



HOME INSPECTIONS, INC.



Building Inspection Report

555 Main St. Anywhere, USA



Inspection Date:
4/28/2015

Prepared For:
Mr. & Mrs. Smith

Prepared By:
ASI Home Inspection, Inc.
1230 Hawkins Court
Bartlett, IL 60103
630 289-4700 Office
Entity License Number:
451.000126

Report Number:
00000

Inspector:
Tony Infelise
Licensed Home Inspector
IL License Number: 450.000207 Expiration Date: 11/30/2016

Inspected by: RSR Date: 4/28/2015



Report Overview

THE HOUSE IN PERSPECTIVE

This is a 3-bedroom Ranch style single family home that is approximately 42 years old. The building was vacant during the inspection.

CONVENTIONS USED IN THIS REPORT

For your convenience, the following conventions have been used in this report.

Major Concern: a system or component, which is considered significantly deficient or is unsafe. Significant deficiencies need to be corrected and, except for some safety items, are likely to involve significant expense.

Safety Issue: denotes a condition that is unsafe and in need of prompt attention.

Repair: denotes a system or component which is missing or which needs corrective action to assure proper and reliable function.

Improve: denotes improvements, which are recommended but not required.

Monitor: denotes a system or component needing further investigation and/or monitoring in order to determine if repairs are necessary.

- The front of the building faces south.

SUMMARY

All of the repairs should be done by qualified, licensed (if applicable) professionals. Obtain work orders and receipts for your records. Please read the entire report.

Foundation

Repair: Two active seepage cracks were found along the back wall of the crawlspace. Signs of moisture were on the wall and on the crawlspace floor under the cracks.

This type and pattern of cracking is usually the result of concrete shrinkage as it cures and are very common and normal on concrete foundations. The one problem with these types of cracks is that they may leak. I recommend contacting a qualified waterproofing company for repairs. The only type of repair that I recommend is epoxy injection. This repair is fairly costly, but is considered permanent and companies that perform this repair usually offer lifetime warranties.

Sloped Roofing

Repair: The ridge cap shingles for the main section of the roof are missing and need to be installed. It's needed to seal the ridge and to prevent water from entering the building. Contact a qualified roofing contractor for repairs.

Repair: There is a large blue tarp that is installed on the roof of the building, directly over the garage. I was able to unscrew some of the wood boards that are holding in place to partially view under tarp and I could not see anything that was out of the ordinary. The shingles were installed and the roof deck was solid. I was also able to access the attic directly under this area and could not locate any leaking.

I recommend completely removing the tarp to view the entire area. I do not know why this area was covered, but one guess could be because of a leak coming in from the area where the ridge cap is missing and someone mistakenly thought it was from the garage roof area.

If there are no other problems found when the tarp is removed, all of the screw holes from the wood boards need to be sealed or the shingles replaced if you can match the shingles.

FYI: The shingle installer created a woven valley at the intersection between main roof and the front entry roof. Most shingle manufacturers do not recommend using laminated shingles in a woven valley. These shingles tend to be too dense to bend in a woven valley, where they may crack. Most recommend creating a cut valley.

So far this valley is lying flat with no cracking. If cracks appear in the future, these valleys will need to be repaired.

Gutters & Downspouts

Repair: Gutters and downspouts need to be installed on the roof. For some reason they were removed, most likely when the shingles on the roof were replaced, and were never re-installed.

Without gutters and downspouts, water will collect near the building where it may eventually enter the crawlspace.

Concrete Patio

Major Concern: Repair: The concrete patio has settled, creating a displacement in the center that can be considered a tripping hazard. Also it's back-pitched towards the building. This will cause water, snow and ice to drain near the foundation. At this point it looks as if this patio would not be a good candidate for concrete raising. I recommend contacting a qualified concrete contractor to remove and replace this patio.

Walkway

Safety Issue: Repair: The sidewalk near the front entry stoop has settled, creating step of nearly 12 inches tall. This is a tripping concern. This concrete has settled nearly 5" as is mostly likely not a candidate for concrete raising. The better solution would be to remove the sidewalk, re-level and compact the fill under the sidewalk and pour new concrete. Contact a qualified concrete contractor for repairs.

Garage

Safety Issue: Repair: The back of the garage ceiling is wide open the attic area above the building. This section of the garage ceiling needs to be enclosed to create a fire separation between the garage and attic. The idea is to prevent or slow the spread of a fire from the garage to the roof structure.

Safety Issue: Repair: The reinforcement bar for the top panel of the overhead garage door (OHD) is not installed. Most, if not all manufacturers will require a reinforcement bar be installed if a powered garage door opener is installed on the overhead door (see the manufacturers warning sticker on the middle panel of the overhead door). This bar prevents the top panel of the door from buckling under pressure. Contact a qualified OHD servicer for repairs.

Repair: I could not operate the overhead garage door opener during the inspection. The wires to the wall control button were cut and need to be repaired.

Repair: The body of the garage door opener needs to be sway-braced. It could be easily moved from side to side when pushed by hand.

