

MI HOUSE DETECTIVE, LLC

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RESIDENTIAL REPORT

1234 Main St. Boyne City MI 49712

Buyer Name 08/31/2018 9:00AM



Inspector
Bill Ulvund
InterNACHI Certified Professional Inspector,
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Agent Name 555-555-5555 agent@spectora.com

1234 Main St.

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SUMMARY





RECOMMENDATION

SAFETY HAZARD

- 2.2.1 Exterior Vegetation, Grading, Drainage & Retaining Walls: Negative Grading
- 2.3.1 Exterior Siding, Flashing & Trim: Cracking Major
- 2.3.2 Exterior Siding, Flashing & Trim: Flashing/Trim Improperly Installed
- 2.4.1 Exterior Exterior Doors: Hardware Damaged
- 2.6.1 Exterior Decks, Balconies, Porches & Steps: Improper Deck Construction Practices
- 3.2.1 Roof Roof Drainage Systems: Gutters Missing
- 4.1.1 Basement, Foundation, Crawlspace & Structure Foundation: Water Intrusion

Θ

- 4.2.1 Basement, Foundation, Crawlspace & Structure Basements & Crawlspaces: Evidence of Water Intrusion
- 4.2.2 Basement, Foundation, Crawlspace & Structure Basements & Crawlspaces: Crawlspace Venting-
- 4.2.3 Basement, Foundation, Crawlspace & Structure Basements & Crawlspaces: Undermining
- 4.4.1 Basement, Foundation, Crawlspace & Structure Wall Structure: Opens space around penetration
- 5.1.1 Heating Equipment: Needs Servicing/Cleaning
- 5.3.1 Heating Distribution Systems: Duct Damaged
- 5.3.2 Heating Distribution Systems: Ducts in crawlspace
- 7.1.1 Plumbing Main Water Shut-off Device: Corrosion
- O 7.2.1 Plumbing Drain, Waste, & Vent Systems: Leaking Pipe

7.3.1 Plumbing - Water Supply, Distribution Systems & Fixtures: Lower water-flow and temperature in left hand sink

A

- 8.2.1 Electrical Main & Subpanels, Service & Grounding, Main Overcurrent Device: Breaker Incorrectly Wired
- (2) 8.4.1 Electrical Lighting Fixtures, Switches & Receptacles: Retainers absent
- ▲ 8.5.1 Electrical GFCI & AFCI: No GFCI Protection Installed
- O 10.2.1 Attic, Insulation & Ventilation Vapor Retarders (Crawlspace or Basement): No Vapor Barrier
- 11.1.1 Doors, Windows & Interior Doors: Door Sticks

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1: INSPECTION DETAILS

Information

In Attendance

Home Owner

Temperature (approximate)

77 Fahrenheit (F)

Occupancy

Furnished, Occupied

Type of Building

Single Family

Style

Ranch

Weather Conditions

Heavy Rain

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2: EXTERIOR

		D	NP	NI	IN
2.1	Walkways, Patios & Driveways				Χ
2.2	Vegetation, Grading, Drainage & Retaining Walls				Χ
2.3	Siding, Flashing & Trim				Χ
2.4	Exterior Doors				Χ
2.5	Exterior Windows				Χ
2.6	Decks, Balconies, Porches & Steps				Χ
2.7	Eaves, Soffits & Fascia				Χ

D = Deficiency

NP = Not Present

NI = Not Inspected

IN = Inspected

Information

Inspection Method

Visual, Infrared

Exterior Doors: Exterior Entry

Door

Hollow Core

Siding, Flashing & Trim: Siding

Material

Vinyl

Decks, Balconies, Porches &

Steps: Appurtenance Deck, Covered Porch

Siding, Flashing & Trim: Siding

Style

Clapboard

Decks, Balconies, Porches &

Steps: Material

Wood

Walkways, Patios & Driveways: Driveway Material

Gravel





Observations

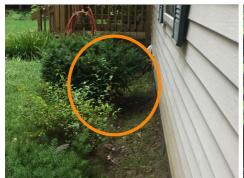
2.2.1 Vegetation, Grading, Drainage & Retaining Walls

NEGATIVE GRADING

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Grading is sloping towards the home in some areas. This could lead to water intrusion and foundation issues. Recommend qualified landscaper or foundation contractor regrade so water flows away from home.

Here is a helpful article discussing negative grading.







2.3.1 Siding, Flashing & Trim

CRACKING - MAJOR

Moderate to major cracking was observed at one or more points on the exterior. This can be the result of poor original compaction of soil at the time of construction or excess moisture in the underlying soil. Recommend consulting with a structural engineer and/or soil expert.





