

# *3-D Home Inspection, Inc*

## Property Inspection Report



1023, Great Street, Best Town, IL 61112

Inspection prepared for: Home Buyer

Real Estate Agent: Agent USA -

Date of Inspection: 12/8/2021 Time: 09:00 AM

Age of Home: 0 Size: 0

Inspector: Mike Stephans

450-002256 / 451-000548

4003 Osbron St, Plano, 60545

Phone: 630-392\*4278

Email: [mike@3DHomeInspect.com](mailto:mike@3DHomeInspect.com)

*Michael R. Stephans*



## Report Introduction

The opportunity to conduct your home inspection is greatly appreciated! It is important that you understand that all comments of conditions, observations, and recommendations are my opinions. Comments in the report are based on my interpretation of the various industry standards and practices. Throughout the report, all comments and notes are to be considered as starting with the phrase, "In my opinion."

Beware that others may disagree or have a different perspective than mine. Not all home inspectors or tradesmen agree on defects, installation methods, seriousness or other considerations.

The inspection report provides you with information about the home that I believe to be of concern or interest. You are paying me for my opinion which is reflected in the report. REPAIR/REPLACE and SAFETY items will be included in the summary at the discretion of the inspector. You should review the entire report with your attorney during the inspection review process. In addition to the summary comments, comments in the Acceptable, Monitor, Not Applicable, Limitation, and Materials areas should be reviewed to determine their significance as well as the approach to take with the seller.

In an attempt to avoid redundancy in the report, ANY AND ALL RECOMMENDATIONS OR COMMENTS FOR SERVICE, REPAIR, REPLACEMENT, ADDITIONAL EVALUATION, CORRECTIVE ACTION OR SIMILAR SHOULD ONLY BE PERFORMED USING RECOGNIZED METHODS AND MATERIALS BY A QUALIFIED, LICENSED PROFESSIONAL CONTRACTOR IN HIS OR HER RESPECTIVE FIELD. You should also be aware that professional licensing of some trades is not required by some municipal or other governmental bodies. It is not within the scope of the inspection to verify the pulling of permits by contractors, sellers, occupants, and/or owners. It is strongly recommended you verify the pulling of permits. Obtaining permits is important as it will aid in making sure any remodeling or repair work is being done to local practices.

The inspection report is not designed to predict when things will break down or cause problems, nor is it designed to provide an educational warning on every side effect – physical or environmental – from a defect or malfunction. A time may come that you discover something wrong with the house and you may be upset or disappointed with your home inspection. Please remember that some problems may only be discovered by living in the house and not during the limited-time, single visit of a home inspection. These problems may have existed during the home inspection but showed no indicators to allow for discovery.

It is important to understand that the observed defect may be a symptom of a greater problem, or a solution may involve troubleshooting a system and not just addressing the item identified in the report. This inspection report cannot address those possibilities. Repairs to these unknown defects may be necessary.

Please CAREFULLY READ the report in its entirety. If there is a summary, it is intended to provide a convenient and cursory preview of the more significant conditions and components that we have identified within our report as needing service, but could be incomplete. It is obviously not comprehensive, and should NOT be used as a substitute for reading the entire report; nor is it a tacit endorsement of the condition of components or features that may not appear in this summary. Also, in accordance with the terms of the contract, the service recommendations that we make in this summary and throughout the report should be completed well before the close of escrow by qualified, licensed (if applicable) professional contractors, who may well identify additional defects or recommend some upgrades that could affect your evaluation of the property. It is recommended you request any and all documentation for work performed on behalf of the seller prior to closing on the property. In many cases warranties can be transferred if requested.

**Video In Your Report** –The inspector may have included videos of issues within the report. If you are opening the PDF version of the report make sure you are viewing the PDF in the free Adobe Reader PDF program. If you're viewing the report as a web page the videos will play in any browser. Click on any video within the report to start playing.

**THERMAL IMAGING:** An infrared camera may be used for specific areas or visual problems, and should not be viewed as a full thermal scan of the entire home. Thermal observations are not guaranteed, either expressed or implied. Thermal observations are limited and not conclusive evidence of the presence or lack thereof of insulation, moisture, air leakage, or other anomalies.

Remember, even though the inspection is completed and the report delivered, I am still available for your questions concerning the inspection or report.

Again, thank you for allowing 3-D Home Inspection, Inc. to conduct your inspection.

## LEGEND

Throughout the report we utilize icons to make things easier to find and read. The legend below explains the meaning of the icons as they pertain to the item, component or system being evaluated.

### **CONSIDERATION OF ALL REPORT FINDINGS AND RECOMMENDATIONS SHOULD BE GIVEN PRIOR TO THE EXPIRATION OF THE INSPECTION CONTINGENCY PERIOD.**

OK – The item, while perhaps functioning as intended, may 1) need of minor repair, service, or maintenance; 2) be showing signs of wear, tear, or deterioration that could result in an adverse condition at some point in the future; or 3) require considerations to be made about upgrading the item, component, or system to enhance the function, efficiency and/or safety. Acceptable items can frequently be addressed by a homeowner or handyman and are considered to be routine homeowner maintenance (DIY) or recommended upgrades.

REPAIR / REPLACE - Corrective actions (repair or replace) using recognized materials and/or methods, as deemed necessary, by a qualified contractor in the appropriate trade is recommended to ensure the system/components are working as intended and safely. If during the course of this corrective action other deficient items are found they should also be remedied. It is recommended this corrective action be performed prior to the purchase of the property.

SAFETY - The system or component poses a safety hazard to occupants in or around the house. Some listed concerns will be considered acceptable, or grandfathered, for the time period of construction but pose a current safety hazard by today's best building practices. Corrective actions (repair or replace) using recognized materials and/or methods, as deemed necessary, by a qualified contractor in the appropriate trade is recommended to ensure the system/components are working as intended and safely. If during the course of this corrective action other deficient items are found they should also be remedied. It is recommended this corrective action be performed prior to the purchase of property.

MONITOR – This item is showing signs of aging, weathering, wear, tear, or minor defects. It should be monitored periodically to ensure that the issue hasn't become worse, warranting a repair or replacement.

N/A (Not applicable) - The item was not found, not present, not readily accessible, not within the Scope of the Inspection, or not within the Standards of Practice.

The report contains a unique pop-up glossary feature. When you see words underlined, hover your mouse over the term and a definition or tip about the item will appear! A glossary will also be included in the hard copy report.

## KEY

**QUALIFIED CONTRACTOR:** A qualified contractor is trained, certified, licensed (if applicable), and experienced in a specified trade.

**LIMITATIONS:** Where indicated, disclaimers or limitations are given in the event a system or component is not readily accessible or viewable in whole or part. When these conditions exist, defects may be missed and not reported. Due to the given circumstances at the time of the inspection, neither I, nor 3-D Home Inspection, Inc., can be held liable for items that are outside the scope of the inspection, not readily accessible, latent, unable to be seen or are hidden, or for anything that limits the inspection. The specified area, system, or component needs to be made accessible and further evaluation, as well as possible service, repair and/or replacement, is recommended by a qualified, licensed (if applicable) contractor in the appropriate trade prior to the expiration of the inspection contingency period.

## Table Of Contents

Report Summary	4-8
General Info	9
ROOF	10-11
GROUND	12
BUILDING EXTERIOR	13-16
GARAGE: ATTACHED	17-18
STRUCTURE	19-20
ELECTRICAL	21-23
HVAC - FORCED AIR	24-26
PLUMBING	27-30
INTERIOR	31-32
FIREPLACE/CHIMNEY/WOOD BURNING STOVE	33
INSULATION / VENTILATION	34-35
APPLIANCES	36-37
ENVIRONMENTAL	38-40
Glossary	41-47

## Report Summary

The summary highlights potentially significant findings. These can be a safety hazard, a deficiency requiring a major expense to correct, and/or items to which I would like to draw extra attention. The summary is not a complete listing of all the findings in the report. Please review all pages of the report, as the summary alone does not explain all of the issues that you may want to negotiate with the seller. All repairs should be performed by a qualified contractor in the respective trade, and receipts, as well as warranties and permits as appropriate, for the work done should be provided by the seller.

### GROUNDS

Page 12 Item: 2  
Driveway, Walkways, Patio, Walkouts  
- Condition

• **SAFETY:** Displacement, cracks, and uneven walking surfaces were observed. Uneven walking surfaces can lead to trips and falls if not corrected. **Corrective action** by a qualified contractor is recommended.

### BUILDING EXTERIOR

Page 13 Item: 3  
Masonry Wall - Condition

• **REPAIR / REPLACE:** Brick and mortar damage such as displacement and cracks were observed along with tuck pointing **repairs**. These suggest movement. Corrective action by a qualified mason is recommended.

• **REPAIR / REPLACE:** **Lintels** are rusting. When steel rusts, it expands, and can lead to surrounding brick and mortar damage. Corrective action by a qualified mason is recommended.

• **REPAIR / REPLACE:** **Efflorescence** was observed. This indicates water intrusion or other issue. The inspection could not determine if it is cosmetic or an indication of a larger problem. Corrective action by a qualified mason is recommended.

Page 15 Item: 8  
Decks - Condition

- REPAIR / REPLACE: The ledger board **flashing** is missing, improperly installed, or not visible. This can result in water **leaks** into the walls/house and increases the potential for deck collapse. Corrective action by a qualified, NADRA (North American Deck and Railing Association) certified, decking contractor is recommended.
- REPAIR / REPLACE: The ledger board does not appear properly attached to the building. Lag bolts are not spaced properly or end up in a straight line. In my opinion, this can result in a **ledger board failure** and a collapse. Corrective action by a qualified, NADRA (North American Deck and Railing Association) certified, decking contractor is recommended.
- REPAIR / REPLACE: Beams are relying on shear strength of bolts through the posts and not resting on top of posts and/or with proper fastening hardware. As **wood** ages, this connection is prone to failure. It is not possible to predict if or when failure will occur. There are special metal brackets designed to help support these beams. Corrective action by a qualified, NADRA (North American Deck and Railing Association) certified, decking contractor is recommended.
- REPAIR / REPLACE: The hold down tension brackets are missing, damaged, or improperly installed. These help to hold the deck to the buildings structure. Corrective action by a qualified, NADRA (North American Deck and Railing Association) certified, decking contractor is recommended.
- REPAIR / REPLACE: The stringers are not properly supported by a header board, the bottom of the stringers are not on a proper landing or footing support. This increases the potential for failure that can lead to falls or injury. Corrective action by a qualified, NADRA (North American Deck and Railing Association) certified, decking contractor is recommended.

GARAGE: ATTACHED

Page 18 Item: 5  
Walls & Ceiling - Condition

- REPAIR / REPLACE: The fire separation wall has been altered. This can allow the easy spread of fire from the garage into the house. Corrective action by a qualified carpenter is recommended.

ELECTRICAL

Page 21 Item: 2  
Main and Service Panels - Condition

- SAFETY: One or more lugs in the neutral bus bar contain two or more conductors (wires) commonly called **double tap**. Typically, lugs are not designed for more than one wire. Wires can overheat or work loose creating arch & fire hazards. Two or more neutral wires under the same lug can lead to circuit isolation hazards under certain conditions. Although this is a common trade practice or was allowed at one time, it is not technically correct as prescribed by the manufacturer. Corrective action by a qualified electrician is recommended.

