

# BUILDING INSPECTION REPORT

by

**NATIONAL INSPECTION SERVICES**

*Residential*

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**INSPECTION ADDRESS: 2249 Suffolk Street  
Fort Collins, Colorado**

**CUSTOMER: Steve Mecklenburg**

**INSPECTION DATE: January 20, 2010**

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# BUILDING INSPECTION REPORT

## NATIONAL INSPECTION SERVICES

*Residential*

FORT COLLINS, COLORADO

*It is our intent to supply you with an unbiased report and to observe that which the average prospective real estate purchaser may overlook. This report is based on a visual inspection only, at your request, in easily accessible areas, without the use of tools or testing devices, therefore, we cannot and do not guarantee that defects, whether structural, mechanical, or otherwise do not exist. This report constitutes a condition survey only, is not intended to be exhaustive, and is not a warranty. Any attached documents or addenda, whether printed or written, whether contractual or informational, shall be considered a part of this report. It is recommended that any deficiencies and the components/systems related to these deficiencies noted in the report be evaluated/inspected and repaired as needed by licensed contractors/professionals PRIOR TO THE CLOSE OF ESCROW. Further evaluation PRIOR to the close of escrow is recommended so a properly licensed professional can evaluate our concerns further and inspect the remainder of the system or component for additional concerns that may be outside our area of expertise or the scope of our inspection. Performance standards are based solely on the knowledge and experience of the inspector and therefore are not legally binding and are specifically excluded as being covered in our agreement to perform this inspection. Only those items discussed in this document were inspected and NONE OTHER. This report is written to meet or exceed our understanding of the minimum requirements of the ASHI Standards of Practice. Please call our office for any clarifications of further questions.*

### GENERAL INFORMATION:

#### DESCRIPTION OF THE STRUCTURE:

<b>Structure Type:</b>	Detached single family residence, 2-story Bi-Level
<b>Approximate Year Built:</b>	1972
<b>Foundation Type:</b>	Basement (finished)

#### Inspection Information:

<b>Report number:</b>	N3446
<b>Time started / finished:</b>	10:00 13:00
<b>Present during inspection:</b>	Buyers
<b>For reference, front of house faces:</b>	North
<b>Ground condition:</b>	Damp – partial snow covered
<b>Weather:</b>	Cloudy with cold temperatures

#### THE SCOPE OF THE INSPECTION

The Inspection was a limited visual examination of certain readily accessible systems and components using normal operating controls and opening readily openable access panels. The purpose of the Inspection was to provide the Customer with information about the condition of certain systems and components of the property at the time of the Inspection. The Inspection was performed in accordance with the Standards of Practice of the American Society of Home Inspectors (ASHI), a copy of which is available from us upon written request and was available for review by you prior to accepting our services. The ASHI standards are hereby incorporated by reference in their entirety and are hereby made a part of this Agreement. All terms used herein and not otherwise defined have the meaning set forth in the ASHI standards.

The inspector is a generalist and is not a licensed engineer or expert in any specific craft or trade. If the inspector recommends further action, including (but not limited to) consulting with a specialized expert(s), you must do so at your expense or otherwise assume all risks associated with failure to do so. The inspection was not technically exhaustive. The fee charged for this inspection was substantially less than that of a technically exhaustive inspection.

This written inspection Report describes the following systems and components: foundation, heating, electrical, plumbing, air conditioning, living areas, architectural features, bedrooms, kitchen, fireplace, bathrooms and laundry room, attic, exterior, grading, roofing, roof drainage, chimneys and garage. Should we, as a courtesy, exceed any particular requirement set forth herein in one area, we shall not be obligated to exceed the requirements of other areas.

## FOUNDATION:

<b>Evidence of water within <input checked="" type="checkbox"/> basement:</b>	No
<b>Method of inspection:</b>	Area entered
<b><input checked="" type="checkbox"/> Basement floor construction:</b>	Concrete
<b>Insulation in unfinished areas:</b>	Not visible due to basement finish
<b>Ventilation means:</b>	Windows
<b>Vapor barrier, interior:</b>	Not visible
<b><input checked="" type="checkbox"/> Basement condition:</b>	Satisfactory
<b>Foundation Type:</b>	Poured concrete
<b>Foundation Condition:</b>	Satisfactory – inspection limited by basement finish
<b>Main floor structure:</b>	<b>Joists size:</b> Not visible <b>Spacing:</b> Not visible
<b>Sills:</b>	Not visible
<b>Main carrying beams or walls:</b>	<b>Size:</b> Not visible <b>Material:</b> Not visible
<b>Support under beams or walls:</b>	Not visible due to basement finish

### Remarks:



1. Cracking evident in the concrete foundation walls and slab floor. These cracks do not appear to be indicative of a chronic or degenerative condition but should be monitored.



2. This house has an active radon mitigation system that utilizes a Sub-Slab Depressurization (SSD) technique. Selection, sizing and layout of the system should be further evaluated\*.

Representation about the functional condition of the radon mitigation system cannot be made since National Inspection Services did not test the concentration of radon gas levels in the air. We recommend further evaluation and testing measures be conducted by a NEHA ([www.neha-nrpp.org](http://www.neha-nrpp.org)) certified tester, such as National Inspection Services, to confirm whether the SSD system is adequately reducing the levels of radon gas within the home.

