



INSPECTION REPORT

Inspector: Azmi Alkurd

License #3380001698

10000 Four Point Sample Rd, Sample, VA 10000

Inspection prepared for: Sample Client

Date of Inspection: 11/18/2021 Time: 1:30 pm

Year Built : 1998 Size: 4497

Weather: 70 degrees



46179 WESTLAKE DR, SUITE 200B, STERLING VA 20165



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Report Summary

The summary below consists of potentially significant findings. These findings can be a safety hazard, a deficiency requiring a major expense to correct or items I would like to draw extra attention to. The summary is not a complete listing of all the findings in the report, and reflects the opinion of the inspector. Please review all pages of the report as the summary alone does not explain all of the issues. All repairs should be done by a licensed & bonded tradesman or qualified professional. I recommend obtaining a copy of all receipts, warranties and permits for the work done.

Maintenance

Roof

Page 7 Item: 1	Roof Condition	• Clean roof areas: Significant amounts of organic debris evident.
Page 10 Item: 2	Gutter	• Debris noted in gutters. Recommend cleaning gutters so that water can properly drain. • Downspout/s discharging on roof observed.

Foundation

Page 20 Item: 1	Foundation Walls	• Cracks/deteriorated mortar observed. Recommend sealing/re-pointing as needed to prevent moisture intrusion.
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HVAC Zone 1

Page 41 Item: 7	Enclosure	• The furnace is dirty and there are no records of prior service. Recommend having furnace cleaned and serviced by licensed HVAC tech to ensure proper performance.
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HVAC Zone 2

Page 47 Item: 4	Heater Condition	• HVAC system service date was over 12 months or not being able to be determined. We recommend the HVAC system be serviced and cleaned by a licensed HVAC specialist.
Page 47 Item: 5	Filters	• The filter is dirty. Needs replacement.

Repair

Roof

Page 14 Item: 4	Chimney	• Chimney rain cap is severely rusted/deteriorated. Recommend painting to preserve its remaining life.
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Attic

Page 16 Item: 1	Access	• Access cover has no insulation. Recommended insulating the access cover to minimize the heat loss.
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Water Heater

Page 32 Item: 1	Heater Enclosure	• The water heater enclosure is bent due to prior damage.
Page 33 Item: 4	Water Heater Condition	• Rust observed at water heater enclosure. Recommend repair/replacement by licensed plumbing contractor.

HVAC Zone 1		
Page 39 Item: 2	Refrigerant Lines	<ul style="list-style-type: none"> • Deteriorated insulation on the refrigerant lines, replace as needed • Deteriorated sealant at the pipe wall penetration, repair/seal as needed.
HVAC Zone 2		
Page 46 Item: 2	Refrigerant Lines	<ul style="list-style-type: none"> • Deteriorated insulation on the refrigerant lines, replace as needed
Page 49 Item: 7	Enclosure	<ul style="list-style-type: none"> • The air handler is dirty and appears to have a bio growth (mold like substance), we recommend testing for mold.
Page 51 Item: 9	Air Supply	<ul style="list-style-type: none"> • Return air appears to be detached/leaking at unit. We recommend sealing or patching the ductwork in these areas.

Safety		
Electrical		
Page 24 Item: 2	Electrical Panel	<ul style="list-style-type: none"> • Unsecured wiring entering panel. All wiring should be secured within 12 inches of panel. Recommend correction by licensed electrician. • Double tapped neutral wires noted at bus bars. Recommend correction by licensed electrician. • Sharp-pointed metal screws hold panel cover in place. Recommend replacing with flat-tipped screws for safety.
Page 27 Item: 5	Breakers	<ul style="list-style-type: none"> • White wire connected to hot breaker switch, white wires are designated to neutral bus connection, replace or label as needed.
Water Heater		
Page 35 Item: 6	Overflow Condition	<ul style="list-style-type: none"> • Missing overflow discharge pipe noted. This is a potential scalding concern as water can discharge improperly. Recommend installing the proper type of relief extension to discharge within 6" from the floor.
HVAC Zone 2		
Page 49 Item: 7	Enclosure	<ul style="list-style-type: none"> • Burner Flames with orange/red pulses, this an indication of incomplete combustion. Recommend servicing the unit by a certified HVAC specialist.

INTRODUCTION:

We appreciate the opportunity to conduct this inspection for you! Please carefully read your entire Inspection Report. Call us after you have reviewed your report, so we can go over any questions you may have. Remember, when the inspection is completed and the report is delivered, we are still available to you for any questions you may have, throughout the entire closing process.

Properties being inspected do not "Pass" or "Fail." - The following report is based on an inspection of the visible portion of the structure; inspection may be limited by vegetation and possessions. Depending upon the age of the property, some items like GFCI outlets may not be installed; this report will focus on safety and function, not current code. This report identifies specific non-code, non-cosmetic concerns that the inspector feels may need further investigation or repair.

For your safety and liability purposes, we recommend that licensed contractors evaluate and repair any critical concerns and defects. Note that this report is a snapshot in time. We recommend that you or your representative carry out a final walk-through inspection immediately before closing to check the condition of the property, using this report as a guide.

Inspection Details

1. Attendance

In Attendance: Buyer Agent present

2. Home Type

Home Type: Single Family Home

3. Occupancy

Occupancy: Vacant

Inspection Type

1. Limitations

Good	Fair	Poor	N/A	None

Materials: 4-Point Inspection

Roof

1. Roof Condition

Good	Fair	Poor	N/A	None
	✓			

Materials: Inspected from ground level with extended "Eyestick" and camera. Some areas of the roof may be visually restricted from inspection.

Materials: Asphalt shingles.

Observations:

- New roof was installed in 2021 according to the owner. Recommend inquiring who replaced roof and if there are any transferable warranties.
- Clean roof areas: Significant amounts of organic debris evident.



Clean roof areas: Significant amounts of organic debris evident.