Lot Drainage

Repair: Level grading was found along the north end of the building. This should be improved to promote the flow of storm water away from the structure. This can often be accomplished by adding topsoil. The ground should slope away from the house at a rate of one inch per foot for at least the first five feet. Try to keep at least four inches of clearance between the ground and the siding. Poor grading can allow water to enter the crawlspace area.

Concrete Porch

Repair: The concrete porch is cracking and has some fairly large chunks of concrete that are missing. The rusting metal rebar imbedded in the concrete is causing this. Metal will expand when it rusts and in this case the installer set the rebar too close to the surface of the porch.

At this point, you may be able to cut out the rusting rebar and patch the damaged areas. Also there are epoxies and concrete sealers/stains available that may help slow down the damage.

Asphalt Driveway

Repair: Overall the asphalt driveway is in fairly poor condition. It is cracking and spalling and has settled in a few areas. You may be able to seal it and leave it in place for a season or two, but eventually it will need to be torn out and replaced.

Electrical Panel

Safety Issue: Repair: The insulation on the right hand side aluminum service entrance cable (SEC) has melted. This side of the SEC overheated for some reason; either from missing its anti-oxidation paste or from a loose connection. Contact a qualified electrician to find out what caused this and to repair it as needed.

Safety Issue: Repair: The bond strap on the neutral bar needs to be installed (its screwed to the back of the electrical panel). This strap is designed to screw through the neutral bar and into the panel enclosure to physically tie all of the parts for the grounding system together. Without this strap the grounding system, in this case the metal conduit may not be able to clear a ground fault if a section of conduit happened to become energized. Contact a qualified electrician to install this bond strap. This is an easy repair, but one that is needed.

Central Air Conditioner Circuit

Safety Issue: Repair: A non-professional installation was found at the circuit for the central AC unit. The installer used non-metallic cable (Romex), which is typically not allowed in this jurisdiction and failed to use the proper cable connectors at the electrical panel and the service disconnect near the unit. Also the cable is wedged between the siding and the service disconnect housing where it extends into the crawlspace where it loosely extends towards the electrical panel.

Non-professional wiring is always a safety concern. This circuit needs to be torn out and properly installed by a qualified electrician.

Outlets and Switches

Safety Issue: Repair: Add GFCI protection to the kitchen outlets. A ground fault circuit interrupter (GFCI) offers increased protection from shock or electrocution by detecting electrical current leakage.

Repair: The dimmer switch to the hallway light fixtures is broken and needs to be replaced.

Smoke Detectors

Improve: Safety Issue: I recommend replacing all of the smoke detectors in the building. The National Fire Protection Association (NFPA) is an association made up of fire officials and other people committed to reducing the risk of fire through education and the development of fire safety codes. They recommend replacing the smoke detectors in the home if the units are 10 years old or older. The NFPA says that the failure rate of aging smoke detectors can be as high as 30%. This is great advice. I recommend replacing the smoke detectors in the home with new units. This way you will know the history of the smoke detectors in your home. Test the new units every month and change the batteries every 6 months to ensure proper operation.

Furnace

Safety Issue: Repair: All the sections of flue piping for the furnace need to be screwed together. If one of these sections happens to get knocked loose, the flue gasses will enter the home. Currently there are sections of piping that are just wedged together. Add the screws to tie all the sections together.

Safety Issue: Repair: A flexible appliance connector is installed on the gas line to the control valve of the furnace. Most municipalities and even the utility company (NICOR) require hard piping all the way up to the control valve. Appliance connectors can become damaged, especially in areas used for storage. This should be repaired to prevent any problems in the future.

Return Air Ductwork

Repair: The return duct on top of the furnace is loose and needs to be re-secured in place. I was able to open the return grill located on the hallway wall in front of the furnace room and see a fairly large open gap along the back of the return duct. When this is being repaired, you may want to ask the HVAC tech if there is any way a filter slot can be added on the return duct inside of the furnace room. The current location of the filter is very inconvenient.

Central AC System

Repair: A condensate line needs to be installed to direct water either to the sump pump in the crawlspace or to the exterior of the building. Currently the condensate line is just stubbed into the crawlspace and spills water on the crawlspace floor. Contact a qualified HVAC tech for repairs.

The exterior temperature was in the low 60's at the start of the inspection. Even though these were not the ideal conditions to test the system (high humidity and hot conditions are the best way to tell how well the AC system is cooling), it cycled properly and cooled the building.

Remember to change the filter regularly and have the system serviced annually to keep the unit operating as efficiently as possible.

FYI: The AC system is original, approximately 17 years old, meeting its typical average life span. Being a mechanical system, it is next to impossible to tell when this unit will fail, but at this age, it can happen at anytime. Budgeting for a replacement unit in the near future should be a priority.

Attic

Repair: There is no insulation at all over the laundry room. This area needs to be properly insulated.

Improve: The R-value is the rating of the insulations resistance to heat loss (the higher the R-value the better). The R-value in this attic is considered below today's standards. Typically we'd like to see a minimum of an R-30. This would require about 6" to 8" additional of fiberglass insulation.

