

Rusk Professional Property Inspection

Confidential - Property Inspection Report - Confidential



442 Report Rd, Sample, Ohio 45866
Inspection prepared for: Mr. & Mrs. Sample Report
Date of Inspection: 3/28/2014

Inspector: Gary Rusk
Phone: 419-203-2481
Email: ruskpropertyinspect@gmail.com

Inspection and Site Details

1. Inspection Time

Materials: 2:45 PM
Materials: 5:30 PM

2. Attending Inspection

Materials: Client not present

3. Residence Type/Style

Materials: Single Family, Manufactured Home

4. Garage

Materials: Attached 1-Car Garage

5. Square Footage

Materials: Approx 1556 sq. ft.

6. Direction Of Front Entrance

Materials: For the purpose of this report the building is considered to be facing North

7. Occupancy

Materials: Occupied - Furnished

8. Weather Conditions

Materials: Clear, sunny sky, Temperature at the time of inspection approximately, 40 degrees

Exterior

1. Driveway

Materials: Gravel
Observations:
• Appeared functional and satisfactory, at time of inspection.

2. Walkways

Materials: Concrete front walkway, Gravel; side and rear walkway
Observations:
• Appeared functional and satisfactory, at time of inspection.

3. Stoop, Steps

Materials: Wood steps front and back
Observations:
• Rot was found at the base of the front step. A qualified contractor should evaluate and repair as necessary. All rotten wood should be replaced or removed.



Wood steps to sliding glass door needs cleaned and sealed



Front step is starting to rot at the bottom, where it is in contact with the concrete



Step starting to rot

4. Porch & Patio

Materials: Front patio: concrete floor, Rear patio:, Stamped concrete

Observations:

- Appeared functional and satisfactory, at time of inspection.

5. Exterior Caulking

Materials: The purpose of exterior caulking is to minimize air flow and moisture through cracks, seams, and utility penetrations/openings. Controlling air infiltration is one of the most cost effective energy-efficient measures in modern construction practices. A home that is not sealed will be uncomfortable due to drafts and will use about 30% more energy than a relatively air-tight home. In addition, good caulking and sealing will reduce dust and dirt in the home and is one of the simplest energy efficient measures to install., TIP: One of the better exterior caulk brands is: OSI Pro-Series QUAD Window, Siding, Gutter & Roof Sealant. Can be found at home building centers.

Observations:

- Caulking is recommended around windows/doors/masonry ledges/corners/utility penetrations.

6. Exterior Cladding

Materials: Vinyl Siding

Observations:

- Most of the house siding appeared in serviceable condition, at time of inspection, except: a few loose pieces of siding, a few cracks & holes, poor previous patches in several places.



Caulk used to repair siding



Hole in siding, right side of sliding glass door



Damaged siding on the front of the house



Gap in the top finish trim



Poor repair/patch



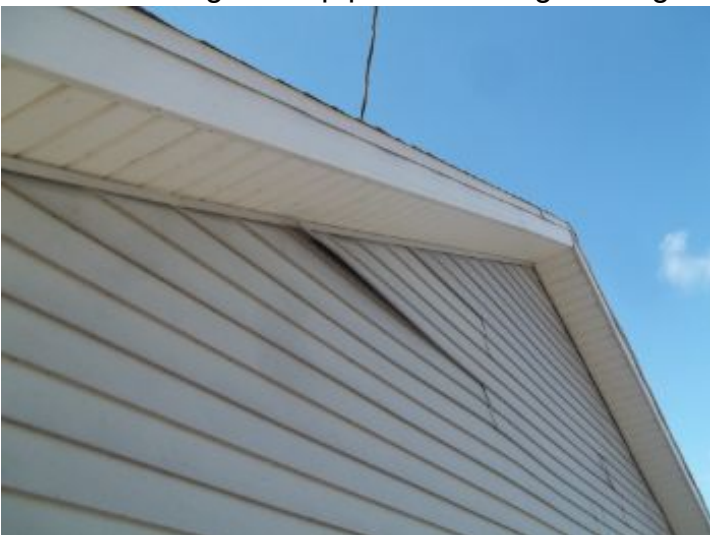
Another patch



Loose siding and top piece of siding missing



Loose siding west side of house



loose siding east side of garage



Crack in siding



nails need removed



and sealed

7. Eaves, Soffits, Fascia and Trim

Materials: Metal soffit and fascia

Observations:

- Soffit at rear of garage loose/falling off. Needs repair to prevent water and/or rodents from entering garage.



Soffit loose on the back of the garage



Holes need sealed where the old gutters were removed



holes need sealed

8. Window/Door Frames and Trim

Materials: Wood windows with storm windows

Observations:

- Rear garage window leaking, sub sheeting was wet under the window



Rear garage window leaking, sub sheeting was wet under the window

9. Exterior Doors

Materials: Metal doors, Sliding glass door for rear patio

Observations:

- Front door needs adjusted, door does not seal tight.
- Seal strip loose at top of sliding glass door on the out side.
- Rear garage service door not tested due to storage blocking the door.
- Water/rot damage to bottom door jamb of side garage door. Repair or replace as needed.



Rear door to garage not inspected



Loose seal trim on the sliding glass door

10. Exterior of Foundation Walls

Materials: This residence has a raised foundation, commonly called a crawl space. Such foundations permit access, and provide a convenient area for the distribution of water pipes, drain pipes, vent pipes, electrical conduits, and ducts. However, although raised foundations are far from uniform, most include concrete footings and walls that extend above the ground with anchor bolts or straps that hold the house onto the foundation. This house is not anchored to the foundation walls, it has anchor straps from the steel frame to the ground anchors.

Observations:

- Shrinkage and settlement cracking noted at some of the mortar joints in the house and garage foundation. This cracking is common and usually no reason for concern. Recommend monitoring and consultation with qualified contractor should condition worsen or if water intrusion occur.

11. Vegetation Affecting Structure

Materials: No Deficiencies Observed

12. Grading and Surface Drainage

Materials: Ground generally graded away from house

Observations:

- The exterior drainage is generally away from foundation.