Above fireplace. Siding detached



2.3.2 Siding, Flashing & Trim

FLASHING/TRIM IMPROPERLY INSTALLED

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Flashing & trim pieces were improperly installed, which could result in moisture intrusion and damaging leaks. Recommend a qualified siding contractor evaluate and repair.



2.4.1 Exterior Doors

HARDWARE DAMAGED

One or more pieces of door hardware are damaged. Recommend repair or replace.



2.6.1 Decks, Balconies, Porches & Steps

IMPROPER DECK CONSTRUCTION PRACTICES

Deck was observed to have general poor construction. Recommend qualified deck contractor evaluate.



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Due to height and weight load of roof over front porch this should be a 6 x 6 post in direct line with the post going in the ground

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3: ROOF

		D	NP	NI	IN
3.1	Coverings				
3.2	Roof Drainage Systems				Χ
3.3	Flashings				
3.4	Skylights, Chimneys & Other Roof Penetrations		Χ		

D = Deficiency NP = No

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IN = Inspected

Information

Roof Type/Style

Gable

Coverings: Material

Fiberglass

Roof Drainage Systems: Gutter

MaterialNo gutters

Flashings: Material

Aluminum

Inspection Method

Roof



Observations

3.2.1 Roof Drainage Systems

GUTTERS MISSING

There are no gutters present on the structure. Gutters are recommended because they collect rain water from the roof and direct it away form the building.

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4: BASEMENT, FOUNDATION, CRAWLSPACE & STRUCTURE

		D	NP	NI	IN
4.1	Foundation				Χ
4.2	Basements & Crawlspaces				Χ
4.3	Floor Structure				Χ
4.4	Wall Structure				Χ
4.5	Ceiling Structure				Χ

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Information

Foundation: MaterialMasonry Block

Basements & Crawlspaces: Flooring Insulation
None

Floor Structure:

Basement/Crawlspace Floor

Wood



Floor Structure: Material Steel I-Beams, Wood Beams Floor Structure: Sub-floor
Plywood

Inspection Method

Crawlspace Access, Visual, Infrared

Infrared / Thermal Image

NOTE: Thermal images of moisture problems (if any) have been confirmed with a quality moisture meter and proper repairs should only be done by a qualified professional. Moisture can be conducive to fungi-mold, decay, and wood destroying insects that cannot always be seen. Also, remember that more repair items may be discovered during the process of further evaluations and repairs of any item listed.

NOTE: Although Infrared Thermal Imaging is a far better diagnostic tool than the naked eye, it does not guarantee 100% accuracy, unless removal or destruction of components can be achieved to validate findings. When possible, other tools are used to verify Thermal Images, but even with these considerations, we do not claim to have x-ray vision. Conditions may change and cause the apparent temperature readings revealed in Thermal Images to be different at any given time.

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Basements & Crawlspaces: Crawlspace Floor

No soil cover

• Soil cover (non-sealed edges)

The floor of the crawlspace was covered with a plastic soil cover which consisted of sheet plastic spread across the floor of a crawlspace. Soil covers are installed to help minimize moisture evaporation into crawlspace air from the soil. Edges at overlaps and the crawlspace perimeter were not sealed. Ventilation openings can be reduced from 1:150 to 1:1,500

Soil cover (sealed edges)

The floor of the crawlspace was covered with a plastic soil cover which consisted of sheet plastic spread across the floor of a crawlspace. Soil covers are installed to help minimize moisture evaporation into crawlspace air from the soil. Edges were sealed at overlaps and at the perimeter, which is typically done to help lower radon levels.

No soil cover

No soil cover was installed at the time of the inspection. Soil covers help reduce humidity levels in crawlspaces by limiting moisture evaporation into the air from soil. Reducing humidity levels can help reduce the chances for mold growth. Ventilation should be 1:150 sq/ft







Observations

4.1.1 Foundation

WATER INTRUSION

Water intrusion was evident on the surface of the floor slab or in the basement/crawlspace. This can compromise the soil's ability to stabilize the structure and could cause damage. Recommend a qualified contractor identify the source of moisture and remedy.



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4.2.1 Basements & Crawlspaces

EVIDENCE OF WATER INTRUSION

Flooring structure showed signs of water intrusion, recommend a qualified contractor identify source or moisture and remedy.

Recommendation

Contact a qualified mold inspection professional.