This is called a discretionary improvement, meaning will you recover the cost of adding insulation in the anticipated time period you'll be living in the home. If you're only planning to live in the home 3-5 years, you may not recover the cost of adding the insulation, by reducing the homes energy costs. This is a question you have to consider when deciding on adding insulation.

Master Bathroom

Repair: The toilet in this bathroom is leaking. Water was found streaming out from the toilet flange when the fixture was flushed (viewed from the crawlspace). Contact a qualified plumber for repairs.

Hall Bathroom

Repair: The water supply to the toilet in this bathroom was off during the inspection and the toilet was very loose. This fixture could be easily swayed from side to side. Also judging by the water staining on the waste line for this toilet in the crawlspace, this toilet may be leaking.

This repair may be as simple as removing the toilet, replacing the wax seal and securing the toilet back into place or as difficult as replacing a broken toilet flange. A qualified plumber should repair this toilet.

Repair: Water was found leaking into the crawlspace from the area where the water lines to the mixing valve for the tub/shower stall stub through the floor structure. It looks as if there may be a problem with the mixing valve or the piping to the mixing valve. Contact a qualified plumber for repairs.

Water Heater

Safety Issue: Repair: An extension is needed for the pressure/temperature relief valve to safely direct hot water to the floor if the valve opens. This extension cannot have any reductions in size from the valve opening and needs to terminate within 6 inches of the floor. Add a properly sized extension as needed.

Safety Issue: Repair: A flexible appliance connector is installed on the gas line to the control valve of the water heater. Typically appliance connectors are not allowed for permanently installed gas-burning systems. Most municipalities and even the utility company (NICOR) require hard piping all the way up to the control valve. Appliance connectors can become damaged, especially in areas used for storage or high traffic areas. This should be repaired to prevent any problems in the future.

Laundry Room

Repair: The hot and cold water shut off valves in the laundry room need to be replaced. I tried opening the hot water valve (the handle to the cold water valve is missing) and water spilled out through the stem of this gate valve. I then shut the water off and could not operate the washing machine during this inspection.

Water Softener

Repair: There is an abandoned water softener inside the crawlspace, near the crawlspace access hatch that should be eliminated. So far it is intact and not leaking, but it should be removed before any problems occur.

Kitchen Sink

Repair: The faucet to the kitchen sink needs to be replaced. Water spilled out from in between the base and the handle when the water was operated and spilled onto the counter top. The water supply to this sink could not be operated during this inspection.

Sump Pump

Repair: The sump pump in the crawlspace has been removed. The water in the sump pit was spilling over the top rim of the pit and onto the crawlspace floor. This sump pump system does not have a typically drain tile system installed (it's basically a pit installed in the crawlspace floor), but it will pick up ground water and help keep the area dry. A sump pump needs to be installed.

Main Water Shut Off Valve (village shut off)

Repair: Water was found pooling around the main water shut off valve located outside of the building near the sidewalk (this is the shut off valve controlled by the village commonly called the Buffalo box). It looks as if the shut off valve may be leaking. I recommend contacting the public works department at the Village of Elk Grove to find out who is responsible for repairs and have it repaired as needed.

Closets

Safety Issue: Improve: I recommend replacing all of the incandescent light fixtures over the storage shelves in the closets with cool burning florescent fixtures. If storage stacked on these shelves is stacked on or near to the incandescent bulb it may overheat and cause a fire. These florescent fixtures are fairly inexpensive, very easy to install and are readily available at any home improvement store.

Interior Doors

Repair: The closet doors to the west bedroom are missing and need to be replaced.

Carpeting

Repair: All of the carpets in the building are worn and heavily stained and in my opinion, should be replaced.

THE SCOPE OF THE INSPECTION

All components designated for inspection in the Illinois Home Inspector Licensing Act and the ASHI® Standards of Practice are inspected, except as may be noted in the “Limitations of Inspection” sections within this report.

It is the goal of the inspection to put a homebuyer in a better position to make a buying decision. Not all improvements will be identified during this inspection. Unexpected repairs should still be anticipated. The inspection should not be considered a guarantee or warranty of any kind.

Please refer to the pre-inspection contract for a full explanation of the scope of the inspection.

WEATHER CONDITIONS

Dry weather conditions prevailed at the time of the inspection.

The estimated outside temperature was 61degrees F.

RECENT WEATHER CONDITIONS

Weather conditions leading up to the inspection have been relatively dry.

Please know that there is no such thing as a perfect house and not every defect will be found. Every effort will be made to point out all existing defects, starting with safety and major concerns and then concentrating with the maintenance issues, but expect to have to do repairs and to perform routine maintenance. Creating a home improvement fund would be a wise idea to offset any improvement cost that come up in the future and also to save up for major upgrades (new roof, upgrading improvements, the HVAC system, ect.)