Page 21 Item: 3  
Wiring and Distribution - Condition

- **REPAIR / REPLACE:** Distribution wiring at one or more locations is not properly or reasonably protected. These are prone to mechanical damage which can lead to shock or fire hazards. Corrective action by a qualified electrician is recommended.

Page 22 Item: 5  
Breakers / Receptacles - Condition

- **SAFETY:** Of the representative sampling of receptacles tested, certain receptacles read on the test meter to be 'open or bad ground' / 'open neutral' / or 'reverse polarity' / or did not have power. This is considered to be improperly wired and a shock, electrocution, or fire hazard. Corrective action by a qualified electrician is recommended.
- **SAFETY:** One or more receptacles did not properly respond to **GFCI** testing or GFCI protection is not installed at certain locations as prescribed by today's best building practice. This increases the potential for shock and electrocution hazards. Corrective action by a qualified electrician is recommended.
- **SAFETY:** One or more circuit breakers are not from the same manufacturer as the electrical panel. This is commonly called **mixed breakers**. This poses certain fire hazards if they do not seat properly as required by the panel's manufacturer. Corrective action by a qualified electrician is recommended.

Page 23 Item: 7  
Smoke-Carbon Monoxide (C/O)  
Alarms(Detectors) - Condition

- **SAFETY:** Smoke detectors have a yellowish hue which indicates they are near, at, or beyond 10 years. Detectors that are 10 years or older are considered to be unreliable due to sensor degradation and a safety hazard from fire and smoke. Corrective action by a qualified party is recommended. For more info on smoke detectors [click here](#).

#### HVAC - FORCED AIR

Page 25 Item: 3  
Vents, Flues, Chimneys, Combustion  
air - Condition

- **REPAIR / REPLACE:** The crown cap is damaged, cracked, or does not properly overhang the chimney's sides. This may allow water to enter and damage the brick, **flue** and chimney or other building and finish materials. Corrective action by a qualified **CSIA** certified, Chimney Sweep is recommended.
- **SAFETY:** The furnace is mid-efficient with its vent pipe connector routed into a masonry chimney. Mid-efficiency furnaces requires an appropriate metal flue liner (preferably stainless steel as aluminum will deteriorate within a short time). As much as I can see, the chimney is not equipped with a metal flue liner. A lack of an appropriate metal liner can result in liner / chimney deterioration and other flue gas related problems. Corrective action by a qualified CSIA (Chimney Safety Institute of America) certified, mason contractor is recommended.
- **REPAIR / REPLACE:** There is no rain cap. This helps to keeps water, birds, animals out of the building and in the case of a wood burning fireplace, prevents sparks from escaping. Although not required, one is recommended. Corrective action by a qualified CSIA certified, Chimney Sweep is recommended.



**PLUMBING**

Page 29 Item: 8  
Vents, Flues, Chimneys, Combustion  
air - Condition

• **SAFETY:** The plastic escutcheon rings on top of the water heater are melted. This indicates past or intermittent **spillage** of exhaust gases commonly called **backdrafting**. Exhaust gases potentially contain **carbon monoxide** or other harmful gases. This can be caused by poor draft, blocks in the flue, or negative pressures caused by **mechanical fans** in the house. Corrective action by a qualified plumber is recommended.

**INTERIOR**

Page 31 Item: 3  
Windows, Skylights, Glass -  
Condition

• **REPAIR / REPLACE:** Windows in one or more rooms have visual indicators of fogging, condensation streaks or droplets, desiccant beads, cracked glass, or rust between glass panes. This is often referred to as a 'blown seal'. Windows with **blown seals** no longer retains their insulating value. There may be more windows but not noticeable due to fogging that comes and goes. The windows are nearing the end of their life expectancy. Repairs will help to extend their life but you should expect to replace one or more in each of the upcoming years. Consultation with a qualified window contractor is recommended to determine the scope to repair or replace the windows.

**FIREPLACE/CHIMNEY/WOOD BURNING STOVE**

Page 33 Item: 1  
Mason Fireplace / Chimney-  
Condition

• **SAFETY:** There is a build up of creosote and debris in the fire box, smoke chamber and/or flue. This is a fire hazard. Servicing by a qualified, CSIA certified Chimney Sweep is recommended along with a Level 2 inspection. Fireplaces, flues, chimney's and related features are often neglected and a fire hazard. To ensure fireplaces are safe to operate, the NFPA® (National Fire Protection Association) recommends a **Level 2 fireplace/chimney inspection** when there is a transfer of property. It is recommended you ask the seller if a level 2 inspection has been recently performed. Otherwise, a level 2 inspection/servicing is recommended by a qualified, CSIA certified, Chimney Sweep prior to closing on the property and before using the fireplace. A Level 2 inspection is considered technically exhaustive and beyond the scope of this inspection.

**INSULATION / VENTILATION**

Page 34 Item: 3  
Ventilation (bathroom,  
range/microwave, dryer, laundry  
room, kitchen) - Condition

• **REPAIR / REPLACE:** Ducts for one or more mechanical fans terminate in the attic such as a roof or soffit vent, or directly into the attic. Terminating inside an attic adds considerable **moisture** which can lead to condensation, rot, or potentially mold. This is most likely reason for the rusted roofing nail tips. Best building practice is for mechanical vent termination to be to the outside with a vent jack. Corrective action by a qualified insulation and ventilation contractor is recommended.



**APPLIANCES**

Page 36 Item: 2  
Range - Condition

- **SAFETY:** The **anti-tip bracket** is missing or not working properly. A missing or non-functioning bracket is an injury/scalding hazard should the range tip and fall or cause juices to splash. Corrective action by a qualified appliance handyman is recommended. For more information [click here](#).

**ENVIRONMENTAL**

Page 39 Item: 4  
Mice / Bats - Condition

- **REPAIR / REPLACE:** This inspection excludes any and all conditions associated with pests and insects. However, there are indicators (holes in attic fiberglass insulation) that suggests mice activity. In my opinion, this is not uncommon but is considered a health issue. This inspection could not determine if they are active or if other corrective measures have taken place. If corrective measures have been performed, its effectiveness is unknown. It is unknown how much damage is present to building or finishing materials. You should ask the seller if any remediation has been performed and when. If not or not performed recently, further evaluation by a qualified pest/insect control specialist is recommended. If the presence of mice is confirmed then remediation to eradicate them and consultation with a qualified general contractor is recommended to determine the extent of damage to the building with an estimate to repair.

# General Info

## 1. Attendance/Time

### ATTENDANCE/TIME:

- Client(s), Client's realtor
- Inspection time: 10 am to 1 pm

## 2. Weather

### WEATHER / SOIL

- Soil Condition: dry;
- Temperature: 75 degrees-F at the start of the inspection.  
Weather Conditions: mostly sunny skies.

## 3. Characteristics

### CHARACTERISTICS

- Detached, Single Family, 2 Story  
Occupied
- The water / sewer appeared to be Public Water & Sewer  
For the purpose of this report the building faces North  
The house is estimated to be in the range of 41 to 50 years

## 4. General Information

### LIMITATIONS/COMMENTS/MATERIALS:

- Pictures in this sample report are from different houses.

# ROOF

## 1. Limitations

### LIMITATIONS:

- No certification, warranty of guarantee is given as to water tight integrity or remaining useful life.
- The roof was viewed from the ground and partially walked. Due to height/slope the entire roof could not be walked or seen.
- Conditions such as hail damage or the lack of underlayment may not be easily detected and may result in future concerns.
- **Flashing** to joining wall was not visible in whole or part due to wall/shingle coverings.
- Many **leaks** occur only under conditions of prolonged rain, and these conditions may not be present at the time of the inspection.
- The underside of the roof sheathing/**valley**s/penetrations were not visible in whole or part to inspect for leaks.
- There are numerous factors that affect the life expectancy of the roofing material. It is not within the scope of a home inspection to accurately determine the remaining years of effective use.

### COMMENTS:

- The roof is showing signs of aging and weathering such as but not limited to granule loss, loss of pliability, discoloration, and/or minor damage. It is considered to be in the second half of its life expectancy. A higher level of maintenance should be expected.
- Roofs are designed to shed water not be waterproof. Leaks can occur under certain conditions. The roof should be checked as part of a normal maintenance routine, at least once or twice a year, and particularly after a heavy rain or high winds. Loose, torn or otherwise damaged shingles should be replaced. These defects are usually easy to spot without getting on the roof. The attic is a good place to check for leaks during or after a heavy rain or snow. **Curling**, cupping, or **brittle shingles** typically indicate advancing age and can compromise the roof. Annual inspection by a qualified roofer is suggested.

## 2. Main Roof - Condition

### MATERIALS/COMMENTS:

- For the purpose of this report, the buildings roof design is gable. The roof covering appeared to be an **architectural asphalt** composition shingle commonly called dimensional or laminated.

### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection of the viewable areas. No major damage or missing shingles were observed.



lower roof



lower roof



upper roof



upper roof

### 3. Flashings: Ridge, Vents, Walls, Drip edges, other - Condition

#### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection of the viewable areas.



flashing&gt;vent



flashing&gt;ridge

### 4. Flashings: Chimney's, Skylights - Condition

#### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection of the viewable areas.



flashing&gt;chimney

# GROUNDS

## 1. Limitations / Comments

### LIMITATIONS/COMMENTS:

- Due to accessibility restrictions the exterior was inspected from the ground level only.
- The sub-surface or underground drains cannot be viewed and are not within the scope of the inspection or Standards of Practice.

## 2. Driveway, Walkways, Patio, Walkouts - Condition

### MATERIALS:

- Driveway - **concrete**; Walkways - concrete; Patio - not applicable

### OBSERVATIONS:

- **SAFETY:** Displacement, cracks, and uneven walking surfaces were observed. Uneven walking surfaces can lead to trips and falls if not corrected. **Corrective action** by a qualified contractor is recommended.



uneven walking surface



walkway>uneven walking surface

## 3. Topography, Vegetation, Landscaping - Condition

### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection. The overall drainage of site appears proper based upon visual observation. However, grade settlement at the foundation can lead to puddles and potential **seepage** into the building. There may be other areas of settlement that can lead to trips and falls. The house and your safety will benefit from regrading around the foundation and any low spots or holes by a qualified landscaping contractor.



# BUILDING EXTERIOR

## 1. Limitations/Comments

### LIMITATIONS/COMMENTS:

- Due to accessibility restrictions the exterior was inspected from the ground level only.

### MATERIALS:

- Wall covering appeared to be - **brick veneer**, **vinyl siding**.

## 2. Vinyl/Aluminum Flashing/Trim - Condition

### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection of the viewable areas.

