

STRUCTURE TECH HOME INSPECTIONS

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HOME INSPECTION REPORT

1234 Main st. undefined, undefined undefined

Buyer Name 07/07/2022 9:00AM



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1: OVERVIEW

Information

Style of Building

Single Family

Weather

Overcast, Recent Rainfall

Type of Construction

Wood Frame

Temperature

75° - 80°

Occupied

Yes

Present at Inspection

Buyer(s), Buyer(s) Agent, Inspection Services - Sewer Inspector, Inspection Services -Mold Inspector, Inspection Services - Radon Tech

Service Providers

Click here for a list of service providers with whom we've had good experiences. We keep this list up-to-date. If you have anything less than a positive experience with any of these providers, please let us know.

Report Information

The service recommendations in this report should be completed by licensed, qualified, competent specialists. These specialists may identify additional defects or recommend upgrades that could affect your valuation of the property. This inspection was conducted in accordance with the ASHI Standard of Practice.

This report is the exclusive property of Structure Tech Home Inspections and the Client whose name appears within, and its use by any unauthorized persons is prohibited.

Observation Key

Maintenance/Information - Property condition information and maintenance suggestions.

Attention - Service, maintenance, repair, or replacement is recommended.

Priority - Requires service, replacement, or further inspection by a specialist.

Items or systems not specifically noted in this report were considered acceptable or functioning at the time of inspection as per the ASHI Standard of Practice. Items and systems that were inspected are noted on the STANDARDS tab.

2: ROOF COVERING

Information

Inspection Method

Roofing Material

Walked surface

Architectural Shingles

Observations

2.1.1 Sloped Roof

ACCEPTABLE

Maintenance/Information

The sloped roof covering was acceptable.



2.5.1 Roof Caps



DRYER VENT TERMINATES AT ROOF

The vent terminal for the dryer exhaust was located at the roof. The terminal will need to be cleaned regularly to help prevent accumulated lint from blocking the vent. The vent may also contribute to ice dams in the winter. Consider having the dryer exhaust relocated to a more accessible location, such as an exterior sidewall. For more information on this topic, click here: Clothes Dryer Maintenance



back of house - outside laundry room window

3: CHIMNEY & FIREPLACE

Observations

3.6.1 Fireplaces - Gas

ACCEPTABLE

The gas fireplace/fireplaces were in acceptable condition.









no signs of CO backdrafting into the



acceptable flue gas CO level



basement



no signs of CO backdrafting into the home



acceptable flue gas CO level

4: BASEMENT / FOUNDATION / STRUCTURE

Information

Basement Insulation

Crawl Space

Foundation walls: not visible, Rim No crawl space present

space: spray foam

Poured concrete

Roof Structure

Factory built truss system

Floor Structure

Open web floor trusses

Wall Structure

Wood Studs

Limitations

Foundation

Styles & Materials

STORED ITEMS

Stored items prevented a complete inspection of the basement.



Styles & Materials

FINISHED AREAS

There were finished areas and/or insulated areas that could not be inspected (e.g. basement floor, foundation walls, insulation, wall structure, and/or floor structure).







Observations

4.2.1 Basement Floor

SHRINKAGE CRACKS

Maintenance/Information

There were cracks visible on the floor in the basement. These cracks are typically due to shrinkage and are not a concern.



4.5.1 Signs of Moisture

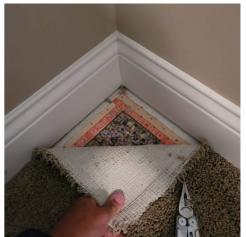
NO SIGNS OF MOISTURE

There were no visible signs of moisture intrusion at the interior.









4.6.1 Sump System

Maintenance/Information

BACKUP SUMP PUMP RECOMMENDED

Consider having a backup sump pump installed to help guard against basement flooding if the primary pump fails, or there is a power outage. For more information on this topic, click here: Backup Sump Pumps



water in basket at time of inspection and pump was active

4.6.2 Sump System

COVER - NOT SECURED & NOT AIRTIGHT

Attention

The sump cover was not screwed shut, which is a safety issue. The sump basket cover was also not airtight. This can allow air with relatively high levels of moisture to enter the home and can contribute to radon gas entry. Have the sump basket cover made airtight and secure the cover with screws to help prevent its removal by children. For more information on this topic, click here: Five Common Sump System Defects



4.6.3 Sump System

DISCHARGE PIPE - CORRUGATED AT EXTERIOR

Maintenance/Information

The sump pump discharge tube was connected to a corrugated tube that runs across the lawn. This tube has the potential to fill with ice and prevent the pump from functioning properly during the winter. Remember to disconnect the corrugated extension tube in the fall. For more information on this topic, click here: Potential for Freezing at the Exterior



4.6.4 Sump System



DISCHARGE PIPE - LOOSE

The sump pump discharge pipe was loose and should be secured to help reduce the potential for damage.