13. Limitations of Exterior Inspection

Materials: A home inspection does not include an assessment of geological, geotechnical, or hydrological conditions -- or environmental hazards.

Roofing

1. Roof Style and Pitch

Materials: Side Gabled, Low slope: roof angle (pitch) less than 22.5 degrees

2. Method of Roof Inspection

Materials: Walked on Roof Surface

3. Roof Covering

Materials: Dimensional (upgraded) architectural shingles

Materials: Shingles appear to be almost new, Average life expectancy of dimensional shingles is 20 - 30 years, if properly maintained. This can fluctuate due to such variables such as color, vegetation, building orientation, and amount of sunlight received as well as adequate attic ventilation.

Observations:

- Roof appeared serviceable with no deficiencies noted at time of inspection, except slight damaged to the ridge cap on the garage from the overhead service cable rubbing the cap when the wind blows. No prediction of future performance or warranties can be offered.



Ridge cap being damaged by the utility overhead service drop cable

4. Flashings

Materials: Not Visible, See Limitations

Observations:

- Flashing not visible



Roofer should have installed a kick-outs so water does not run behind the siding

5. Roof Penetrations

Materials: ABS piping for plumbing vent stack(s), Metal roof vents, Metal roof vent for gas furnace, Metal roof vent for gas water heater

Observations:

- Appeared functional, at time of inspection

6. Roof Drainage System

Materials: Aluminum gutters and downspouts, All downspouts discharge above grade

Observations:

- Existing splash guards may be insufficient to divert water away from foundation
- Loose gutter on front of garage. Suggest securing gutter before the wind damaged the gutter.
- Holes in the drip edge, from where the old gutters were removed need sealed



Downspouts discharging to close to the foundation



Gutter loose on front of garage and front wall and roof bowed out

7. Limitations of Roofing Inspection

Materials: Roofs may leak at any time. Leaks often appear at roof penetrations, flashings, changes in direction or changes in material. A roof leak should be addressed promptly to avoid damage to the structure, interior finishes and furnishings. A roof leak does not necessarily mean the roof has to be replaced. We recommend an annual inspection and tune-up to minimize the risk of leakage and to maximize roof life., Impossible to inspect the total underside surface of the roof sheathing for evidence of leaks. Evidence of prior leaks may be hidden by insulation, baffles or interior finishes. Leakage can develop at any time and may depend on rain intensity, wind direction, ice buildup, and other factors., Estimates of remaining roof life are approximations only and do not preclude the possibility of leakage.

Structure

1. Information

Materials: This is a manufactured home and the piers for the frame are not not too the manufacturers or state required specifications. If your loan provider requires an engineered report the house will require an additional 8 piers installed. (There are nor piers installed within 2 feet of the foundation walls, the distance between foundation walls and first/last piers is about 8 feet.)

2. Foundation Type

Materials: House has a crawlspace type foundation with concrete block walls and no sill plate. House is sitting on the foundation walls, but is not attached to the foundation.

3. Foundation Walls

Materials: Concrete block

Observations:

- Shrinkage and settlement cracking noted at some of the mortar joints in the house and garage foundation. This cracking is common and usually no reason for concern. Recommend monitoring and consultation with qualified contractor should condition worsen or if water intrusion occur.

4. Under Floor Crawlspace(s)

Materials: Crawled

Observations:

- Standing water was found along the east wall of the crawl space. Accumulated water is a conducive condition for wood destroying insects and organisms and should not be present in the crawl space. A qualified contractor who specializes in drainage issues should evaluate and repair as necessary. Typical repairs for preventing water from accumulating in crawl spaces include:
 - Repairing, installing or improving rain run-off systems (gutters, downspouts and extensions or drain lines)
 - Improving perimeter grading
 - Repairing, installing or improving underground footing and/or curtain drains

Ideally, water should not enter crawl spaces, but if water must be controlled after it enters the crawl space, then typical repairs include installing trenches, drains and/or sump pump(s) in the crawl space.

- Evidence of prior water intrusion was found in one or more sections of the crawl space. For example, sediment stains on the vapor barrier or foundation, and/or efflorescence on the foundation. Accumulated water is a conducive condition for wood destroying insects and organisms and should not be present in the crawl space. The client(s) should review any disclosure statements available and ask the property owner(s) about past accumulation of water in the crawl space. The crawl space should be monitored in the future for accumulated water, especially after heavy and/or prolonged periods of rain. If water is found to accumulate, a qualified contractor who specializes in drainage issues should evaluate and repair as necessary. Typical repairs for preventing water from accumulating in crawl spaces include:

- Repairing, installing or improving rain run-off systems (gutters, downspouts and extensions or drain lines)
- Improving perimeter grading
- Repairing, installing or improving underground footing and/or curtain drains

Ideally, water should not enter crawl spaces, but if water must be controlled after it enters the crawl space, then typical repairs include installing trenches, gravity drains and/or sump pump(s) in the crawl space.



Crawlspace access in garage under step



Evidence of prior water intrusion was found in one or more sections of the crawl space.



Bottom board damaged insulation missing

5. Columns and Beams

Materials: Steel frame for the manufactured home, Masonry block piers



No piers at the end of steel frame



Suggest checking all the shims on the piers and tightening them as needed

6. Floor Structure

Materials: Dimensional lumber wood Joists, 2 X 6

7. Wall Structure

Materials: Wood frame

Observations:

- Limited view due to finishing materials except garage walls.

8. Ceiling and Roof Structure

Materials: Engineered wood roof truss framing on house, not visible to inspect, no attic area.

Observations:

- The framing for the garage roof is substandard, they used 2 x 4 lumber (they should of used at the very minium 2 x 6 lumber) for the rafters and ridge beam. No cross ties (ceiling joist) were installed to keep the roof from sagging and walls pushing out. The ridge is now sagging, rafters are sagging, the front and back of the garage is bowed out. The gable overhangs look like they were added as an after thought and appear at be sagging. Recommend having a general contractor review the roof system for repair or replacement.