4.2.2 Basements & Crawlspaces

CRAWLSPACE VENTING-

Operable vents-

The crawlspace was equipped with operable vents which should be closed during cold weather to prevent pipes in the crawlspace from freezing and to save on heating costs. Vents should be opened during warm weather to allow natural air movement to carry away moisture evaporating from the soil. (1 sq/ft per 150 sq/ft of floor space.

Unvented Crawlspace-

4.2.3 Basements & Crawlspaces

UNDERMINING



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The Inspector recommends correction of any neutral or negative grade around the home to prevent future damage. The grade should slope away from the home for a minimum distance of 6 feet from the foundation.

• Undermining (found. damage visible)

Gaps visible beneath foundation walls in the crawlspace indicate undermining has occurred. Undermining occurs when flowing water erodes soil from beneath a foundation. This is a structural problem because foundations are designed to transfer the weight of the structure above to the soil. Without the support of soil, the foundation is exposed to structural loads for which it was not designed and can fail. The Inspector recommends identifying the source of the moisture and correcting it.

Moisture intrusion can also encourage the growth of microbes such as mold fungi. Cracking in the foundation in this area was consistent with damage typically caused by inadequate foundation support. You should consult with a qualified foundation repair contractor before the expiration of your Inspection Objection Deadline to gain an understanding of options and costs for correction.

• Damage beneath slider (recent)

Wood framing visible in the crawlspace beneath the sliding glass door had evidence of moisture intrusion. The moisture meter indicated elevated levels of moisture indicating recent leakage.

Recommendation

Contact a qualified structural engineer.

4.4.1 Wall Structure

OPENS SPACE AROUND PENETRATION

Seal air space to reduce air transmission

Recommendation

Recommended DIY Project



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5: HEATING

		D	NP	NI	IN
5.1	Equipment				Χ
5.2	Normal Operating Controls				Χ
5.3	Distribution Systems				Х
5.4	Presence of Installed Heat Source in Each Room		Χ		

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Information

Equipment: Energy SourcePropane

Equipment: Heat Type
Forced Air

Distribution Systems: Ductwork
Non-insulated

Equipment: BrandArmstrong Air

To determine age and information on your HVAC Equipmentthis site is a great resource of information.







Observations

5.1.1 Equipment

NEEDS SERVICING/CLEANING

The furnace should be cleaned and serviced annually. Recommend a qualified HVAC contractor clean, service and certify furnace.

Here is a resource on the importance of furnace maintenance.

The filter was not observed.

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5.3.1 Distribution Systems

DUCT DAMAGED

Air supply duct was damaged. Recommend a qualified HVAC contractor repair.



Restriction to airflow. Crawlspace

5.3.2 Distribution Systems

DUCTS IN CRAWLSPACE

Air supply ducts were not properly sealed. Recommend a qualified HVAC contractor seal supply and return ducts for maximum efficiency.

Unsealed/uninsulated ducts in unheated space may lose 25% to 40% of their energy.





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6: COOLING

		D	NP	NI	IN
6.1	Cooling Equipment		Χ		
6.2	Normal Operating Controls		Χ		
6.3	Distribution System		Χ		
6.4	Presence of Installed Cooling Source in Each Room		Χ		

D = Deficiency NP = Not Present NI = Not Inspected IN = Inspected

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7: PLUMBING

		D	NP	NI	IN
7.1	Main Water Shut-off Device				Χ
7.2	Drain, Waste, & Vent Systems				Χ
7.3	Water Supply, Distribution Systems & Fixtures				Χ
7.4	Hot Water Systems, Controls, Flues & Vents				Χ
7.5	Fuel Storage & Distribution Systems				Χ
7.6	Sump Pump			Χ	Χ

D = Deficiency

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NI = Not Inspected

Drain, Waste, & Vent Systems:

IN = Inspected

Information

Water Source

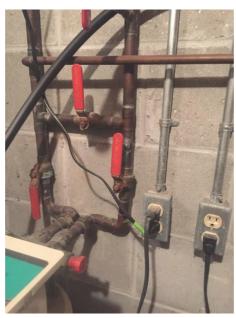
Well

Main Water Shut-off Device: Location

Basement, Utility Room, North

Drain Size
h 2"

3



Drain, Waste, & Vent Systems: Material PVC Water Supply, Distribution
Systems & Fixtures: Distribution

Material Copper

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Water Supply, Distribution Systems & Fixtures: Water Supply Material Copper



Hot Water Systems, Controls, Flues & Vents: Capacity

Basement

40 gallons



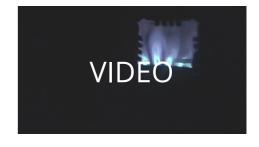
Fuel Storage & Distribution Systems: Main Gas Shut-off Location Basement

Basement, At Tank

Hot Water Systems, Controls, Flues & Vents: Location

Basement, Washer/Dryer Area

Hot Water Systems, Controls, Flues & Vents: Power Source/Type Propane



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Filters

Water Softener, Sediment Filter



Hot Water Systems, Controls, Flues & Vents: Manufacturer

American Water Heater Company

I recommend flushing & servicing your water heater tank annually for optimal performance. Water temperature should be set to at least 120 degrees F to kill microbes and no higher than 130 degrees F to prevent scalding.

