR
2.0	Wall Cladding Flashing and Trim	•				
2.1	Doors (Exterior)	•				
2.2	Windows (Exterior)	•			•	•
2.3	Decks, Balconies, Stoops, Steps, Areaways, Porches, Patio/Cover and Applicable Railings	•				
2.4	Vegetation, Grading, Drainage of Grounds, Driveways, Walkways and Retaining Walls (With respect to their effect on the condition of the building)	•				
2.5	Eaves, Soffits and Fascias	•				
		IN	NI	NP	M	RR

IN= Inspected, NI= Not Inspected, NP= Not Present, M= Maintain, RR= Repair or Replace





## Comments:

### **2.0 Building Exterior**

The front exterior the the home is made up of brick and masonry stucco, and the rear exterior of the home is made up of brick.

The Inspector observed no deficiencies in the condition of the building's main exteriors at the time of the inspection.

### **2.1 Exterior Doors**

The Inspector observed no deficiencies in the condition of exterior doors on the day of inspection.

### **2.2 (1) Windows (Exterior)**

The Inspector observed some minor deficiencies in the condition of window exteriors at the time of the inspection. Notable exceptions will be listed next in this report.





## 2.2 (2) Windows (Exterior)

**Exterior Window Sealants (Maintain):** Window exteriors were observed to have protective flashings in place which is good. Sealants used around the seams of these flashings are starting to age and loose their seal (this is normal over time). Because sealants will eventually dry, shrink and crack, sealant-dependent areas should be examined on an annual basis and sealant re-applied as necessary. Only four photos are provided for brevity, but this condition was witnessed to varying degrees outside all window exteriors that were examined. It is recommended that all exterior window sealants be maintained to prevent moisture intrusion.



2.2 Item 1(Picture) Exterior window sealant has lost its seal.





2.2 Item 2(Picture) Exterior window sealant has lost its seal.





2.2 Item 3(Picture) Exterior window sealant has lost its seal.





2.2 Item 4(Picture) Exterior window sealant has lost its seal.

**2.3 Decks, Balconies, Stoops, Steps, Areaways, Porches, Patio/Cover and Applicable Railings**

The Inspector observed no deficiencies in the condition of exterior stoops, steps, areaways, or patio/cover.

**2.4 Vegetation, Grading, Drainage of Grounds, Driveways, Walkways and Retaining Walls (With respect to their effect on the condition of the building)**



At the time of the inspection, the Inspector observed no deficiencies in the condition of vegetation, grading, drainage, patio floors, walkways, or retaining walls.

## **2.5 Eaves, Soffits and Fascias**

On the day of inspection, the Inspector observed no deficiencies at the eaves, soffits, or fascias.

---

The exterior of the home was inspected and reported on with the above information. While the inspector makes every effort to find all areas of concern, some areas can go unnoticed. Please be aware that the inspector has your best interest in mind. Any repair items mentioned in this report should be considered before purchase. It is recommended that qualified contractors be used in your further inspection or repair issues as it relates to the comments in this inspection report.



## 4. Interiors

The home inspector shall observe: Walls, ceiling, and floors; Steps, stairways, balconies, and railings; Counters and a representative number of installed cabinets; and A representative number of doors and windows. The home inspector shall: Operate a representative number of windows and interior doors; and Report signs of abnormal or harmful water penetration into the building or signs of abnormal or harmful condensation on building components. The home inspector is not required to observe: Paint, wallpaper, and other finish treatments on the interior walls, ceilings, and floors; carpeting; or draperies, blinds, or other window treatments.

### Styles & Materials

**Ceiling Materials:**

Gypsum Board

**Wall Material:**

Gypsum Board

**Floor Covering(s):**

Parquet  
Tile

**Interior Doors:**

Solid wood

**Window Types:**

Double-hung

**Window Manufacturer:**

CRYSTAL

**Cabinetry:**

Wood  
Laminate

**Countertop:**

Stone

		IN	NI	NP	M	RR
4.0	Ceilings	•				
4.1	Walls	•				
4.2	Floors	•				
4.3	Bathroom & Shower Stalls (Walls, Floors & Ceilings)	•				
4.4	Steps, Stairways, and Railings	•				
4.5	Counters and Cabinets (representative number)	•				
4.6	Doors (representative number)	•				
4.7	Windows (representative number)	•				
4.8	Evidence of pests	•				
		IN	NI	NP	M	RR

IN= Inspected, NI= Not Inspected, NP= Not Present, M= Maintain, RR= Repair or Replace

### Comments:

**4.0 Ceilings**

At the time of the inspection, the Inspector observed no deficiencies in the condition of the ceilings in the home.

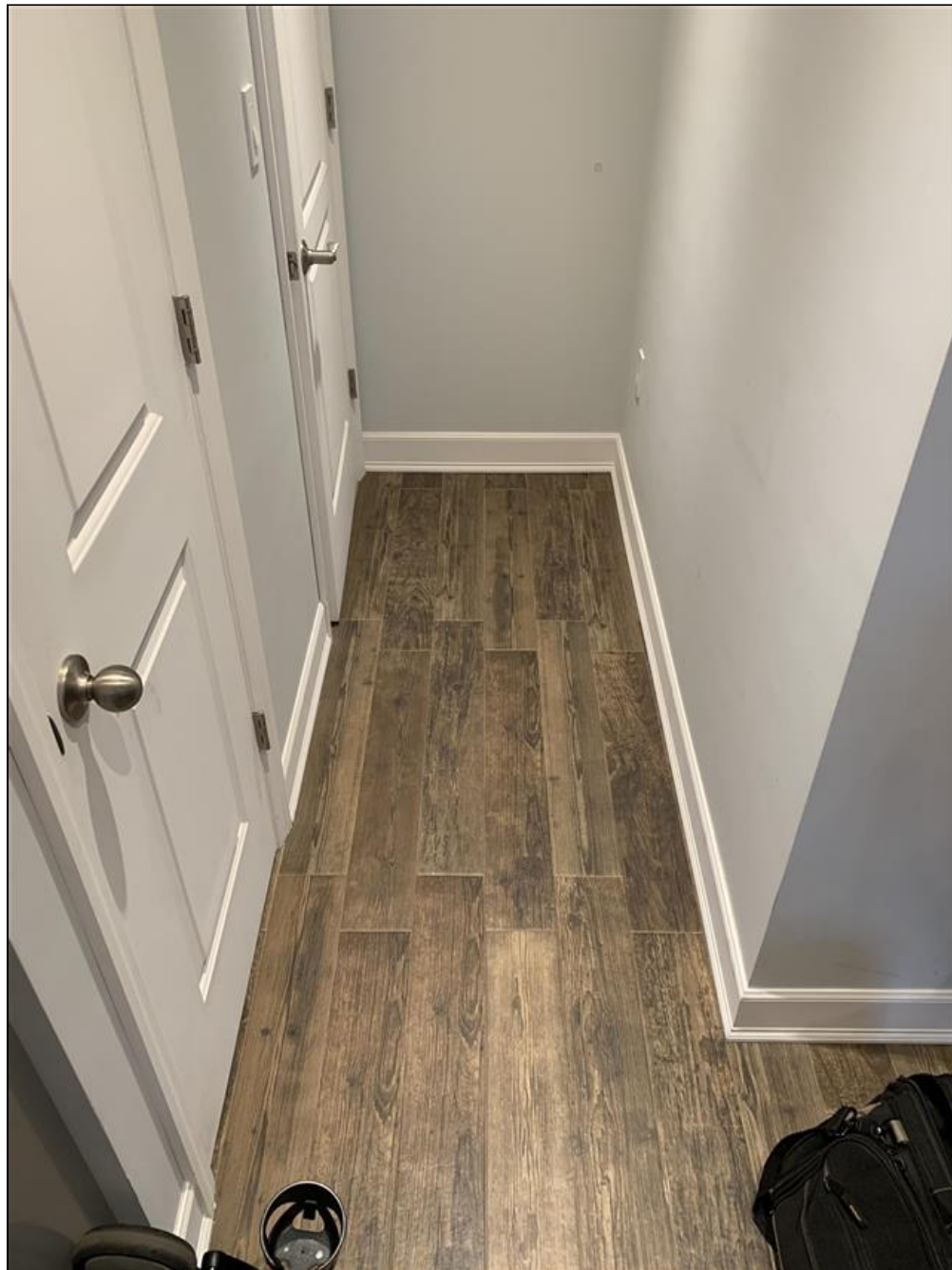
**4.1 Interior Walls**

At the time of the inspection, the Inspector observed no deficiencies of the condition of walls in the home interior.

**4.2 Floors (Interior)**



At the time of the inspection, the Inspector observed no deficiencies in the condition of floors in the home.



4.2 Item 1(Picture) First Floor: Ceramic or porcelain tile (wood appearance).







4.2 Item 2(Picture) First Floor: Ceramic or porcelain tile (wood appearance).





4.2 Item 3(Picture) First Floor: Ceramic or porcelain tile (wood appearance).



4.2 Item 4(Picture) Second Floor Kitchen: Tiled Floor.





4.2 Item 5(Picture) Second Floor: Example photo of wood flooring.





4.2 Item 6(Picture) Second Floor: Example photo of wood flooring.





4.2 Item 7(Picture) Second Floor: Example photo of wood flooring.





4.2 Item 8(Picture) Third Floor: Example photo of wood flooring.





4.2 Item 9(Picture) Third Floor: Example photo of wood flooring.







4.2 Item 10(Picture) Third Floor: Example photo of wood flooring.

#### **4.3 Bathroom & Shower Stalls (Walls, Floors & Ceilings)**

At the time of the inspection, the Inspector observed no deficiencies in the condition of the walls, floors, ceilings, or sealant points within the bath/shower stall areas throughout the home.

#### **4.4 Steps, Stairways, and Railings (Interior)**



At the time of the inspection, the Inspector observed no deficiencies in the condition of the stairways serving the interior of the building.

### **4.5 Counters and Cabinets**

At the time of the inspection, the Inspector observed no deficiencies in the condition of the cabinets or counters throughout the home.

### **4.6 Doors (Interior)**

At the time of the inspection, the Inspector observed no deficiencies in the condition of interior doors.

### **4.7 (1) Windows (representative number)**

At the time of the inspection, most of the windows of the home were found to be in workable order. The windows are not new but looked pretty good and were functional.

**Window Seals:** The rubber seals around the glass panes appeared a bit aged but no condensation between panes (indicative of a failed window seal) was observed.

A couple windows had disconnected or broken channel balances which will be mentioned next in this report.

**4.7 (2) Windows (representative number)**

**Window Channel Balance:** A window balance is a somewhat hidden window component sitting inside the window frame. It's only found in double hung or single hung windows and assists with the weight of the sash as you open and close your windows. They also hold the top sash of double hung windows closed while they're not in use.

**Window Channel Balances Disconnected / Broken:** While inspecting the windows of the home two windows were observed to have disconnected or broken channel balances. Window channel balances can sometimes be reconnected, however; there also may be a broken component requiring that the balances be replaced. Further investigation and proper sizing for replacement parts may be needed.



4.7 Item 1(Picture) One of the window channel balances was found to be disconnected or broken in the first floor bedroom (right most window).



4.7 Item 2(Picture) A window channel balance was found to be disconnected or broken in the third floor walk-in-closet / bedroom.





4.7 Item 3(Picture) Floor plan showing locations.

#### 4.8 Evidence of Pests

At the time of the inspection, the Inspector observed no visible evidence of pests (rodents, wood destroying organisms, or other insects) within the home interior. Areas hidden behind walls or other finishings can not be verified.

The interior of the home was inspected and reported on with the above information. While the inspector makes every effort to find all areas of concern, some areas can go unnoticed. The inspection did not involve moving furniture and inspecting behind furniture, area rugs or areas obstructed from view. Please be aware that the inspector has your best interest in mind. Any repair items mentioned in this report should be considered before purchase. It is recommended that qualified contractors be used in your further inspection or repair issues as it relates to the comments in this inspection report.