5: EXTERIOR

Information

Exterior Faucets: Winterization reminder

Winterize all exterior faucets every fall to help prevent freeze damage. For instructions, click here: How to prevent your outside faucets from freezing







side of house back of house

shutoff valve in basement utility room

Limitations

Foundation Walls

COVERED

The exterior of the foundation walls were covered by insulation, vegetation, grading, and/or other components. The concealed portions of the foundation were not inspected.



covered by protective membrane

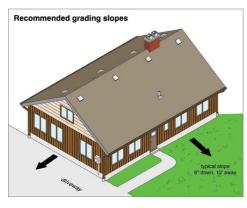
Observations

5.1.1 Drainage & Grading

GRADING - FLAT



The ground was flat in areas next to the building, which could allow water to enter the basement or cause excessive soil pressures against the foundation walls. The soil or hard surfaces should slope away from the house for at least ten feet to help prevent basement water intrusion and foundation problems.





5.3.1 Downspouts

DOWNSPOUTS - CLOSE TO DECK FOOTINGS



The downspouts lacked proper extensions to carry the water away from the deck footings. Downspouts dumping water near the footings will concentrate water against them and greatly increase the potential for problems with settled footings or frost heave. Add solid aluminum downspout extensions to carry the water at least 6 feet away from the footings.



5.3.2 Downspouts

DOWNSPOUTS - DRAINS TO UNDERGROUND SYSTEM



Some downspouts drain to an underground system, which cannot be seen. Check with the seller for the history of this installation and the exit locations to keep clear.



5.3.3 Downspouts



EXTENSIONS - DAMAGED

One or more downspout extensions were damaged and should be replaced.

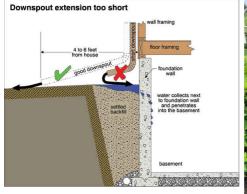


5.3.4 Downspouts

EXTENSIONS - IMPROPER



One or more downspouts lacked proper extensions to carry the water away from the foundation. Downspouts dumping water against the building will concentrate water and greatly increase the potential for basement water problems and foundation problems. Additionally, plastic/corrugated downspouts are prone to clogging and deterioration. Add solid aluminum downspout extensions to carry the water at least 6 feet away from the house and beyond any landscape edging.



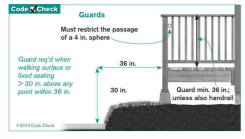


5.6.1 Stairways & Guards

GUARDRAIL - MISSING AT FRONT PORCH



The minimum Minnesota requirement requires a guardrail at a dropoff greater than 30", measured straight down. While the finished grade makes the drop-off less than 30", the diagram below should be used as a guideline to help determine whether to install guardrails for safety.







5.8.1 Windows

MISSING SCREENS



One or more window screens were missing. Have the screens installed for the pre-closing walk-through to verify that all screens are present, fit properly, and in acceptable condition.



2nd floor bedroom

5.11.1 Vent Terminals

BATH - BEES' NEST



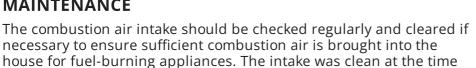
There were nests at one or more bath fan exhausts, blocking the dampers. Remove the nests.



1st floor bathroom

5.12.1 Combustion Air Intake

COMBUSTION AIR INTAKE MAINTENANCE



Maintenance/Information

Combustion Air Ducts, Part II: Problems and Solutions

of inspection. For more information on this topic, click here:



5.13.1 Air Exchanger Intake/Exhaust

AIR EXCHANGER INTAKE -REMEMBER TO CLEAN



Remember to clean the intake vent for the air exchanger. This will ensure proper airflow and operation of the air exchanger.



5.20.1 Vegetation

BUSHES CLOSE TO HOUSE



Bushes were growing close to the house, but should be kept a minimum of 12" away to help prevent damage to the siding. Trim the bushes.