Here is a nice maintenance guide from Lowe's to help.

How old is your Water Heater click here for a reference link to find out!



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Sump Pump: Location

Basement





Observations

7.1.1 Main Water Shut-off Device

CORROSION

Water main shut-off shows signs of corrosion. Recommend a qualified plumber evaluate.



Moves smoothly

7.2.1 Drain, Waste, & Vent Systems

LEAKING PIPE

A drain, waste and/or vent pipe showed signs of a leak. Recommend a qualified plumber evaluate and repair.

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7.3.1 Water Supply, Distribution Systems & Fixtures

LOWER WATER-FLOW AND TEMPERATURE IN LEFT HAND SINK

BATHROOM

Recommendation

Contact a qualified professional.









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8: ELECTRICAL

		D	NP	NI	IN
8.1	Service Entrance Conductors				Χ
8.2	Main & Subpanels, Service & Grounding, Main Overcurrent Device				Χ
8.3	Branch Wiring Circuits, Breakers & Fuses				Χ
8.4	Lighting Fixtures, Switches & Receptacles				Χ
8.5	GFCI & AFCI				Χ
8.6	Smoke Detectors				Χ
8.7	Carbon Monoxide Detectors			Χ	

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Information

Service Entrance Conductors: Electrical Service Conductors

Main & Subpanels, Service & **Grounding, Main Overcurrent Device: Panel Manufacturer** Unknown

& Fuses: Branch Wire 15 and 20 **AMP**

Copper

Main & Subpanels, Service & **Grounding, Main Overcurrent** 120 Volts, Copper, Below Ground Device: Main Panel Location

Basement

Main & Subpanels, Service & **Grounding, Main Overcurrent**

Device: Panel Type Circuit Breaker

Branch Wiring Circuits, Breakers Branch Wiring Circuits, Breakers

& Fuses: Wiring Method

Romex

Main & Subpanels, Service & **Grounding, Main Overcurrent**

Device: Panel Capacity

200 AMP

Main & Subpanels, Service & **Grounding, Main Overcurrent Device: Sub Panel Location**

Garage

Observations

8.2.1 Main & Subpanels, Service & Grounding, Main Overcurrent Device



BREAKER INCORRECTLY WIRED

Circuit breaker was incorrectly wired / installed. This indicates that work was probably not performed by a licensed electrician and poses a safety hazard. Recommend that a licensed electrician check the entire panel and repair and replace as need.



Double tapped breaker

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8.4.1 Lighting Fixtures, Switches & Receptacles

RETAINERS ABSENT

Wires that run through conduit must have a retainer at the end of the conduit to secure the wires

Recommendation

Contact a qualified professional.



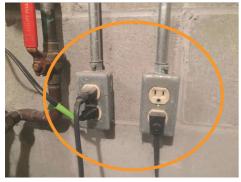
8.5.1 GFCI & AFCI

Safety Hazard NO GFCI PROTECTION INSTALLED

MASTER BATHROOM, BASEMENT LAUNDRY AREA AND SUMP PUMP LOCATION

No GFCI protection present in all locations. Recommend licensed electrician upgrade by installing ground fault receptacles in all locations.

Here is a link to read about how GFCI receptacles keep you safe.





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9: FIREPLACE

		D	NP	NI	IN
9.1	Vents, Flues & Chimneys			Χ	
9.2	Lintels				Χ
9.3	Damper Doors				
9.4	Cleanout Doors & Frames			Χ	

D = Deficiency NP = Not Present NI = Not Inspected IN = Inspected

Information

Type

Gas

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10: ATTIC, INSULATION & VENTILATION

		D	NP	NI	IN
10.1	Attic Insulation			Χ	
10.2	Vapor Retarders (Crawlspace or Basement)				Χ
10.3	Ventilation				Х
10.4	Exhaust Systems				Χ

D = Deficiency NP = Not Present NI = Not Inspected IN = Inspected

Information

Ventilation: Ventilation Type

Ridge Vents



Exhaust Systems: Exhaust Fans

Fan/Heat/Light

Inspection Method

Basement access hatch

Infrared / Thermal Image

NOTE: Thermal images of moisture problems (if any) have been confirmed with a quality moisture meter and proper repairs should only be done by a qualified professional. Moisture can be conducive to fungi-mold, decay, and wood destroying insects that cannot always be seen. Also, remember that more repair items may be discovered during the process of further evaluations and repairs of any item listed.