## 3. Masonry Wall - Condition

### OBSERVATIONS:

- REPAIR / REPLACE: Brick and mortar damage such as displacement and cracks were observed along with tuck pointing **repairs**. These suggest movement. Corrective action by a qualified mason is recommended.
- REPAIR / REPLACE: **Lintels** are rusting. When steel rusts, it expands, and can lead to surrounding brick and mortar damage. Corrective action by a qualified mason is recommended.
- REPAIR / REPLACE: **Efflorescence** was observed. This indicates water intrusion or other issue. The inspection could not determine if it is cosmetic or an indication of a larger problem. Corrective action by a qualified mason is recommended.



mortar repair



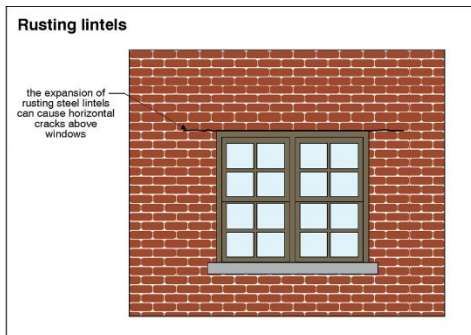
mortar repairs



brick/mortar failure



lintel above window &gt; rusted



Efflorescence

## 4. Paint/Caulk - Condition

### OBSERVATIONS:

- REPAIR / REPLACE: **Caulk failure** and/or flashing defects were observed at one or more areas. This may be allowing water leaks or insect/rodent intrusion. the condition of the underlying materials is unknown. Corrective action by a qualified contractor is recommended.



flashing/caulk not finished

## 5. Roof Overhang - Condition

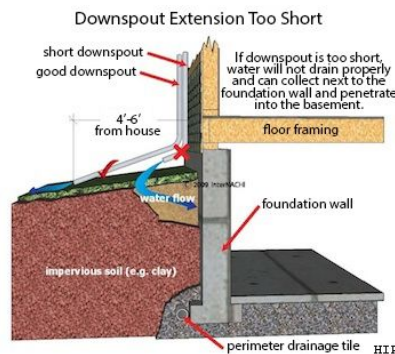
### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection of the viewable areas.

## 6. Gutters / Downspouts - Condition

### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection of the viewable areas. Were possible, extending the downspout extensions 6-feet away from the foundation is recommended.



## 7. Door & Window Trim - Condition

### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection of the viewable areas.



## 8. Decks - Condition

### LIMITATIONS/COMMENTS/MATERIALS:

- Deck - **wood**; Type: Attached to building
- Due to visual and readily accessibility limitations this inspection could not determine if the ledger board is properly installed and adequately attached with recognized **fasteners** to structural framing. Inadequate fastener installation can lead to collapse.

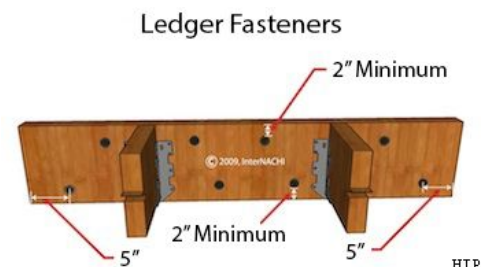
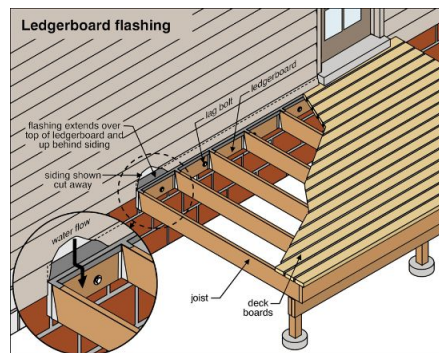
[https://spax.us/uploads/resources/SPAX\\_Technical\\_Bulletin\\_Deck\\_Ledger\\_Attachment\\_Form\\_S-1803\\_Rev\\_6-18.pdf](https://spax.us/uploads/resources/SPAX_Technical_Bulletin_Deck_Ledger_Attachment_Form_S-1803_Rev_6-18.pdf)

### OBSERVATIONS:

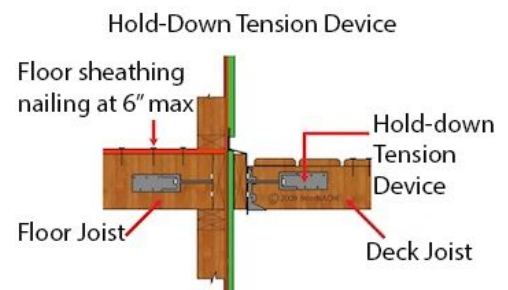
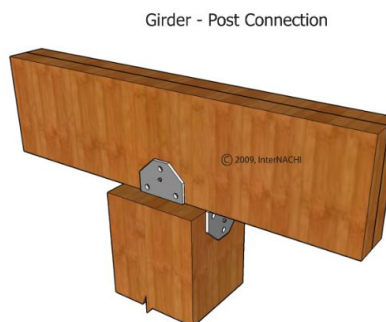
- **REPAIR / REPLACE:** The ledger board flashing is missing, improperly installed, or not visible. This can result in water leaks into the walls/house and increases the potential for deck collapse. Corrective action by a qualified, NADRA (North American Deck and Railing Association) certified, decking contractor is recommended.
- **REPAIR / REPLACE:** The ledger board does not appear properly attached to the building. Lag bolts are not spaced properly or end up in a straight line. In my opinion, this can result in a **ledger board failure** and a collapse. Corrective action by a qualified, NADRA (North American Deck and Railing Association) certified, decking contractor is recommended.
- **REPAIR / REPLACE:** Beams are relying on shear strength of bolts through the posts and not resting on top of posts and/or with proper fastening hardware. As wood ages, this connection is prone to failure. It is not possible to predict if or when failure will occur. There are special metal brackets designed to help support these beams. Corrective action by a qualified, NADRA (North American Deck and Railing Association) certified, decking contractor is recommended.
- **REPAIR / REPLACE:** The hold down tension brackets are missing, damaged, or improperly installed. These help to hold the deck to the buildings structure. Corrective action by a qualified, NADRA (North American Deck and Railing Association) certified, decking contractor is recommended.
- **REPAIR / REPLACE:** The stringers are not properly supported by a header board, the bottom of the stringers are not on a proper landing or footing support. This increases the potential for failure that can lead to falls or injury. Corrective action by a qualified, NADRA (North American Deck and Railing Association) certified, decking contractor is recommended.

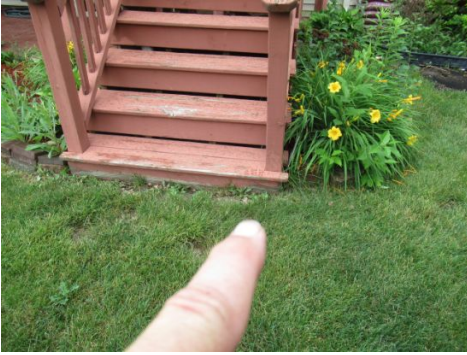


ledger board flashing not found / improper bolt pattern



beams straddle posts





stingers not on solid surface



guarding not graspable

#### 9. Porches, Entrances, Steps, Balconies - Condition

##### LIMITATIONS/MATERIALS/COMMENTS:

- Front entrance/porch - concrete

##### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection.

# GARAGE: ATTACHED

## 1. Limitations

### LIMITATIONS/COMMENTS:

- Garage door openers are not tested for down force resistance and reversal as recommended by manufacturers. If not properly adjusted, the door can be damaged using this method. Since I am aware of this problem and I have no wish to damage the property, I do not perform this operation.
- Operating keypads and/or remotes is not within the scope of the inspection. You will need to verify their functionality.
- Due to finished walls, the wall structure and insulation was not readily accessible for viewing.

### TYPE:

- Garage size: 2 car, Vehicle doors: 1 door, Automatic door operators: 1. Recommend all components and hardware be inspected annually and adjusted, repaired, or replaced as needed by a qualified garage door contractor.

## 2. Vehicle Door - Condition

### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection. The door was manually operated. It opened and closed freely and stayed in the open position when released. Recommend periodic manual operation to verify its proper operation.

## 3. Automatic Door Operator - Condition

### OBSERVATIONS:

- **REPAIR / REPLACE:** There is no reinforcement bracket. These help to prevent the arm of the automatic door operator from pulling out of the door that can lead to damage. Corrective action by a qualified garage door contractor is recommended.

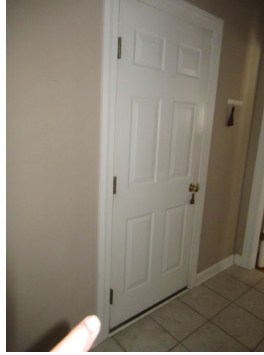


no reinforcing bracket for arm extension

## 4. Doors - Condition

### OBSERVATIONS:

- **REPAIR / REPLACE:** The door into the house has no automatic door closure hinges or mechanism. Based on today's best building practices a properly working door closing mechanism helps to provide **garage and house separation** for fire and fumes. Corrective action by a qualified carpenter is recommended.



no door closing hinges

#### 5. Walls & Ceiling - Condition

##### OBSERVATIONS:

- **REPAIR / REPLACE:** The fire separation wall has been altered. This can allow the easy spread of fire from the garage into the house. Corrective action by a qualified carpenter is recommended.



breach in the fire separation wall

#### 6. Attic Hatch - Condition

##### OBSERVATIONS:

- Not applicable. The garage is tucked under the house living area.

# STRUCTURE

## 1. Limitations

### LIMITATIONS:

• The structural components (Foundation walls/floor, Flooring structure, Wall structure, Roof structure, Footings, Stairs) were visually inspected from inside and outside the house. Due to accessibility and visual limitations such as but not limited to construction and style of the house, **grading**, vegetation, building & finish materials, **parging**, insulation, storage, belongings, the structural components of the foundation, floor, ceiling, walls could not be fully viewed. The basement is considered to be unfinished but foundation walls and ceiling structure were painted which can hide defects. Only readily accessible / visible portions of the foundation and structure were observed. Foundation surfaces and structural components hidden behind finishes, building materials, or belongings could not be observed by the inspector. Defects may be present at hidden foundation and structural areas that could allow water infiltration or may have been caused by structural movement.

### CONFIGURATIONS/TYPE/COMMENTS:

• The house is over a basement.

## 2. Foundation Wall/Floor - Condition

### LIMITATIONS/MATERIALS:

• The foundation walls and basement floor are **poured concrete**.

### OBSERVATIONS:

• OK: No indications of significant deficiencies were observed during the inspection of the viewable areas. The walls and floor appeared relatively straight and level. Typical but no major cracks were observed. For more info on foundation cracks [click here](#).

## 3. Below Grade Seepage - Condition

### OBSERVATIONS:

• **REPAIR / REPLACE:** Seepage was not observed during the inspection although there is the potential for it at the cracks in the foundation walls. Consultation with a qualified water seepage contractor is recommended for preventative options.

## 4. Flooring Structure - Condition

### LIMITATIONS/COMMENTS/MATERIALS:

• Posts: metal, Beams: metal, Joists: wood, Sub-flooring: OSB.

### OBSERVATIONS:

• OK: No indications of significant deficiencies were observed during the inspection of the viewable areas.

## 5. Wall Structure - Condition

### LIMITATIONS/COMMENTS/MATERIALS:

• The wall framing is wood.

### OBSERVATIONS:

• OK: No indications of significant deficiencies were observed during the inspection of the viewable areas.