5.20.2 Vegetation

VINES AT WALLS



There were vines present at the exterior walls. Vines prevent the exterior walls from drying out and can grow through small crevices, eventually damaging the siding. Have the vines removed.



5.21.1 Irrigation

WINTERIZATION REMINDER



The irrigation system must be winterized every fall to help prevent underground pipes from freezing. Ask the seller for information regarding the current service provider.







plumbing at exterior

rain sensor at garage roofline

shutoff valve in utility room

6: SIDING

Information

Siding Material

Fiber Cement (e.g. James Hardie), Adhered Masonry Veneer

Observations

6.1.1 Adhered Masonry Veneer

ACCEPTABLE

The adhered masonry veneer siding was acceptable.



6.2.1 Fiber Cement

ACCEPTABLE

The fiber cement siding was acceptable.



7: ELECTRICAL

Information

Location of Main Disconnect

Garage

Predominant Branch Circuit

Non-metallic sheathed cable (Romex)

Location of Sub Panels

None

Service Amperage

200 amp

Main Panel Type Circuit Breaker

Limitations

Garage Electrical

STORED ITEMS BLOCK OUTLETS

Stored items may have prevented viewing/testing one or more outlets in the garage.



Observations

7.1.1 Main Panel

ACCEPTABLE

The main electrical panel was acceptable.





7.6.1 Interior Electrical



OUTLETS - LOOSE

One or more outlets were loose and should be secured. This is typically as easy as removing the cover plate and tightening the screws that hold the outlet in place.



7.6.2 Interior Electrical



WIRING - UNPROTECTED IN CABINET

There was unprotected non-metallic cable (Romex) inside one or more cabinets. This can allow damage to the wire from items being moved in the cabinet. This has potential to be a fire/shock hazard which should be corrected.



kitchen island

7.10.1 Smoke Alarms/CO Alarms

SMOKE ALARMS - REPLACE



There were one or more smoke alarms present that use an ionization type sensor to detect smoke. This type of sensor has a history of not signaling an alarm soon enough in the event of a smoldering fire, which may not give occupants proper warning to safely escape. For increased safety, replace all ionization smoke alarms with photoelectric, 10-year sealed-battery smoke alarms. For more information on this topic, click here: Photoelectric smoke alarms are all you need



7.10.2 Smoke Alarms/CO Alarms



CO ALARMS - PRESENT

Carbon monoxide alarms were properly located and installed. CO alarms are required outside and within 10' of every sleeping room. Depending on the manufacturer/model specifications, carbon monoxide alarms have a lifespan of 5 to 10 years and should be replaced at that time.



For more information on CO alarms click here.

8: PLUMBING

Information

Drain/Waste/Vent Pipes

Main Sewer Cleanout Location

Base of main sewer stack, Utility

PVC

room

Main Gas Shut-Off Location
Next to furnace

Water Distribution Pipes

PEX

Main Water Shut-Off Location

Basement, Utility Room

Water Heater Age

7 - 8 years old

Water Heater Type

Electric - storage tank

Drain/Waste/Vent: Sewer inspection performed

A video inspection of the main sewer line was performed. The results of that inspection are sent in a separate report.

Water Distribution: Water sensor alarm

Consider installing water sensor alarms in areas susceptible to water damage due to plumbing leaks or pump failures (e.g. water heaters, boilers, sump baskets, clothes washers, dishwashers, and HVAC condensate drains). For more information on this topic, click here: Automatic water leak protection

Water Softener/Filtration: Technical description of water softening

Water softening resin beads are not water soluble and have a negative electrical charge. To start the water softening cycle, the resin beads are covered with sodium (Na+) ions by washing them in a strong sodium chloride brine solution (salt pellets in the tank). The sodium ions attach to the resin beads. Untreated water enters the resin tank and passes through the resin beads. The negatively charged resin beads have a greater attraction for the two positive charges in the ions of both the calcium (CA++) and the magnesium (Ma++) than they do for the single positive charge of the sodium (Na+) ion. The calcium and magnesium ions attach to the resin beads and the sodium ions are released. The resin beads "exchange" the sodium ions for the "hard water" ions allowing "soft" water to flow from the resin tank.

Limitations

Bathtubs & Showers

BATHTUB ACCESS

The bathtub access panels were blocked, nailed shut, painted shut, or no access was created. The concealed components were not inspected. Additionally, if the drains need to be accessed, openings will need to be created in walls or ceilings.