## 5. Structural Components

The General Home Inspection includes inspection of the home structural elements that were readily visible at the time of the inspection. This typically includes the foundation, exterior walls, floor structures and roof structure. Much of the home structure is hidden behind exterior and interior roof, floor, wall, and ceiling coverings, or is buried underground. Because the General Home Inspection is limited to visual and non-invasive methods, this report may not identify all structural deficiencies. Upon observing indications that structural problems may exist that are not readily visible, the inspector may recommend inspection, testing, or evaluation by a specialist that may include invasive measures.

### Styles & Materials

**Foundation:**

Concrete slab

**Method used to observe Crawlspace:**

No crawlspace

**Floor Structure:**

Not visible

**Wall Structure:**

Brick

Masonry

Not entirely visible

**Columns or Piers:**

No observed structural columns or piers

**Ceiling Structure:**

Not visible

**Roof Structure:**

Not visible

**Roof-Type:**

Low sloped

**Method used to observe attic:**

No accessible attic

**Attic info:**

No accessible attic

		IN	NI	NP	M	RR
5.0	Foundations, Basement and Crawlspace (Report signs of abnormal or harmful water penetration into the building or signs of abnormal or harmful condensation on building components.)	•				
5.1	Walls (Structural)	•				
5.2	Columns or Piers		•	•		
5.3	Floors (Structural)	•				
5.4	Ceilings (Structural)	•				
5.5	Roof Structure and Attic	•				
		IN	NI	NP	M	RR

IN= Inspected, NI= Not Inspected, NP= Not Present, M= Maintain, RR= Repair or Replace

### Comments:

**5.0 Foundations, Basement and Crawlspace (Report signs of abnormal or harmful water penetration into the building or signs of abnormal or harmful condensation on building components.)**

At the time of the inspection, the Inspector observed no deficiencies in the condition of the home's structure. This home does not have a below grade basement. The first floor of the home has been completely finished so the foundation could not be directly observed. The General Home Inspection does not include evaluation of structural components hidden behind floor, wall, or ceiling coverings, but is visual and non-invasive only.

At the time of inspection, no signs of structural issues were observed. No abnormal or harmful water penetration into the building was observed.

**5.1 Walls (Structural)**

At the time of the inspection, the Inspector observed no deficiencies in the condition of the structural integrity of walls throughout the home. The General Home Inspection does not include evaluation of structural components hidden behind floor, wall, or ceiling coverings, but is visual and non-invasive only.

### **5.2 Columns or Piers**

At the time of the inspection, the Inspector did not observed any structural columns or piers.

### **5.3 Floors (Structural)**

At the time of the inspection, the Inspector observed no deficiencies in the structural condition of the floors throughout the home.

### **5.4 Ceilings (Structural)**

At the time of the inspection, the Inspector observed no deficiencies in the structural condition of the ceilings throughout the home.

### **5.5 Roof Structure (no attic)**

At the time of the inspection, the Inspector observed no deficiencies in the structural condition of the roof. No attic space was present at this home.

---

The structure of the home was inspected and reported on with the above information. While the inspector makes every effort to find all areas of concern, some areas can go unnoticed. Please be aware that the inspector has your best interest in mind. Any repair items mentioned in this report should be considered before purchase. It is recommended that qualified contractors be used in your further inspection or repair issues as it relates to the comments in this inspection report.



## 6. Plumbing System

The home inspector shall observe (where visible and accessible): Interior water supply and distribution system, including: piping materials, supports, and insulation; fixtures and faucets; functional flow; leaks; and cross connections; Interior drain, waste, and vent system, including: traps; drain, waste, and vent piping; piping supports and pipe insulation; leaks; and functional drainage; Hot water systems including: water heating equipment; normal operating controls; automatic safety controls; and chimneys, flues, and vents; Fuel storage and distribution systems including: interior fuel storage equipment, supply piping, venting, and supports; leaks; and Sump pumps. The home inspector shall describe: Water supply and distribution piping materials; Drain, waste, and vent piping materials; Water heating equipment; and Location of main water supply shutoff device. The home inspector shall operate all plumbing fixtures, including their faucets and all exterior faucets attached to the house, except where the flow end of the faucet is connected to an appliance. The home inspector is not required to: State the effectiveness of anti-siphon devices; Determine whether water supply and waste disposal systems are public or private; Operate automatic safety controls; Operate any valve except water closet flush valves, fixture faucets, and hose faucets; Observe: Water conditioning systems; Fire and lawn sprinkler systems; On-site water supply quantity and quality; On-site waste disposal systems; Foundation irrigation systems; Spas, except as to functional flow and functional drainage; Swimming pools; Solar water heating equipment; or Observe the system for proper sizing, design, or use of proper materials.

### Styles & Materials

<b>Water Source:</b> Public	<b>Water Filters:</b> None observed	<b>Plumbing Water Supply (into home):</b> Copper where visible
<b>Plumbing Water Distribution (inside home):</b> Copper where visible	<b>Washer Drain Size:</b> Not visible Extra Info : Drain was blocked by washer & dryer.	<b>Plumbing Waste:</b> Cast iron
<b>Water Heater Power Source:</b> Natural gas	<b>Water Heater Capacity:</b> 50 Gallon	<b>Manufacturer:</b> A.O. SMITH
<b>Water Heater Location:</b> Utility room located outside at rear of home		

		IN	NI	NP	M	RR
6.0	Plumbing Drain, Waste and Vent Systems	•			•	•
6.1	Plumbing Water Supply, Distribution System and Fixtures	•				•
6.2	Hot Water Systems, Controls, Chimneys, Flues and Vents	•				•
6.3	Main Water Shut-off Device (Describe location)	•				
6.4	Fuel Storage and Distribution Systems (Interior fuel storage, piping, venting, supports, leaks)	•				
6.5	Main Fuel Shut-off (Describe Location)	•				
6.6	Sump Pump		•	•		
		IN	NI	NP	M	RR

IN= Inspected, NI= Not Inspected, NP= Not Present, M= Maintain, RR= Repair or Replace

### Comments:

#### 6.0 (1) Plumbing Drain, Waste and Vent Systems

**Cast Iron Drain Pipe Appears Aged:** The main waste pipes of the home (visible via the hatch in first floor bedroom closet) are cast iron. The cast iron sewer pipes observed under the hatch of the first floor bedroom appeared aged. These pipes are buried below ground beneath the first floor slab and appeared to likely be the original drain pipes from when the home was constructed. Cast iron pipes are said to last around 100 years. The Inspector is not saying





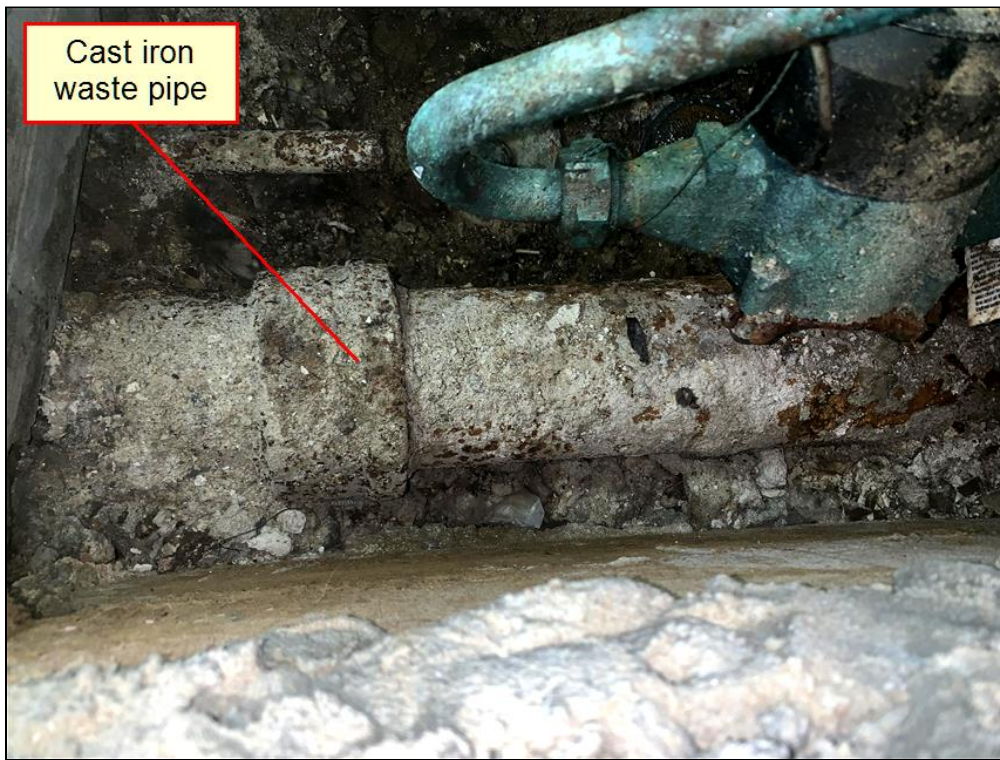


that these pipes are damaged; just that they appear original and aged from the section that was observed. To really evaluate the condition of these pipes a plumber would have to be hired to send a camera inside the pipes.

**Sewer Trap:** The sewer trap for the home is located below a floor hatch located in the closet of the first floor bedroom closet (also where water meter and water shutoff valve are located). The main purpose of this trap is to create a water barrier so sewer gasses from the street side cannot enter the home's sewer line. The trap also provides access points for repair and cleaning out clogs. One of the caps of the trap has been replaced which may indicate that work has been done (repair or clog removal). You may want to inquire about this to find out what work has been done (if any) and if the current owners have documentation of the work.

At the time of inspection, drainage throughout the home was sufficient.

One minor drain related issue was noted which will be mentioned next in this report.

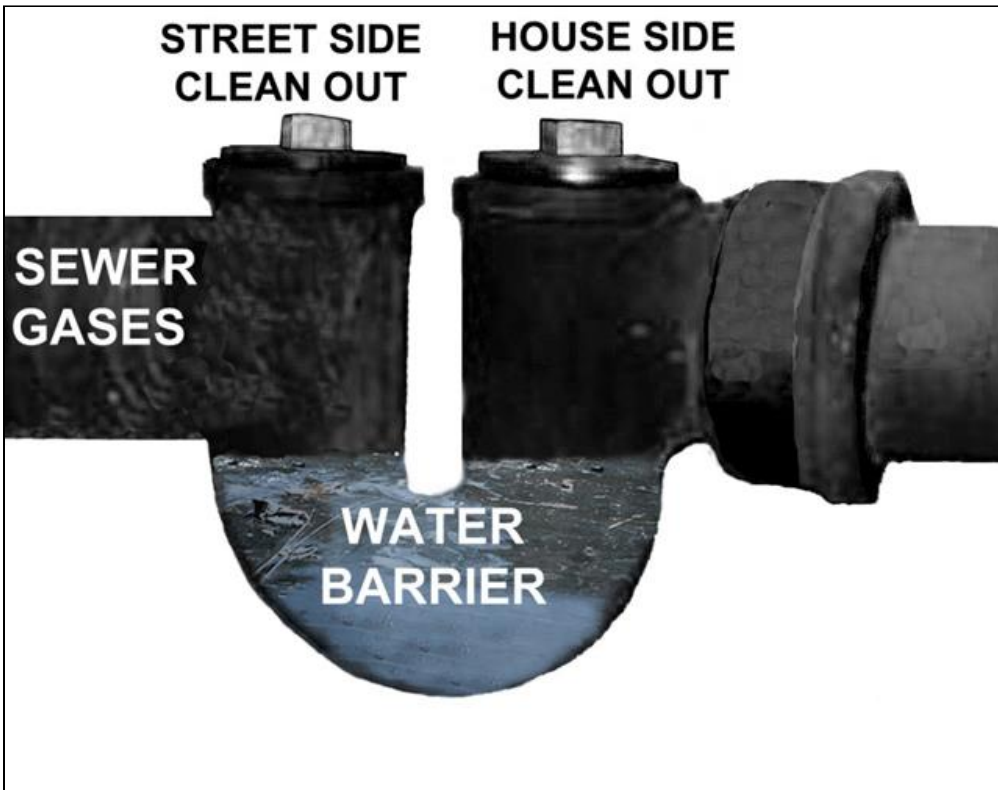


6.0 Item 1(Picture) Photo showing cast iron waste pipe.





6.0 Item 2(Picture) Sewer trap. One of the caps is newer which may indicate the a repair or the removal of a clog.



6.0 Item 3(Picture) Diagram showing how a sewer trap works to block sewer gases (the street side will be the side closest to the street - not always on left as in diagram).