## 6. Roof / Attic Structure - Condition

### LIMITATIONS/COMMENTS/MATERIALS:

- **Roof framing**: wood joists and **rafters**, Roof decking: OSB.

The roof structure was viewed from inside the attic. Accessibility and limitations for inspector safety prevented traversing the entire attic. Sections of the framing & sheathing could not be viewed due to construction and style of the house, building & finish materials, insulation, and/or belongings. Roofing structural components hidden or outside the view of the inspector could not be observed. Defects may be present that could allow water infiltration or may have been caused by structural movement.

### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection of the viewable areas. Viewing was limited.



example of roof structure

## 7. Footings - Condition

### OBSERVATIONS:

- Unable to determine. Grade, building and/or finishing materials did not make them readily accessible for inspection.

## 8. Stairs - Condition

### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection to the stair viewable structure.

# ELECTRICAL

## 1. Service Entrance - Condition

### TYPE/COMMENTS:

- Underground, 240 volts, 3 copper wires, located on the side exterior wall.

### OBSERVATIONS:

- No indications of significant deficiencies were observed during the inspection.



Service Entrance

## 2. Main and Service Panels - Condition

### OBSERVATIONS:

- **SAFETY:** One or more lugs in the neutral bus bar contain two or more conductors (wires) commonly called **double tap**. Typically, lugs are not designed for more than one wire. Wires can overheat or work loose creating arch & fire hazards. Two or more neutral wires under the same lug can lead to circuit isolation hazards under certain conditions. Although this is a common trade practice or was allowed at one time, it is not technically correct as prescribed by the manufacturer. Corrective action by a qualified electrician is recommended.



Service Panel



neutral bus bar > **double taps**

## 3. Wiring and Distribution - Condition

### TYPE/MATERIALS:

- Wiring - Copper; Method - Metal Conduit.

### OBSERVATIONS:

- **REPAIR / REPLACE:** Distribution wiring at one or more locations is not properly or reasonably protected. These are prone to mechanical damage which can lead to shock or fire hazards. Corrective action by a qualified electrician is recommended.





loose junction box/exposed wiring

#### 4. Bond / Ground - Condition

##### LIMITATIONS/COMMENTS/MATERIALS:

- Ground termination: **ground rod** at the Service Entrance panel, plumbing - on utility side of water meter, with **umper wire** over the water meter, metal conduit is being used as equipment grounding conductor (EGC).

##### OBSERVATIONS:

- No indications of significant deficiencies were observed during the inspection.

#### 5. Breakers / Receptacles - Condition

##### LIMITATIONS/COMMENTS/TYPE:

- Current best practice requires **AFCI** protection for all 15 and 20 amp branch circuits providing power to outlets in residential family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunroom, recreation rooms, closets, hallways, and similar rooms or areas. Upgrading with AFCI overprotection for your improved safety by a qualified electrician is suggested. Following the manufacturers instructions for testing is recommended. AFCI breakers/receptacles are not intentionally tested/tripped if the house is occupied or there are appliances, equipment, or other devices plugged into them.

##### OBSERVATIONS:

- **SAFETY:** Of the representative sampling of receptacles tested, certain receptacles read on the test meter to be 'open or bad ground' / 'open neutral' / or 'reverse polarity' / or did not have power. This is considered to be improperly wired and a shock, electrocution, or fire hazard. Corrective action by a qualified electrician is recommended.
- **SAFETY:** One or more receptacles did not properly respond to **GFCI** testing or GFCI protection is not installed at certain locations as prescribed by today's best building practice. This increases the potential for shock and electrocution hazards. Corrective action by a qualified electrician is recommended.
- **SAFETY:** One or more circuit breakers are not from the same manufacturer as the electrical panel. This is commonly called **mixed breakers**. This poses certain fire hazards if they do not seat properly as required by the panel's manufacturer. Corrective action by a qualified electrician is recommended.



Receptacle did not respond to GFCI testing



receptacle&gt;reversed polarity



no receptacles at kitchen island



mixed breaker / not AFCI

#### 6. Lights, Switches, Ceiling Fans - Condition

##### OBSERVATIONS:

- **SAFETY:** One or more closet light fixtures do not have shades or other means to protect the bulbs from storage. Incandescent bulbs pose a fire hazard from close by combustible materials and CFL bulbs can release mercury if broken. Closet lamp holder fixtures need to have bulb protection to help prevent combustible material contact and mechanical damage that can lead to shock or fires. Corrective action by a qualified electrician is recommended.

#### 7. Smoke-Carbon Monoxide (C/O) Alarms(Detectors) - Condition

##### OBSERVATIONS:

- **SAFETY:** Smoke detectors have a yellowish hue which indicates they are near, at, or beyond 10 years. Detectors that are 10 years or older are considered to be unreliable due to sensor degradation and a safety hazard from fire and smoke. Corrective action by a qualified party is recommended. For more info on smoke detectors [click here](#).

#### 8. Door Bell - Condition

##### OBSERVATIONS:

- **OK:** No indications of significant deficiencies were observed during the inspection.

# HVAC - FORCED AIR

## 1. Limitations/Comments - HVAC System

### HEATING SYSTEM: LIMITATIONS/COMMENTS

- During non-heating seasons when the heating system is not normally in use, a quick operation is conducted by turning up/down the temperature on the thermostat. This cannot ascertain the adequacy of the distribution system and amount of heat. Problems which may only show up during long term operation of the heating system may go undetected.,
- Only covers that a homeowner would remove during the course of normal and routine maintenance were removed to view the readily accessible / viewable components.
- The heat exchanger was not visible or readily accessible. A heat exchanger can only be fully inspected when the furnace blower, burner assemblies and/or other equipment are dismantled or removed from the furnace. This is beyond the Standard of Practice and this home inspection.
- The furnace has an induced draft fan which prevents testing of exhaust gases in the vent stack unless dismantling or destructive techniques are used. Destructive or dismantling techniques are not within the scope of this home inspection.
- A heat loss calculation, heat supply adequacy, or distribution balance is not performed. This is considered technically exhaustive and is beyond the scope of a home inspection.
- Thermostats are not checked for calibration or programming functions. You should have the seller provide instructions for programming or how to do so.
- 3-D Home Inspection Inc. or I do not warranty / guarantee the heating system. Things can break/stop working at any moment. Warranty programs are available which your Realtor will be able to provide to you for your consideration.

### COOLING SYSTEM: LIMITATIONS/COMMENTS

- The central **a/c** was running at the start of the inspection. The central a/c system was visually inspected. Dismantling of equipment was not done as it is not in the scope of the inspection or standards of practice.
- The indoor (evaporator) coil was not readily accessible or visible and could not be inspected. It is not within the scope of the home inspection to remove the cover.
- A heat loss or heat gain calculation was not done. The air flow was felt by hand at a representative sample of registers, no exhaustive air flow capacity testing was performed. This is beyond the scope of a home inspection.
- Thermostats are not checked for calibration or programming functions. You should have the seller provide instructions for programming or how to do so.
- 3-D Home Inspection Inc. or I do not warranty / guarantee the air conditioner. Things can break/stop working at any moment. Warranty programs are available which your Realtor will be able to provide to you for your consideration.

## 2. Furnace - Condition

### TYPE/DESCRIPTION/COMMENTS:

• The furnace was manufactured by ???? in ##### and is located in the basement. It is a mid-efficiency, forced air system, which distributes heat through ducts and registers. It exhausts gases out of the building through metal **flue** vent. According to most HVAC contractors gas burning furnaces have a life expectancy of 15 to 20 years when first installed. Since the home inspection is not technically exhaustive, the likelihood of failure is based on probability rather than testing or furnace tear down. This furnace is most likely in its 2nd quarter of life expectancy and the failure probability is low. Changing/cleaning the filter as needed will help to prolong the life of the furnace. Air duct cleaning is suggested prior to closing on the property, every five years thereafter, or as needed to help remove dust, allergens, and irritants. Testing for high **carbon monoxide** levels is outside the Scope of the Inspection nor required by the Standards of Practice. Recommend you give consideration to testing by a qualified BPI Building Analyst or similar. Annual maintenance by a qualified, **NATE** (North American Technician Excellence) certified, HVAC contractor will help to maintain the HVAC system and any remaining manufacture warranty.

### OBSERVATIONS:

• OK: No indications of significant deficiencies were observed during the inspection. The furnace was operated. It is recommended you verify with the seller when the furnace had its last annual maintenance checkup and request any and all documentation to support repairs to or replacement of key components. If not known or within the last year, servicing/repairs is recommended by a qualified, NATE certified, HVAC contractor.

## 3. Vents, Flues, Chimneys, Combustion air - Condition

### OBSERVATIONS:

- **REPAIR / REPLACE:** The crown cap is damaged, cracked, or does not properly overhang the chimney's sides. This may allow water to enter and damage the brick, flue and chimney or other building and finish materials. Corrective action by a qualified **CSIA** certified, Chimney Sweep is recommended.
- **SAFETY:** The furnace is mid-efficient with its vent pipe connector routed into a masonry chimney. Mid-efficiency furnaces requires an appropriate metal flue liner (preferably stainless steel as aluminum will deteriorate within a short time). As much as I can see, the chimney is not equipped with a metal flue liner. A lack of an appropriate metal liner can result in liner / chimney deterioration and other flue gas related problems. Corrective action by a qualified CSIA (Chimney Safety Institute of America) certified, mason contractor is recommended.
- **REPAIR / REPLACE:** There is no rain cap. This helps to keeps water, birds, animals out of the building and in the case of a wood burning fireplace, prevents sparks from escaping. Although not required, one is recommended. Corrective action by a qualified CSIA certified, Chimney Sweep is recommended.



crown>cracked



liner damage / no rain cap



#### 4. A/C (Main) - Condition

##### TYPE/DESCRIPTION/COMMENTS:

- The central air conditioning system was manufactured by ??? in ##### and is located at the rear exterior wall. It appeared to be a 2.5 ton air-to-air central air conditioner powered by 120/240 volts and utilizes the same ducts / registers as the furnace system. According to most HVAC contractors, when first installed, central air conditioners have a life expectancy of 15 to 20 years. Annual maintenance by a qualified, NATE certified, HVAC contractor will help to maintain the HVAC system and any remaining manufacture warranty.

INFORMATIONAL: R-22 refrigerant is specified on the data plate for this a/c system. R-22 is no longer being manufacture and is in short supply. Recharging the system with R-22 is becoming expensive and may become cost prohibitive. Tuning up the a/c system by hiring a qualified HVAC contractor is recommended to make sure the system doesn't have a small leak. This will help to reduce future costs and will help to prolong the life of your system. Mixing R-410A refrigerant with R-22 can cause damage that can be costly to repair/replace. Other refrigerants are available that are compatible with an R-22 system but may not be as effective. Budgeting to replace the entire central air conditioning system is recommended.

##### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection for the exterior cabinet, condenser, compressor, and fan. It is recommended you verify with the seller when the air conditioner had its last annual maintenance checkup and request any and all documentation to support repairs to or replacement of key components. If not known or within the last year, servicing/repairs is recommended by a qualified, NATE certified, HVAC contractor.