Structure

DESCRIPTION OF STRUCTURE

Foundation:	•Poured concrete •The crawlspace was accessed and inspected
Columns:	•Wood main beam resting on concrete piers
Floor Structure:	•2x10 conventional floor joists w/ a plywood sub-floor
Wall Structure:	•Wood framed
Ceiling Structure:	•Joists
Roof Structure:	•2x4 engineered roof trusses w/ plywood roof sheathing

STRUCTURE OBSERVATIONS

No major defects were found in the accessible structural components of the house. Overall the building appears to be structurally sound. The walls and floors of the building are relatively plumb and level. There was nothing found that would indicate abnormal movement or settlement.



A few seeping cracks were found along the back wall of the crawlspace.

- Furniture and/or storage restricted access to some structural components.
- Engineering or architectural services such as calculation of structural capacities, adequacy, or integrity are not part of this home inspection.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

RECOMMENDATIONS / OBSERVATIONS

Foundation

Repair: Two active seepage cracks were found along the back wall of the crawlspace. Signs of moisture were on the wall and on the crawlspace floor under the cracks.

This type and pattern of cracking is usually the result of concrete shrinkage as it cures and are very common and normal on concrete foundations. The one problem with these types of cracks is that they may leak. I recommend contacting a qualified waterproofing company for repairs. The only type of repair that I recommend is epoxy injection. This repair is fairly costly, but is considered permanent and companies that perform this repair usually offer lifetime warranties.

LIMITATIONS OF STRUCTURE INSPECTION

- Structural components concealed behind finished surfaces could not be inspected.

Roofing

DESCRIPTION OF ROOFING

Roof Covering:	•Architectural asphalt shingles (gable roof)
Roof Flashings:	•Not visible
Roof Drainage System:	•No gutter installed
Method of Inspection:	•Walked on the roof

ROOFING OBSERVATIONS



The ridge cap shingles are missing along the entire length of the main roof.



I do not know why the tarp was installed. I was able to partially remove it to view some of the area. It needs to be completely removed and repaired if needed.

The average life of an asphalt shingled roof is **15 to 17 years**. Many factors can affect the average life like the exposure to the sun, the pitch of the roof (the steeper the better) and proper attic ventilation. Two layers of shingles maximum are recommended on the roof. More than two layers can put excessive stress on the roof's structure.

Overall the roof is in satisfactory condition with the shingles lying flat and sealing properly. Minor granule loss was observed on the face of the shingles. This is considered normal aging for this age and type of shingle.

In all, the roof coverings show evidence of normal wear and tear for a home of this age. The estimated age of this roof is 5 to 7 years old.

RECOMMENDATIONS / OBSERVATIONS

Sloped Roofing

Repair: The ridge cap shingles for the main section of the roof are missing and need to be installed. It's needed to seal the ridge and to prevent water from entering the building. Contact a qualified roofing contractor for repairs.

Repair: There is a large blue tarp that is installed on the roof of the building, directly over the garage. I was able to unscrew some of the wood boards that are holding in place to partially view under tarp and I could not see anything that was out of the ordinary. The shingles were installed and the roof deck was solid. I was also able to access the attic directly under this area and could not locate any leaking.

I recommend completely removing the tarp to view the entire area. I do not know why this area was covered, but one guess could be because of a leak coming in from the area where the ridge cap is missing and someone mistakenly thought it was from the garage roof area.

If there are no other problems found when the tarp is removed, all of the screw holes from the wood boards need to be sealed or the shingles replaced if you can match the shingles.

FYI: The shingle installer created a woven valley at the intersection between main roof and the front entry roof. Most shingle manufacturers do not recommend using laminated shingles in a woven valley. These shingles tend to be too dense to bend in a woven valley, where they may crack. Most recommend creating a cut valley.

So far this valley is lying flat with no cracking. If cracks appear in the future, these valleys will need to be repaired.

Gutters & Downspouts

Repair: Gutters and downspouts need to be installed on the roof. For some reason they were removed, most likely when the shingles on the roof were replaced, and were never re-installed.

Without gutters and downspouts, water will collect near the building where it may eventually enter the crawlspace.

LIMITATIONS OF ROOFING INSPECTION

- Estimates of remaining roof life are approximations only and do not preclude the possibility of leakage. Leakage can develop at any time and may depend on rain intensity, wind direction, ice build up, and other factors.
- Chimney/flue interiors that are not readily accessible are not inspected and could require repair.
- Roof inspection may be limited by access, condition, weather, or other safety concerns.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Exterior

DESCRIPTION OF EXTERIOR

Wall Covering:	•Vinyl siding
Eaves, Soffits, And Fascias:	•Aluminum
Exterior Doors:	•Metal front entry door •Sliding glass door to the back of the building
Window/Door Frames and Trim:	•Vinyl windows
Entry Driveway:	•Asphalt
Entry Walkway:	•Concrete sidewalk to the front entryway of the building
Overhead Garage Door:	•Steel OHD (1-car) •Automatic garage door opener installed
Surface Drainage:	•Level grading (north) •Graded away from the building
Patio:	•Concrete
Deck:	•Free standing wood deck built on-grade •Wood steps and stoop in front of the sliding glass door
Fencing:	•Chain link and wood fencing

EXTERIOR OBSERVATIONS

Seal the asphalt driveway every 2 to 3 years to prevent premature deterioration. Sealing every year may cause a buildup of sealant and actually start to peel.