East side gable overhang sagging



Garage rafters sagging



Roof and wall bowed out from roof sagging



Dangerous roof framing, not to any building standards



Garage roof sagging

9. Limitations of Structure Inspection

Materials: Full inspection of all structural components (posts/girders, foundation walls, sub flooring, and/or framing) is not possible in areas/rooms where there are finished walls, ceilings and floors., No representation can be made to future leaking of foundation walls., Furniture, storage, and/or personal items restricted access to some structural components., Engineering or architectural services such as calculation of structural capacities, adequacy, or integrity are not part of a home inspection., Most of the floor system, plumbing and ductwork in the crawlspace is covered with a membrane called (bottom board) so these systems/components could not be view to be fully evaluated.

Attic and Insulation

1. Attic Access

Materials: No attic present

Observations: Manufactured home with vaulted ceiling, no attic

2. Insulation in Unfinished Spaces

Materials: Unknown

Materials: Unknown

Observations:

- No attic, ceiling insulation could not be inspected

3. Attic Ventilation

Materials: Passive ventilation, Fixed, roof-field exhaust vents

Observations:

- No deficiencies noted.

4. Garage/Carport Attic

Materials: No attic present

Observations:

- No insulation over garage

5. Limitations of Attic and Insulation Inspection

Materials: Insulation/ventilation type and levels in concealed areas, like exterior walls and attics that are not accessible, can not be inspected., The area above the house had no visible access and therefore could not be inspected.

Interior

1. Door Bell

Observations:

- none

2. Walls and Ceilings

Materials: Drywall panels

Observations:

- Some cosmetic, common small cracks and typical flaws in drywall finish noted. This is normal wear for age of home.

3. Floor Surfaces

Materials: Laminate, Vinyl stick down tiles in kitchen, Ceramic tile in master bathroom, Carpet in living room, Bedroom/craft room no floor covering installed

Observations:

- No deficiencies noted - with normal wear and age.



No floor covering in center bedroom

4. Windows

Materials: Wood windows; Double glazed thermal seal type with storm windows

Observations:

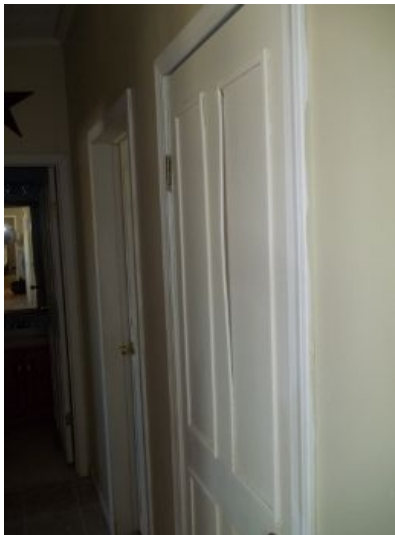
- Operated windows appeared functional, at time of inspection

5. Interior Doors

Materials: Louvered Solid Core Pine Interior Bifold Closet Door, Most are flush lauan Hollow Core Door

Observations:

- Most of the doors need some repair or adjustment; such as trim secured, striker plate missing, doors binding - ect. 2 of the closet doors are missing.



Door trim coming loose on several of the doors

6. Closets

Observations:

- doors missing

7. Limitations of Interiors Inspection

Materials: There were a moderate amount of personal/household items in each room. Furniture, storage, appliances and/or wall hangings are not moved to permit inspection and may block defects.

HVAC System

1. HVAC System

Materials:

- The heating, ventilation, and air conditioning and cooling system (often referred to as HVAC) is the climate control system for the structure. The goal of these systems is to keep the occupants at a comfortable level while maintaining indoor air quality, ventilation while keeping maintenance costs at a minimum. The HVAC system is usually powered by electricity and natural gas, but can also be powered by other sources such as butane, oil, propane, solar panels, or wood.

The inspector will usually test the heating and air conditioner using the thermostat or other controls. Depending on outside temperatures (below 63f) the air conditioning part of a central HVAC system can not be tested due to the possibility of damage to the compressor part of the system. For a more thorough investigation of the system please contact a licensed HVAC service person.

2. Thermostat(s)

Materials: Digital - programmable type., Location: Dining room

Observations:

- No deficiencies noted.

3. Heating System

Materials: Miller Forced air natural gas furnace - located in utility room

Materials: Manufacture date: Aug. 1990, Average life of a gas-fired hot air furnace is 15-25 years if well maintained

Observations:

- Heat worked in all rooms worked when tested.
- Because of the age and of this furnace, recommend that a qualified heating and cooling technician inspect the heat exchanger and perform a Carbon Monoxide test when it's serviced.
- The heating unit has exceeded its designed life expectancy. We make no warranty, guarantee or estimation as to the remaining useful life of this unit.

4. Energy Source

Materials: Natural Gas -- Gas meter located west side of the house

Materials: Electric - 240/250 volt

5. Venting, Flue(s), and Chimney(s)

Materials: Metal double wall chimney vent pipe

Observations:

- The visible portions of the vent pipes appeared functional. Except as noted
- Rust noted at top exterior chimney flue cap at roof. Recommend cleaning and painting.



Furnace vent stack needs cleaned and painted

6. Cooling System

Materials: Approximately: 24 years - Original equipment

Observations:

- The outdoor air temperature was below 60 degrees Fahrenheit during the inspection. Because of this, the inspector was unable to operate and fully evaluate the cooling system.
- The estimated useful life for air conditioning compressors is 8 to 15 years. This unit appears to have exceeded this age and may need replacing at any time. Recommend budgeting for a replacement in the near future.



Data missing from AC unit, appears to be original equipment

7. Heating & Cooling Distribution

Observations:

- Duct system not visible except for the 12 inch flex duct connect the 2 duct systems together. It is not properly supported, part of it is lying on the crawlspace ground/gravel and part is supported with the cable from the electric brake system from the axle. The duct should not be lying on the ground/grave. If water gets in the crawlspace it could ruin the duct. The duct should be strapped with wide duct strap at least 12 inches above the ground, the electric cable could damage the flex duct or reduce the air flow.