NOTE: Although Infrared Thermal Imaging is a far better diagnostic tool than the naked eye, it does not guarantee 100% accuracy, unless removal or destruction of components can be achieved to validate findings. When possible, other tools are used to verify Thermal Images, but even with these considerations, we do not claim to have x-ray vision. Conditions may change and cause the apparent temperature readings revealed in Thermal Images to be different at any given time.

Dryer Vent

Metal

Duct material should be metal, not vinyl. Metal flex ducting should be used sparingly as it tends to trap lint and moisture. Smooth wall galvanized or aluminum is preferred.

No penetrations, like screws, should exist at the interior of the vent ducting. Duct length from the dryer to exterior vent should never be greater than 25 feet; less distance if turns or right angles are involved. Every 90-degree turn will shorten your allowable distance by 5 feet.

Duct vents should exit to the exterior with a secure and covered vent cap.

Exterior vents should have working flappers that open when the dryer is venting and closed otherwise. This will keep out cold air and pests.

There should be no visible lint buildup at any connection from the dryer to the exterior.

Duct vents at exterior should exceed 3 feet from any other opening; window, door, other vents, etc.

Duct vents at exterior should be at least 6 feet from the A/C condensing unit.

Duct vents should never be terminated in the attic or crawlspace.

Never combine dryer venting with any other venting source.

Lastly, check your appliance filter before each load to be dried.

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Limitations

Attic Insulation

HOME OWNER DECLINED ACCESS

BEDROOM CLOSET

Observations

10.2.1 Vapor Retarders (Crawlspace or Basement)

NO VAPOR BARRIER

There is no vapor barrier beneath the flooring. This can result in unwanted moisture.

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11: DOORS, WINDOWS & INTERIOR

		D	NP	NI	IN
11.1	Doors				Χ
11.2	Windows				Х
11.3	Floors				Χ
11.4	Walls				Χ
11.5	Ceilings				Χ
11.6	Steps, Stairways & Railings				Χ
11.7	Countertops & Cabinets				Χ

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Information

Windows: Window Manufacturer Windows: Window Type

Unknown Double-hung, Sliders, Casement

Walls: Wall Material

Drywall

Ceilings: Ceiling Material

Gypsum Board

Floors: Floor Coverings
Carpet, Hardwood

Countertops & Cabinets:

Cabinetry Wood

Countertops & Cabinets:

Countertop Material

Granite

Observations

11.1.1 Doors

DOOR STICKS

Door sticks and is tough to open. Recommend sanding down offending sides.

Here is a helpful DIY article on how to fix a sticking door.



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STANDARDS OF PRACTICE

Exterior

I. The inspector shall inspect: A. the exterior wall-covering materials, flashing and trim; B. all exterior doors; C. adjacent walkways and driveways; D. stairs, steps, stoops, stairways and ramps; E. porches, patios, decks, balconies and carports; F. railings, guards and handrails; G. the eaves, soffits and fascia; H. a representative number of windows; and I. vegetation, surface drainage, retaining walls and grading of the property, where they may adversely affect the structure due to moisture intrusion. II. The inspector shall describe: A. the type of exterior wall-covering materials. III. The inspector shall report as in need of correction: A. any improper spacing between intermediate balusters, spindles and rails. IV. The inspector is not required to: A. inspect or operate screens, storm windows, shutters, awnings, fences, outbuildings, or exterior accent lighting. B. inspect items that are not visible or readily accessible from the ground, including window and door flashing. C. inspect or identify geological, geotechnical, hydrological or soil conditions. D. inspect recreational facilities or playground equipment. E. inspect seawalls, breakwalls or docks. F. inspect erosion-control or earth-stabilization measures. G. inspect for safety-type glass. H. inspect underground utilities. I. inspect swimming pools or spas. M. inspect wells or springs. K. inspect solar, wind or geothermal systems. L. inspect swimming pools or spas. M. inspect drainfields or dry wells. P. determine the integrity of multiple-pane window glazing or thermal window seals.