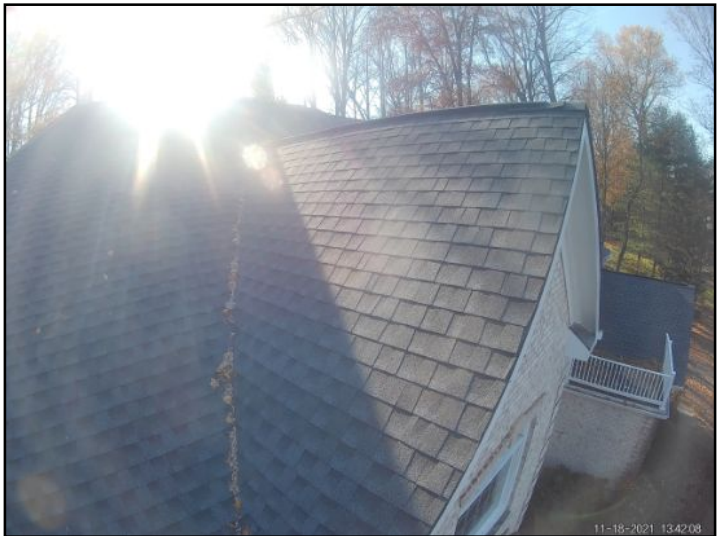


Clean roof areas: Significant amounts of organic debris evident.



Clean roof areas: Significant amounts of organic debris evident.

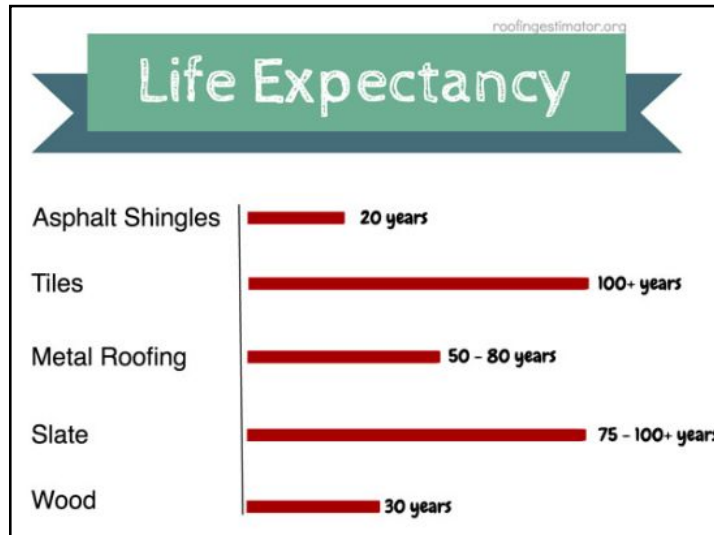




Clean roof areas: Significant amounts of organic debris evident.



Clean roof areas: Significant amounts of organic debris evident.



2. Gutter

Good	Fair	Poor	N/A	None
	✓			

Observations:

- Downspouts discharge underground, the points of termination are not visible.
- Downspout drains from one roof section onto another roof section; this will lead to premature wear of the roofing materials and increase likelihood of water damage. Downspouts should drain directly into another gutter or away from the house. Recommend installing/modifying downspout to direct water directly into lower gutter or away from house.
- Debris noted in gutters. Recommend cleaning gutters so that water can properly drain.
- Downspout/s discharging on roof observed.





Debris noted in gutters. Recommend cleaning gutters so that water can properly drain.



Downspout/s discharging on roof observed.



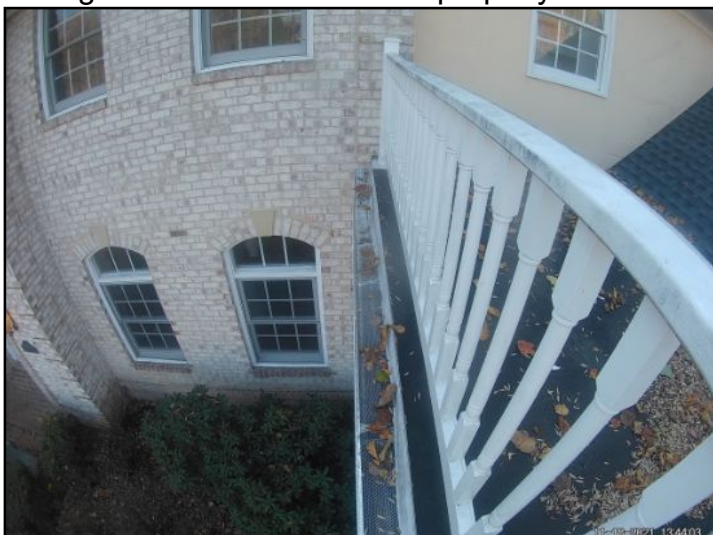
Debris noted in gutters. Recommend cleaning gutters so that water can properly drain.



Downspout/s discharging on roof observed.



Debris noted in gutters. Recommend cleaning gutters so that water can properly drain.



3. Vent Stack

Good	Fair	Poor	N/A	None
✓				

Observations:

- Appeared to be in good condition at the time of inspection.



4. Chimney

Good	Fair	Poor	N/A	None
	✓			

Observations:

- Chimney rain cap is severely rusted/deteriorated. Recommend painting to preserve its remaining life.



Chimney rain cap is severely rusted/deteriorated. Recommend painting to preserve its remaining life.



Attic

1. Access

Good	Fair	Poor	N/A	None
	✓			

Observations:

- Bedroom ceiling.
- Pull down ladder located in bedroom.
- Access cover has no insulation. Recommended insulating the access cover to minimize the heat loss.



2. Structure

Good	Fair	Poor	N/A	None
	✓			

Observations:

- Visible structure of attic/roof sheathing appeared to be good, no issues observed at the time of inspection.





3. Insulation Condition

Good	Fair	Poor	N/A	None
✓				

Materials: Loose fill insulation.
 Depth: Insulation averages about 10-12 inches in depth
 Observations:
 • Insulation appeared adequate and in good condition.



4. Ventilation

Good	Fair	Poor	N/A	None
✓				

Observations:
 • Soffit and ridge vent.
 • Attic fan appears to be controlled by a thermostat; no operational test was performed. Suggest verification of performance prior to closing.

5. Electrical

Good	Fair	Poor	N/A	None
✓				

Observations:
 • No deficiencies noted at the time of inspection.

6. Duct Work

Good	Fair	Poor	N/A	None
	✓			

Observations:
 • Functional.