**6.0 (2) Plumbing Drain, Waste and Vent Systems**





**Leaking Drain Below Backyard Sink:** A sink was installed at the rear of the home in the back yard. This sink was working on the day of inspection but the PVC drain pipe below it has a leak. It appears that this could easily be fixed using PVC joint compound at the joint where it is leaking.



6.0 Item 4(Picture) Sink at back of home with leak location indicated.





6.0 Item 5(Picture) PVC drain below sink at rear of home. The leak appears to be coming from the joint indicated in the photo and can likely be fixed using a PVC joint compound.

#### **6.1 (1) Plumbing Water Supply, Distribution System and Fixtures**

At the time of the inspection, the Inspector observed one deficiency in the condition of a plumbing fixture which will be noted next in this report. Everything else appeared to be in workable condition.

#### **6.1 (2) Plumbing Water Supply, Distribution System and Fixtures**



**Kitchen Faucet Keeps Running:** The kitchen faucet keeps running after being turned off. The Inspector was able to get the faucet to stop running by moving the valve arm around but this shouldn't be necessary. Over time this will likely get worse until addressed.



6.1 Item 1(Picture) Faucet still running when in off position.

**6.2 (1) Hot Water Systems, Controls, Chimneys, Flues and Vents**

Hot water for the home is provided by an A.O. Smith brand 50 gallon gas fired water heater manufactured on 4/28/2016. Hot water heaters tend to last around 12 years.





**Hot Water Temperature:** On the day of inspection the hot water of the home was measured to be around 124-126 degrees F which is a bit on the hot side. Safety and energy conservation are key factors to be considered when selecting the water temperature setting of the water heater's thermostat. The lower the temperature, the greater the safety and savings in energy cost. To achieve this, the Inspector recommend a temperature setting of 115 - 120°F. Water temperatures over 125°F can cause scalding. Water temperature can be adjusted via the dial at the lower front of the water heater (see photo).

One issue with the hot water heater was noted which will be mentioned next in this report.



6.2 Item 1(Picture) A.O. Smith brand 50 gallon gas fired water heater.





6.2 Item 2(Picture)





6.2 Item 3(Picture)







6.2 Item 4(Picture) Hot water temperatures can be controlled here.

**6.2 (2) Hot Water Systems, Controls, Chimneys, Flues and Vents**

**Test & Pressure Valve Extension:** At the time of inspection no TPR valve extension was present. The TPR (Test & Pressure-relief) valve extension pipe should be constructed of an approved material, such as CPVC, copper, polyethylene, galvanized steel, polypropylene, or stainless steel. PVC and other non-approved plastics should not be used since they can easily melt. The extension should not terminate more than 6 inches (152 mm) above the floor or waste receptor. The Inspector recommends repair by a qualified plumber.

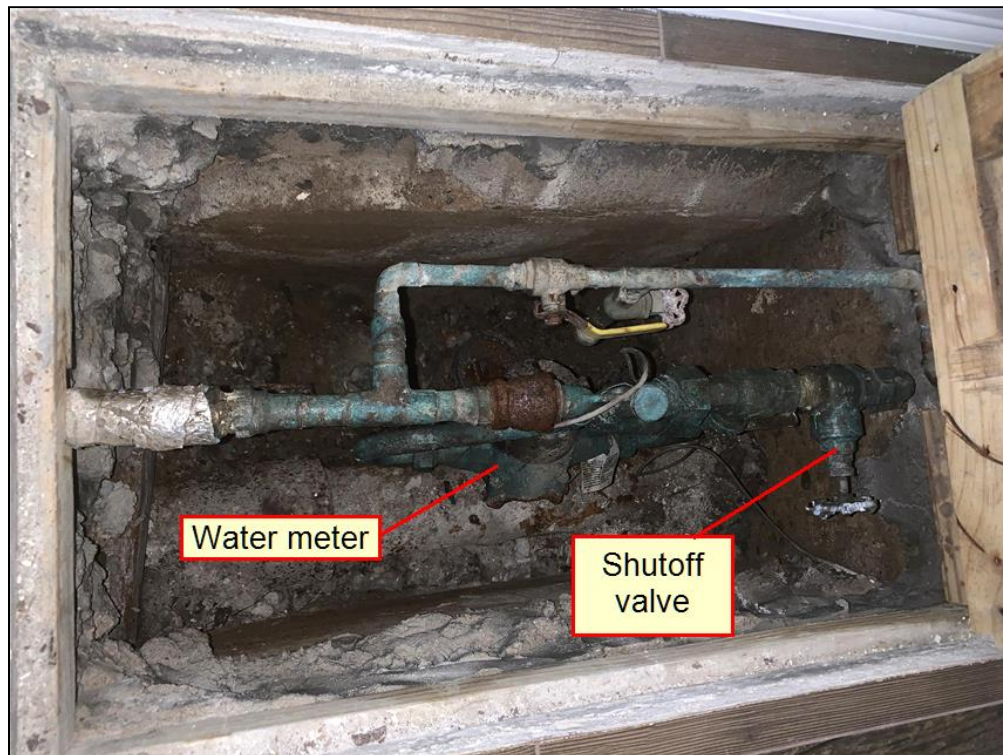


6.2 Item 5(Picture) A TPR valve extension pipe should be installed here for safety.

**6.3 Main Water Shut-off Device (Describe location)**



The water main coming into the home is copper (good). The water main enters the home below ground and it accessible via a floor hatch located in the closet of the first floor bedroom closet. This is also were the water meter and the water shutoff valve is located.



6.3 Item 1(Picture) Water meter and main shutoff valve.





6.3 Item 2(Picture) Water meter.





6.3 Item 3(Picture) Shutoff valve.

**6.4 Fuel Storage and Distribution Systems (Interior fuel storage, piping, venting, supports, leaks)**

At the time of the inspection, the Inspector observed no deficiencies in the condition and distribution of the fuel piping that was observable. No fuel storage was observed on this property.

**6.5 Main Fuel Shut-off (Describe Location)**





The main fuel (natural gas) shut-off & meter are located in a cabinet near the first floor kitchen. The main gas shut off valve is located just above the gas meter. Operating this valve requires a wrench. Shutting this valve off should shut off gas to the entire home.



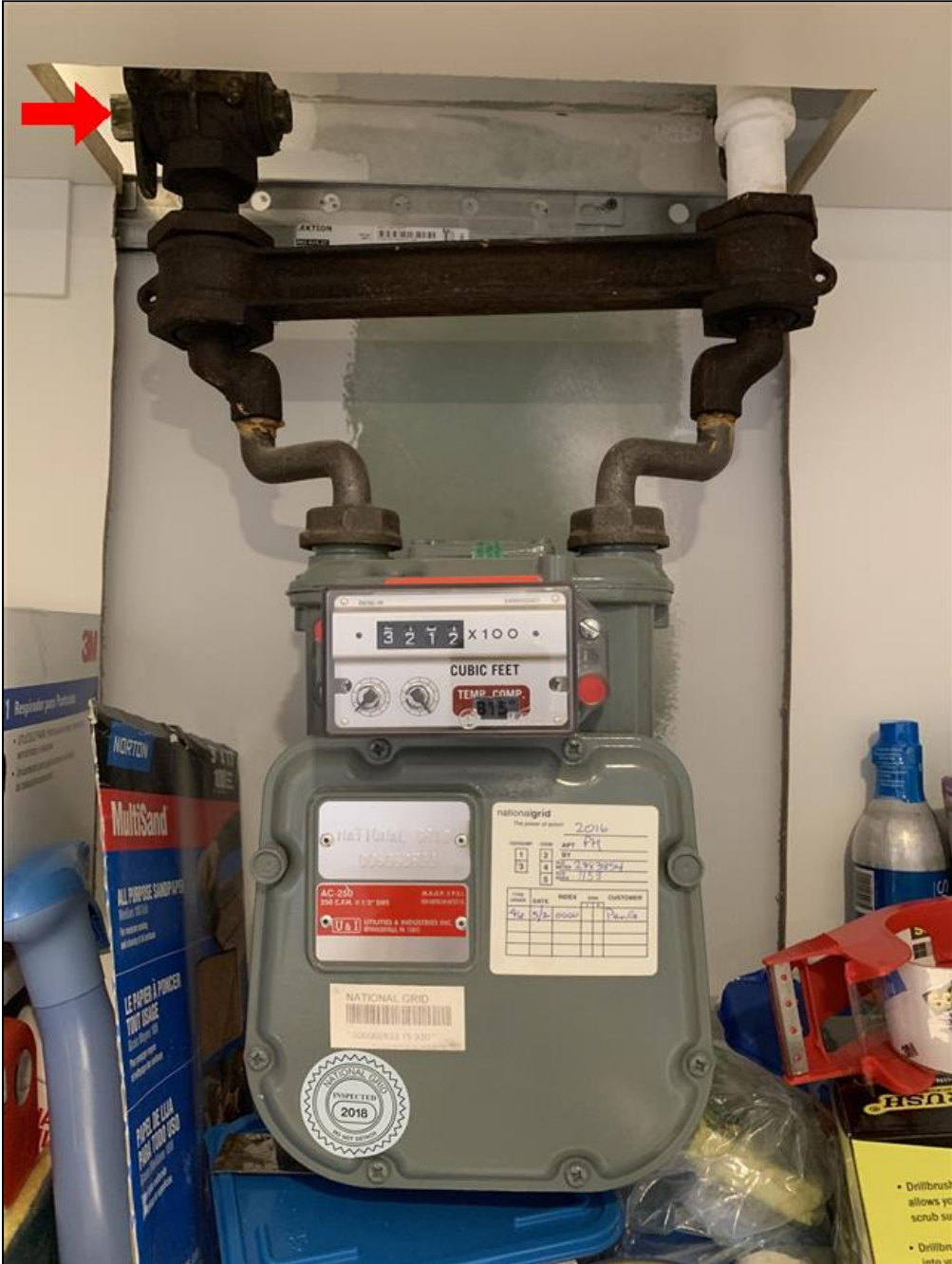
6.5 Item 1(Picture) Gas meter is located inside this cabinet near the first floor kitchen area.