#### 5. Condensation System - Condition

##### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection.

#### 6. Distribution (Duct) System - Condition

##### LIMITATIONS/COMMENTS:

- Removing registers is considered to be dismantling. At the discretion of the inspector, registers may be removed and the duct viewed without exhaustive means such as a scope. Ductwork may contain undetected dust, fine dirt, pet dander, allergens, and other particles that potentially affect indoor air quality. This is especially true with panned joists commonly used for cold air returns. Determining causes for such conditions is outside the scope of the inspection and can vary from household to household and other conditions. Opinions vary on duct cleaning and how often. Recommend you ask the seller if/when the HVAC ducts were last cleaned. Cleaning ductwork prior to closing on the property should be given consideration on your part. For more information on EPA's information on duct cleaning [click here](#).

##### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection. Although the air flow adequacy and distribution balancing is outside the scope of the inspection, air flow was felt coming out of registers throughout the house but varied from room to room. It may be difficult (or not possible) to balance the air flow in certain rooms to desired levels. Trial and error testing of the damper(s) and registers may help to achieve desired levels. Repairs may be necessary to the equipment/ductwork if desired levels cannot be achieved.

#### 7. Thermostat, Filter, Humidified - Condition

##### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection. Clean furnace filters are vital to help keep the HVAC system clean and operating efficiently. A by-product of this is the air you breathe will be cleaner. A **humidifier** is installed. Humidifier inspections are not within the scope of the Standards of Practice. Generally speaking, humidifiers should be serviced and cleaned every year. Dirty filters should be changed to help prevent clogs from forming that can lead to leaks and damage to HVAC components. In summer when not in use, turn off the water valve, shut the damper closed (if applicable), and turn off the control. Adding a **filter cover** over the furnace filter opening is recommended. See ( [www.filterlock.net](http://www.filterlock.net) ) for more information.

# PLUMBING

## 1. Limitations/Comments

### LIMITATIONS/COMMENTS:

- Toilets, faucets and drain plugs for sinks, tubs, showers were visually observed. A representative sampling of faucets and fixtures were operated with faucets run for approximately 5 to 7 minutes and toilets flushed multiple times.
- Plumbing systems or components that are concealed, hidden, latent, or not readily accessible cannot be inspected.
- This inspection does not determine the quality of the water in this home including, but not limited to, lead levels or other contamination.
- Shut off valves for water or gas are not operated during the inspection. Valves are designed for emergency use and repairs only. These valves have a high tendency to leak when operated. It is not within the Standards of Practice to determine why they are off or to turn them on. They may be off for reasons other than winterizing.
- The overflow devices are not operated as part of the home inspection. These are considered back emergency devices to reduce overflow damage. Since they don't get used, they often dry up and have minor leaks. Since I am aware of this common problem and I have no wish to damage the property, I do not test these devices.
- The quality of the draw for the water heater flue cannot be evaluated beyond a simple match test. It is beyond the scope of the home inspection to make this determination.
- Sealed covers on sump and ejector pump pits aren't dismantled. The contents could not be seen. Removing covers can allow gases to enter the building. Running pumps when the pits are dry can damage the pumps.
- The water treatment devices (which includes, but is not limited to, the water softener and/or water filter units) are not tested as part of the standard home inspection. It not possible to determine the operation effectiveness or quality.
- Water is run from faucets approximately 5 to 7 minutes. Toilets are operated several times.
- Whirlpool tubs, if present, are operated for basic jet functions only, unless otherwise noted. Jets should not be operated unless they are covered by water.

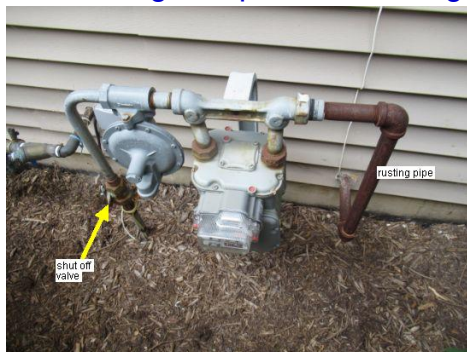
## 2. Fuel Storage / Distribution - Condition

### MATERIALS/COMMENTS:

- The main gas shut off is at the gas meter and is located at the side exterior wall. The fuel source is natural gas and utilizes black pipe.

### OBSERVATION:

- **REPAIR / REPLACE:** There is rust on the pipe going into the house from the gas meter. This side of the meter is the homeowners' responsibility. Corrective action by a qualified plumber is recommended to help prevent further rusting and possible damage or gas leaks.



Main gas shut off valve/rusting pipe

### 3. Water - Incoming Service, Supply Distribution - Condition

#### COMMENTS/MATERIALS:

- The main shut off / meter is located in the basement; Service entrance pipe is copper; Supply pipe is copper.

#### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection of the viewable areas.



main water shut off valve / meter

### 4. Pipe - Drain, Waste, Vent - Condition

#### LIMITATIONS/COMMENTS/MATERIALS:

- Plastic, of the viewable areas.

#### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection while running water. Leaks, damage, backups, or other defects were not observed. Scoping the waste pipe from the house to the city sewers by a qualified plumber is recommended as regular maintenance every 5 years or as needed. Only a video-scan of the interior of the waste pipes, underground or hidden, can fully confirm their actual condition. A sewer backup is a potentially nasty and expensive condition. It is recommended you ask the seller if / when the waste pipes were scoped and request documentation for said scoping. If the house has been vacant or a larger family moves in, it could result in clogged sewer pipes. Giving consideration to video scoping the waste lines to the city sewers prior to closing on the property is recommended.

### 5. Sump Pump - Condition

#### LIMITATION/COMMENTS/TYPE:

- The sump pump is submersible. Pumps and pressure switches or floats need occasional replacement. A pump's life expectancy is typically 5 to 7 years. If the age of the pump cannot be determined, replacement is recommended as a proactive measure. The discharge pipes/air vents on the outside of the house should be monitored in the winter for signs of freezing or back up which can result in the pump running constantly because the ice is keeping the water from draining out. Emergency backup sump pump systems are recommended.

#### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection. The cover was sealed and could not be removed without dismantling. Water could not be added to the pit to activate the pump system and determine its operating condition. You will have to monitor the sump pump system during a rain to evaluate its proper operation. For your added protection installing a high water alarm to alert you to pump or switch failure and installing an emergency backup pump is in case of power outage is recommended. It is recommended you check with your insurance provider for the limits covered by damages from pump failure.



## 6. Ejector Pump - Condition

### LIMITATIONS/COMMENTS/MATERIALS:

- The ejector pump is submersible. Pumps and pressure switches need occasional replacement. A pump's life expectancy is typically 5 to 7 years. If the age of the pump cannot be determined, replacement is recommended as a proactive measure.

### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection. The pump ran on its own during the inspection when running water from basement faucets. For your added protection installing a high water alarm to alert you to pump or switch failure and installing an emergency backup pump in case of power outage by a qualified plumber is recommended.

INFORMATIONAL: You should check with your insurance provider for the limits covered by damages from pump failure.

## 7. Hot Water System - Condition

### LIMITATIONS/TYPE:

- The water heater was built by/for ???? in #####. It is a natural draft, gas fueled, 50 gallon, using convection principles to exhaust the combusted gases through metal vent pipes or chimney liners. Maintenance per the manufactures instructions is recommended. This will help to extend its life and maximize its efficiency. Typical life expectancy is 8 to 12 years after installation.

Over time water heaters will fail. Upgrading to a high efficiency power vented or sealed combustion unit, either tanked or tankless is recommended. In addition to being more efficient, either type will help to eliminate the risk of exhaust gas **spillage** that exists with the current natural draft units.

The water temperature at any faucet is recommended to be no higher than 120 degrees-F otherwise scalding can occur quickly. To reduce the risk of scalding, turn the temperature down at the water heater to the manufacturers instructions. Be aware this will increase the potential for Legionella Bacteria growth commonly referred to as Legionnaires' disease. To minimize the risk of scalding and bacteria growth, installing a tempering valve by a qualified plumber and turning up the temperature on the control valve is an option. Otherwise, consultation with a qualified plumber is recommended. Testing for high carbon monoxide levels is outside the Scope of the Inspection nor required by the Standards of Practice. Recommend you give consideration to testing by a qualified BPI Building Analyst or similar.

### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection. The water heater was heating water, no damage, leaks, unusual noises, excessively **high water temperatures**, or other defects were observed. The water heater is near or at the end of its life expectancy. A water heater's life expectancy is typically 8 to 12 years. There is no way to predict if or when leaks or component failure will occur that will necessitate a water heater replacement. Things can break/stop working at any moment. Warranty programs are available which your Realtor will be able to provide to you for your consideration. You should expect/budget to replace it within a couple of years, possibly sooner before it can cause harm or property damage. If you hear noises coming from the water heater, replacement is recommended.

## 8. Vents, Flues, Chimneys, Combustion air - Condition

### OBSERVATIONS:

- **SAFETY:** The plastic escutcheon rings on top of the water heater are melted. This indicates past or intermittent spillage of exhaust gases commonly called **backdrafting**. Exhaust gases potentially contain carbon monoxide or other harmful gases. This can be caused by poor draft, blocks in the flue, or negative pressures caused by **mechanical fans** in the house. Corrective action by a qualified plumber is recommended.



melted escutcheon rings

#### 9. Water Softener - Condition

##### OBSERVATIONS:

- Water softeners / filters are not in the scope of the home inspection nor required to be inspected by the Standard of Practice. Regular inspection (for leaks) and maintenance (adding salt or filter cleaning / replacement ) will help to maintain water quality and functional flow. Servicing / maintenance per the manufacturer instructions is recommended.

#### 10. Shower / Tubs - Condition

##### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection. No damage, leaks, backups, or other defects were observed.

#### 11. Sinks-Kitchen/bathroom/Laundry/Wet - Condition

##### OBSERVATIONS:

- OK: No indications of significantly deficiencies were observed during the inspection for the bathroom sinks. Be aware one or more bathroom vanity tops do not have an overflow drain feature. Leaving the vanities unattended with the water running and the drain plug closed can lead to flooding. Removing the drain plug and replacing with a screen is one option.

#### 12. Toilets / Bidets - Condition

##### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection. Toilets were operated several times. They drained and recovered. No damage, leaks, backups, mechanical problems, or other defects were observed.

#### 13. Hose Faucet - Condition

##### LIMITATIONS/COMMENTS/TYPE:

- The anti-siphon feature helps to prevent contaminated water from being siphoned back into the potable water supply and the **rost free** feature shuts off water inside the house to help prevent pipes from freezing and bursting. Some hose faucets may have an integrated vacuum break, commonly called an anti-siphon, that cannot be seen. There is no way during the home inspection to make this determination. Leaks from the anti-siphon indicate a malfunction and replacement of the valve or faucet is necessary. Hoses, splitters, or other devices should be removed before winter so water can drain, helping to prevent freezing and bursting of the pipes.

##### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection. A sampling of faucets were operated. No leaks were observed and water drained out when the faucet was turned off.