2nd floor bathroom - blocked by stored items in adjacent closet

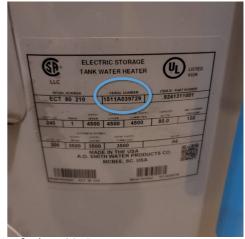
Observations

8.4.1 Water Heater

AGE - END OF LIFE (CLOSE)



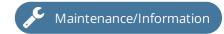
The water heater was near the end of its service life expectancy. Plan for replacement.



mfg date 2015

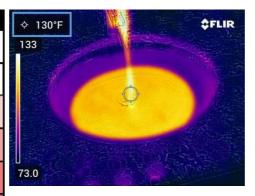
8.4.2 Water Heater

WATER TEMPERATURE TOO HIGH



The hot water temperature was too high, which can cause scalding very quickly. The water temperature should not be higher than 120° at any faucet. To reduce the risk of scalding, reduce the temperature at the water heater. Be aware, however, that this can increase the potential for Legionellae Bacteria growth. To minimize the risk of scalding and bacteria growth, consider installing a tempering valve. For more information on this topic, click here: There's No Perfect Temperature For Your Water Heater

Water Scalding Chart		
Set water heater to 120 degrees or less for safety!		
TEMPERATURE	TIME TO PRODUCE SERIOUS BURN	
120 degrees (hot)	More than 5 minutes	
130 degrees	About 30 seconds	
140 degrees	Less than 5 seconds	
150 degrees	About 11/2 seconds	
160 degrees (very hot)	About 1/2 second	



8.8.1 Water Softener/Filtration



TEST STRIP

The photo below shows a hardness test strip, taken from a water supply with softened water. Consult with a water treatment specialist if the test strip results differ from your preference.







salt in storage tank

water tested soft

9: HEATING

Information

Heating System

Heating System Age

Forced Air, Electric (in-floor)

7 - 8 years old

Furnace Filter: Change filter regularly

Change the filter regularly to ensure the proper operation of the HVAC system. For more information on this topic, click here: Don't Ruin Your Furnace. Change Your Filter Frequently.







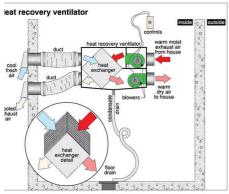
clean

filter size

location

Air Exchange System: HRV (Heat Recovery Ventilator)

An HRV (heat recovery ventilator) was installed as the home's air exchange system. Follow the manufacturer's recommendations for operation and cleaning. For general operation and maintenance information, click here: HRV, Part 2 of 3: Maintenance & Operation







internal components



Observations

9.1.1 Furnace

OPERATION - SHORT-CYCLING



The furnace short-cycled during the inspection, which indicates a problem with the furnace. There are several potential reasons for this. Have the furnace further evaluated and repaired as needed.

9.3.1 Blower Fan

DIRTY BLOWER FAN



The blower fan blades were dirty. Have the furnace and the air conditioner evaporator coil professionally cleaned.



9.9.1 Humidifier



NOT TESTED

Humidifiers are not tested for operation. Their use is not recommended as they can cause moisture problems in the home. For more information on this topic, click here: Whole-House Humidifiers

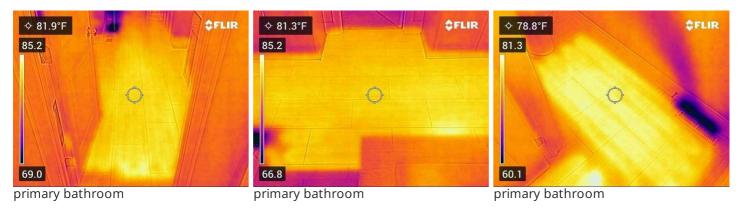


9.12.1 Electric Heat

IN-FLOOR HEAT FUNCTIONAL

The in-floor heat was functional





10: COOLING

Information

Cooling MethodForced Air

Cooling System Age 7 - 8 years old

Refrigerant Type R-410A

Observations

10.1.1 Operation/Condition

COOLING SYSTEM OPERATIONAL



The air-conditioning responded to thermostatic controls and achieved an acceptable differential temperature split between the supply and return air (approximately 15-20 degrees).