Duct not properly supported



Crossover duct is lying on the ground

8. Filter(s)

Materials: Fiberglass disposable filter(s) located on the door of the furnace

Observations:

- No deficiencies noted.

9. Limitations of Heating and Air Conditioning Inspection

Materials: Heat gain calculations, adequacy, efficiency, or the balanced distribution of air throughout the home are not performed as part of a home inspection. These calculations are typically performed by designers to determine the required size of HVAC systems. As a very rough rule of thumb -- Air conditioning adequacy is 600-800 sq. feet of living area per ton (12,000 BTU) of A/C cooling capacity.

Electrical

1. Service Drop

Materials: Underground service lateral from utility pole disconnect to the house, Meter Location: on utility pole east side of house

Observations:

- **SAFETY CONCERN:** Sheathing on the wire coming out of the service meter to the overhead triplex cable is deteriorated and frayed, exposing the ground wires.
- The utility service stranded triplex cable are rubbing the roof ridges shingles when the wind blows. This is a safety hazard for shock since the cable is being damaged when it comes in contact with the roof ridge. People walking on the roof may also come into contact with the service drop wires. The utility company and/or a qualified electrician should evaluate and repair as necessary.



Sheathing on the wire coming out of the service meter to the overhead triplex cable is deteriorated and frayed



Improper clearance on utility service drop

2. Service Entrance Wires

Materials: Aluminum, 100 Amps

Observations:

- No deficiencies noted from outside disconnect to service panel.

3. Electrical Service Rating

Materials: Amperage Rating; 100 amps, Service drop, service disconnect and service entrance cable are rated for 100 amps. Main load center (panel box) is a 200 amp panel.

4. Main Service Panel(s)

Materials: Manufacturer; Westinghouse load center, this is considered a sub panel when there is an outside disconnect

Observations:

- The wiring within the panel appeared satisfactory and functional.

5. Main Disconnect

Materials: 100 amp breaker and a 50 amp breaker located in the main panel by the meter base

Observations:

- No problems noted



Main Disconnect

6. Overcurrent Protection

Materials: Breakers

Observations:

- No problems noted

7. Sub Panel(s)

Materials: See main panel

8. Distribution Wiring

Materials: Copper

Observations:

- Visible wiring appeared functional, at time of inspection; except as noted. Cover plate missing from junction box in the garage. No cable/wire connectors to secure or protect the wires in the junction box.



Cover plate missing, cable connectors missing

9. Lighting, Fixtures

Materials: Grounded and Ungrounded

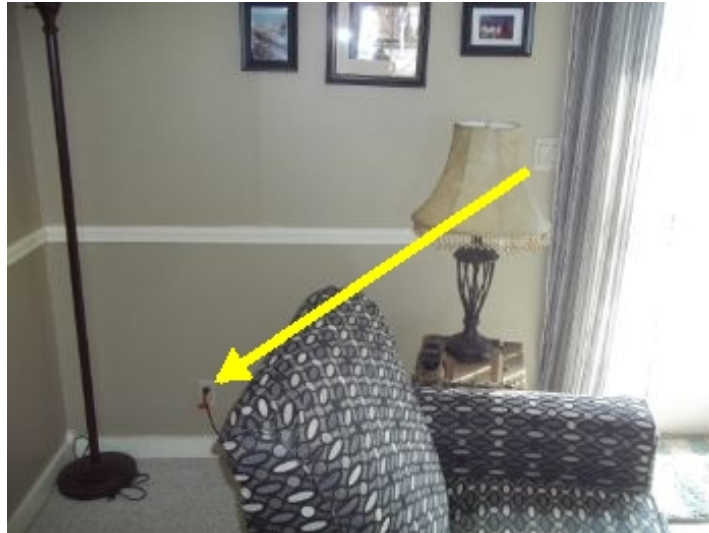
Observations:

- A representative sampling of light fixtures were tested. No deficiencies noted.

10. Switches

Observations:

- A representative number of switches were tested and are generally serviceable, unless otherwise noted.



Light switch controls this outlet

11. Outlets

Observations:

- A representative number of receptacles were tested and are generally serviceable, unless otherwise noted. Receptacles covers missing in the garage all outlets



cover plate missing



Cover plate missing



No outlet on island cabinet

12. GFCI - Ground Fault Circuit Interrupter

Materials: GFCI is an electrical safety device that cuts power to the individual outlet and/or entire circuit when as little as .005 amps is detected leaking--this is faster than a person's nervous system can react! Kitchens, bathrooms, whirlpools/hot-tubs, unfinished basements, garages, and exterior circuits are normally GFCI protected. This protection is from electrical shock. , Recommend review of the Consumer Product Safety Commission publication at the following web site:
<http://www.cpsc.gov/CPSCPUB/PUBS/99.html>

Materials: Present at:, Bathrooms

Observations:

- The GFCI outlets in both bathrooms are controlled by the light switch to the master bathroom light. Nether outlet is grounded.
 - Test GFCIs monthly to ensure proper operation.
 - There appears to be no GFCI protection at the kitchen and garage. These are the locations in and around the home when GFCIs were first required:
- 1973 - Outdoor Receptacles
 - 1975 - Bathroom Receptacles
 - 1978 - Garage Receptacles
 - 1981 - Whirlpools and Tubs
 - 1987 - Receptacles Near Kitchen Sinks
 - 1990 - Receptacles in Unfinished Basements and Crawl Spaces
 - 1993 - Receptacles Near Wet Bar Sinks
 - 1996 - All Kitchen Counter-Top Receptacles



GFCI outlet not grounded, also has no power when the bathroom light switch in the master bedroom is off

13. Smoke/Heat Detector(s)

Materials: Present at:, Kitchen and living room

Observations:

- Testing of smoke detectors is not included in this inspection. Pushing the "Test" button only verifies that there is power at the detector--either a battery or hard wired to the house power--and not the operational workings of the detector. The operational check is done by filling the sensor with smoke and is beyond the scope of this inspection. Battery operated smoke alarms should be checked routinely and the batteries changed frequently.
- Every home should have a smoke detector outside each sleeping area and on every level of the home, including the basement. The National Fire Alarm Code, developed by NFPA, requires a smoke detector in each sleeping room for new construction. On floors without bedrooms, detectors should be installed in or near living areas, such as dens, living rooms, or family rooms. Be sure everyone sleeping in your home can hear your smoke detector's alarms. If any residents are hearing-impaired or sleep with bedroom doors closed, install additional detectors inside sleeping areas as well. There are special smoke detectors for the hearing impaired; these flash a light in addition to sounding an audible alarm.
- Based on the age of this structure and the appearance of existing smoke alarms, the alarms may be older than 10 years old. According to National Fire Protection Association, aging smoke alarms don't operate as efficiently and often are the source for nuisance alarms. Older smoke alarms are estimated to have a 30% probability of failure within the first 10 years. Newer smoke alarms do better, but should be replaced after 10 years. Unless you know that the smoke alarms are new, replacing them when moving into a new residence is also recommended by NFPA. For more information, visit this article: [NFPA urges replacing home smoke alarms after 10 years.](http://www.nfpa.org/publications/articles/2006/06/01/060601a.shtml)

14. Carbon Monoxide (CO) Detector(s)

Materials: None installed/plugged in

Comments:

- SAFETY INFO: Carbon Monoxide (CO) is a lethal gas--invisible,tasteless, odorless--produced in normal amounts whenever you use an appliance which burns a combustible fuel--gas, oil, kerosene, charcoal, and wood. When proper ventilation becomes blocked or inadequate, CO concentrations build up inside your home and become deadly.
- This property has one or more fuel burning appliances, and no carbon monoxide alarms are visible. This is a safety hazard. Recommend installing one or more carbon monoxide alarms as necessary and as per the manufacturer's instructions. For more information, visit <http://www.cpsc.gov/CPSPUB/PREREL/prhtml05/05017.html>

15. Limitations of Electrical Inspection

Materials: Labeling of electric circuit locations on Main Electrical Panel are not checked for accuracy., Electrical components concealed behind finished surfaces are not visible to be inspected., Only a representative sampling of outlets, switches and light fixtures were tested., The inspection does not include remote control devices, alarm systems and components, low voltage wiring, systems, and components, ancillary wiring, systems, and other components which are not part of the primary electrical power distribution system.

Plumbing

1. Information

Materials: PB2110 (Polybutylene piping)

"The water supply pipes are Polybutylene plastic (PB). This system of plumbing has experienced a higher than normal rate of problems associated with leaks where the pipes are joined together. There is also a current theory that chemicals in municipal water systems react with the piping and resins in the fittings, weakening the pipes and joints. The manufacturers have been involved with and settled class action lawsuits alleging manufacturing defects with this plumbing system containing plastic or metal insert fittings (including copper and brass). For more information about PB, see <http://www.polybutylene.com>, and <http://www.pbpipe.com>. We recommend that you do your own research on this type of plumbing system and rely on the evaluation and advice of a licensed plumbing contractor prior to the close of escrow."

2. Water Supply Source

Materials: Private well water supply

3. Service Piping Into The House

Materials: ABS plastic

4. Main Water Shut Off

Materials: Utility Room, Crawlspace

Observations:

- Two main water shutoff valve is located inside the crawl space 1 at the pressure tank and 1 where the supply line comes out of the ground. Appears another 1 is in the utility room at the water softener.

5. Supply Branch Piping

Materials: Polybutylene (PB)

Observations:

- The plumbing systems in this home is polybutylene water pipes, commonly referred to as PB, that have been alleged to be defective, and could be replaced at no cost to the consumer. They were installed in homes between 1978 and 1995.

How to identify:

Polybutylene (PB) plumbing, when used for the potable water supply system in the house, is a gray, (possibly silver or black) plastic pipe marked (PB2110 or PB2110-M).

Since the pipe is used with copper stab-outs for fixtures with exposed plumbing (such as in the bathroom), it is necessary to look in an area where the main water supply plumbing is exposed, such as in an unfinished basement, crawlspace or under the kitchen sink. Note: PB for underground service from the water company to a structure or "Yard Service Line" is blue (possibly gray or black). Yard Service is not readily visible. PB pipe is not used for drains, waste or vent piping

The condition of the PB pipe and fitting cannot be determined by any inspection method since there are no visible signs of deterioration until failure occurs.

What to do?

There is no single course of action that is recommended for consumers with a PB system. Many recommend replacing the entire system, even if there have not been any problems. This course of action should be considered on an individual basis, taking into account a person's level of risk aversion, the types of materials used and the age of the system, as well as past performance. For information on the Cox v Shell settlement contact the Consumer Plumbing Recovery Center at (800) 356-3496 or visiting their web site at www.pbpipe.com.

Problems With Polybutylene:

Although some poly piping problems stem from improper installation, most complaints are with the integrity of the piping itself. Polybutylene pipe is known to deteriorate due to contact with oxidants normally found in public water supplies. The failure can occur in the plastic fittings or in the pipe itself. A main concern regarding poly pipe is that, since the oxidants are carried in the water, the pipe deteriorates from the inside. This makes it very difficult to determine if the pipe is truly in good condition. Most home inspectors cannot give a reliable assessment on the condition of poly piping unless there is a visible problem with the exterior of the pipe or its installation. In addition, when a leak occurs, it may be extremely severe because the deterioration occurs from within.

Poly pipe leaks are unpredictable and there are no symptoms to warn of an impending leak. Some factors that affect polybutylene piping adversely can include:

- o Poor installation
- o Water quality
- o Pipe age
- o Chlorine levels
- o Deterioration of fittings (both metal and plastic)

When polybutylene pipe reacts with the oxidants in normal tap water, it becomes brittle, sometimes scaling or flaking. This results in a fracturing of the interior surface of the pipe, which allows for more deterioration. Eventually the pipe will begin to leak, causing damage throughout a home. Poly pipe with plastic fittings or with metal fittings will eventually incur damage; poly piping is not a reliable piping under any circumstances. If a pipe has been leaking for some time without the knowledge of a homeowner, severe structural damage to the home can result, making repairs extremely difficult.