# INTERIOR

## 1. Limitations/Comments

### LIMITATIONS/COMMENTS:

- This inspection does not verify/validate the square footage, number or types of rooms, or other features as specified on the MLS or other similar information resources. The interior areas, systems and components were visually inspected. A representative sampling of doors and windows were opened/closed. Screens/storm windows are not opened/closed.
- Occupants belongings limited viewing in multiple areas.
- At your final walk through or prior to the closing transaction check to make sure 1) windows & doors open/close freely, and there is no new damage, cracked glass, or have **moisture** / condensation between panes; 2) wall and ceilings are not damaged or have new stains especially on ceilings below sources of water; and 3) cabinets & counter tops are not damaged and open/close freely; and faucets and fixtures should be operated and checked for damage and leaks.
- Due to accessibility, visual limitations, time of day, cleanliness of the glass, weather conditions, seasonal changes or conditions, indicators of broken seals on insulated glass may go undetected during the limited time of a home inspection.
- Window treatments are not in the scope of the building inspection. They are not considered permanent or a necessary part of the house. They are operated solely as a courtesy to you but will not be operated at the discretion of the inspector or included in the report. Window treatments may hide window defects.

## 2. Doors - Condition

### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection. The doors open/closed freely and the locks worked.

## 3. Windows, Skylights, Glass - Condition

### LIMITATIONS/MATERIALS:

- The windows are **multi-pane**.

### OBSERVATIONS:

- **REPAIR / REPLACE:** Windows in one or more rooms have visual indicators of fogging, condensation streaks or droplets, desiccant beads, cracked glass, or rust between glass panes. This is often referred to as a 'blown seal'. Windows with **blown seals** no longer retains their insulating value. There may be more windows but not noticeable due to fogging that comes and goes. The windows are nearing the end of their life expectancy. Repairs will help to extend their life but you should expect to replace one or more in each of the upcoming years. Consultation with a qualified window contractor is recommended to determine the scope to repair or replace the windows.



condensation between glass panels

#### 4. Walls/Ceilings - Condition

##### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection. The overall condition is in good shape with some damage, cracks, blemishes, nail pops, failing drywall mud or corner beads, or similar. These appeared to be typical conditions most likely from naturally occurring movement and considered to be cosmetic. Corrective action will help to obtain a better quality finish but will not likely affect performance.

#### 5. Floor coverings - Condition

##### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection.

#### 6. Steps, Stairs, & Guardrails - Condition

##### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection.

#### 7. Cabinets / Countertops - Condition

##### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection. Typical wear and tear was observed and is cosmetic in nature.

# FIREPLACE/CHIMNEY/WOOD BURNING STOVE

## 1. Mason Fireplace / Chimney- Condition

### LIMITATIONS/TYPE:

- The fireplace/chimney is masonry with a clay liner. It is fueled by natural gas with ceramic logs. Manually lit gas fireplaces are not operated as part of this inspection. Annual inspection by a Certified CSIA (Chimney Safety Institute of America) Chimney Sweep is recommended. If changing from gas to wood burning a level 2 fireplace/chimney inspection is required.

### OBSERVATIONS:

- **SAFETY:** There is a build up of creosote and debris in the fire box, smoke chamber and/or flue. This is a fire hazard. Servicing by a qualified, CSIA certified Chimney Sweep is recommended along with a Level 2 inspection.

Fireplaces, flues, chimney's and related features are often neglected and a fire hazard. To ensure fireplaces are safe to operate, the NFPA® (National Fire Protection Association) recommends a [Level 2 fireplace/chimney inspection](#) when there is a transfer of property. It is recommended you ask the seller if a level 2 inspection has been recently performed. Otherwise, a level 2 inspection/servicing is recommended by a qualified, CSIA certified, Chimney Sweep prior to closing on the property and before using the fireplace. A Level 2 inspection is considered technically exhaustive and beyond the scope of this inspection.

# INSULATION / VENTILATION

## 1. Attics

### ATTIC: LIMITATIONS/COMMENTS:

- The attics insulation and ventilation was viewed from inside. Accessibility and limitations for inspector safety prevented traversing the entire attic. Sections of the insulation and ventilation could not be viewed due to construction and style of the house, building & finish materials, insulation, and/or belongings. The condition of the insulation and ventilation hidden or outside the view of the inspector is unknown. Defects may be present that could allow air and heat loss or impede ventilation that can lead to building and finishing damage, rot, or mold.

## 2. Attic Insulation & Ventilation - Condition

### INSULATION: LIMITATIONS/COMMENTS/MATERIALS

- Fiberglass

### VENTILATION: LIMITATIONS/COMMENTS/MATERIALS

- Intake: **Soffit vents**; Exhaust: roof vents.

### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection of the viewable areas.



example of attic insulation

## 3. Ventilation (bathroom, range/microwave, dryer, laundry room, kitchen) - Condition

### LIMITATIONS/MATERIALS/COMMENTS:

- Venting for bathroom(s) were not readily accessible due to building or finishing materials. Their condition could not be determined. Current best practice calls for mechanical fan ducts to be insulated and terminated to the outside with a vent jack. Insulating ducts which run through unheated parts of the home will help to prevent air loss and the buildup of condensation inside the ducts. Condensation can cause damage to the duct, bath fan, and ceiling materials. For more information [click here](#).

### OBSERVATIONS:

- **REPAIR / REPLACE:** Ducts for one or more mechanical fans terminate in the attic such as a roof or soffit vent, or directly into the attic. Terminating inside an attic adds considerable moisture which can lead to condensation, rot, or potentially mold. This is most likely reason for the rusted roofing nail tips. Best building practice is for mechanical vent termination to be to the outside with a vent jack. Corrective action by a qualified insulation and ventilation contractor is recommended.



bathroom duct laying on attic floor

#### 4. Walls / floors / Ceiling Insulation & Air/Vapor/Moisture- Condition

##### MATERIALS: INSULATION AND VAPOR/AIR BARRIERS

- Unable to determine the insulation and vapor barrier. The finish materials did not make the walls readily accessible for inspection. Access was not found.

##### MATERIALS: HOUSEWRAP

- Unable to determine if a **housewrap**, commonly called Tyvek, or similar is present. The finish materials did not make it readily accessible for inspection.

##### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection of the viewable areas.

#### 5. Attic Hatch - Condition

##### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection. Adding weather stripping and/or insulation will help to reduce air/heat loss into the attic and utility costs.



# APPLIANCES

## 1. Limits/Comments

### LIMITATIONS/COMMENTS:

- According to the Standards of Practice, appliances are operated but only one cycle and not for a complete cycle or under real load applications. How well the appliance functions or the quality it provides under real conditions is unknown. The inspection of appliances is limited to basic response of basic features only and to listen for unusual noises. Broilers, self-cleaning features are not operated/inspected.
  - Countertop appliances (including **microwaves**) are not operated as they are not built-in appliances.
  - Testing for **microwave leaks** was not performed as this is considered technically exhaustive and outside the Scope of the Inspection and the Standard of Practice.
  - At the final walk through or prior to the final closing, you should operate the appliances to verify their proper operation.
  - 3-D Home Inspection Inc. or I do not warranty / guarantee any appliance as to their operation. Warranty programs are available which your Realtor will be able to provide to you.
- 3-D Home Inspection, Inc does not check for recalled appliances. It is strongly recommended you check for manufacturer's recall information by either registering all appliances in the home with their respective manufacturer, or researching the appliances online at cpsc.gov.

## 2. Range - Condition

### TYPE/LIMITATIONS:

- Free standing, fueled by gas with an isolation (on/off) valve behind the appliance. Gas burning appliances are not moved out. Doing so may damage the gas flex lines or finish materials. Testing for high carbon monoxide levels is outside the Scope of the Inspection nor required by the Standards of Practice. Recommend you give consideration to testing by a qualified BPI Building Analyst or similar.

### OBSERVATIONS:

- **SAFETY:** The **anti-tip bracket** is missing or not working properly. A missing or non-functioning bracket is an injury/scalding hazard should the range tip and fall or cause juices to splash. Corrective action by a qualified appliance handyman is recommended. For more information [click here](#).

## 3. Refrigerator - Condition

### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection. Both the refrigerator and freezer were cold and the water and ice dispenser worked. Due to time limitations, it could not be determined whether the ice maker was making ice.

## 4. Microwave - Condition

### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection. The microwave along with its fan and light were operated. The filter should be checked regularly and cleaned or replaced as they collect grease, creating a potential fire hazard.
- Be aware, the microwave is installed to recirculate the exhaust back into the room. Although this was an allowed practice, today's best building practice is to vent to the outside. This will help to remove gasses which potentially contain carbon monoxide, odors, heat, and steam that can develop when you're preparing a meal. Consultation with a qualified contractor is recommended for options to install venting to the outside. For more information on venting [click here](#).

## 5. Dishwasher - Condition

### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection. The dishwasher was run through a rinse or short cycle. No unusual noises, leaks, or other defects were found.

#### 6. Garbage Disposal - Condition

##### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection. The **garbage disposa** was operated with water and ice only. You will have to evaluate its operation with food.

#### 7. Cloths Washer - Condition

##### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection. The **clothes washer** is showing signs of wear and tear and was run through a short cycle. Water drained, no leaks, damage, unusual noises, or other defects were observed.

#### 8. Dryer - Condition

##### TYPE/LIMITATIONS/COMMENTS:

- Fuel source: gas, black pipe, with an isolation (on/off) valve. Gas burning appliances are not moved out. Doing so may damage the gas flex lines or finish materials.

##### OBSERVATIONS:

- OK: No indications of significant deficiencies were observed during the inspection. The dryer is showing signs of normal wear and tear. The visible dryer vent is inspected but the interior of the vent is excluded. Lint build-up inside can increase drying times, reduce equipment life, and increase risk of fire. It is recommended the dryer vent be cleaned prior to closing (unless recently cleaned) and as regular maintenance, twice a year or as needed, to help reduce the chance of fire. For more info on dryer vents [click here](#).

#### 9. Bathroom Exhaust - Condition

##### OBSERVATIONS:

- REPAIR / REPLACE: A **bathroom fan** was making an unusual noise. This indicates a malfunction that may prevent the removal of moisture and other pollutants. Corrective action by a qualified contractor is recommended.

# ENVIRONMENTAL

## 1. Limitations

### LIMITATIONS:

- Pest, animal, and insect inspection was not performed. It is not within the scope of the standard home inspection, excluded in our inspection agreement, and not a requirement of the Standard of Practice for home inspectors to inspect. As a courtesy, observations will be discussed and included in the report at the sole discretion of the inspector but not to be considered as part of the official report and to be used for informational purposes only. You are encouraged to have a pest/termite inspection performed by a certified specialist prior to the close of the inspection contingency period.
- Environmental inspection or testing was not performed for such things as, but not limited to **radon**, asbestos, **lead pipe** or paint. It is not within the scope of the standard home inspection, excluded in our inspection agreement, and not a requirement of the Standard of Practice for home inspectors. As a courtesy, observations will be discussed and included in the report at the sole discretion of the inspector but not to be considered as part of the official report and only to be used for informational purposes only. You are encouraged to have environmental inspections performed by licensed, certified specialists especially if houses were built prior to 1980, prior to the close of the inspection contingency period.
- Mold inspection was not performed. It is not within the scope of the home inspection, excluded in our inspection agreement, and not a requirement of the Standard of Practice for home inspectors. As a courtesy, observations will be discussed and included in the report at the sole discretion of the inspector but not to be considered as part of the official report or legal advice and only to be used for informational purposes only. You are encouraged to have a mold inspection / testing performed by a certified mold inspector prior to the close of the inspection contingency period.