Maintenance/Information



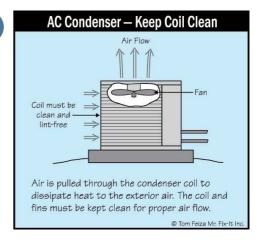
return temp

supply temp - temp drop of approximately 16 degrees (acceptable)

10.5.1 Compressor/Condenser

DIRTY

The condensing coil was dirty, which will reduce the efficiency of the unit. Have the coil cleaned. For more information on this topic, click here: Three Simple AC Maintenance Items.



11: INTERIOR

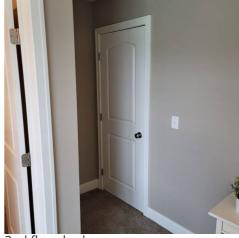
Observations

11.1.1 Doors

DOORS NOT LATCHING



One or more doors did not latch properly. For instructions on how to correct this, click here: Door repair: how to fix a door that doesn't latch



2nd floor bedroom

11.7.1 Walls

CRACKS AT WALLS



There were some common cracks present in the walls, which are typically cosmetic and not structural.



11.7.2 Walls

DRYWALL BY SHOWER DAMAGED



There was water damage at the drywall at the base of the shower wall. Consider adding splash guards to help prevent future water damage.







no/low moisture level (acceptable)

2nd floor bathroom

11.8.1 Floors

CARPET LOOSE



The carpeting was loose in areas. Have the carpet re-stretched or replaced.



12: APPLIANCES

Information

Kitchen: Garbage Disposal

Operational



Kitchen: Refrigerator/FreezerOperational







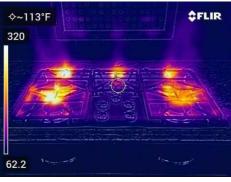




Kitchen: Stove

Operational





Kitchen: OvenOperational

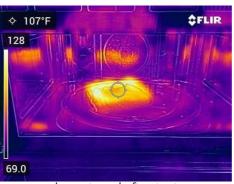




Kitchen: Built-in Microwave

Operational



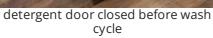


damp towel after test

Kitchen: Dishwasher Operational









detergent door open after wash cycle

Laundry: DryerOperational







dry towel after 60 minute timed cycle

Laundry: Washer Operational







damp towel after wash cycle

Limitations

Laundry

HOSES NOT VISIBLE

The washing machine hoses were blocked by the washing machine and not visible.

Observations

12.2.1 Laundry

FRONT LOADER CAUTION



The front-loading washing machine had a rubber gasket that can build up with mold growth. Keep the door slightly open when not in use to help keep the gasket dry.



12.2.2 Laundry

NO EMERGENCY DRAIN PAN



There was no emergency drain pan installed at the washing machine. Without a drain pan, the washing machine could cause damage if it leaked or if a hose burst. Consider installing an emergency shut-off device such as Flood Stop on the water supply lines. These are DIY devices that can help prevent major damage for approximately \$200.



12.3.1 Dryer Duct

REMINDER TO CLEAN

Have the dryer duct cleaned once or twice a year to help prevent lint build-up, which can lead to a fire.



13: ATTIC

Information

Attic Inspection MethodInspected from attic access

Attic InsulationLoose fill fiberglass

Vapor Barrier Polyethylene

Limitations

Styles & Materials

INSPECTED FROM ATTIC ACCESS

The attic could not be safely traversed without disturbing the insulation and/or due to confined spaces. The attic inspection was limited to areas observed from the attic access.

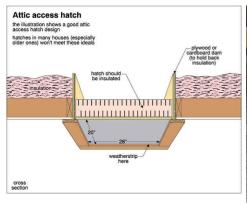
Observations

13.1.1 Attic Access

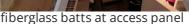


FIBERGLASS AND NO WEATHER STRIP

The attic access panel was covered with a piece of fiberglass insulation. It can be difficult to get the fiberglass to drop back down on top of the attic access panel if it is not properly attached. Insulate the top of the access panel with rigid foam. Additionally, the access panel did not make a tight seal at the ceiling. Have the access weather stripped to help prevent air leakage at this location. For more information on this topic, click here: Poorly insulated attic access panels









weather strip here

13.2.1 Attic Insulation

ACCEPTABLE

The attic insulation was acceptable.





13.3.1 Framing & Sheathing

ACCEPTABLE

The framing and sheathing were acceptable.