7. Exhaust Vent

Good	Fair	Poor	N/A	None
✓				

Observations:
 • Functional.



8. Attic Plumbing

Good	Fair	Poor	N/A	None
✓				

Observations:
 • **PVC** plumbing vent pipe appeared functional, at time of inspection.



Foundation

1. Foundation Walls

Good	Fair	Poor	N/A	None
			✓	

Observations:

- Foundation walls were below grade. Cracks in foundation walls were not visible at time of inspection. Recommend monitoring for cracks and repairing/sealing to prevent moisture from entering structure.
- Cracks/deteriorated mortar observed. Recommend sealing/re-pointing as needed to prevent moisture intrusion.



Cracks/deteriorated mortar observed. Recommend sealing/re-pointing as needed to prevent moisture intrusion.

Basement & Crawlspace

1. Sump Pump Condition -01

Good	Fair	Poor	N/A	None
			✓	

Observations:

- Operation of sump/ejector pump was not performed at the time of inspection due to no readily accessible water source to test for proper function of float and pump



Kitchen

The kitchen is used for food preparation and often for entertainment. Kitchens typically include a stove, dishwasher, sink and other appliances.

1. Sinks

Good	Fair	Poor	N/A	None
	✓			

Observations:

- Sink appeared to be in good condition at the time of inspection..



2. Spray Wand

Good	Fair	Poor	N/A	None
✓				

Observations:

- The spray wand was operated and was functional.



3. Plumbing

Good	Fair	Poor	N/A	None
	✓			

Observations:

- Evidence of previous/past leak noted, it is dry at the time of the inspection. Recommend monitoring area.



Evidence of previous/past leak noted, it is dry at the time of the inspection.

Electrical

1. Cable Feeds

Good	Fair	Poor	N/A	None
✓				

Observations:

- Underground service lateral.



2. Electrical Panel

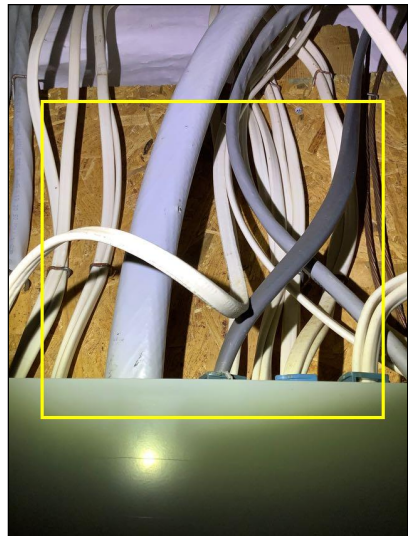
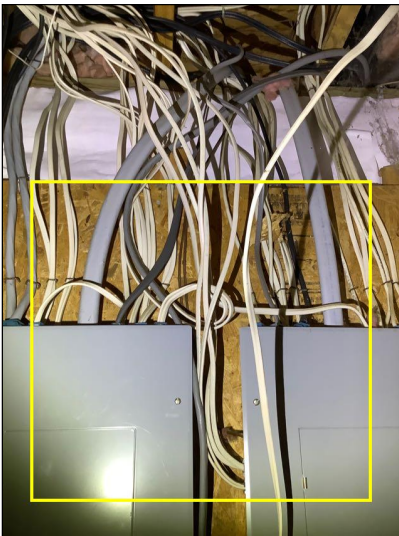
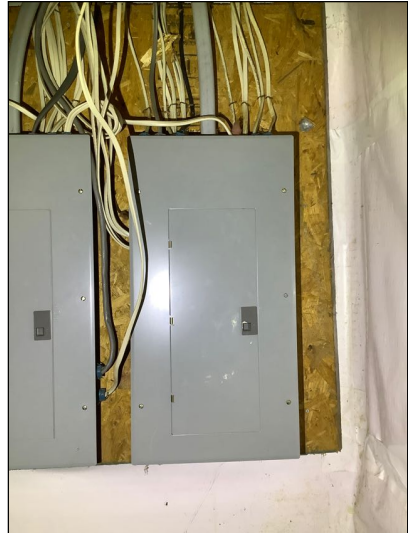
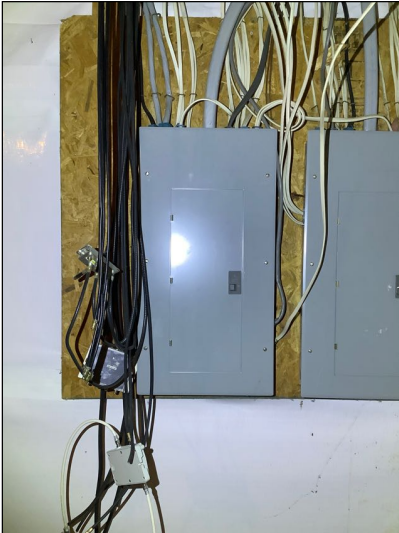
Good	Fair	Poor	N/A	None
	✓			

Location: Panel box located in basement.

Location: Upper Floor

Observations:

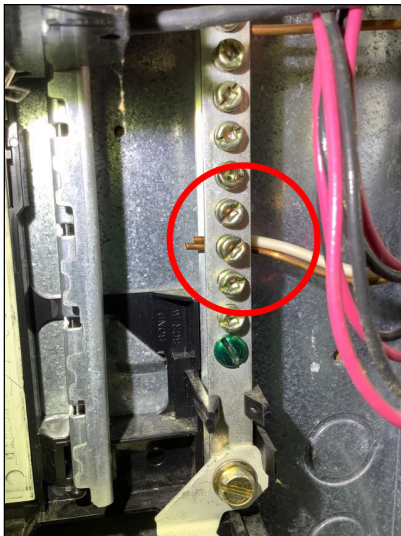
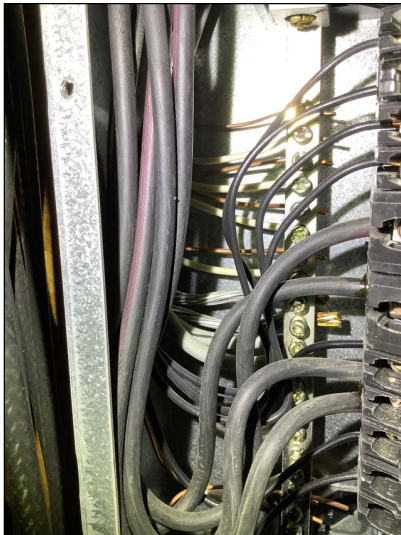
- Double tapped breaker(s) inside panel box (more than one electrical conductor attached). This is not standard practice, and may cause overheating or even an electrical fire. Recommend evaluation by an electrician. Double tapping and lugging can create hot spots on breakers and neutral bars because they are not tightened to the correct torque--especially if two different size conductors are used. Because the hot [black] and neutral [white]wires are both current carrying conductors, the chance is then greater for potential hot spots. If the **double tap** or lug becomes loose, it begins to arc. As it arcs it builds up carbon. Carbon is then resistance and with more carbon buildup the more difficult it is for the conductor to make contact, thus increasing the current. The end result can be the breaker tripping because of the loose connection [current exceeding the rating of the breaker], or signs of overheating such as discolored wires, melted wires, etc, or even fire.
- Sharp-pointed metal screws hold panel cover in place. These are a potential hazard as they may puncture wire insulation and electrify panel box, becoming a shock or electrocution hazard. These screws should be replaced with approved, flat-tipped screws.
- **Unsecured wiring entering panel. All wiring should be secured within 12 inches of panel. Recommend correction by licensed electrician.**
- **Double tapped neutral wires noted at bus bars. Recommend correction by licensed electrician.**
- **Sharp-pointed metal screws hold panel cover in place. Recommend replacing with flat-tipped screws for safety.**



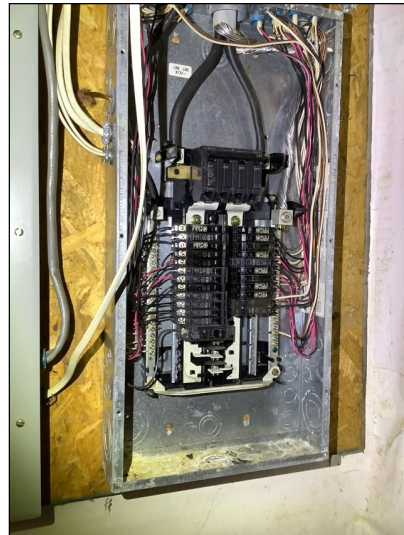
Unsecured wires entering panel

Unsecured wires entering panel





Double tapped neutral wire observed at bus bar



Sharp-pointed metal screws hold panel cover in place. These are a potential hazard as they may puncture wire insulation and electrify panel box, becoming a shock or electrocution hazard. These screws should be replaced with approved, flat-tipped screws.

3. Main Amp Breaker

Good	Fair	Poor	N/A	None
✓				

Observations:
 • 2 panels 200 Amps each



4. Breakers in off position

Good	Fair	Poor	N/A	None
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Observations:
• 1



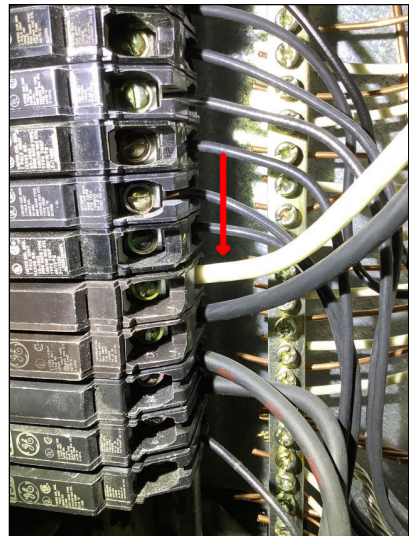
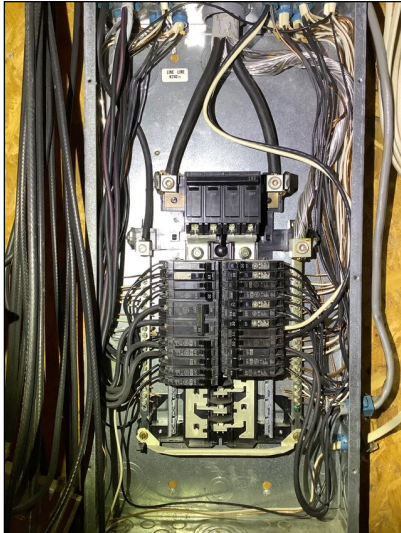
5. Breakers

Good	Fair	Poor	N/A	None
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

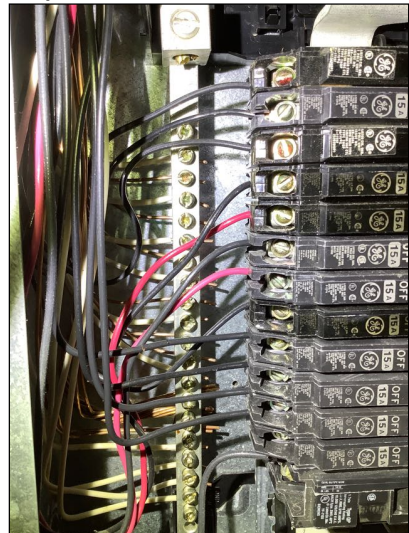
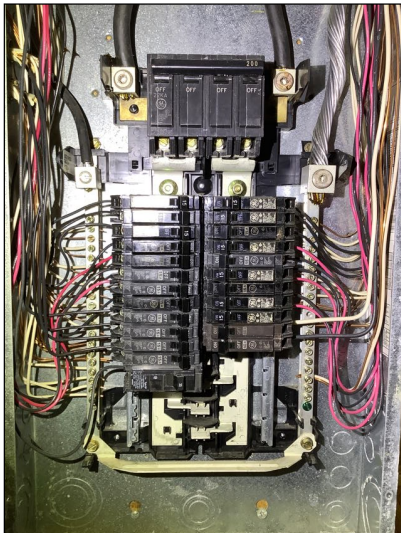
Materials: Copper non-metallic sheathed cable.