### COMMENTS:

- The following sections are not in the scope of the home inspection or required by the Standard of Practice for Home Inspectors. This is only provided as a courtesy and to inform you for standard of care purposes. There may be defects in topic sections below but not observed during the inspection. It is in your best interest and part of your due diligence to investigate these further and/or make arrangements for specialists in these areas to inspect/test.

## 2. Radon - Condition

### TYPE:

- An active radon mitigation system present:
  - A blower fan is installed in/at an exterior wall. Periodic inspection is recommended for proper operation.
  - There is a manometer (U-shaped tube with a colored liquid inside) on the radon pipe in the basement. If the liquid levels in the glass tube of the gauge is a "U" shape and not a "J" shape then the fan is not properly working. The gauge is not an indicator of radon levels.
  - The sump pump pit should be sealed with a sight glass to view inside the pit. This is done to prevent radon gases from entering the building and to see the sump pump and components. If the seal is damaged or broken then repair / replacement is recommended to reseal the plastic cover.
  - The Illinois Emergency Management Agency's Division of Nuclear Safety (DNS) recommends testing radon levels every two years even with a mitigation system to make sure it is working as intended.

### OBSERVATION:

- N/A: Radon test will be performed by Qualified Radon Measurement contractor. In most cases, the report will be available within one business day after the monitor(s) is picked up. Testing every two years is recommended by IEMA (Illinois Emergency Management Agency) to verify radon is not above the recommended action level.



active radon mitigation pipe



manometer for radon mitigation system

### 3. Wood Destroying Organisms - Condition

#### OBSERVATIONS:

- N/A: See limitations above.

### 4. Mice / Bats - Condition

#### OBSERVATIONS:

- **REPAIR / REPLACE:** This inspection excludes any and all conditions associated with pests and insects. However, there are indicators (holes in attic fiberglass insulation) that suggests mice activity. In my opinion, this is not uncommon but is considered a health issue. This inspection could not determine if they are active or if other corrective measures have taken place. If corrective measures have been performed, its effectiveness is unknown. It is unknown how much damage is present to building or finishing materials. You should ask the seller if any remediation has been performed and when. If not or not performed recently, further evaluation by a qualified pest/insect control specialist is recommended. If the presence of mice is confirmed then remediation to eradicate them and consultation with a qualified general contractor is recommended to determine the extent of damage to the building with an estimate to repair.

### 5. Insects - Condition

#### OBSERVATIONS:

- N/A: See limitations above.

### 6. Animal - Condition

#### OBSERVATIONS:

- N/A: See limitations above.

### 7. Mold - Condition

#### OBSERVATIONS:

- N/A: See limitations above.

### 8. Asbestos - Condition

#### OBSERVATIONS:

- N/A: Not applicable based on construction practices when the house was built.

### 9. Lead Pipe - Condition

#### OBSERVATIONS:

- N/A: See limitations above.

### 10. Lead Paint - Condition

#### OBSERVATIONS:

- N/A: Not applicable based on construction practices when the house was built.

## 11. Indoor Air Quality

### OBSERVATIONS:

- N/A: See limitations above



## Glossary

Term	Definition
A/C	Abbreviation for air conditioner and air conditioning
AFCI	Arc-fault circuit interrupter: A device intended to provide protection from the effects of arc faults by recognizing characteristics unique to arcing and by functioning to de-energize the circuit when an arc fault is detected. AFCI overprotection are currently required by the National Electric Code (NEC) although at the time of the buildings construction the Authority Having Jurisdiction (AHJ) may not have required them. This information is unknown for the writing of this report
Anti-tip bracket	Anti-tip brackets help to prevent freestanding ranges, stoves, and ovens from tipping or flipping over should the door be used as a step or when placing a hot, heavy tray or pan on it. Any of these appliances that tip or flip can crush, scald, or burn anyone.
Architectural asphalt	This type of roofing material has an estimated life span of approximately 25 to 30 years when first installed. Some shingles are manufactured to last up to 35 years. Various conditions, such as weather, installation, and roof design can affect the longevity of this type roof cover. It is not within the scope of this inspection to determine the remaining life expectancy or its material make-up.
Backdrafting	Backdrafting pushes harmful and toxic gases into your home, creating unsavory smells as well as not allowing the fireplace to perform properly. A variety of problems can cause backdrafting such as blocked, damaged, or clogged components, environmental issues, poor design, negative pressures, poor wood quality, and so on. Backdrafting should not be taken lightly.
Bathroom fan	Bathrooms are notorious for excess humidity and odors. Improperly managed moisture can lead to mold, creating health concerns and damaging expensive-to-repair finishes. Fan covers/grills need to be regularly cleaned to help allow moisture to be removed. Dirty covers will reduce air flow to that is necessary to remove this moisture/steam. This can cause a concentration of moisture resulting in premature failure of the paint or wallpaper, mildew or mold, and/or rot.
Blown seals	Blown seals can be caused from manufacturing defects or improper installation, but the most common reasons are the sun and age. Sunshine can be the biggest culprit causing a daily expansion and contraction of the window panes that puts undue stress on the seal. It is not a question of if, it's a question of when blown seals will occur. There may be blown seals but not easily seen. Replacement is not a priority from an opening/closing functional standpoint. Replacement of one or more older windows should be expected every year until all are replaced.

Brick veneer	Brick veneer is non load bearing, typically only one brick thick and has a gap between the inner face of the brick and the wall sheathing. Weep holes are provided on the bottom layer usually every third or fourth brick. This design will allow wind driven rain that penetrates the brick to run down the inner brick facing and exit out the weep hole. Weep holes should not be blocked. The brick surface should be inspected for deterioration / damage / cracks / efflorescence / spalling / damaged mortar once a year. The metal lintels holding the brick above windows and doors needs to be kept free from rust, The mortar of the brick window sills needs to be monitored for failure. Most problems associated with this siding material are installation defects, rather than deficiencies with the materials themselves. This will allow for early detection of any problems, so they may be fixed before they turn into major problems.
Brittle shingles	Brittle shingles indicate a roof in the later stage of its useful life. The roof may be leaking but not yet visible. The roof should be inspected once if not twice a year for damage, especially after sever weather. Repairs may help to extend the life of the roof but you should expect to replace the roof within a few years.
CSIA	Chimney Safety Institute of America
Carbon monoxide	Carbon monoxide is an odorless, colorless gas that can cause illness, poisoning, or death.
Caulk failure	Caulk is a sealant to fill gaps that can allow water, insect, or rodent intrusion. Typical areas of caulk use is: window & door trim (depending on the type of siding), change of materials or directions, and wall penetrations of utilities, equipment, or plumbing/electrical components.
Clothes washer	Best practice with washers is 1) to have a floor pan underneath with a water sensor that can help to contain and sound an alarm should there be water in the pan from a leak, and 2) to have water supply hoses that are stainless steel braided that are less likely to burst.
Concrete	It is not uncommon for paved surfaces to experience damage such as cracks, deterioration, or settlement. In fact, most paved surfaces will develop cracks in the first few year due to curing and settlement. Cracks less than 1/4-inch wide that do not exhibit vertical displacement of a 1/4-inch are generally not considered to be a trip hazard. If the conditions above are caught in the early stages of development, then repairs are typically easy to perform.
Corrective action	Further evaluation of the system and components is recommended. Repairs, replacement, or servicing should be performed by a qualified contractor in the respective trade who may also identify additional defects or recommend upgrades that could affect your evaluation of the property. It is recommended you request from the seller all receipts, warranties, and permits (as appropriate) for the work performed.
Curling	Shingles that are curling indicate that they are in the later stage of their useful service life and prone to wind or other mechanical damage. Leaks may be present but not visible. Repairs may help to extend its life but you should expect to replace the roof/flushing with a full tear off in the near term.

Double Tap	A double tap occurs when two or more conductors (wires) are connected under one lug (screw) inside a service panel. Most circuit breakers, neutral bus bars, and main lugs do not support double tapping, although some manufacturers do have some for that purpose. It is not within the scope of this inspection nor required by the Standards of Practice to make that determination.
Double taps	A double tap occurs when two or more conductors (wires) are connected under one lug (screw) inside a service panel. Most circuit breakers, neutral bus bars, and main lugs do not support double tapping, although some manufacturers do have some for that purpose. It is not within the scope of this inspection nor required by the Standards of Practice to make that determination.
Efflorescence	Efflorescence is a white salty deposit. As moisture moves through a concrete surface it picks up salt and after evaporation leaves it on the surface. In my opinion, efflorescence is not uncommon. In most cases it is not serious but does indicate moisture infiltration that should be corrected. Exact causes, severity, frequency can't be determined during a home inspection. Proper exterior water management that diverts water away from the foundation will help to reduce seepage but not necessarily stop it. Interior repairs are generally simple with a sealant or minor masonry repairs. If this basement area is going to be finished, you should seek consultation from a water seepage contractor.
Fasteners	Fasteners are a device such as nails, screws, bolts, and so on that closes or secures something in place.
Filter cover	A missing filter cover will allow unfiltered air to be pulled into the return duct and furnace burner compartment. Unfiltered air contains dirt, dust, and allergens that will make their way through the furnace and be blown through the ductwork. Dirt/dust will negatively affect the efficiency of the furnace. This is even more important if the furnace is located in an attic, crawl space, workshop, and so on. Allergens can cause poor indoor air quality. Clean furnace filters that are properly sealed are vital to help keep the HVAC system clean and operating efficiently. It will also help to keep the air you breathe cleaner.
Flashing	Flashing is a thin layer of waterproof material that keeps water from getting into places it doesn't belong. It is typically found at change of materials or change of material direction.
Flue	A flue-gas stack is a type of chimney. It is a vertical pipe, channel or similar structure through which combustion product gases called flue gases are exhausted to the outside air typically through the roof.
Frost free	The frost free feature shuts off water inside the house that allows the remaining water in the faucet to drain which helps to prevent freezing and bursting while the anti-siphon feature helps to prevent contaminated water from being siphoned back into the potable water supply should the city lose pressure in its plumbing system.
GFCI	A special device that is intended for the protection of the user by de-energizing a circuit, capable of opening the circuit when even a small amount of current is flowing through the grounding system.