6.5 Item 2(Picture) Gas meter.





6.5 Item 3(Picture) Gas meter with shutoff valve indicated (requires a wrench to operate).

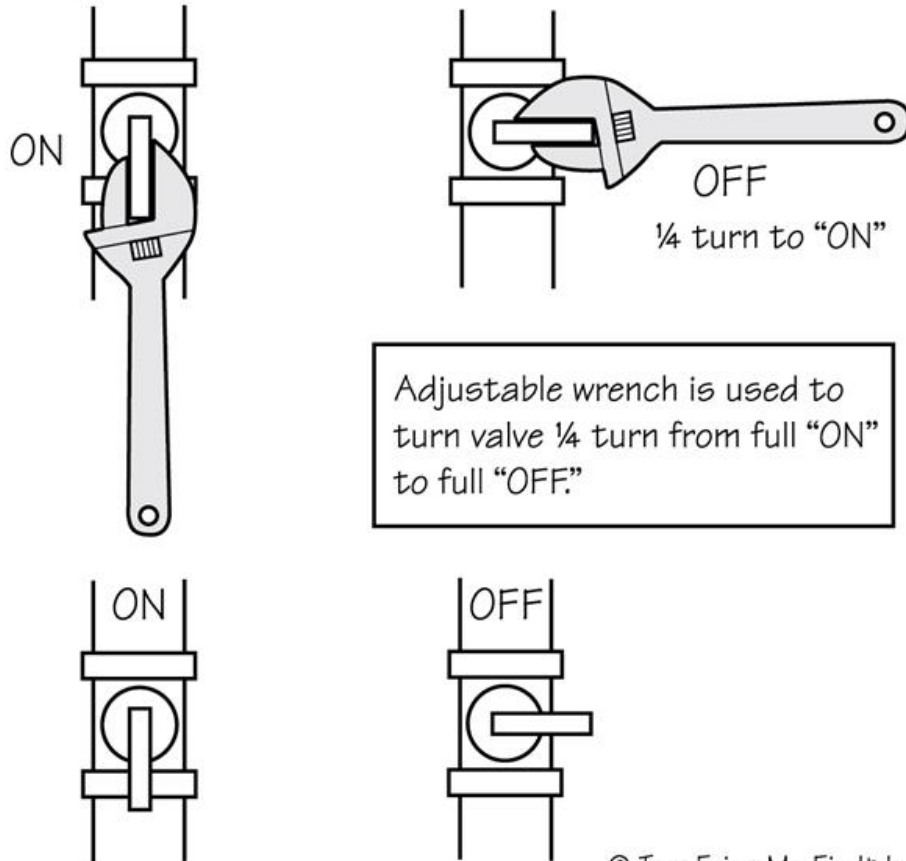






# Operating "Wrench Type" Valve

Valves used on water and gas lines



Adjustable wrench is used to turn valve 1/4 turn from full "ON" to full "OFF."

© Tom Feiza Mr. Fix-It Inc.

P066

6.5 Item 4(Picture) Diagram showing operation of wrench type valves.

## 6.6 Sump Pump

No sump pump was observed at this property.

The plumbing in the home was inspected and reported on with the above information. While the inspector makes every effort to find all areas of concern, some areas can go unnoticed. Washing machine drain line for example cannot be checked for leaks or the ability to handle the volume during drain cycle. Older homes with galvanized supply lines or cast iron drain lines can be obstructed and barely working during an inspection but then fails under heavy use. If the water is turned off or not used for periods of time (like a vacant home waiting for closing) rust or deposits within the pipes can further clog the piping system. Please be aware that the inspector has your best interest in mind. Any repair items mentioned in this report should be considered before purchase. It is recommended that qualified contractors be used in your further inspection or repair issues as it relates to the comments in this inspection report.





# 7. Electrical System

The home inspector shall observe (where visible and accessible): Service entrance conductors; Service equipment, grounding equipment, main over current device, and main and distribution panels; Amperage and voltage ratings of the service; Branch circuit conductors, their over current devices, and the compatibility of their ampacities and voltages; The operation of a representative number of installed ceiling fans, lighting fixtures, switches and receptacles located inside the house, garage, and on the dwelling's exterior walls; The polarity and grounding of all receptacles within six feet of interior plumbing fixtures, and all receptacles in the garage or carport, and on the exterior of inspected structures; The operation of ground fault circuit interrupters; and Smoke detectors. The home inspector shall describe: Service amperage and voltage; Service entry conductor materials; Service type as being overhead or underground; and Location of main and distribution panels. The home inspector shall report any observed aluminum branch circuit wiring. The home inspector shall report on presence or absence of smoke detectors, and operate their test function, if accessible, except when detectors are part of a central system. The home inspector is not required to: Insert any tool, probe, or testing device inside the panels; Test or operate any over current device except ground fault circuit interrupters; Dismantle any electrical device or control other than to remove the covers of the main and auxiliary distribution panels; or Observe: Low voltage systems; Security system devices, heat detectors, or carbon monoxide detectors; Telephone, security, cable TV, intercoms, or other ancillary wiring that is not a part of the primary electrical distribution system; or Built-in vacuum equipment.

## Styles & Materials

**Electrical Service Conductors:**

Below ground

**Panel capacity:**

100 AMP

**Panel Type:**

Circuit breakers

**Electric Panel Manufacturer:**

MURRAY

**Branch wire 15 and 20 AMP:**

Copper

**Wiring Methods:**

Metal Conduit (where visible)

		IN	NI	NP	M	RR
7.0	Service Entrance Conductors	•				
7.1	Service and Grounding Equipment, Main Overcurrent Device, Main and/or Sub Panels	•				•
7.2	Branch Circuit Conductors, Overcurrent Devices and Compatibility of their Amperage and Voltage	•				
7.3	Connected Devices and Fixtures (Observed from a representative number of ceiling fans, lighting fixtures, switches and receptacles located inside the house, garage, and on the dwelling's exterior walls)	•				•
7.4	Grounding & GFCI Protection of Receptacles within 6 feet of interior plumbing fixtures, in garages, carports, or located on exterior walls of the inspected structure	•				•
7.5	Operation of GFCI (Ground Fault Circuit Interrupters)	•				
7.6	Location of Distribution Panels	•				
7.7	Smoke Detectors	•				•
7.8	Carbon Monoxide Detectors	•			•	
		IN	NI	NP	M	RR

IN= Inspected, NI= Not Inspected, NP= Not Present, M= Maintain, RR= Repair or Replace





Comments:

7.0 Service Entrance Conductors

The main service entrance conductors enter the utility room located at the rear of the home from below ground. This is where the electrical meter and main electrical panel serving the home are also located.



7.0 Item 1(Picture) The main service entrance conductors enter the utility room located at the rear of the home from below ground.





7.0 Item 2(Picture) Electrical meter.





**7.1 (1) Electrical Service Grounding**

**Electrical Service Grounding Not Observed:** No service grounding was visible at the time of the inspection. This would normally be achieved via a grounding electrode conductor from the panel clamped to the top of a driven rod that serves as the grounding electrode. Grounding electrode rods are typically an 8-foot copper or steel rod required to be driven into the soil for its full length. In addition to this, secondary grounding is often achieved by a ground wire bonded to the water main. The Inspector did not observe either of these. If grounding is not present this would be improper and also a safety concern. Further evaluation by a licensed electrician is advised to ensure proper grounding.



**7.1 (2) Main Overcurrent Device**

The main overcurrent device serving the home is a 100 Amp circuit breaker located in the electrical panel. This indicates that the panel is provided 100 Amp service.

Shutting this breaker off should cut all power to the home.



7.1 Item 1(Picture) Main overcurrent device.

**7.1 (3) Main and/or Sub Panels**

The electrical panel serving the home is an older Murray brand load center with a max rating of 100 Amps. At the time of inspection some issues with the panel were noted which will be mentioned next in this report.

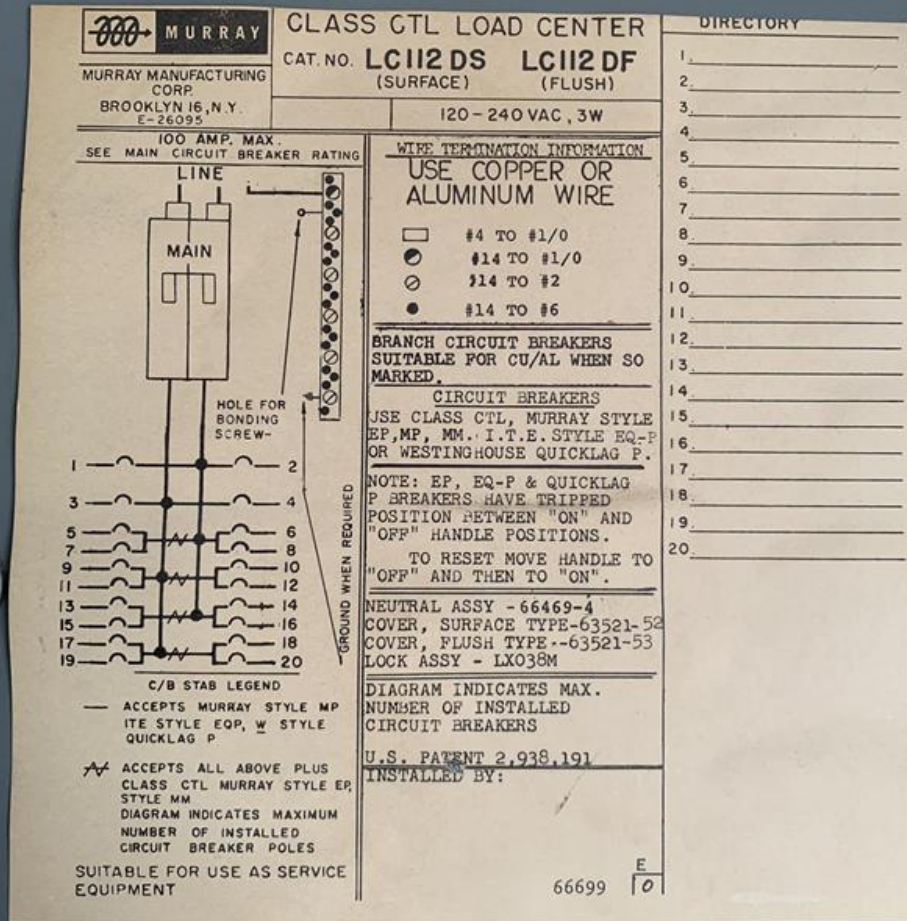
**100 Amp Service:** The manufacturer's label listed the service panel amperage rating at 100 amps, which is considered marginal by modern standards. 100 amp services were typically installed before modern appliances were common in homes. Homes with 100 amp services that contain modern electrical appliances such as dishwashers, dryers, ranges, water heaters and air conditioners may have a higher risk excessive amounts of breaker tripping. You may wish to consult with a qualified electrical contractor to discuss the need for and to determine options and prices for upgrading the service panel. **Note:** While the above is technically true no breakers tripped while testing various appliances. The two heat pumps and all six air handling units were running at the same time during the inspection while other appliances were being turned on and tested. This is mentioned primarily for your knowledge as requirements may change depending on your electrical needs.