Damage from polybutylene pipe leaks can be expensive, in some cases more than the original cost of the house. Insurance companies sometimes cancel or refuse policies for homes with known poly piping problems, and it is difficult to market a home that has such an unreliable plumbing system.

Poly piping can be used anywhere in the home's plumbing system - usually its presence can be ascertained by checking the attachments under household sinks, near hot water heaters, or leading into toilets. Following is a list of common places you may inspect for the presence of poly piping:

Interior

- o Entering the water heater
- o Crossing basement ceilings
- o Feeding sinks, toilets, and bathtubs

Exterior

- o Entering the home through basement walls, etc
- o Attached to your home's main water shutoff valve
- o Attached to your home's water meter (often a copper pipe at a water meter will be attached to poly pipe somewhere underground, so it is wise to check both ends of the pipe)

Note: Not all polybutylene piping systems use polybutylene fittings; some use copper. Therefore, if you see copper fittings on a pipe, it does not indicate that you do not have poly piping.

Another important area where poly piping may have been installed is the incoming water supply line to your house. If this

incoming pipe is a light blue plastic pipe, it is likely that you have a type of poly pipe informally called "Big Blue". This pipe is extremely prone to failure and unexpected bursting. If you have this type of pipe as an incoming water supply line, it is recommended that you have it inspected by a licensed plumber for replacement as soon as possible.

Remediation/Replacement:

The only way to eliminate the possibility of problems that can come from deteriorating polybutylene piping is to replace the pipe itself. Fortunately, this procedure is relatively inexpensive and can usually be performed by a certified plumber or re-pipe specialist. The process of re-piping (both interior and exterior) can involve some of the following procedures:

Exterior

- o Slight excavation with a trencher
- o Pipe-splitting (whereby the pipe is purposefully cut in half and a new, stable pipe is run through it)
- o Deep trench excavation (in areas with an exceptionally deep-buried pipe system)

Interior

- o The possible cutting of several holes in walls and floors

Poly piping runs behind the walls and under the floors of a home, but while the re-piping of a house will require that holes be cut in the walls and floors, a professional can perform it with a minimum of damage to walls and other structures. If there has already been damage to your home from a poly pipe leak, then the cost of re-piping and repairing your home will be increased considerably.

6. Water Flow and Pressure

Materials: Not tested/Private system

Observations:

- The water flow was overall functional. This was determined by running water in the bath sink and shower while toilet is flushed.

7. Faucets

Observations:

- No deficiencies noted.

8. Sinks

Observations:

- No deficiencies observed.

9. Traps and Drains

Observations:

- Water was run through the fixtures and drains. Functional drainage was observed.
- Shower drain is leaking. Recommend a plumber to review for repair.



Shower drain appears to have a leak

10. Waste System

Materials: Private sewage disposal - Septic - system

11. Drainage, Wastewater & Vent Piping

Materials: Visible waste piping in house:, ABS (Acrylonitrile-Butadiene-Styrene) piping - black in color

Observations:

- Visible piping appeared serviceable at time of inspection.

12. Water Heater(s)

Materials: Kenmore gas water heater

Materials: 40 Gallons

13. Water Heater(s) Condition

Materials: Manufactured: 43 week of 2011

Observations:

- Tank appears to be in satisfactory condition -- no concerns.

14. Water Heater Vent Piping

Materials: Metal double wall chimney vent pipe

Observations:

- Visible piping appeared serviceable at time of inspection.

15. Fuel Supply and Distribution

Materials: Black iron pipe used for gas branch/distribution service

Materials: Main gas shut off located at outside meter - west side of house

Observations:

- Meter located at exterior. All gas appliances have cut-off valves in line at each unit. No gas odors detected.

16. Pump(s)

Observations:

- No sump tank or pit liner is visible for the sump pump. Standard building practices call for a sump tank to be installed, made from polyethylene, clay, tile, steel, concrete or fiberglass. Sump tanks are normally 18 inches in diameter and vary from two to three feet deep. Sediment may accumulate and shorten the life of the pump if the sump pump is installed in an unlined pit. A qualified contractor should install a sump tank as per standard building practices. For more information on sump pump installations, visit <http://www.hometips.com/cs-protected/guides/sumps.html>

17. Other Components

Materials: Water softener system

Observations: Not tested.

18. Well

Materials: Drilled well, backyard west side of house

Materials: In well pump: The estimated useful life for most well pumps is 15 to 20 years. Suggest asking home owner how old the pump is.

Observations:

- Pressure tank in the crawlspace is setting on the damp gravel. Suggest setting the pressure tank on a concrete or ABS pad.



Well located west side of back yard

19. Limitations of Plumbing Inspection

Materials: The sections of the plumbing system concealed by finishes and/or storage (below sinks, etc.), below the structure, or beneath the ground surface are not inspected.

Bathrooms

1. Tub(s)

Materials: Plastic/Fiberglass; Tub/shower in the quest/main bath room

Observations:

- Guest/ main bathroom bottom of tub, by the drain appears to have been patched. Repair not professionally done.

2. Shower(s)

Materials: Plastic, fiberglass, and tempered glass

Observations:

- No discrepancies noted

3. Toilet(s)

Observations:

- Operated when tested. No deficiencies noted.

4. Exhaust Fan(s)

Observations:

- Appeared functional, at time of inspection.

5. Cabinets and Vanities

Materials: Wood laminate

Observations:

- Appeared functional and in satisfactory condition, at time of inspection.

6. Countertops

Observations:

- No discrepancies noted.
- normal wear

Laundry Area

1. Washer

Materials: Hotpoint

Observations:

- The clothes washer was not operated or evaluated. It is excluded from this inspection.