The concrete patio is cracked and displaced and needs to be removed.

RECOMMENDATIONS / OBSERVATIONS

Concrete Patio

Major Concern: Repair: The concrete patio has settled, creating a displacement in the center that can be considered a tripping hazard. Also it's back-pitched towards the building. This will cause water, snow and ice to drain near the foundation.

At this point it looks as if this patio would not be a good candidate for concrete raising. I recommend contacting a qualified concrete contractor to remove and replace this patio.

Walkway

Safety Issue: Repair: The sidewalk near the front entry stoop has settled, creating step of nearly 12 inches tall. This is a tripping concern. This concrete has settled nearly 5" as is mostly likely not a candidate for concrete raising. The better solution would be to remove the sidewalk, re-level and compact the fill under the sidewalk and pour new concrete. Contact a qualified concrete contractor for repairs.

Lot Drainage

Repair: Level grading was found along the north end of the building. This should be improved to promote the flow of storm water away from the structure. This can often be accomplished by adding topsoil. The ground should slope away from the house at a rate of one inch per foot for at least the first five feet. Try to keep at least four inches of clearance between the ground and the siding. Poor grading can allow water to enter the crawlspace area.

Concrete Porch

Repair: The concrete porch is cracking and has some fairly large chunks of concrete that are missing. The rusting metal rebar imbedded in the concrete is causing this. Metal will expand when it rusts and in this case the installer set the rebar too close to the surface of the porch.

At this point, you may be able to cut out the rusting rebar and patch the damaged areas. Also there are epoxies and concrete sealers/stains available that may help slow down the damage.

Asphalt Driveway

Repair: Overall the asphalt driveway is in fairly poor condition. It is cracking and spalling and has settled in a few areas. You may be able to seal it and leave it in place for a season or two, but eventually it will need to be torn out and replaced.



The garage ceiling needs to be repaired.

Garage

Safety Issue: Repair: The back of the garage ceiling is wide open the attic area above the building. This section of the garage ceiling needs to be enclosed to create a fire separation between the garage and attic. The idea is to prevent or slow the spread of a fire from the garage to the roof structure.

Safety Issue: Repair: The reinforcement bar for the top panel of the overhead garage door (OHD) is not installed. Most, if not all manufacturers will require a reinforcement bar be installed if a powered garage door opener is installed on the overhead door (see the manufacturers warning sticker on the middle panel of the overhead door). This bar prevents the top panel of the door from buckling under pressure. Contact a qualified OHD servicer for repairs.

Repair: I could not operate the overhead garage door opener during the inspection. The wires to the wall control button were cut and need to be repaired.

Repair: The body of the garage door opener needs to

be sway-braced. It could be easily moved from side to side when pushed by hand.

LIMITATIONS OF EXTERIOR INSPECTION

- The inspection does not include an assessment of geological, geotechnical, or hydrological conditions, or environmental hazards.
- Screening, shutters, awnings, or similar seasonal accessories, recreational facilities and outbuildings are not inspected.

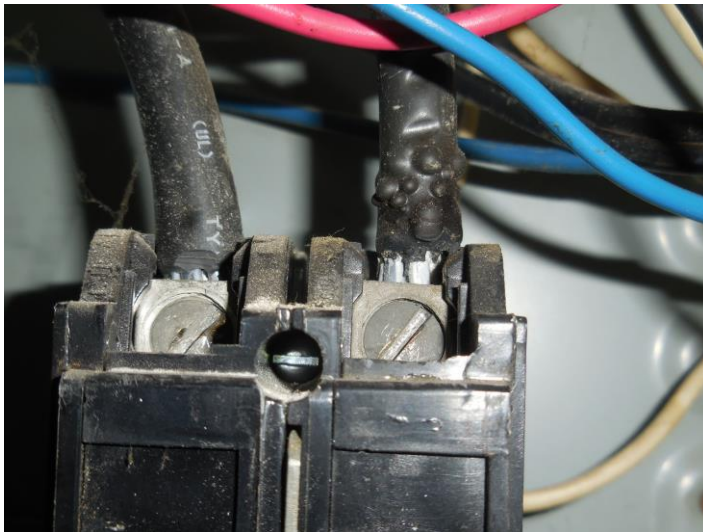
Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Electrical

DESCRIPTION OF ELECTRICAL

Size of Electrical Service:	•120/240v main service - service size: 100amp Murray panel and breakers
Service Drop:	•Underground
Service Entrance Conductors:	•Aluminum (#2awg)
Service Equipment & Main Disconnects:	•Main service rating 100amps •Breakers •Located: The storage room along the west end of the building
Service Grounding:	•Water pipe connection
Service Panel & Over-current Protection:	•Panel rating: 100amp
Distribution Wiring:	•Copper
Wiring Method:	•Wires in metal conduit
Switches & Receptacles:	•Grounded
Ground Fault Circuit Interrupters:	•Bathrooms •Exterior •Garage
Smoke Detectors:	•Present

ELECTRICAL OBSERVATIONS



The insulation of this service entrance cable overheated and melted for some reason.