7.1 Item 2(Picture) Murray brand electrical panel.



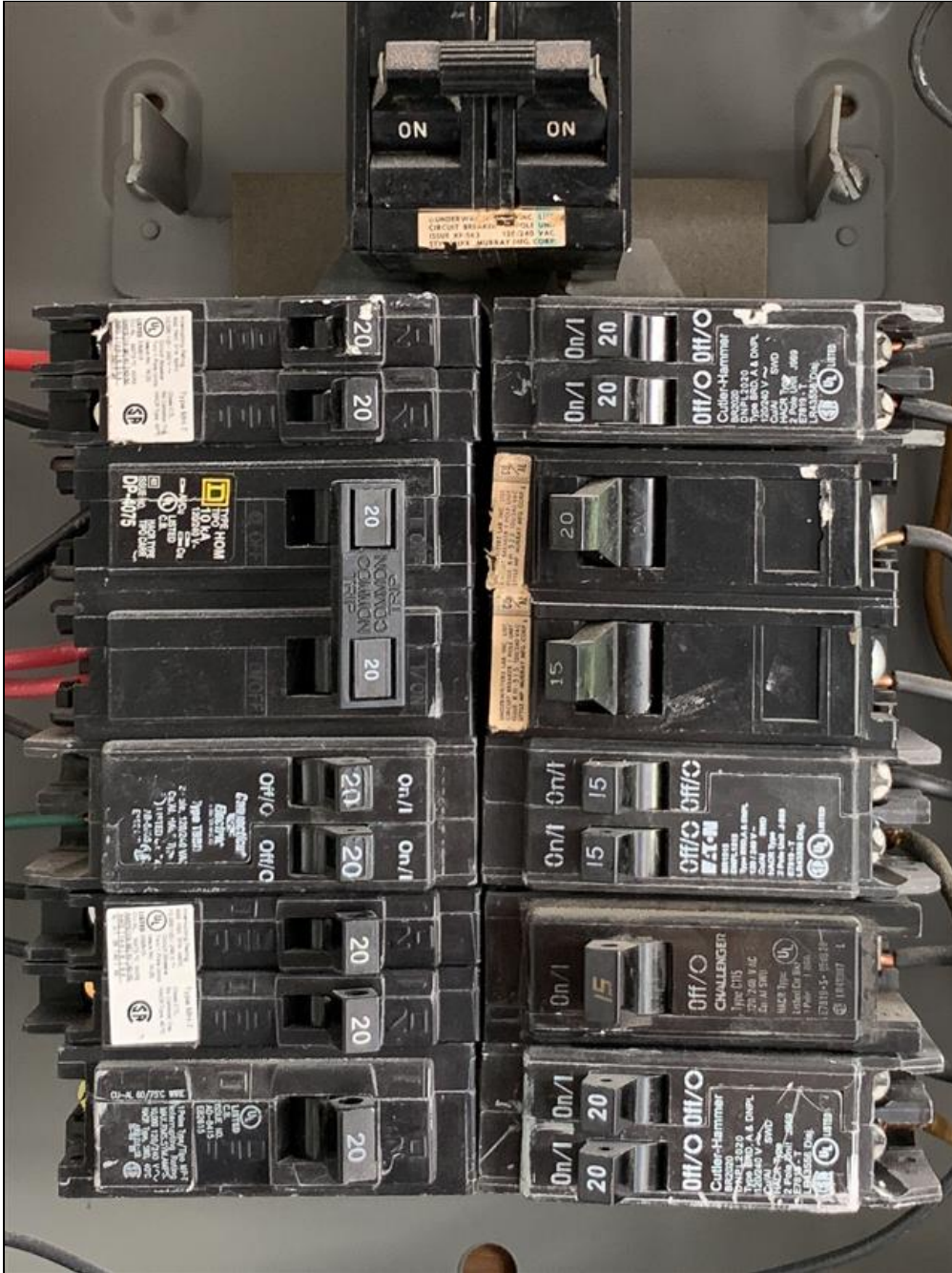




7.1 Item 3(Picture) Panel information tag.

7.1 (4) Main and/or Sub Panels

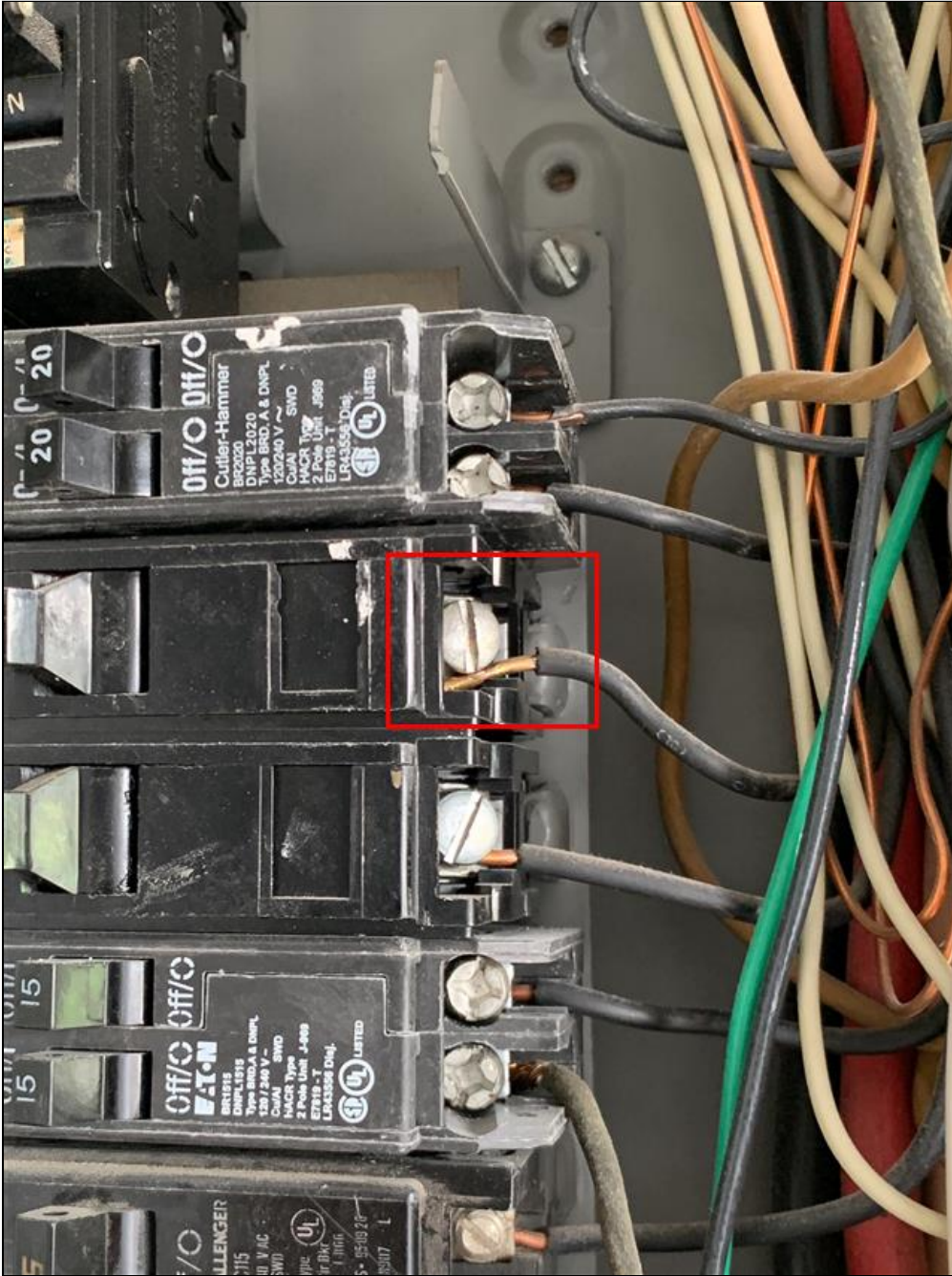
**Mismatched Brands:** Circuit breakers in the service panel were of a brand (Cutler-Hammer, Challenger, Eaton, Square D, Connecticut) different from the main panel brand (Murray / Westinghouse). Because circuit breakers made by different manufacturers vary in design, panel manufacturers typically require that breakers manufactured by their company be used in their panels. Breakers from one manufacturer used in the panel of another manufacturer may result in poor connections which can create a potential fire or shock/electrocution hazard. Using the wrong brands can also void the warranty of the panel. The Inspector recommends correction by a qualified electrical contractor.



7.1 Item 4(Picture) Mismatched brands.

7.1 (5) Main and/or Sub Panels

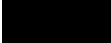
**Wire Not Properly Connected to Breaker:** A branch circuit conductor appears to be improperly secured to a breaker terminal. This wire should be connected properly to avoid it coming loose.



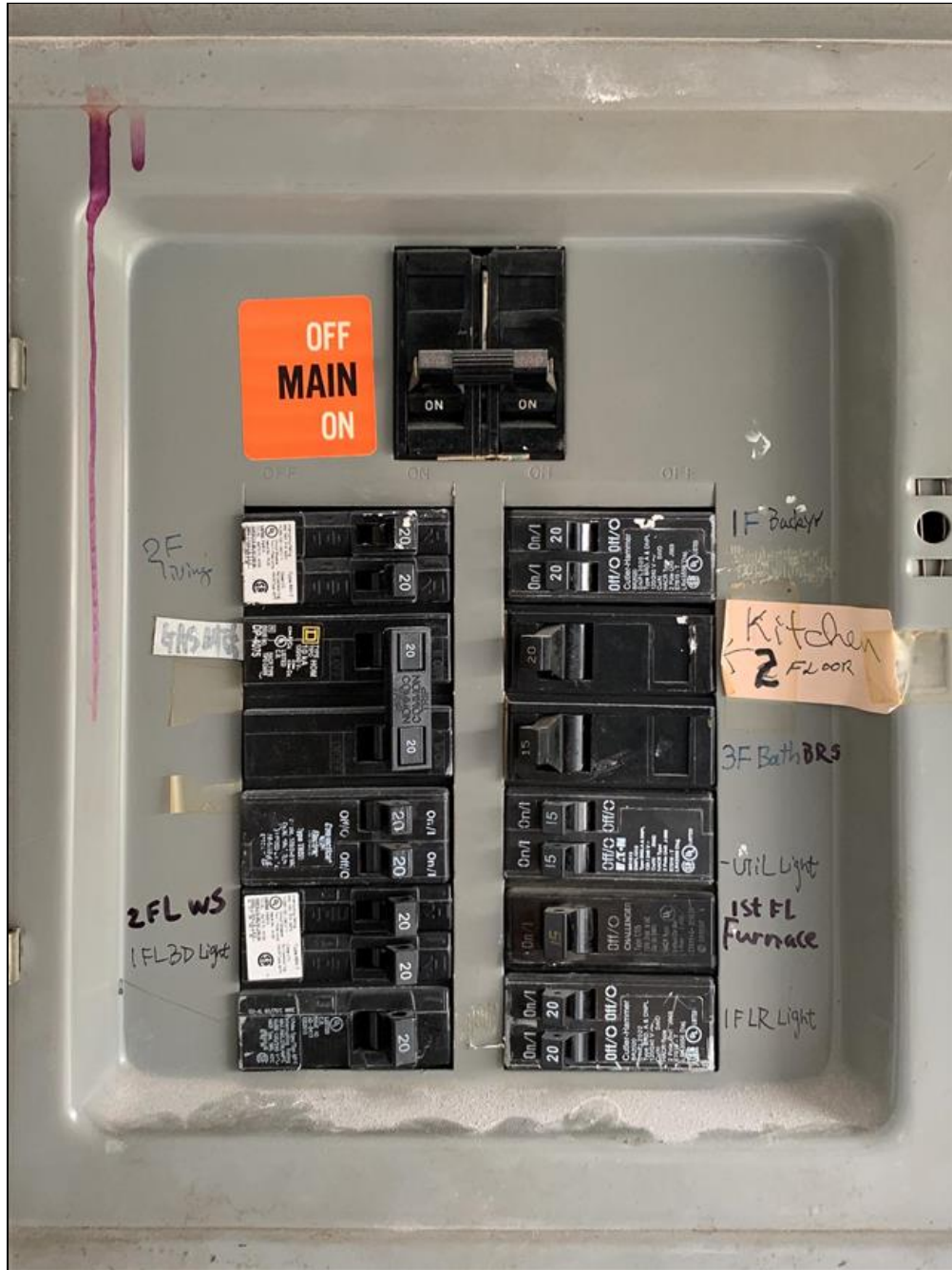
7.1 Item 5(Picture) Conductor is not properly secured to breaker terminal.

### 7.1 (6) Main and/or Sub Panels

**Label / Identify:** The Circuit Directory labels for identifying individual electrical circuits were not filled out very well. The service panel should contain correctly and clearly-marked labels identifying ALL individual circuits so that in an emergency, individual circuits can be quickly identified and shut off. Example: One circuit does not have a label and



one circuit is labeled with "Furnace" but there is not a furnace on this property. The Inspector recommends that the Circuit Directory labels be filled out better than they are for the reasons stated above.