Roof

I. The inspector shall inspect from ground level or the eaves: A. the roof-covering materials; B. the gutters; C. the downspouts; D. the vents, flashing, skylights, chimney, and other roof penetrations; and E. the general structure of the roof from the readily accessible panels, doors or stairs. II. The inspector shall describe: A. the type of roof-covering materials. III. The inspector shall report as in need of correction: A. observed indications of active roof leaks. IV. The inspector is not required to: A. walk on any roof surface. B. predict the service life expectancy. C. inspect underground downspout diverter drainage pipes. D. remove snow, ice, debris or other conditions that prohibit the observation of the roof surfaces. E. move insulation. F. inspect antennae, satellite dishes, lightning arresters, de-icing equipment, or similar attachments. G. walk on any roof areas that appear, in the inspectors opinion, to be unsafe. H. walk on any roof areas if doing so might, in the inspector's opinion, cause damage. I. perform a water test. J. warrant or certify the roof. K. confirm proper fastening or installation of any roof-covering material.

Basement, Foundation, Crawlspace & Structure

I. The inspector shall inspect: A. the foundation; B. the basement; C. the crawlspace; and D. structural components. II. The inspector shall describe: A. the type of foundation; and B. the location of the access to the under-floor space. III. The inspector shall report as in need of correction: A. observed indications of wood in contact with or near soil; B. observed indications of active water penetration; C. observed indications of possible foundation movement, such as sheetrock cracks, brick cracks, out-of-square door frames, and unlevel floors; and D. any observed cutting, notching and boring of framing members that may, in the inspector's opinion, present a structural or safety concern. IV. The inspector is not required to: A. enter any crawlspace that is not readily accessible, or where entry could cause damage or pose a hazard to him/herself. B. move stored items or debris. C. operate sump pumps with inaccessible floats. D. identify the size, spacing, span or location or determine the adequacy of foundation bolting, bracing, joists, joist spans or support systems. E. provide any engineering or architectural service. F. report on the adequacy of any structural system or component.

Heating

I. The inspector shall inspect: A. the heating system, using normal operating controls. II. The inspector shall describe: A. the location of the thermostat for the heating system; B. the energy source; and C. the heating method. III. The inspector shall report as in need of correction: A. any heating system that did not operate; and B. if the heating system was deemed inaccessible. IV. The inspector is not required to: A. inspect or evaluate the interior of flues or chimneys, fire chambers, heat exchangers, combustion air systems, fresh-air intakes, humidifiers, dehumidifiers, electronic air filters, geothermal systems, or solar heating systems. B. inspect fuel tanks or underground or concealed fuel supply systems. C. determine the uniformity, temperature, flow, balance, distribution, size, capacity, BTU, or supply adequacy of the heating system. D. light or ignite pilot flames. E. activate heating, heat pump systems, or other heating systems when ambient temperatures or other circumstances are not conducive to safe operation or may damage the equipment. F. override electronic thermostats. G. evaluate fuel quality. H. verify thermostat calibration, heat anticipation, or automatic setbacks, timers, programs or clocks.

Cooling

I. The inspector shall inspect: A. the cooling system, using normal operating controls. II. The inspector shall describe: A. the location of the thermostat for the cooling system; and B. the cooling method. III. The inspector shall report as

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in need of correction: A. any cooling system that did not operate; and B. if the cooling system was deemed inaccessible. IV. The inspector is not required to: A. determine the uniformity, temperature, flow, balance, distribution, size, capacity, BTU, or supply adequacy of the cooling system. B. inspect portable window units, through-wall units, or electronic air filters. C. operate equipment or systems if the exterior temperature is below 65 Fahrenheit, or when other circumstances are not conducive to safe operation or may damage the equipment. D. inspect or determine thermostat calibration, cooling anticipation, or automatic setbacks or clocks. E. examine electrical current, coolant fluids or gases, or coolant leakage.