2. Dryer

Materials: Hotpoint

Observations:

- The clothes dryer was not operated or evaluated. It is excluded from this inspection.

3. Other Components

Materials: Water softener/filtration system.

Observations: Not tested

4. Limitations of Appliances Inspection

Materials: Neither the clothes washer nor dryer were operated or evaluated. They are excluded from this inspection. , Washing machines and dryers are not moved during the inspection - condition of walls and flooring under these machines can not be determined. Washing machine drains or supply valves are not inspected. Water supply valves if turned may be subject to leaking.

Kitchen

1. Dishwasher

Materials: Manufacturer:, Whirlpool

Observations:

- Dishes in dish washer, I turned it on but did not run it

2. Garbage Disposal

Materials: Kenmore

Observations:

- Operated - appeared functional at time of inspection.

3. Ranges, Ovens, Cooktops

Materials: Amana

Observations:

- Not tested

4. Hood/Exhaust Fan

Observations:

- Vented to exterior
- Functioned and operated normally when tested.

5. Microwave

Materials: None Installed

6. Refrigerator

Materials: General Electric

7. Cabinets

Materials: Manufactured styles covered with vinyl wrap and wood doors

Observations:

- Appeared functional and in satisfactory condition, at time of inspection, some cosmetic damage noted.

8. Countertops

Materials: Laminate

Observations:

- No discrepancies noted.
- normal wear

9. Limitations of Roofing Inspection

Materials: Inspector recommends client(s) to use recall websites such as <http://www.cpsc.gov/> or <http://wemakeitsafer.com/> to check for recalls of appliances and other consumer products. A home inspector can not possibly know about all safety recalls. These sites can assist searching for safety recalls and also email any future product recalls.

General Information

Garage

1. Garage Door Opener

Materials: CHAMBERLAIN, LIFT-MASTER

Materials: The automatic garage door opener(s) reversed direction when met with resistance., The infrared "photo eye" devices that trigger the vehicle door opener's auto-reverse feature operated properly when tested

Observations:

- Appeared functional using normal controls, at time of inspection.

2. Vehicle Door

Materials: One 12' x 7' Newer steel door

Observations:

- No deficiencies observed.

3. Garage Floor

Observations:

- The garage had some storage and clutter at the time of inspection.
- Visible portions of the garage@@carport@@ floor appeared sound with no observable cracks, at time of inspection.

4. Sill Plates

Observations:

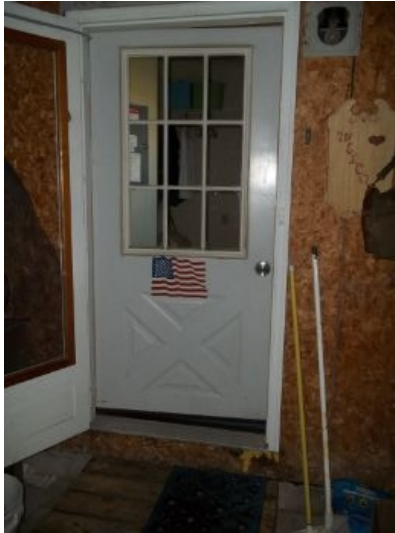
- Appeared satisfactory, at time of inspection.

5. Fire Door

Materials: Door not fire rated

Observations:

- The door between the garage & house is not a fire rated door. This may not have been required when originally built. Fire doors are fundamental to the integrity of fire barriers which provide resistance to the spread of fire, smoke, and toxic gasses. This means that should a fire occur in the garage, this door does not afford protection until fire-rescue people arrive. This door should be replaced with a fire rated door.



The door between the garage & house is not a fire rated door. This may not have been required when originally built. Fire doors are fundamental to the integrity of fire barriers which provide resistance to the spread of fire, smoke, and toxic gasses. This means that should a fire occur in the garage, this door does not afford protection until fire-rescue people arrive. This door should be replaced with a fire rated door.

6. Firewall & Ceiling

Observations:

- There are no firewalls and ceiling present. This may not have been required when originally built. Firewalls & ceilings are fundamental to the integrity of fire barriers which provide resistance to the spread of fire, smoke, and toxic gasses. This means that should a fire occur in the garage, the wall and ceiling does not afford protection until fire-rescue people arrive.

Report Summary

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

<i>Exterior</i>		
Page 6 Item: 9	Exterior Doors	<ul style="list-style-type: none"> Water/rot damage to bottom door jamb of side garage door. Repair or replace as needed.
<i>Structure</i>		
Page 12 Item: 8	Ceiling and Roof Structure	<ul style="list-style-type: none"> The framing for the garage roof is substandard, they used 2 x 4 lumber (they should of used at the very minium 2 x 6 lumber) for the rafters and ridge beam. No cross ties (ceiling joist) were installed to keep the roof from sagging and walls pushing out. The ridge is now sagging, rafters are sagging, the front and back of the garage is bowed out. The gable overhangs look like they were added as an after thought and appear at be sagging. Recommend having a general contractor review the roof system for repair or replacement.
<i>HVAC System</i>		
Page 17 Item: 6	Cooling System	<ul style="list-style-type: none"> The estimated useful life for air conditioning compressors is 8 to 15 years. This unit appears to have exceeded this age and may need replacing at any time. Recommend budgeting for a replacement in the near future.
<i>Electrical</i>		
Page 18 Item: 1	Service Drop	<ul style="list-style-type: none"> SAFETY CONCERN: Sheathing on the wire coming out of the service meter to the overhead triplex cable is deteriorated and frayed, exposing the ground wires. The utility service stranded triplex cable are rubbing the roof ridges shingles when the wind blows. This is a safety hazard for shock since the cable is being damaged when it comes in contact with the roof ridge. People walking on the roof may also come into contact with the service drop wires. The utility company and/or a qualified electrician should evaluate and repair as necessary.
Page 22 Item: 12	GFCI - Ground Fault Circuit Interrupter	<ul style="list-style-type: none"> There appears to be no GFCI protection at the kitchen and garage. These are the locations in and around the home when GFCIs were first required: 1973 - Outdoor Receptacles 1975 - Bathroom Receptacles 1978 - Garage Receptacles 1981 - Whirlpools and Tubs 1987 - Receptacles Near Kitchen Sinks 1990 - Receptacles in Unfinished Basements and Crawl Spaces 1993 - Receptacles Near Wet Bar Sinks 1996 - All Kitchen Counter-Top Receptacles
Page 23 Item: 14	Carbon Monoxide (CO) Detector(s)	<ul style="list-style-type: none"> This property has one or more fuel burning appliances, and no carbon monoxide alarms are visible. This is a safety hazard. Recommend installing one or more carbon monoxide alarms as necessary and as per the manufacturer's instructions. For more information, visit http://www.cpsc.gov/CPSC/PUB/PREREL/prhtml05/05017.html
<i>Plumbing</i>		