RECOMMENDATIONS / OBSERVATIONS

Electrical Panel

Safety Issue: Repair: The insulation on the right hand side aluminum service entrance cable (SEC) has melted. This side of the SEC overheated for some reason; either from missing its anti-oxidation paste or from a loose connection. Contact a qualified electrician to find out what caused this and to repair it as needed.

Safety Issue: Repair: The bond strap on the neutral bar needs to be installed (its screwed to the back of the electrical panel). This strap is designed to screw through the neutral bar and into the panel enclosure to physically tie all of the parts for the grounding system together. Without this strap the grounding system, in this case the metal conduit may not be able to clear a ground fault if a section of conduit happened to become energized.

Contact a qualified electrician to install this bond strap. This is an easy repair, but one that is needed.

Smoke Detectors

Improve: Safety Issue: I recommend replacing all of the smoke detectors in the building. The National Fire Protection Association (NFPA) is an association made up of fire officials and other people committed to reducing the risk of fire through education and the development of fire safety codes. They recommend replacing the smoke detectors in the home if the units are 10 years old or older. The NFPA says that the failure rate of aging smoke detectors can be as high as 30%. This is great advice. I recommend replacing the smoke detectors in the home with new units. This way you will know the history of the smoke detectors in your home. Test the new units every month and change the batteries every 6 months to ensure proper operation.



Non-professional wiring was found at the circuit for the central AC system.

Central Air Conditioner Circuit

Safety Issue: Repair: A non-professional installation was found at the circuit for the central AC unit. The installer used non-metallic cable (Romex), which is typically not allowed in this jurisdiction and failed to use the proper cable connectors at the electrical panel and the service disconnect near the unit. Also the cable is wedged between the siding and the service disconnect housing where it extends into the crawlspace where it loosely extends towards the electrical panel. Non-professional wiring is always a safety concern. This circuit needs to be torn out and properly installed by a qualified electrician.

Outlets and Switches

Safety Issue: Repair: Add GFCI protection to the kitchen outlets. A ground fault circuit interrupter (GFCI) offers increased protection from shock or electrocution by detecting electrical current leakage. **Repair:** The dimmer switch to the hallway light fixtures is broken and needs to be replaced.

LIMITATIONS OF ELECTRICAL INSPECTION

- Electrical components concealed behind finished surfaces are not inspected.
- Only a representative sampling of outlets and light fixtures were tested.
- Furniture and/or storage restricted access to some electrical components, which may not be inspected.
- The inspection does not include remote control devices, alarm systems and components, low voltage wiring, systems, and components, ancillary wiring, systems, and other components that are not part of the primary electrical power distribution system.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Heating

DESCRIPTION OF HEATING

Heating System Type:	•Forced air furnace •Manufacturer: Janitrol •Model Number: GTD070-3A
Energy Source:	•Approximate Age: MFD in 2002 •Unit size: 70,000btu
Vents, Flues, Chimneys:	•Gas
Heat Distribution Methods:	•Metal; B-vented
Other Components:	•Ductwork
	•Digital thermostat

HEATING OBSERVATIONS

Due to the position of the burners, the heat exchanger could not be viewed.

The only way to completely view the heat exchanger is to remove the blower motor and the burners and open the plenum (the ductwork directly on the supply side of the furnace). This is beyond the scope of this inspection

The average life expectancy of a forced air furnace is **17 to 20 years**. The most important factor in prolonging the life of the furnace is regular maintenance and changing or cleaning the filters monthly. I recommend that you have the furnace cleaned and serviced when you move in and then keep up on the regular maintenance. I also suggest you purchase and install carbon monoxide detectors. They are relatively inexpensive and readily available at most home improvement stores



The return duct above the furnace needs to be re-secured in place and cleaned.

gap along the back of the return duct.

When this is being repaired, you may want to ask the HVAC tech if there is any way a filter slot can be added on the return duct inside of the furnace room. The current location of the filter is very inconvenient.

RECOMMENDATIONS / OBSERVATIONS

Furnace

Safety Issue: Repair: All the sections of flue piping for the furnace need to be screwed together. If one of these sections happens to get knocked loose, the flue gasses will enter the home. Currently there are sections of piping that are just wedged together. Add the screws to tie all the sections together.

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Return Air Ductwork

Repair: The return duct on top of the furnace is loose and needs to be re-secured in place. I was able to open the return grill located on the hallway wall in front of the furnace room and see a fairly large open

LIMITATIONS OF HEATING INSPECTION

- The adequacy of heat supply or distribution balance is not inspected.
- The interiors of flues or chimneys that are not readily accessible are not inspected.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Cooling

DESCRIPTION OF COOLING

Central System Type:	•Central air conditioning •Manufacturer: Goodman •Model #: CK18-1B
Energy Source:	•Approximate age: MFD in 1998 •Capacity: 1 ½ -ton •Electricity •240v power supply

COOLING

The average life expectancy of an air conditioning compressor (the heart of the A.C. system) is **15 to 17 years**. Keep the cooling coils of the condenser clean and change or clean the filter at the furnace once a month. Annual servicing is recommended to keep the unit running as efficient as possible.