Garage and house separation	Any wall or ceiling of an attached garage that is shared with an interior space, including non-livable areas such as the attic, should have drywall without openings and at least one coat of drywall compound (mud) over nails, screws and seams where sheets of drywall come together. Painting the walls/ceiling will help to maintain the integrity of the drywall, mudding, and taping.
Garbage disposal	If the garbage disposal stops working, a couple of things can be tried to get it working. First, push the red reset button on the underside of the disposal. If this doesn't work, take a hexagonal key, commonly called allen wrench, and insert it into the hole on the underside of the disposal and turn the allen wrench. This manually forces the disposal to turn and break up any hard food that caused the disposal to stop. If these don't work, a new disposal may be needed.
Grading	Rain water needs to be properly diverted away from the foundation. Ongoing exterior maintenance is recommended to help protect the structure and below grade areas from damage and leaks. This maintenance includes roofs, siding, gutters and downspouts, and grade.
Ground rod	The ground rod is part of the grounding electrode system that limits the electrical potential from lightning, surges, things like that. It helps connect the electrical system to the physical earth to limit the electrical potential.
High water temperatures	The Department of Energy recommends setting your water heater to 120°F (49°C) to save money on hot water, whereas the Consumer Product Safety Commission recommends the same temperature in order to help prevent scalding. Many manufacturers factory-set their water heaters to this temperature or have control settings for this temperature. To reduce the risk of scalding, turn the temperature down on the water heater's control to the manufacturers instructions, then retest the temperature. Keep making adjustments and testing until the recommended temperature is achieved.
Housewrap	Housewrap functions as a weather-resistant barrier, preventing rain from getting into the wall assembly while allowing water vapor to pass to the exterior.
Humidifier	High humidity levels can cause condensation and staining on windows. Hidden condensation in walls can lead to damage, rot, mold, and other related problems. Humidity levels need to be regularly monitored and adjusted as needed. If left to the typical homeowner, manual humidistats aren't adjusted. Automatic humidistats are available to help maintain proper humidity levels according to the exterior temperature.
Jumper wire	A jumper wire connects two normally separated metallic surfaces thus creating a bond. Bonding refers to the connection of two different metallic surfaces with a wire or other device to create an equal electrical potential between these two metallic surfaces.

Lead pipe	Many people have concerns over lead water pipes and the possibility of lead contamination in the water system. Ingestion of lead is a known health hazard and can cause illness including irreparable brain damage especially to babies and children. If this is a concern to you I suggest you have the water tested by a qualified water quality technician / lab and contact the local health department. You might also find useful information from the EPA and their websites. This inspection does not determine the quality of the water in this home including but not limited to lead levels or other contamination.
Leaks	Leaks can cause damage, rot, and other related problems to building and finishing materials that are potentially hidden or latent.
Ledger board failure	Ledger board failure is the number one reason for deck failure and collapse.
Lintels	Lintels are steel bars above windows and doors that support the bricks above. When properly installed the bars extend approximately 6 inches beyond each side of the window and door openings and are covered with mortar at the brick penetration. Lintels transfer the load above the window/doors to the solid wall sections on either side. Inadequate end bearing of the lintels may lead to failure.
Mechanical fans	Best building practice is for the ducts of a mechanical fan to be connected to the exterior of the building with a proper vent jack through 1) the side wall, 2) the roof, or 3) the soffit.
Microwave	According to the American Cancer Society, microwaves are absorbed by the water molecules inside food, which causes them to vibrate and produce heat. However, microwave ovens don't use x-rays or gamma rays – which would actually be harmful to humans. When used properly with the door closed, the microwaves are contained inside the microwave oven.
Microwave leaks	Microwave ovens are designed so that the microwaves are contained within the oven itself and created only when the door is shut and the oven is turned on. When microwave ovens are used according to instructions, there is no evidence that they pose a health risk to people. However, ovens that are damaged or modified could allow microwaves to leak out, creating a potential burn hazard to people nearby. Although burns from microwaves can occur, most burns are caused from the steam of cooking or the heat of the food.
Mixed breakers	Mixed breakers poses certain hazards for shock and fire if breakers are not properly designed for this panel and may void the UL listing of the panel and breakers. There are a handful of breakers that are designed to be used in other manufactures panels. This inspection cannot determine if any mismatched breakers are of those specifically designed for that application.
Moisture	Moisture can cause damage, rot, and other defects to building and finishing materials that may be hidden or latent.
Multi-pane	Multi-pane windows have two, sometimes 3, panes of glass with a seal around the perimeter to encase gas between the glass panes. This helps to improve the insulation value. In time, the glass can develop "blown seals" that causes fogging, condensation, or stains between the glass panes which can come and go making it difficult to detect.



NATE	North American Technician Excellence
Parging	Parging is a mortar-like surface coat applied on the foundation walls. It is considered to be the sacrificial material that can be relatively easy to repair or replace. On the exterior it not only provides cosmetic appeal but acts as a barrier to help prevent water seepage into the below grade areas of the house. On the interior it helps to draw water out of the foundation that would otherwise cause foundation deterioration. Repairs are best performed by a mason contractor.
Poured concrete	Cracking is not uncommon. In fact most foundations will develop cracks in its first few year due to curing and settlement. Cracks less than 1/4" that do not exhibit any vertical or horizontal displacement are generally not regarded as material structural defects but are problematic regarding water seepage. Foundation cracks should be inspected regularly for movement and water seepage. Appropriate corrective action should be taken as needed by a qualified concrete contractor. <a href="https://www.us-bes.com/blog/homeowners-guide-on-concrete-foundation-cracks?ss_source=sscampaigns&amp;ss_campaign_id=6054a8c4163059526b23cb65&amp;ss_email_id=6054ad82a3f544431e829740&amp;ss_campaign_name=Guide+on+Concrete+Foundation+Cracks&amp;ss_campaign_sent_date=2021-03-19T13%3A57%3A34Z">https://www.us-bes.com/blog/homeowners-guide-on-concrete-foundation-cracks?ss_source=sscampaigns&amp;ss_campaign_id=6054a8c4163059526b23cb65&amp;ss_email_id=6054ad82a3f544431e829740&amp;ss_campaign_name=Guide+on+Concrete+Foundation+Cracks&amp;ss_campaign_sent_date=2021-03-19T13%3A57%3A34Z</a>
Radon	Radon gas is a colorless, odor less gas that can lead to lung or other forms of cancer. It is the second leading cause of lung cancer behind cigarette smoke. It comes up through the cracks of the earth and can enter a building no matter the foundation i.e. basement, crawl space, or slab.
Rafters	Rafters are part of the structural framing for the roof. They are the sloped boards of the roof framing to which the roof decking is nailed. Rafters support the weight of the roof as well as dead loads such as snow, and transfer the load to the exterior walls. Rafters are held in place by joists or rafter ties to stop them from collapsing and spreading outward.
Repairs	Further evaluation / servicing, repairs, or replacement should be performed by a qualified contractor in the respective trade who may also identify additional defects or recommend upgrades that could affect your evaluation of the property. Receipts, as well as warranties and permits (as appropriate) for the work performed should be provided by the seller.
Roof framing	Roof framing is typically comprised of rafters/joists or trusses, which are the sloped members to which the roof deck is nailed and ceiling joists or rafter ties which are the horizontal members. This framing is attached to the exterior walls.
Seepage	Seepage is water infiltration into the building typically below grade that can cause damage, rot, and other related problems to belongings or building and finishing materials that is potentially hidden or latent.

Soffit vents	Soffit vents are typically installed on the roof's overhang at eaves. It is common for them to clog due to paint or airborne dirt which will reduce the attic's ventilation. This condition increases the buildup of heat or moisture that can cause damage, rot, mold to building and finishing materials in the attic along with increasing the potential for premature shingle failure. Annual inspection, cleaning, or replacement is recommended by a qualified contractor.
Spillage	Gas burning appliances create exhaust gases which can contain carbon monoxide or other gases due to incomplete combustion that can lead to illness or death. Spillage of exhaust gases can be caused by high winds pushing gases back down a vent, blockages in the vent, improper vent methods or materials, or negative pressures caused with the use of a fireplace, or fans such as but not limited to: dryers, bath fans, rangehood/microwave fans, whole house fans, power attic fans.
Valley	The internal angle formed by the junction of two sloping sides of a roof.
Vinyl siding	Most problems associated with this siding material are installation defects, rather than deficiencies with the materials themselves. Securing the siding too tight and a lack of moldings and trim pieces where the siding butts other materials or changes direction, is one of the more common problems. Annual inspections, maintenance, and repairs as needed, will help extend the life span of this siding.
Wood	Wood is a commonly used in a variety of applications throughout the house. It is not within the Standards of Practice to determine the type, quality, or adequacy of wood.

### **3-D MAINTENANCE CHECK LIST**

Your home is your single largest investment of your lifetime. Below are just some measures to protect your investment. For more home maintenance tips and energy saving advice contact your home inspector. It is recommended that all repairs be performed by qualified handyman services or contractors in the respective trades.

After taking possession of your new home or property you should consider doing the following improvements:

#### **UPON TAKING OWNERSHIP:**

- Change the locks on all exterior doors, for security purposes.
- Install smoke detectors on any level of the home that does not have one, install carbon monoxide detectors within 15 feet of sleeping quarters and where any fossil fuels may be burned i.e. near heater, gas range, near garage entry's, near fireplaces, etc. If these devices are already present, change the batteries and make a note of when you did to schedule future battery replacements the same time next year or when needed.
- Install fire extinguishers near stoves, in garages, and keep one handy near fireplaces and woodstoves.
- Create a fire exit plan to evacuate your home or business in the event of fire or other emergency.
- Make repairs of any trip hazards that were not repaired prior to settlement to avoid possible injury.
- Review your inspection report for any main shutoff location of water, gas, and electrical systems

#### **MONTHLY:**

- Check that your fire extinguishers are fully charged.
- Remove and replace heating and cooling filter elements. If they are the reusable type just clean and replace.
- Inspect and clean electronic air cleaners and humidifiers.
- Bleed the radiator valves if you have hydronic heating systems in the home.
- Clean your gutters and downspouts to ensure proper water flow.
- Check plumbing fixtures for leaks, these are used many times daily and a leak can happen quickly.
- Check your water bill, sewer bill and energy bills for excessive costs. Often times these can point to a leak or even a failing electrical device, such as your refrigerator.

#### **SPRING AND FALL:**

- Check your roof and flashings for signs of damage.
- Check in your attic for evidence of leaks, make sure vents are not clogged, and level out the insulation if necessary. Often times when windy the insulation around your vents will move around.
- Trim back trees and shrubs away from the home.
- Check the basement for evidence of leaks.
- Check all walks for movement and repair any trip hazards that may develop.
- Clean and operate all windows and doors.
- Test all GFCI and AFCI devices installed for proper working condition.
- Shut off exterior hose bibs and remove hoses in the fall; turn back on in the spring.
- Test your TRP (temperature pressure relief) valve on your hot water heater.
- Inspect for the indications of vermin, termites and insects, treat as needed.
- Test your garage doors and clean and lubricate all moving parts.
- Clean or replace exhaust fan filters.
- Service, clean or inspect all major appliances per manufacturer recommendations.

#### **ANNUALLY:**

- Replace all smoke detector batteries and carbon monoxide detector batteries.
- Have all heating, cooling and water systems serviced and cleaned.
- Inspect chimneys and clean them.
- Examine all electrical panels and operate breakers to ensure they are not sticking **(DO NOT TAKE THE COVER OFF THE PANEL!)**
- If you have well water, have your well tested and have your pump and service tank inspected for leaks or evidence of wear.
- All homes are suspect of wood destroying insects (termites, carpenter bees, carpenter ants, etc.), have your home inspected annually by a professional and treated if necessary