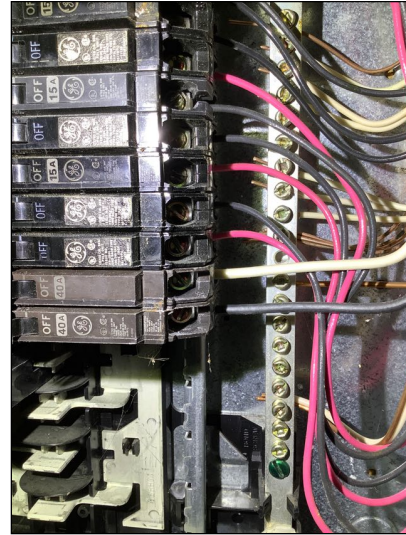
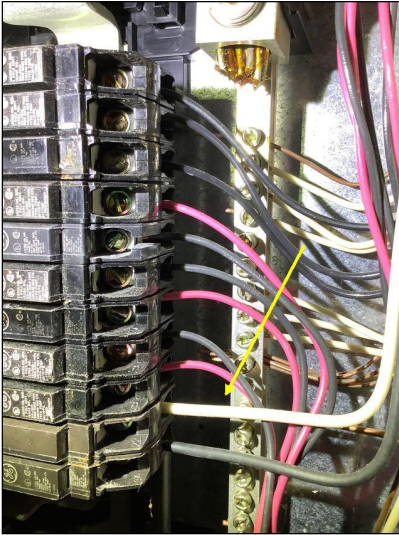
Observations:

- All of the circuit breakers appeared serviceable.
- White wire connected to hot breaker switch, white wires are designated to neutral bus connection, replace or label as needed.



White wire connected to hot breaker switch, white wires are designated to neutral bus connection, replace or label as needed.





White wire connected to hot breaker switch, white wires are designated to neutral bus connection, replace or label as needed.

Water

1. Water Main

Good	Fair	Poor	N/A	None
			✓	

Location:

- Public Water
- 3/4 inch
- Copper pipes
- Location: Basement.
- Limited view of main water valve due to being covered by insulation.



2. Hose bib shut off valve

Good	Fair	Poor	N/A	None
			✓	

Observations:

- Located in basement
- No issues noted at the time of inspection.
- Limited view of hose bib cutoff due to being covered by insulation at time of inspection.



Water Heater

1. Heater Enclosure

Good	Fair	Poor	N/A	None
		✓		

Observations:

- The water heater enclosure is bent due to prior damage.



Dents observed throughout water heater enclosure



Dents observed throughout water heater enclosure



Dents observed throughout water heater enclosure

2. Number Of Gallons

Good	Fair	Poor	N/A	None
✓				

Observations:

- 75 gallons

3. Venting

Good	Fair	Poor	N/A	None
✓				

Observations:

- Appeared in good condition at the time of inspection.



4. Water Heater Condition

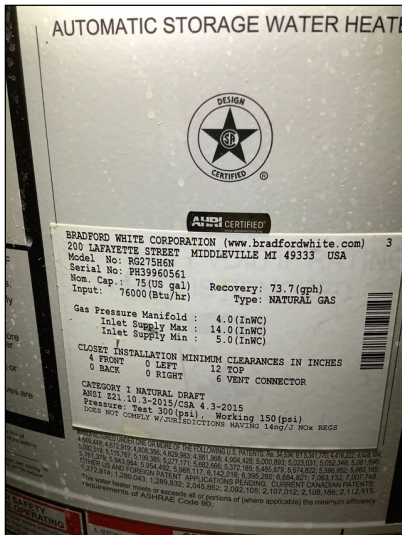
Good	Fair	Poor	N/A	None
	✓			

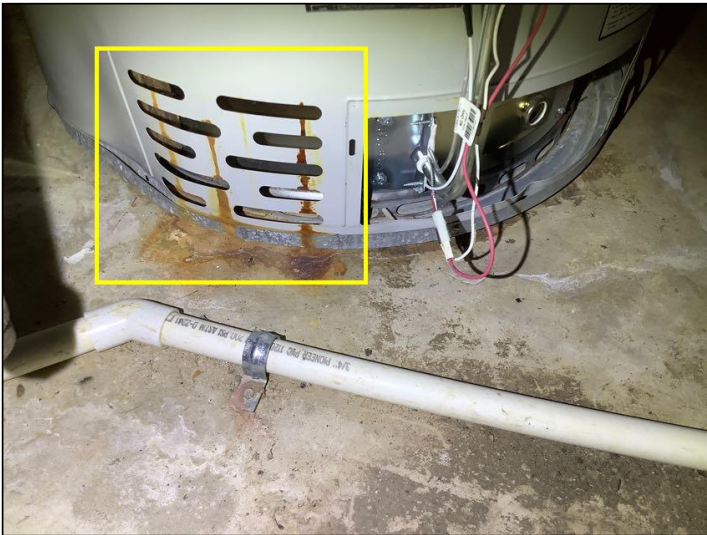
Heater Type: Gas

Location: The heater is located in the basement.

Observations:

- Manufacture date: 2017. Life expectancy around 10 years.
- Water temperature 123 degrees @ Kitchen sink
- **Rust observed at water heater enclosure. Recommend repair/replacement by licensed plumbing contractor.**





Rust noted at water heater enclosure



Water temperature 123 degrees @ Kitchen sink

5. Plumbing

Good	Fair	Poor	N/A	None
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Materials: Copper

Observations:

- No deficiencies observed at the visible portions of the supply piping.
- **Expansion tank** noted.





6. Overflow Condition

Good	Fair	Poor	N/A	None
		✓		

Materials: None
 Observations:

- Missing overflow discharge pipe noted. This is a potential scalding concern as water can discharge improperly. Recommend installing the proper type of relief extension to discharge within 6" from the floor.



Extension missing from water heater TPRV

7. TPRV

Good	Fair	Poor	N/A	None
		✓		

Observations:

- The extension at the water heater relief valve is missing. This is a potential scalding concern as water can discharge improperly. Recommend installing the proper type of relief extension to discharge within 6" from the floor.



The extension at the water heater relief valve is missing. This is a potential scalding concern as water can discharge improperly. Recommend installing the proper type of relief extension to discharge within 6" from the floor.

8. Base

Good	Fair	Poor	N/A	None
				✓

Observations:

- No drip pan and drain line noted. It is recommended to install a drip pan with a drain line if the water heater is inside the home or basement. A leak would cause a lot of water damage. Installing a drip pan and a drain reduces this possibility.