The condensate line for the AC system needs to be re-routed either outside or to the sump pit in the crawlspace.

RECOMMENDATIONS / OBSERVATIONS

Central AC System

Repair: A condensate line needs to be installed to direct water either to the sump pump in the crawlspace or to the exterior of the building. Currently the condensate line is just stubbed into the crawlspace and spills water on the crawlspace floor. Contact a qualified HVAC tech for repairs.

The exterior temperature was in the low 60's at the start of the inspection. Even though these were not the ideal conditions to test the system (high humidity and hot conditions are the best way to tell how well the AC system is cooling), it cycled properly and cooled the building.

Remember to change the filter regularly and have the system serviced annually to keep the unit operating as efficiently as possible.

FYI: The AC system is original, approximately 17 years old, meeting its typical average life span. Being a mechanical system, it is next to impossible to tell when this unit will fail, but at this age, it can happen at

anytime. Budgeting for a replacement unit in the near future should be a priority.

LIMITATIONS OF COOLING INSPECTION

- Window mounted air conditioning units are not inspected.
- The cooling supply adequacy or distribution balance are not inspected.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Insulation / Ventilation

DESCRIPTION OF INSULATION / VENTILATION

The attic area was accessed and inspected.

Attic Insulation:	•Type of insulation: Fiberglass batts •Average inches: 3” •Estimated R-value: R-11
Exterior Wall Insulation:	•Not visible
Roof Ventilation:	•Roof vents
Vapor Retarders:	•Kraft paper on the batt insulation
Crawl Space Insulation:	•None
Crawl Space Ventilation:	•None found

INSULATION / VENTILATION OBSERVATIONS



The insulation over the laundry room is missing and needs to be replaced.

RECOMMENDATIONS / ENERGY SAVING SUGGESTIONS

Attic

Repair: There is no insulation at all over the laundry room. This area needs to be properly insulated.

Improve: The R-value is the rating of the insulations resistance to heat loss (the higher the R-value the better). The R-value in this attic is considered below today's standards. Typically we'd like to see a minimum of an R-30. This would require about 6" to 8" additional of fiberglass insulation.

This is called a discretionary improvement, meaning will you recover the cost of adding insulation in the anticipated time period you'll be living in the home. If you're only planning to live in the home 3-5 years, you may not recover the cost of adding the insulation, by reducing the homes energy costs. This is a question you have to consider when deciding on adding insulation.

LIMITATIONS OF INSULATION / VENTILATION INSPECTION

- Insulation/ventilation type and levels in concealed areas are not inspected. Insulation and vapor barriers are not disturbed and no destructive tests (such as cutting openings in walls to look for insulation) are performed.
- Potentially hazardous materials such as Asbestos and Urea Formaldehyde Foam Insulation (UFFI) cannot be positively identified without a detailed inspection and laboratory analysis. This is beyond the scope of the inspection.
- An analysis of indoor air quality is not part of our inspection.
- Any estimates of insulation R-values or depths are rough average values.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Plumbing

DESCRIPTION OF PLUMBING

Water Supply Source:	•Public water supply
Service Pipe to House:	•Copper
Main Water Valve Location:	•The front wall of the crawlspace
Interior Supply Piping:	•Copper
Waste System:	•Public sewer system
Drain, Waste, & Vent Piping:	•Plastic (PVC)
Water Heater:	•Gas •Manufacturer: General Electric •Approximate Capacity in gallons: 40 •Age: MFD in 2014
Fuel Shut-Off Valves:	•Natural gas main shut off valve is located along the east exterior wall of the building
Other Components:	•Sump pump (see the remarks below)

PLUMBING OBSERVATIONS

The average life expectancy of a water heater is **8 to 12 years**. Signs of when a water heater is starting to fail are the loss of the hot water supply (hot showers tend to get shorter) and leakage around the base of the water heater.



Water spilled out from underneath the flange when the master bathroom toilet was flushed

RECOMMENDATIONS / OBSERVATIONS

Master Bathroom

Repair: The toilet in this bathroom is leaking. Water was found streaming out from the toilet flange when the fixture was flushed (viewed from the crawlspace). Contact a qualified plumber for repairs.

Hall Bathroom

Repair: The water supply to the toilet in this bathroom was off during the inspection and the toilet was very loose. This fixture could be easily swayed from side to side. Also judging by the water staining on the waste line for this toilet in the crawlspace, this toilet may be leaking.

This repair may be as simple as removing the toilet, replacing the wax seal and securing the toilet back into place or as difficult as replacing a broken toilet flange.

A qualified plumber should repair this toilet.

Repair: Water was found leaking into the crawlspace from the area where the water lines to the mixing valve for the tub/shower stall stub through the floor structure.

It looks as if there may be a problem with the mixing valve or the piping to the mixing valve. Contact a qualified plumber for repairs.