Page 26 Item: 5

Supply Branch Piping

• The plumbing systems in this home is polybutylene water pipes, commonly referred to as PB, that have been alleged to be defective, and could be replaced at no cost to the consumer. They were installed in homes between 1978 and 1995.

How to identify:

Polybutylene (PB) plumbing, when used for the potable water supply system in the house, is a gray, (possibly silver or black) plastic pipe marked (PB2110 or PB2110-M).

Since the pipe is used with copper stab-outs for fixtures with exposed plumbing (such as in the bathroom), it is necessary to look in an area where the main water supply plumbing is exposed, such as in an unfinished basement, crawlspace or under the kitchen sink. Note: PB for underground service from the water company to a structure or "Yard Service Line" is blue (possibly gray or black). Yard Service is not readily visible. PB pipe is not used for drains, waste or vent piping

The condition of the PB pipe and fitting cannot be determined by any inspection method since there are no visible signs of deterioration until failure occurs.

What to do?

There is no single course of action that is recommended for consumers with a PB system. Many recommend replacing the entire system, even if there have not been any problems. This course of action should be considered on an individual basis, taking into account a person's level of risk aversion, the types of materials used and the age of the system, as well as past performance. For information on the Cox v Shell settlement contact the Consumer Plumbing Recovery Center at (800) 356-3496 or visiting their web site at www.pbpipe.com.

Problems With Polybutylene:

Although some poly piping problems stem from improper installation, most complaints are with the integrity of the piping itself. Polybutylene pipe is known to deteriorate due to contact with oxidants normally found in public water supplies. The failure can occur in the plastic fittings or in the pipe itself. A main concern regarding poly pipe is that, since the oxidants are carried in the water, the pipe deteriorates from the inside. This makes it very difficult to determine if the pipe is truly in good condition. Most home inspectors cannot give a reliable assessment on the condition of poly piping unless there is a visible problem with the exterior of the pipe or its installation. In addition, when a leak occurs, it may be extremely severe because the deterioration occurs from within.

Poly pipe leaks are unpredictable and there are no symptoms to warn of an impending leak. Some factors that affect polybutylene piping adversely can include:

- o Poor installation
- o Water quality
- o Pipe age
- o Chlorine levels
- o Deterioration of fittings (both metal and plastic)

When polybutylene pipe reacts with the oxidants in normal tap water, it becomes brittle, sometimes scaling or flaking. This results in a fracturing of the interior surface of the pipe, which allows for more deterioration. Eventually the pipe will begin to leak, causing damage throughout a home. Poly pipe with plastic fittings or with metal fittings will eventually incur damage; poly piping is not a reliable piping under any circumstances. If a pipe has been leaking for some time without the knowledge of a homeowner, severe structural damage to the home can result, making repairs extremely difficult.

Damage from polybutylene pipe leaks can be expensive, in some cases more than the original cost of the house. Insurance companies sometimes cancel or refuse policies for homes with known poly piping problems, and it is difficult to market a home that has such an unreliable plumbing system.

Poly piping can be used anywhere in the home's plumbing system - usually its presence can be ascertained by checking the attachments under household sinks, near hot water heaters, or leading into toilets. Following is a list of common places you may inspect for the presence of poly piping:

Interior

- o Entering the water heater
- o Crossing basement ceilings

		<ul style="list-style-type: none">o Feeding sinks, toilets, and bathtubs <p>Exterior</p> <ul style="list-style-type: none">o Entering the home through basement walls, etco Attached to your home's main water shutoff valveo Attached to your home's water meter (often a copper pipe at a water meter will be attached to poly pipe somewhere underground, so it is wise to check both ends of the pipe) <p>Note: Not all polybutylene piping systems use polybutylene fittings; some use copper. Therefore, if you see copper fittings on a pipe, it does not indicate that you do not have poly piping.</p> <p>Another important area where poly piping may have been installed is the incoming water supply line to your house. If this incoming pipe is a light blue plastic pipe, it is likely that you have a type of poly pipe informally called "Big Blue". This pipe is extremely prone to failure and unexpected bursting. If you have this type of pipe as an incoming water supply line, it is recommended that you have it inspected by a licensed plumber for replacement as soon as possible.</p> <p>Remediation/Replacement: The only way to eliminate the possibility of problems that can come from deteriorating polybutylene piping is to replace the pipe itself. Fortunately, this procedure is relatively inexpensive and can usually be performed by a certified plumber or re-pipe specialist. The process of re-piping (both interior and exterior) can involve some of the following procedures:</p> <p>Exterior</p> <ul style="list-style-type: none">o Slight excavation with a trenchero Pipe-splitting (whereby the pipe is purposefully cut in half and a new, stable pipe is run through it)o Deep trench excavation (in areas with an exceptionally deep-buried pipe system) <p>Interior</p> <ul style="list-style-type: none">o The possible cutting of several holes in walls and floors <p>Poly piping runs behind the walls and under the floors of a home, but while the re-piping of a house will require that holes be cut in the walls and floors, a professional can perform it with a minimum of damage to walls and other structures. If there has already been damage to your home from a poly pipe leak, then the cost of re-piping and repairing your home will be increased considerably.</p>
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