9. Gas Valve

Good	Fair	Poor	N/A	None
✓				

Observations:

- Gas valve present and appeared functional.



10. Combustion

Good	Fair	Poor	N/A	None
	✓			

Observations:

- The combustion chamber appeared to be in functional condition.



HVAC Zone 1

1. AC Compress Condition

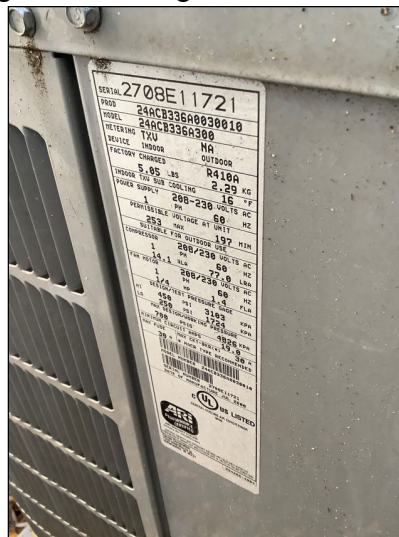
Good	Fair	Poor	N/A	None
	✓			

Compressor Type: Electric

Location: The compressor is located on the back yard.

Observations:

- Manufacture date: 2008. Life expectancy around 20 years.
- Appeared functional at the time of inspection.
- HVAC systems tested in both Heating and Cooling modes.





2. Refrigerant Lines

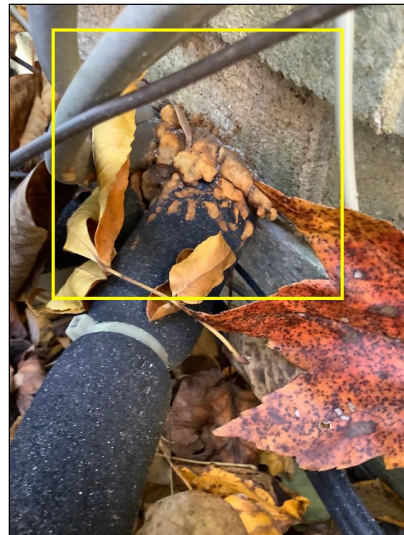
Good	Fair	Poor	N/A	None
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Observations:

- Deteriorated insulation on the refrigerant lines, replace as needed
- Deteriorated sealant at the pipe wall penetration, repair/seal as needed.



Deteriorated insulation on the refrigerant lines, replace as needed



Deteriorated sealant at the pipe wall penetration, repair/seal as needed.

3. Thermostats

Good	Fair	Poor	N/A	None
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Observations:

- Location: living room
- Digital - programmable type.
- Functional at the time of inspection.
- Thermostats are not checked for calibration or timed functions.



4. Heater Condition

Good	Fair	Poor	N/A	None
	✓			

Location: The furnace is located in the basement.

Type: Gas fired forced hot air.

Observations:

- Manufacture date: 2017. Life expectancy around 20 years.
- Unit appeared to operate properly using normal operating controls at the time of inspection.
- HVAC system service date was over 12 months or not being able to be determined. We recommend the HVAC system be serviced and cleaned by a licensed HVAC specialist.



5. Filters

Good	Fair	Poor	N/A	None
✓				

Location: Located side of cabinet.

Observations:

- Filters appeared clean at the time of inspection.
- Filter Size: 20x25x4
- MAINTENANCE: The air filter(s) should be inspected at least monthly and cleaned or replaced as required. Remember that dirty filters are the most common cause of inadequate heating or cooling performance.



Filter Size: 20x25x4

6. Venting

Good	Fair	Poor	N/A	None
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Observations:

- Metal double wall chimney vent pipe noted.
- The visible portions of the vent pipes appeared functional.

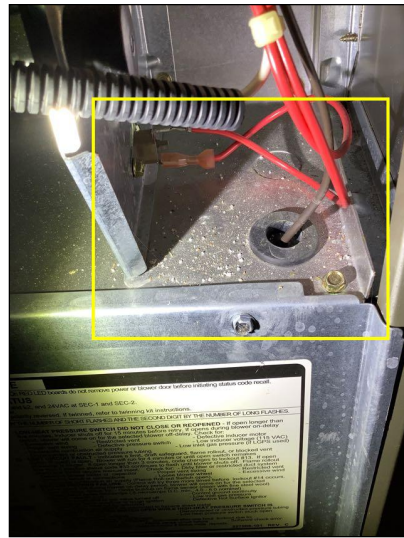
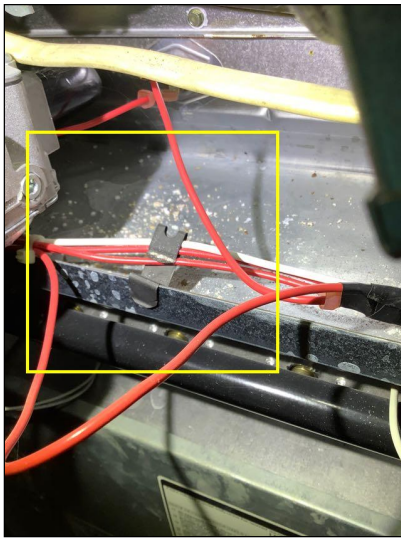


7. Enclosure

Good	Fair	Poor	N/A	None
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

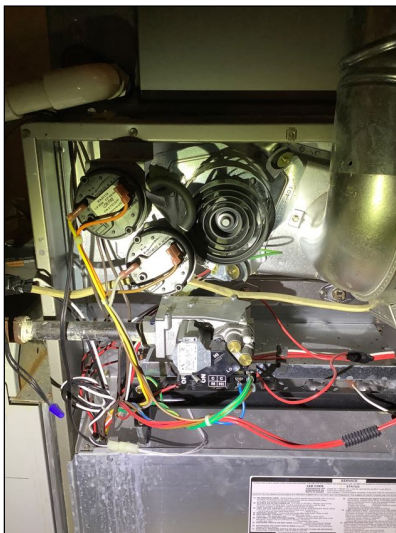
Observations:

- Burner Flames appear in good condition; blue and uniform.
- The furnace is dirty and there are no records of prior service. Recommend having furnace cleaned and serviced by licensed HVAC tech to ensure proper performance.