Water Heater

Safety Issue: Repair: An extension is needed for the pressure/temperature relief valve to safely direct hot water to the floor if the valve opens. This extension cannot have any reductions in size from the valve opening and needs to terminate within 6 inches of the floor. Add a properly sized extension as needed.

Safety Issue: Repair: A flexible appliance connector is installed on the gas line to the control valve of the water heater. Typically appliance connectors are not allowed for permanently installed gas-burning systems. Most municipalities and even the utility company (NICOR) require hard piping all the way up to the control valve. Appliance connectors can become damaged, especially in areas used for storage or high traffic areas. This should be repaired to prevent any problems in the future.



The sub-floor was wet around the water lines to the tub/shower stall in the hall bathroom.

Laundry Room

Repair: The hot and cold water shut off valves in the laundry room need to be replaced. I tried opening the hot water valve (the handle to the cold water valve is missing) and water spilled out through the stem of this gate valve. I then shut the water off and could not operate the washing machine during this inspection.

Water Softener

Repair: There is an abandoned water softener inside the crawlspace, near the crawlspace access hatch that should be eliminated. So far it is intact and not leaking, but it should be removed before any problems occur.

Kitchen Sink

Repair: The faucet to the kitchen sink needs to be replaced. Water spilled out from in between the base and the handle when the water was operated and spilled onto the counter top. The water supply to this sink could not be operated during this inspection.

Sump Pump

Repair: The sump pump in the crawlspace has been removed. The water in the sump pit was spilling over the top rim of the pit and onto the crawlspace floor. This sump pump system does not have a typically drain tile system installed (it's basically a pit installed in the crawlspace floor), but it will pick up ground water and help keep the area dry. A sump pump needs to be installed.

Main Water Shut Off Valve (village shut off)

Repair: Water was found pooling around the main water shut off valve located outside of the building near the sidewalk (this is the shut off valve controlled by the village commonly called the Buffalo box). It looks as if the shut off valve may be leaking. I recommend contacting the public works department at the Village of Elk Grove to find out who is responsible for repairs and have it repaired as needed.



The water supply was off to the hall bathroom toilet, but it's apparent that it leaked in the past and may still be leaking

LIMITATIONS OF PLUMBING INSPECTION

- Portions of the plumbing system concealed by finishes and/or storage (below sinks, etc.), below the structure, or beneath the ground surface is not inspected.
- Water quantity and water quality are not tested.
- Interiors of flues or chimneys that are not readily accessible are not inspected.
- Water conditioning systems, fire and lawn sprinkler systems and private waste disposal systems are not inspected.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Interior

DESCRIPTION OF INTERIOR

Wall And Ceiling Materials:	•Drywall
Floor Surfaces:	•Laminate flooring •Ceramic tile •Carpeting
Window Types & Glazing:	•Double hung •Insulated glass
Doors:	•Wood-hollow core interior doors

INTERIOR OBSERVATIONS

It is a law that carbon monoxide detectors have to be installed in all residences within 15 feet of all sleeping areas. Carbon monoxide detectors are readily available at most home improvement stores. Expect to pay around \$40.00 to \$50.00 for a good detector. Add carbon monoxide detectors to the building to be in compliance with the law and more importantly, for your own safety.

RECOMMENDATIONS / OBSERVATIONS

Closets

Safety Issue: Improve: I recommend replacing all of the incandescent light fixtures over the storage shelves in the closets with cool burning florescent fixtures. If storage stacked on these shelves is stacked on or near to the incandescent bulb it may overheat and cause a fire. These florescent fixtures are fairly inexpensive, very easy to install and are readily available at any home improvement store.

Interior Doors

Repair: The closet doors to the west bedroom are missing and need to be replaced.

Carpeting

Repair: All of the carpets in the building are worn and heavily stained and in my opinion, should be replaced.

LIMITATIONS OF INTERIOR INSPECTION

- Furniture, storage, appliances and/or wall hangings are not moved and may block defects.
- Carpeting, window treatments, central vacuum systems, household appliances, recreational facilities, paint, wallpaper, and other finish treatments are not inspected.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Appliances

DESCRIPTION OF APPLIANCES

Appliances in the Building:

•Dishwasher •Refrigerator •Gas range •Washing machine •Clothes dryer
•Range hood

Laundry Facility:

•Gas and electrical supply for the dryer •Dryer is vented to the exterior of the building •120v circuit for the washing machine •Hot and cold water supply for the washing machine •Standpipe for draining the washing machine

APPLIANCES OBSERVATIONS

RECOMMENDATIONS / OBSERVATIONS

Appliances

The only appliances that were operated were the gas range and the refrigerator, even though the water line to the icemaker in the refrigerator was disconnected.

The water supply to the dishwasher and the washing machine were disconnected. The gas dryer was not operated as ell.

LIMITATIONS OF APPLIANCES INSPECTION

- Thermostats, timers and other specialized features and controls are not tested.
- The temperature calibration, functionality of timers, effectiveness, efficiency and overall performance of appliances is outside the scope of this inspection. Appliances are tested to verify operation only.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.