7.1 Item 6(Picture) All circuits should be clearly and correctly labeled.





**7.2 Branch Circuit Conductors, Overcurrent Devices and Compatibility of their Amperage and Voltage**

At the time of the inspection, the Inspector observed no deficiencies in the amperage compatibility of over current devices and connected conductors.

**7.3 (1) Connected Devices and Fixtures (Observed from a representative number of ceiling fans, lighting fixtures, switches and receptacles located inside the house, garage, and on the dwelling's exterior walls)**

At the time of the inspection, the Inspector observed a number of deficiencies in the condition of connected devices and fixtures. All other devices and fixtures observed appeared to have no deficiencies. Noted exceptions will be mentioned next in this report.





**7.3 (2) Connected Devices and Fixtures (Observed from a representative number of ceiling fans, lighting fixtures, switches and receptacles located inside the house, garage, and on the dwelling's exterior walls)**

**Loose Face Plate:** One electrical receptacle in the first floor recreational room was found to have a loose face plate that falls off. This should be repaired to help avoid electrical shock.



7.3 Item 1(Picture) Face plate is loose and falling off.





7.3 Item 2(Picture) First Floor: Location of loose face plate.





**7.3 (3) Connected Devices and Fixtures (Observed from a representative number of ceiling fans, lighting fixtures, switches and receptacles located inside the house, garage, and on the dwelling's exterior walls)**

**Missing Cover Plate:** At the time of the inspection, a light fixture located in the first floor bedroom closet was observed to be installed without a proper cover plate. This condition leaves energized electrical components exposed to touch and also could lead to a fire being that this is in a closet with clothing and other flammable items.



7.3 Item 3(Picture) Exposed wires in first floor bedroom closet.







7.3 Item 4(Picture) Floor plan showing location of exposed wires.





**7.3 (4) Connected Devices and Fixtures (Observed from a representative number of ceiling fans, lighting fixtures, switches and receptacles located inside the house, garage, and on the dwelling's exterior walls)**

**Loose or missing electrical ground:** An electrical receptacle located in the utility room (just below the electrical panel) appears to have a loose or missing ground. Other receptacles in the home were grounded. It is recommended that this receptacle have a functional equipment grounding conductor installed (or reconnected) by qualified electrical contractor.



7.3 Item 5(Picture) Loose or missing ground.

**7.3 (5) Connected Devices and Fixtures (Observed from a representative number of ceiling fans, lighting fixtures, switches and receptacles located inside the house, garage, and on the dwelling's exterior walls)**



**Hot & Neutral Wires Reversed:** Every electrical receptacle located in the living room of the second floor that were tested read as having their hot and neutral wires reversed. This condition should be corrected by a qualified electrical contractor. These are likely all on the same circuit.

**Explanation:** Most electrical appliances and devices are designed so that their "on-off" switch interrupts electrical power at the point of entry into the appliance or device circuitry or components. If the hot and neutral wires are reversed that may not be the case, and parts of the device will remain energized or potentially energized even when the electrical device switch is OFF. No electrical current may flow, but it could flow if someone touches the wrong part of the device, or damage may be caused in other circumstances as well. Reversed polarity on an electrical outlet is dangerous. If you accidentally reverse these wires the device you plug in to the receptacle may "work" but it is unsafe and risks a short circuit, shock, or fire.



7.3 Item 6(Picture) Hot & neutral wires reversed.





7.3 Item 7(Picture) Hot & neutral wires reversed.





7.3 Item 8(Picture) Hot & neutral wires reversed.





7.3 Item 9(Picture) Hot & neutral wires reversed.

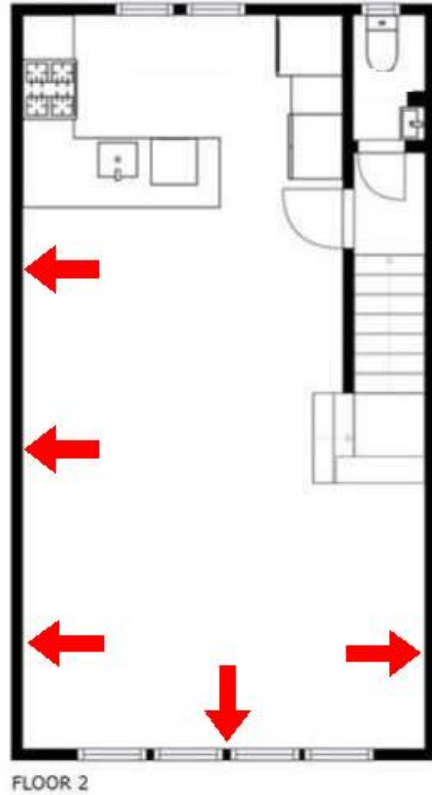




7.3 Item 10(Picture) Hot & neutral wires reversed.







7.3 Item 11(Picture) Floor plan showing location of electrical receptacles with hot & neutral wires reversed.

**7.4 (1) Grounding & GFCI Protection of Receptacles within 6 feet of interior plumbing fixtures, in garages, carports, or located on exterior walls of the inspected structure**

**No GFCI - Recommended Upgrade:** No ground fault circuit interrupter (GFCI) protection was present at the electrical receptacle located at the rear of the home (exterior). Although GFCI protection may not have been required at the time the home was built, for safety reasons, the Inspector recommends that electrical receptacles located in basements, crawlspaces, garages, **the home exterior**, and interior receptacles located within 6 feet of a plumbing





fixture be provided with ground fault circuit interrupter (GFCI) protection in good working order to avoid potential electric shock or electrocution hazards.



7.4 Item 1(Picture) Rear of home: Exterior electrical receptacles should be GFCI protected for added safety.

**7.4 (2) Grounding & GFCI Protection of Receptacles within 6 feet of interior plumbing fixtures, in garages, carports, or located on exterior walls of the inspected structure**

**No GFCI - Recommended Upgrade:** No ground fault circuit interrupter (GFCI) protection was present at the electrical receptacles serving the second floor kitchen counter. Although GFCI protection may not have been required





at the time the home was built, for safety reasons, the Inspector recommends that electrical receptacles located in basements, crawlspaces, garages, the home exterior, **and interior receptacles located within 6 feet of a plumbing fixture** be provided with ground fault circuit interrupter (GFCI) protection in good working order to avoid potential electric shock or electrocution hazards.



7.4 Item 2(Picture) Second floor kitchen counter: Electrical receptacles located within 6 feet of a plumbing fixture should be provided with GFCI protection.





7.4 Item 3(Picture) Second floor kitchen counter: Electrical receptacles located within 6 feet of a plumbing fixture should be provided with GFCI protection.



**7.4 (3) Grounding & GFCI Protection of Receptacles within 6 feet of interior plumbing fixtures, in garages, carports, or located on exterior walls of the inspected structure**

**No GFCI - Recommended Upgrade:** No ground fault circuit interrupter (GFCI) protection was present at the electrical receptacle in the second floor bathroom. Although GFCI protection may not have been required at the time the home was built, for safety reasons, the Inspector recommends that electrical receptacles located in basements, crawlspaces, garages, the home exterior, **and interior receptacles located within 6 feet of a plumbing fixture** be provided with ground fault circuit interrupter (GFCI) protection in good working order to avoid potential electric shock or electrocution hazards.



7.4 Item 4(Picture) Second floor bathroom: Electrical receptacles within 6 feet of a plumbing fixture should have GFCI protection for added safety.



**7.4 (4) Grounding & GFCI Protection of Receptacles within 6 feet of interior plumbing fixtures, in garages, carports, or located on exterior walls of the inspected structure**

**No GFCI - Recommended Upgrade:** No ground fault circuit interrupter (GFCI) protection was present at the electrical receptacle in the third floor bathroom. Although GFCI protection may not have been required at the time the home was built, for safety reasons, the Inspector recommends that electrical receptacles located in basements, crawlspaces, garages, the home exterior, **and interior receptacles located within 6 feet of a plumbing fixture** be provided with ground fault circuit interrupter (GFCI) protection in good working order to avoid potential electric shock or electrocution hazards.



7.4 Item 5(Picture) Third floor bathroom: Electrical receptacles within 6 feet of a plumbing fixture should have GFCI protection for added safety.





**7.5 Operation of GFCI (Ground Fault Circuit Interrupters)**

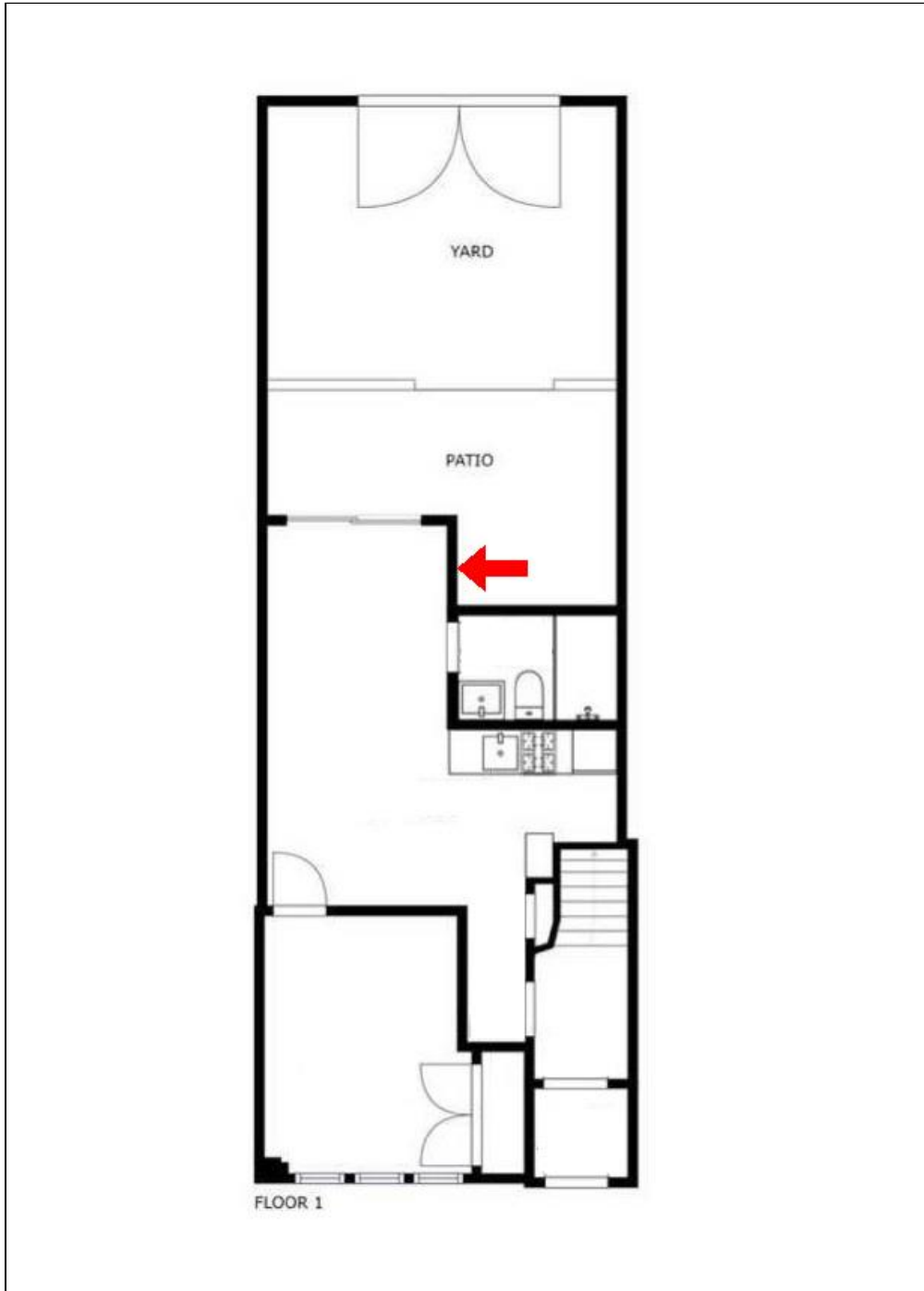
At the time of the inspection, the Inspector observed no deficiencies in the condition and operation of ground fault circuit interrupter (GFCI) protected circuits that were present and tested (interior first floor only).