Dust and debris observed in unit. Recommend having furnace cleaned and serviced by licensed HVAC tech to ensure proper performance.

The furnace is dirty and there are no records of prior service. Recommend having furnace cleaned and serviced by licensed HVAC tech to ensure proper performance.



8. Air Supply

Good	Fair	Poor	N/A	None
✓				

Observations:
 • The air supply system appeared to be functional.

9. Registers

Good	Fair	Poor	N/A	None
✓				

Observations:
 • Functional and achieved adequate differential temperature between supply and return air.



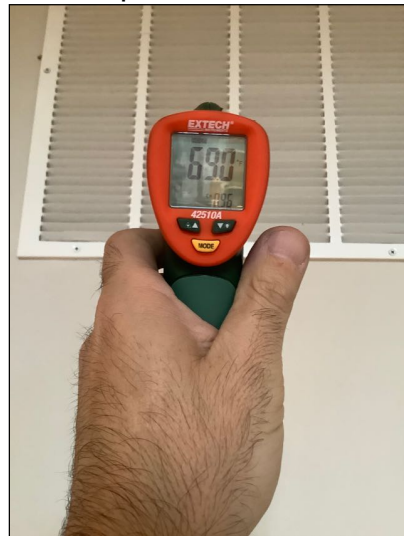
Supply air temp in heat mode 95 degrees



Return air temp in heat mode 75 degrees



Supply air temp in cooling mode 53 degrees



Return air temp in cooling mode 69 degrees

10. Gas Valves

Good	Fair	Poor	N/A	None
✓				

Observations:
 • Gas shut off valves were present and functional.



11. Plumbing

Good	Fair	Poor	N/A	None
	✓			

Observations:

- Appeared functional and in good condition.



HVAC Zone 2

1. AC Compress Condition

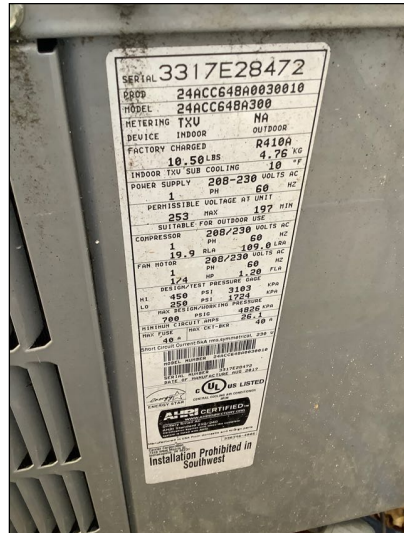
Good	Fair	Poor	N/A	None
	✓			

Compressor Type: Electric

Location: The compressor is located on the back yard.

Observations:

- Manufacture date: 2017. Life expectancy around 20 years.
- Appeared functional at the time of inspection.
- HVAC systems tested in both Heating and Cooling modes.





2. Refrigerant Lines

Good	Fair	Poor	N/A	None
		✓		

Observations:

- Deteriorated insulation on the refrigerant lines, replace as needed



Deteriorated insulation on the refrigerant lines, replace as needed

3. Thermostats

Good	Fair	Poor	N/A	None
✓				

Observations:

- Location: master bedroom
- Digital - programmable type.
- Functional at the time of inspection.
- Thermostats are not checked for calibration or timed functions.



4. Heater Condition

Good	Fair	Poor	N/A	None
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Location: The furnace is located in the attic.

Type: Gas fired forced hot air.

Observations:

- Manufacture date: 2017. Life expectancy around 20 years.
- Unit appeared to operate properly using normal operating controls at the time of inspection.
- HVAC system service date was over 12 months or not being able to be determined. We recommend the HVAC system be serviced and cleaned by a licensed HVAC specialist.



5. Filters

Good	Fair	Poor	N/A	None
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Location: Located inside a filter grill in the hall ceiling.

Observations:

- Filter Size: 20x20x1
- MAINTENANCE: The air filter(s) should be inspected at least monthly and cleaned or replaced as required. Remember that dirty filters are the most common cause of inadequate heating or cooling performance.
- The filter is dirty. Needs replacement.



The filter is dirty. Needs replacement.

6. Venting

Good	Fair	Poor	N/A	None
✓				

Observations:

- Metal double wall chimney vent pipe noted.
- The visible portions of the vent pipes appeared functional.