Plumbing

I. The inspector shall inspect: A. the main water supply shut-off valve; B. the main fuel supply shut-off valve; C. the water heating equipment, including the energy source, venting connections, temperature/pressure-relief (TPR) valves, Watts 210 valves, and seismic bracing; D. interior water supply, including all fixtures and faucets, by running the water; E. all toilets for proper operation by flushing; F. all sinks, tubs and showers for functional drainage; G. the drain, waste and vent system; and H. drainage sump pumps with accessible floats. II. The inspector shall describe: A. whether the water supply is public or private based upon observed evidence; B. the location of the main water supply shut-off valve; C. the location of the main fuel supply shut-off valve; D. the location of any observed fuelstorage system; and E. the capacity of the water heating equipment, if labeled. III. The inspector shall report as in need of correction: A. deficiencies in the water supply by viewing the functional flow in two fixtures operated simultaneously; B. deficiencies in the installation of hot and cold water faucets; C. mechanical drain stops that were missing or did not operate if installed in sinks, lavatories and tubs; and D. toilets that were damaged, had loose connections to the floor, were leaking, or had tank components that did not operate. IV. The inspector is not required to: A. light or ignite pilot flames. B. measure the capacity, temperature, age, life expectancy or adequacy of the water heater. C. inspect the interior of flues or chimneys, combustion air systems, water softener or filtering systems, well pumps or tanks, safety or shut-off valves, floor drains, lawn sprinkler systems, or fire sprinkler systems. D. determine the exact flow rate, volume, pressure, temperature or adequacy of the water supply. E. determine the water quality, potability or reliability of the water supply or source. F. open sealed plumbing access panels. G. inspect clothes washing machines or their connections. H. operate any valve. I. test shower pans, tub and shower surrounds or enclosures for leakage or functional overflow protection. J. evaluate the compliance with conservation, energy or building standards, or the proper design or sizing of any water, waste or venting components, fixtures or piping. K. determine the effectiveness of anti-siphon, backflow prevention or drain-stop devices. L. determine whether there are sufficient cleanouts for effective cleaning of drains. M. evaluate fuel storage tanks or supply systems. N. inspect wastewater treatment systems. O. inspect water treatment systems or water filters. P. inspect water storage tanks, pressure pumps, or bladder tanks. Q. evaluate wait time to obtain hot water at fixtures, or perform testing of any kind to water heater elements. R. evaluate or determine the adequacy of combustion air. S. test, operate, open or close: safety controls, manual stop valves, temperature/pressure-relief valves, control valves, or check valves. T. examine ancillary or auxiliary systems or components, such as, but not limited to, those related to solar water heating and hot water circulation. U. determine the existence or condition of polybutylene plumbing. V. inspect or test for gas or fuel leaks, or indications thereof.

Electrical

I. The inspector shall inspect: A. the service drop; B. the overhead service conductors and attachment point; C. the service head, gooseneck and drip loops; D. the service mast, service conduit and raceway; E. the electric meter and base; F. service-entrance conductors; G. the main service disconnect; H. panelboards and over-current protection devices (circuit breakers and fuses); I. service grounding and bonding; J. a representative number of switches, lighting fixtures and receptacles, including receptacles observed and deemed to be arc-fault circuit interrupter (AFCI)-protected using the AFCI test button, where possible; K. all ground-fault circuit interrupter receptacles and circuit breakers observed and deemed to be GFCIs using a GFCI tester, where possible; and L. smoke and carbonmonoxide detectors. II. The inspector shall describe: A. the main service disconnect's amperage rating, if labeled; and B. the type of wiring observed. III. The inspector shall report as in need of correction: A. deficiencies in the integrity of the serviceentrance conductors insulation, drip loop, and vertical clearances from grade and roofs; B. any unused circuit-breaker panel opening that was not filled; C. the presence of solid conductor aluminum branchcircuit wiring, if readily visible; D. any tested receptacle in which power was not present, polarity was incorrect, the cover was not in place, the GFCI devices were not properly installed or did not operate properly, evidence of arcing or excessive heat, and where the receptacle was not grounded or was not secured to the wall; and E. the absence of smoke detectors. IV. The inspector is not required to: A. insert any tool, probe or device into the main panelboard, sub-panels, distribution panelboards, or electrical fixtures. B. operate electrical systems that are shut down. C. remove panelboard cabinet covers or dead fronts. D. operate or re-set over-current protection devices or overload devices. E. operate or test smoke or carbon-monoxide detectors or alarms F. inspect, operate or test any security, fire or alarms systems or components, or other warning or signaling systems. G. measure or determine the amperage or voltage of the main service equipment, if not visibly labeled. H. inspect ancillary wiring or remotecontrol devices. I. activate any electrical systems or branch circuits that are not energized. J. inspect low-voltage systems, electrical de-icing tapes, swimming pool wiring, or any timecontrolled devices. K. verify the service ground. L. inspect private or emergency electrical supply sources, including, but not limited to: generators, windmills, photovoltaic solar collectors, or battery or electrical storage facility. M. inspect spark or lightning arrestors. N. inspect or test de-icing equipment. O. conduct voltage-drop calculations. P. determine the accuracy of labeling. Q. inspect exterior lighting.