### 7.6 Location of Distribution Panels

See accompanying floor plan photo for exact location of the electrical panel serving the home (first floor utility room).



7.6 Item 1(Picture) Floor plan showing location of electrical panel (the floor plan does not show that this is a room).

### 7.7 Smoke Detectors





**No Smoke Detectors:** No smoke detectors were observed throughout the home. Installing dual smoke & carbon monoxide detectors would be best.

Below I have included information compiled from individual authorities concerning the proper placement of smoke detectors. Individual authorities having jurisdiction (AHJs) may have their own requirements for smoke-alarm placement, so homeowners can check with their local building codes if they need specific instructions. The following guidelines, however, can be helpful.

#### **Smoke Detector Placement:**

*Smoke alarms **SHOULD** be installed in the following locations:*

- On the ceiling or wall outside of each separate sleeping area in the vicinity of bedrooms.
- In each bedroom, as most fires occur during sleeping hours.
- In the basement, preferably on the ceiling near the basement stairs.
- In the garage, due to all the combustible materials commonly stored there.
- On the ceiling or on the wall with the top of the detector between 6 to 12 inches from the ceiling; and/or in each story within a building, including basements and cellars, but not crawlspaces or uninhabited attics.

*Smoke alarms **SHOULD NOT** be installed in the following locations:*

- Near heating or air-conditioning supply and return vents.
- Near a kitchen appliance.
- Near windows, ceiling fans or bathrooms equipped with a shower or tub.
- Where ambient conditions, including humidity and temperature, are outside the limits specified by the manufacturer's instructions.
- Within unfinished attics or garages, or in other spaces where temperatures can rise or fall beyond the limits set by the manufacturer.
- Where the mounting surface could become considerably warmer or cooler than the rest of the room, such as an inadequately insulated ceiling below an unfinished attic; or in dead-air spots, such as the top of a peaked roof or a ceiling-to-wall corner.

### **7.8 Carbon Monoxide Detectors**

A few plug-in carbon monoxide (CO) detectors were observed throughout the home, but **these may or may not be present after the current owners move out as they may take them with them). It would be a good idea to install dual smoke & CO detectors in the appropriate locations.**

**Important:** Whenever acquiring a new home it is highly advised that all battery powered detectors have their batteries replaced immediately upon acquiring ownership. For a higher degree of safety you may consider replacing all current detectors with new dual smoke / CO detectors so you are confident in their age and operation.

Below I have included a list of recommendations of where and where not to install carbon monoxide detectors.

## CO Detector Placement

*CO detectors can monitor exposure levels, but **DO NOT** place them:*

- Directly above or beside fuel-burning appliances, as appliances may emit a small amount of carbon monoxide upon start-up.
- Within 15 feet of heating and cooking appliances, or in or near very humid areas, such as bathrooms.
- Within 5 feet of kitchen stoves and ovens, or near areas locations where household chemicals and bleach are stored (store such chemicals away from bathrooms and kitchens, whenever possible).
- In garages, kitchens, furnace rooms, or in any extremely dusty, dirty, humid, or greasy areas.
- In direct sunlight, or in areas subjected to temperature extremes. These include unconditioned crawlspaces, unfinished attics, un-insulated or poorly insulated ceilings, and porches.
- In turbulent air near ceiling fans, heat vents, air conditioners, fresh-air returns, or open windows. Blowing air may prevent carbon monoxide from reaching the CO sensors.

**DO** place CO detectors:

- Within 10 feet of each bedroom door and near all sleeping areas, where it can wake sleepers. The Consumer Product Safety Commission (CPSC) and Underwriters Laboratories (UL) recommend that every home have at least one carbon monoxide detector for each floor of the home, and within hearing range of each sleeping area.
- On every floor of your home, including the basement (source: International Association of Fire Chiefs/IAFC).
- Near or over any attached garage. Carbon monoxide detectors are affected by excessive humidity and by close proximity to gas stoves (source: City of New York).
- Near, but not directly above, combustion appliances, such as furnaces, water heaters, and fireplaces, and in the garage (source: UL); and

on the ceiling in the same room as permanently installed fuel-burning appliances, and centrally located on every habitable level, and in every HVAC zone of the building (source: National Fire Protection Association 720). This rule applies to commercial buildings.

In North America, some national, state and local municipalities require installation of CO detectors in new and existing homes, as well as commercial businesses, among them: Illinois, Massachusetts, Minnesota, New Jersey, Vermont and New York City, and the Canadian province of Ontario. Installers are encouraged to check with their local municipality to determine what specific requirements have been enacted in their jurisdiction.



7.8 Item 1(Picture) A few plug-in CO detectors were noted but these may not come with the home.



7.8 Item 2(Picture) A few plug-in CO detectors were noted but these may not come with the home.

The electrical system of the home was inspected and reported on with the above information. While the inspector makes every effort to find all areas of concern, some areas can go unnoticed. Outlets were not removed and the inspection was only visual. Any outlet not accessible (behind the refrigerator for example) was not inspected or accessible. Please be aware that the inspector has your best interest in mind. Any repair items mentioned in this report should be considered before purchase. It is recommended that qualified contractors be used in your further inspection or repair issues as it relates to the comments in this inspection report.



## 8. Heating / Central Air Conditioning

The home inspector shall observe permanently installed heating and cooling systems including: Heating equipment; Cooling Equipment that is central to home; Normal operating controls; Automatic safety controls; Chimneys, flues, and vents, where readily visible; Solid fuel heating devices; Heat distribution systems including fans, pumps, ducts and piping, with supports, insulation, air filters, registers, radiators, fan coil units, convectors; and the presence of an installed heat source in each room. The home inspector shall describe: Energy source; and Heating equipment and distribution type. The home inspector shall operate the systems using normal operating controls. The home inspector shall open readily openable access panels provided by the manufacturer or installer for routine homeowner maintenance. The home inspector is not required to: Operate heating systems when weather conditions or other circumstances may cause equipment damage; Operate automatic safety controls; Ignite or extinguish solid fuel fires; or Observe: The interior of flues; Fireplace insert flue connections; Humidifiers; Electronic air filters; or The uniformity or adequacy of heat supply to the various rooms.

### Styles & Materials

<b>Heat Type:</b> Hydronic boiler (provides both steam radiator and circulating water basement heating)	<b>Energy Source:</b> Natural gas	<b>Number of Heat Systems (excluding wood):</b> Two
<b>Heat System Brand:</b> DAIKIN INDUSTRIES WEIL-MCLAIN	<b>Ductwork:</b> N/A	<b>Filter Type:</b> N/A
<b>Filter Size:</b> N/A	<b>Types of Fireplaces:</b> None	<b>Operable Fireplaces:</b> None
<b>Number of Woodstoves:</b> None	<b>Cooling Equipment Type:</b> Heat Pump Forced Air (provides cooling and heating)	<b>Cooling Equipment Energy Source:</b> Electricity
<b>Central Air Manufacturer:</b> DAIKIN INDUSTRIES	<b>Number of AC Units:</b> Two outdoor heat pump units with six indoor air handling units	

		IN	NI	NP	M	RR
8.0	Heating Equipment	•				•
8.1	Normal Operating Controls	•				
8.2	Safety Controls	•				
8.3	Distribution Systems (including fans, pumps, ducts and piping, with supports, insulation, air filters, registers, radiators, fan coil units and convectors)	•				
8.4	Presence of Installed Heat Source in Each Room	•				
8.5	Chimneys, Flues and Vents (for fireplaces or other heat systems)	•				
8.6	Solid Fuel Heating Devices (Fireplaces, Woodstove)		•	•		
8.7	Gas/LP Firelogs and Fireplaces		•	•		
8.8	Cooling and Air Handler Equipment	•				
8.9	Normal Operating Controls	•				
8.10	Presence of Installed Cooling Source in Each Room	•				
		IN	NI	NP	M	RR

IN= Inspected, NI= Not Inspected, NP= Not Present, M= Maintain, RR= Repair or Replace

## Comments:

### 8.0 (1) Heating Equipment

Primary heating of the home is provided by a Weil-McLain brand hydronic boiler (provides both steam (radiators) and circulating water (baseboard)) located in a utility room at the rear of the home and accessible from the rear yard. This heating system has 2 zones. One zone is for the baseboard heating units located on the first floor. The second zone provides steam heat to the radiators located on the second and third floors.

At the time of inspection, the boiler was operational and heat was noted at all heating units (baseboard and radiators).

#### Boiler

Brand: Weil-McLain

Type: Boiler

Model: EG/PEG-40 / 45

Series No: 4

Serial: WMS 550201001

Manufactured: Unknown (No CP# for dating was found). The current owners claim the unit is about 2 years old. You could request documentation to be sure.

One minor issue with the boiler was noted which will be mentioned next in this report.

#### Secondary Heating - Split-System Heat Pumps

The home is also equipped with a Daikin brand split-system heat pump system (provides heating and cooling). This consists of two outdoor units and six indoor air handling units.

#### Outdoor Unit in Front Yard

Brand: Daikin Industries, LTD

Type: Heat Pump (provides both heating and cooling)

Model: 3MXS24NMVJU

Serial: G010659

Manufactured: 12/2015

#### Outdoor Unit at Rear of Home (Mounted outside second floor kitchen window)

Brand: Daikin Industries, LTD



Type: Heat Pump (provides both heating and cooling)

Model: 3MXS24NMVJU

Serial: G011008

Manufactured: 12/2015

**Indoor Fan Coil Units (6 total) Controlled by Remote Control**

Brand: Daikin Industries, LTD

Type: Fan Coil Unit (Indoor Section)

Model: FTXS09LVJU

Manufactured: 12/2015





8.0 Item 1(Picture) Weil-McLain boiler.





8.0 Item 2(Picture) Heat Pump at front of home.





8.0 Item 3(Picture) Heat Pump mounted outside second floor kitchen window.



8.0 Item 4(Picture) Example photo of indoor fan coil units (6 total).

**8.0 (2) Heating Equipment**



**Boiler TPR Valve Discharge Pipe:** Temperature/pressure-relief or TPR valves are safety devices installed on water heating appliances, such as boilers and domestic water supply heaters. TPRs are designed to automatically release water in the event that pressure or temperature in the water tank exceeds safe levels. The TPR valve discharge pipe should extend down to six inches above the floor for safety. The main reason for this is that if someone were in the room and this valve were to discharge personal injury (scalding / burns) may result.



8.0 Item 5(Picture) TPR valve discharge pipe does not extend to 6 inches above the floor.



8.0 Item 6(Picture) TPR valve discharge pipe does not extend to 6 inches above the floor.



## 8.1 Normal Operating Controls

At the time of the inspection, the Inspector observed no deficiencies in the condition of the operating controls of the heating units.

## 8.2 Safety Controls

At the time of the inspection, the Inspector observed no deficiencies with safety related controls of the heating system.

## 8.3 Distribution Systems (including fans, pumps, ducts and piping, with supports, insulation, air filters, registers, radiators, fan coil units and convectors)

At the time of the inspection, the Inspector observed no deficiencies with heating distribution systems. All baseboard and radiator heating units were verified as working.

The split-system heat pumps and blower units were also all verified to be working as expected.

## 8.4 Presence of Installed Heat Source in Each Room

A sufficient number of heating units were observed throughout the home.

## 8.5 Chimneys, Flues and Vents (for fireplaces or other heat systems)

At the time of the inspection, the Inspector observed no deficiencies in the condition of the venting for the gas water heater or boiler.