Return air vent detached at furnace in attic



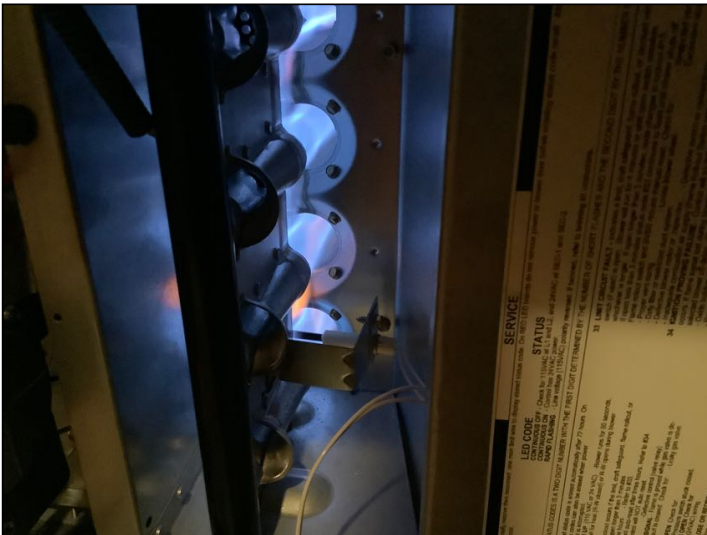


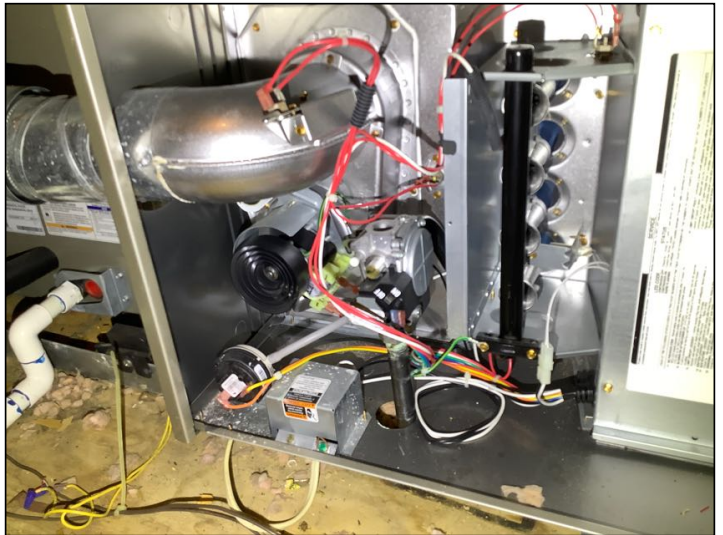
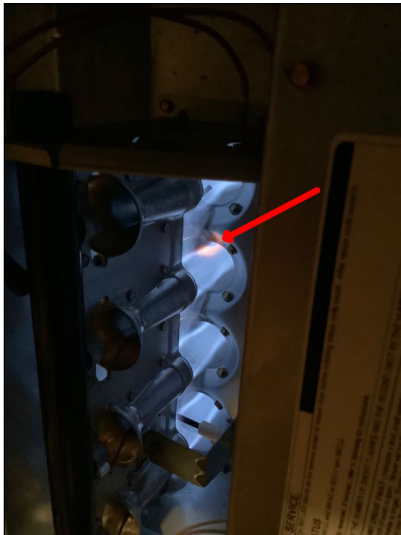
7. Enclosure

Good	Fair	Poor	N/A	None
	✓			

Observations:

- The air handler is dirty and appears to have a bio growth (mold like substance), we recommend testing for mold.
- Burner Flames with orange/red pulses, this an indication of incomplete combustion. Recommend servicing the unit by a certified HVAC specialist.





Burner Flames with orange/red pulses, this an indication of incomplete combustion. Recommend servicing the unit by a certified HVAC specialist.



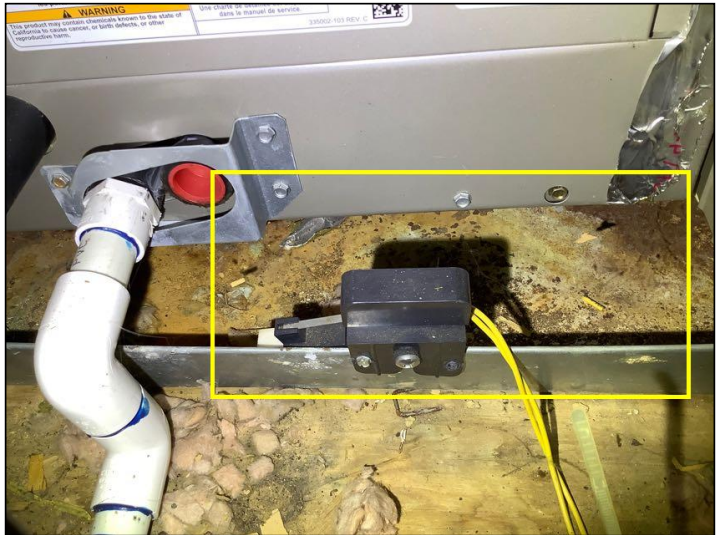
The air handler is dirty and appears to have a bio growth (mold like substance), we recommend testing for mold.

8. Enclosure Base

Good	Fair	Poor	N/A	None
	✓			

Observations:

- The heater base shows signs of water damage. Possible prior water intrusion.



The heater base shows signs of water damage. Possible prior water intrusion.

9. Air Supply

Good	Fair	Poor	N/A	None
		✓		

Observations:

- Return air appears to be detached/leaking at unit. We recommend sealing or patching the ductwork in these areas.



Return air vent detached at furnace in attic



10. Registers

Good	Fair	Poor	N/A	None
✓				

Observations:

- Functional and achieved adequate differential temperature between supply and return air.



Supply air temp in heat mode 118 degrees



Return air temp in heat mode 78 degrees



Return air temp in cooling mode 74 degrees



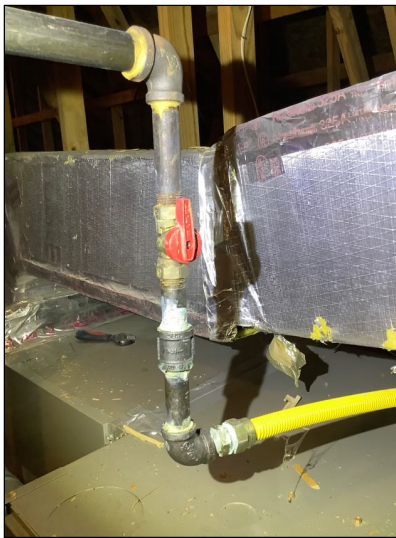
Supply air temp in cooling mode 55 degrees

11. Gas Valves

Good	Fair	Poor	N/A	None
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Observations:

- Gas shut off valves were present and functional.



12. Plumbing

Good	Fair	Poor	N/A	None
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Observations:

- Appeared functional and in good condition.



Glossary

Term	Definition
Double Tap	<p>A double tap occurs when two conductors are connected under one screw inside a panelboard. Most circuit breakers do not support double tapping, although some manufacturers, such as like Cutler Hammer, make hardware specially designed for this purpose.</p> <p>Double tapping is a defect when it is used on incompatible devices. If the conductors come loose, they cause overheating and electrical arcing, and the risk of fire is also present. A double tap can be accommodated by installing a new circuit board compatible with double tapping. It is also possible to add another circuit breaker or install a tandem breaker to the existing breaker box.</p>
Expansion Tank	<p>An expansion tank or expansion vessel is a small tank used to protect closed (not open to atmospheric pressure) water heating systems and domestic hot water systems from excessive pressure. The tank is partially filled with air, whose compressibility cushions shock caused by water hammer and absorbs excess water pressure caused by thermal expansion.</p>
PVC	<p>Polyvinyl chloride, which is used in the manufacture of white plastic pipe typically used for water supply lines.</p>