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Fireplace

I. The inspector shall inspect:

readily accessible and visible portions of the fireplaces and chimneys;

lintels above the fireplace openings;

damper doors by opening and closing them, if readily accessible and manually operable; and

cleanout doors and frames.

II. The inspector shall describe:

the type of fireplace.

III. The inspector shall report as in need of correction:

evidence of joint separation, damage or deterioration of the hearth, hearth extension or chambers;

manually operated dampers that did not open and close;

the lack of a smoke detector in the same room as the fireplace;

the lack of a carbon-monoxide detector in the same room as the fireplace; and

cleanouts not made of metal, pre-cast cement, or other non-combustible material.

IV. The inspector is not required to:

inspect the flue or vent system.

inspect the interior of chimneys or flues, fire doors or screens, seals or gaskets, or mantels.

determine the need for a chimney sweep.

operate gas fireplace inserts.

light pilot flames.

determine the appropriateness of any installation.

inspect automatic fuel-fed devices.

inspect combustion and/or make-up air devices.

inspect heat-distribution assists, whether gravity-controlled or fan-assisted.

ignite or extinguish fires.

determine the adequacy of drafts or draft characteristics.

move fireplace inserts, stoves or firebox contents.

perform a smoke test.

dismantle or remove any component.

perform a National Fire Protection Association (NFPA)-style inspection.

perform a Phase I fireplace and chimney inspection.

Attic, Insulation & Ventilation

I. The inspector shall inspect: A. insulation in unfinished spaces, including attics, crawlspaces and foundation areas; B. ventilation of unfinished spaces, including attics, crawlspaces and foundation areas; and C. mechanical exhaust systems in the kitchen, bathrooms and laundry area. II. The inspector shall describe: A. the type of insulation observed; and B. the approximate average depth of insulation observed at the unfinished attic floor area or roof structure. III. The inspector shall report as in need of correction: A. the general absence of insulation or ventilation in unfinished spaces. IV. The inspector is not required to: A. enter the attic or any unfinished spaces that are not readily accessible, or where entry could cause damage or, in the inspector's opinion, pose a safety hazard. B. move, touch or disturb insulation. C. move, touch or disturb vapor retarders. D. break or otherwise damage the surface finish or weather seal on or around access panels or covers. E. identify the composition or R-value of insulation material. F. activate thermostatically operated fans. G. determine the types of materials used in insulation or wrapping of pipes, ducts, jackets, boilers or wiring. H. determine the adequacy of ventilation.

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Doors, Windows & Interior

I. The inspector shall inspect: A. a representative number of doors and windows by opening and closing them; B. floors, walls and ceilings; C. stairs, steps, landings, stairways and ramps; D. railings, guards and handrails; and E. garage vehicle doors and the operation of garage vehicle door openers, using normal operating controls. II. The inspector shall describe: A. a garage vehicle door as manually-operated or installed with a garage door opener. III. The inspector shall report as in need of correction: A. improper spacing between intermediate balusters, spindles and rails for steps, stairways, guards and railings; B. photo-electric safety sensors that did not operate properly; and C. any window that was obviously fogged or displayed other evidence of broken seals. IV. The inspector is not required to: A. inspect paint, wallpaper, window treatments or finish treatments. B. inspect floor coverings or carpeting. C. inspect central vacuum systems. D. inspect for safety glazing. E. inspect security systems or components. F. evaluate the fastening of islands, countertops, cabinets, sink tops or fixtures. G. move furniture, stored items, or any coverings, such as carpets or rugs, in order to inspect the concealed floor structure. H. move suspended-ceiling tiles. I. inspect or move any household appliances. J. inspect or operate equipment housed in the garage, except as otherwise noted. K. verify or certify the proper operation of any pressure-activated auto-reverse or related safety feature of a garage door. L. operate or evaluate any security bar release and opening mechanisms, whether interior or exterior, including their compliance with local, state or federal standards. M. operate any system, appliance or component that requires the use of special keys, codes, combinations or devices. N. operate or evaluate self-cleaning oven cycles, tilt guards/latches, or signal lights. O. inspect microwave ovens or test leakage from microwave ovens. P. operate or examine any sauna, steamgenerating equipment, kiln, toaster, ice maker, coffee maker, can opener, bread warmer, blender, instant hot-water dispenser, or other small, ancillary appliances or devices. Q. inspect elevators. R. inspect remote controls. S. inspect appliances. T. inspect items not permanently installed. U. discover firewall compromises. V. inspect pools, spas or fountains. W. determine the adequacy of whirlpool or spa jets, water force, or bubble effects. X. determine the structural integrity or leakage of pools or spas.

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