## 8.6 Solid Fuel Heating Devices (Fireplaces, Woodstove)

No solid fuel heating devices in this home.

## 8.7 Gas/LP Firelogs and Fireplaces

No gas/LP firelogs or fireplaces in this home.

## 8.8 Split-System Heat Pumps (Provide both heating and cooling)

Cooling of the home is provided by two Daikin brand split-system heat pumps (provides cooling & heating). This consists of two outdoor units and six indoor air handling units.



At the time of the inspection, the Inspector observed no deficiencies in the condition or operation of the cooling and air handling equipment.

**Air Handling Unit Drainage:** The white conduit at the exterior of the front and rear of the home is for the drainage of condensation created by the air handling units on the third floor.

**Outdoor Unit in Front Yard**

Brand: Daikin Industries, LTD

Type: Heat Pump (provides both heating and cooling)

Model: 3MXS24NMVJU

Serial: G010659

Manufactured: 12/2015

**Outdoor Unit at Rear of Home (Mounted outside second floor kitchen window)**

Brand: Daikin Industries, LTD

Type: Heat Pump (provides both heating and cooling)

Model: 3MXS24NMVJU

Serial: G011008

Manufactured: 12/2015

**Indoor Fan Coil Units (6 total) Controlled by Remote Control**

Brand: Daikin Industries, LTD

Type: Fan Coil Unit (Indoor Section)

Model: FTXS09LVJU

Manufactured: 12/2015





8.8 Item 1(Picture) Heat Pump at front of home.





8.8 Item 2(Picture) Heat Pump mounted outside second floor kitchen window.



8.8 Item 3(Picture) Example photo of indoor fan coil units (6 total).







8.8 Item 4(Picture) Conduit for third floor HVAC condensation drainage.





8.8 Item 5(Picture) Conduit for third floor HVAC condensation drainage.

### 8.9 Normal Operating Controls

At the time of the inspection, the Inspector observed no deficiencies in the condition of the operating controls of the cooling units. All indoor air handling units are controlled by hand held remote control.

### 8.10 Presence of Installed Cooling Source in Each Room

A sufficient number of cooling units were observed throughout the home.



---

The heating and cooling system of this home was inspected and reported on with the above information. While the inspector makes every effort to find all areas of concern, some areas can go unnoticed. The inspection is not meant to be technically exhaustive. The inspection does not involve removal and inspection behind service door or dismantling that would otherwise reveal something only a licensed heat contractor would discover. Please be aware that the inspector has your best interest in mind. Any repair items mentioned in this report should be considered before purchase. It is recommended that qualified contractors be used in your further inspection or repair issues as it relates to the comments in this inspection report.



## 9. Insulation and Ventilation

The home inspector shall observe (where visible and accessible): Insulation and vapor retarders in unfinished spaces; Ventilation of attics and foundation areas; Kitchen, bathroom, and laundry venting systems; and the operation of any readily accessible attic ventilation fan, and, when temperature permits, the operation of any readily accessible thermostatic control. The home inspector shall describe: Insulation in unfinished spaces; and Absence of insulation in unfinished space at conditioned surfaces. The home inspector shall: Move insulation where readily visible evidence indicates the need to do so; and Move insulation where chimneys penetrate roofs, where plumbing drain/waste pipes penetrate floors, adjacent to earth filled stoops or porches, and at exterior doors. The home inspector is not required to report on: Concealed insulation and vapor retarders; or Venting equipment that is integral with household appliances.

### Styles & Materials

**Attic Insulation:**

No accessible attic

**Attic Ventilation:**

No accessible attic

**Dryer Power Source:**

120 Volt

**Dryer Vent:**

Flexible Metal

**Floor System Insulation:**

Not visible

		IN	NI	NP	M	RR
9.0	Insulation in Attic		•			
9.1	Insulation Under Floor System		•			
9.2	Vapor Retarders (in Crawlspace or basement)		•	•		
9.3	Ventilation of Attic and Foundation Areas		•	•		
9.4	Venting Systems (Kitchens, Baths and Laundry)	•				•
9.5	Ventilation Fans and Thermostatic Controls in Attic		•	•		
		IN	NI	NP	M	RR

IN= Inspected, NI= Not Inspected, NP= Not Present, M= Maintain, RR= Repair or Replace



## Comments:

### 9.0 Insulation in Attic

No accessible attic on this property.

### 9.1 Insulation Under Floor System

Insulation within the floor system (if present) was not visible on the day of inspection.

### 9.2 Vapor Retarders (in Crawlspace or basement)

This home does not have a below grade basement or crawlspace.

### 9.3 Ventilation of Attic and Foundation Areas

No accessible attic or below grade basement was observed at this property.

### 9.4 Venting Systems (Kitchens, Baths and Laundry)

**Kitchen Venting:** Both range hoods appear to vent to the outside.

**Bathroom Venting:** The first floor bathroom vents to the exterior. The second floor bathroom is a half bath and doesn't need ventilation. **The third floor bathroom vents to the outside, however; the fan is very weak and will likely need replacement for proper ventilation.**

**Laundry Venting:** The clothes dryer vents to the outside.

### 9.5 Ventilation Fans and Thermostatic Controls in Attic

No accessible attic was observed at this property.

---

The insulation and ventilation of the home was inspected and reported on with the above information. While the inspector makes every effort to find all areas of concern, some areas can go unnoticed. Venting of exhaust fans or clothes dryer cannot be fully inspected and bends or obstructions can occur without being accessible or visible (behind wall and ceiling coverings). Only insulation that is visible was inspected. Please be aware that the inspector has your best interest in mind. Any repair items mentioned in this report should be considered before purchase. It is recommended that qualified contractors be used in your further inspection or repair issues as it relates to the comments in this inspection report.



# 10. Appliances

The home inspector shall observe and operate the basic functions of the following kitchen appliances: Permanently installed dishwasher, through its normal cycle; Range, cook top, and permanently installed oven; Trash compactor; Garbage disposal; Ventilation equipment or range hood; and Permanently installed microwave oven. The home inspector is not required to observe: Clocks, timers, self-cleaning oven function, or thermostats for calibration or automatic operation; Non built-in appliances; or Refrigeration units. The home inspector is not required to operate: Appliances in use; or Any appliance that is shut down or otherwise inoperable.

## Styles & Materials

<b>Range/Oven:</b> GENERAL ELECTRIC VERONA	<b>Exhaust/Range hood:</b> FABER UNKNOWN BRAND	<b>Refrigerator:</b> LG MIDEA
<b>Dishwasher Brand:</b> BOSCH	<b>Built in Microwave:</b> Not built-in	<b>Disposer Brand:</b> NONE
<b>Trash Compactors:</b> NONE	<b>Clothes Dryer:</b> FRIGIDAIRE / ELECTROLUX	<b>Clothes Washer:</b> FRIGIDAIRE / ELECTROLUX

		IN	NI	NP	M	RR
10.0	Ranges/Ovens/Cooktops	•				
10.1	Range Hood(s)	•				
10.2	Refrigerator	•				
10.3	Dishwasher	•				•
10.4	Built-In Microwave Cooking Equipment		•	•		
10.5	Food Waste Disposer		•	•		
10.6	Trash Compactor		•	•		
10.7	Clothes Dryer	•				
10.8	Clothes Washer	•				
		IN	NI	NP	M	RR

IN= Inspected, NI= Not Inspected, NP= Not Present, M= Maintain, RR= Repair or Replace

## Comments:

### 10.0 Ranges/Ovens/Cooktops

At the time of the inspection, the Inspector observed no deficiencies in the condition or operation of the gas ranges. The oven in the second floor kitchen was not fully tested as the oven was filled with personal items (some flammable).

#### Gas Range - First Floor

Brand: Verona

Type: Gas Range

Model: Unknown





Serial: Unknown

Manufactured: Unknown

**Gas Range Oven - Second Floor**

Brand: General Electric

Type: Range/Stove/Oven

Model: JGSP28SEN2SS

Serial: TS283663Q

According to the serial number this product may have been manufactured in LaFayette, GA, October of 2009





10.0 Item 1(Picture) Verona gas range on first floor.







10.0 Item 2(Picture) General Electric gas range oven.





10.0 Item 3(Picture) The oven was not fully run due to items (some flammable) in the oven.

### 10.1 Range Hood(s)

The exhaust vent of the range hoods both discharged exhaust to the home exterior (good) and both were fully operational on the day of inspection.

#### Range Hood - First Floor

Brand: Unknown

Type: Range Hood

Model: Unknown

Serial: Unknown

Manufactured: Unknown

#### Range Hood - Second Floor

Brand: Faber

Type: Range Hood

Model: DIAMONTE PRO 30"



Serial: W294901406

Manufactured: Unknown



10.1 Item 1(Picture) Range hood on first floor.





10.1 Item 2(Picture) Range hood on first floor.





10.1 Item 3(Picture) Range hood on second floor.





10.1 Item 4(Picture) Range hood on second floor.

## 10.2 Refrigerator

At the time of the inspection, the Inspector observed no deficiencies in the condition and operation of the refrigerators.

### Refrigerator - First Floor

Brand: Midea

Type: Fridge

Model: Unknown

Serial: Unknown

Manufactured: Unknown

### Refrigerator - Second Floor

Brand: LG

Type: Fridge

Model: LFC21770ST/05





Serial: 909KRKS00437

Manufactured: Korea, September of 2009



10.2 Item 1(Picture) Fridge on first floor.





10.2 Item 2(Picture) Fridge on second floor.

**10.3 (1) Dishwasher**

At the time of the inspection, the Inspector observed no deficiencies in the condition and operation of the dishwasher. It was operated through one rinse cycle.

One minor exception will be noted next in this report.

Brand: Bosch

Type: Dishwasher





Model: SHE4AM15UC/02

FD #: FD890500759

According to the serial number this product may have been manufactured May of 2009.



10.3 Item 1(Picture) Dishwasher (second floor).



10.3 Item 2(Picture) Dishwasher (second floor).





10.3 (2) Dishwasher

**Dishwasher Not Secured:** The dishwasher is loose and needs securing to the underside of the countertop. This can be remedied using a proper length screw on each side.



10.3 Item 3(Picture)





#### **10.4 Built-In Microwave Cooking Equipment**

Only "built-in" microwaves are inspected. Counter / table top microwaves may not come with the home. This home did not have a built-in microwave on the day of inspection so a microwave was not tested.





**10.7 Clothes Dryer**

At the time of the inspection, the Inspector observed no deficiencies in the condition of the clothes dryer.

Brand: Frigidaire / Electrolux

Type: Clothes Dryer

Model: GLGQ2152ES3

Serial: XD93802627

Manufactured in Webster City, IA, September of 2009





10.7 Item 1(Picture) Clothes dryer.

### 10.8 Clothes Washer

At the time of the inspection, the Inspector observed no deficiencies in the condition of the clothes washer. The washer was run through one short cycle.

Brand: Frigidaire / Electrolux

Type: Clothes Washer

Model: GLTF2940FS1



Serial: XC91903755

Manufactured in Webster City, IA, May of 2009



10.8 Item 1(Picture) Clothes washer.

The built-in appliances of the home were inspected and reported on with the above information. While the inspector makes every effort to find all areas of concern, some areas can go unnoticed. Please be aware that the inspector has your best interest in mind. Any repair items mentioned in this report should be considered before purchase. It is recommended that qualified contractors be used in your further inspection or repair issues as it relates to the comments in this inspection report.





# Towne Inspections

Darrin R. Towne

**New York State Licensed & Insured Home Inspector**

**InterNACHI Certified Professional Inspector**

**Lic. 16000065488**

**P: 347.678.0683**

**E: [darrin@towneinspections.com](mailto:darrin@towneinspections.com)**

**W: <https://towneinspections.com>**