13.5.1 Attic Bypasses



TECH TUBE

The 'tech tube' that leads to the basement was open in the attic. This can allow conditioned air from the house into the attic, possibly causing moisture issues. Have this tube sealed in the attic. For more information on this topic, click here: A New Attic Problem with New Construction Homes



14: GARAGE

Information

Garage Door Openers: Garage door testing

Garage door openers should be tested for auto-reverse monthly. This test should be conducted with a 2x4 lying flat on the ground, and allowing the door to close on the 2x4. If the door does not reverse, it should be adjusted or replaced to prevent a child or animal from getting trapped beneath it. Be advised, however, that testing this safety feature may result in damage to the door, opener, or both, which is why this test is not conducted at the time of inspection. For a short video showing how this test is performed, click here: How To Do a Garage Door Safety Test

Limitations

Floor

STORED ITEMS

There were stored items in the garage which prevented the garage floor, walls, and other components from being fully inspected.



Observations

14.1.1 Garage Door

TORSION SPRING BROKEN

A Priority

The torsion spring was broken at the overhead door. This will cause excess strain on the opener and could allow the door to fall if disconnected from the opener. Have the spring replaced to avoid possible injury.



15: ENVIRONMENTAL

Information

Mold: Test Performed

A mold screening test was performed on the home. The results of that test are sent in a separate report. For more information from the Minnesota Department of Health, click here: Mold and Moisture

Radon: Test performed

A short-term (48 hour) radon test was performed on the home. The results of that test are sent in a separate report. For more information on radon and radon testing, click here: Radon Testing - What the Results Mean



basement bedroom

Observations

15.3.1 Radon

INSTALLED MITIGATION SYSTEM



There was an installed radon mitigation system. Consider periodic long-term testing to ensure the mitigation system is effective. For more information on radon and radon testing, click here: Radon Testing

Do-it-yourself radon test kits can be purchased here: Radon Test Kit

The Minnesota Department of Health (MDH) provides information on radon and how to protect your family's health. Click here for their brochure: Keeping your home safe from radon





radon pipe in utility room

radon pipe and outlet in attic

STANDARDS OF PRACTICE

Roof Covering

The inspection of the roof includes the roofing materials, roof drainage systems, flashings, skylights, chimneys, and roof penetrations.

Chimney & Fireplace

The inspection of the chimney includes the vent and system components.

Basement / Foundation / Structure

The inspection of the structural components includes the foundation and framing.

Exterior

The inspection of the exterior includes the siding, flashing, trim, all exterior doors, decks, balconies, stoops, steps, porches, and guardrails. It includes eaves, soffits, and fascias that are accessible from the ground level. This also includes vegetation, grading, surface drainage, and retaining walls that are likely to adversely affect the building. This also includes adjacent entryway walkways, patios, and driveways.

Siding

The inspection of the siding includes the installation and condition of the exterior cladding, flashing, and trim.

Electrical

The inspection of the electrical system includes the following: the service drop; the service entrance conductors, cables, and raceways; service equipment and main disconnects; service grounding; interior components of service panels and sub panels; conductors; overcurrent protection devices; a representative number of installed lighting fixtures, switches, and receptacles; ground fault circuit interrupters and arc fault circuit interrupters.

Plumbing

The inspection of the plumbing system includes:

- the water supply and distribution system, including all fixtures and faucets
- the drain, waste, and vent systems, including all fixtures
- the water heating equipment and hot water supply system
- vent systems, flues, and chimneys
- fuel storage and fuel distribution systems
- drainage sumps, sump pumps, and related piping
- Inspectors do not operate shut-off valves

Heating

The inspection of the heating system includes any installed heating equipment and their filters, vent systems, flues, and chimneys. Any readily openable access panels are also opened.

Cooling

The inspection of the air conditioning consists of the central and through-wall equipment (but not window units), as well as the distribution systems. Any readily openable access panels are also opened.

Interior

The inspection of the interior includes:

- walls, ceilings, and floors
- steps, stairways, and railings
- countertops and a representative number of installed cabinets

- a representative number of doors and windows

Attic

The inspection of the attic(s) includes the insulation, ventilation, and vapor retarders where visible. The inspection also includes mechanical exhaust systems (e.g. kitchen, bathrooms, laundry, clothes dryer).

Garage

The inspection of the garage includes the garage doors and garage door operators.

Environmental

Environmental items included in this section are specifically excluded by our standards of practice as well as our inspection agreement, but may be noted here as a courtesy, or as a convenience if additional testing was conducted at the same time as the home inspection.