\*(Pursuant to \*EPA's Radon Mitigation Standards (EPA 402-R-93-078, Revised April 1994), the Model Standards and Techniques for Control of Radon in New Residential Buildings (EPA 402-R-94-009, March 1994), and proper radon control methods contained in residential construction rules.)



**Inconsequential crack in foundation wall**



**HEATING:**

**Heating Fuel:** Natural gas  
**Type:** Forced hot air  
**Distribution:** Metal ducts  
**Main fuel shut-off location:** On supply line  
**Condition of  furnace** Satisfactory  
**Operating Controls:** Yes  
**Automatic safety controls:** Yes  
**Humidifier:**                      **Condition:** No – abandoned              Not Applicable (N/A)  
**Apparent carbon monoxide leaks:** No  
**Apparent fuel gas leaks:** No  
**Approximated age of system:** 1 ½ years  
Manufacturer: Payne (Serial Number: 3408A04819)  
Manufactured date: Aug 2008 per manufacturer's data plate  
**Furnace filter size:** 16x20x1  
**Manufacturer's recommended heat rise:** 45°- 75° F  
**Actual furnace heat rise:** 74.5° F = within the manufacturer's stated parameters  
**Maximum air temperature per manufacturer's data plate:** 185° F  
**Actual furnace maximum air temperature:** 144.5° F = within the manufacturer's stated parameters  
**Furnace requires normal servicing:** No



**Remarks:**



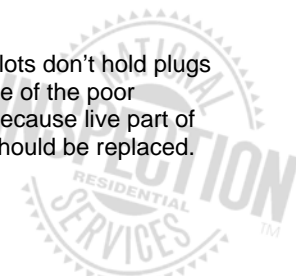
## ELECTRICAL:

<b>Electrical service:</b>	<b>Location:</b> Underground	<b>Amperage:</b> 200
	<b>Conductor material:</b> Copper	<b>Voltage:</b> 120/240
<b>Main service disconnect location:</b>	At main panel	
<b>Ground cable</b>	Yes	
<b>Type of overload protection:</b>	Circuit breakers	
<b>Number of Circuits</b>	21	
<b>Condition of main panel or primary panelboard:</b>	Fair – see Remark #5	
<b>Location of main panel or primary panelboard:</b>	Garage	
<b>Accessibility of main panel:</b>	Satisfactory	
<b>Main panel rating:</b>	Fair	
<b>Compatibility of overload protection with conductor size:</b>	Adequate	
<b>Wiring methods:</b>	Non- metallic sheathed cable	
<b>Branch conductor materials:</b>	Copper & Aluminum	
<b>Solid conductor aluminum wiring:</b>	Yes – see Remark #5	
<b>Polarized and grounded receptacles:</b>	Yes	
<b>Locations of protected circuits:</b> <i>If "NO" see remark below.</i>	<b>Bath</b> – yes <b>Kitchen</b> – yes & NO (see photo) <b>Garage</b> – NO <b>Exterior</b> – NO <b>Jetted tub</b> – N/A <b>Hot tub (exterior)</b> – N/A <b>AFCI</b> – None	
<b>Representative number of switches, fixtures, and receptacles operated:</b>	Yes	
<b>Smoke Detectors present and performed a non-invasive, audible test only:</b>	Yes	
<b>Carbon Monoxide Detector(s) present and performed a non-invasive, audible test only:</b>	Yes – upper level only	
<b>Other built-in electrical equipment:</b>	Attic fan	
<b>Sub-panel or secondary panelboard condition:</b>	No sub-panel present	

### Remarks:

-  3. I recommend GFCI (ground fault circuit interrupter) protection for receptacles located in bathrooms, garages, kitchens, crawlspaces, and unfinished basements; and in certain locations such as near outdoor spas or hot tubs.
-  4. A receptacle in Bath 2 apparently has had heavy use. As a result, this outlet's slots don't hold plugs tightly. Plugs that tend to move or fall out of worn outlets are dangerous because of the poor connection and overheating that can result. These outlets are also dangerous because live part of the plug blades may be exposed if the plug is not tight in the outlet. This outlet should be replaced.

**Electrical section continues on next page ...**





5. In many jurisdictions, stranded aluminum wiring is commonly used for service entrance conductors and for larger appliance wires. However, solid aluminum conductors are problematic because they expand and contract more dramatically than copper and tend to loosen, which creates a fire hazard. In this instance, solid aluminum distribution wiring was evident. Because circuits that use single solid aluminum wiring are considered a significantly higher fire risk than copper wired circuits, I recommend a detailed inspection by a qualified *master* electrician and adjustments pursuant to this advised evaluation. Only a qualified electrician who *specializes* in repairing aluminum wiring\* should perform evaluations and/or repair.

\* Suggested websites for information on solid aluminum wiring, (not a comprehensive list):

<http://www.cpsc.gov/cpsc/pub/prereel/prhtml74/74040.html>;

<http://www.hsb.com/thelocomotive/Story/FullStory/ST-FS-ALUM2.html>; and [www.alwirerepair.com](http://www.alwirerepair.com)



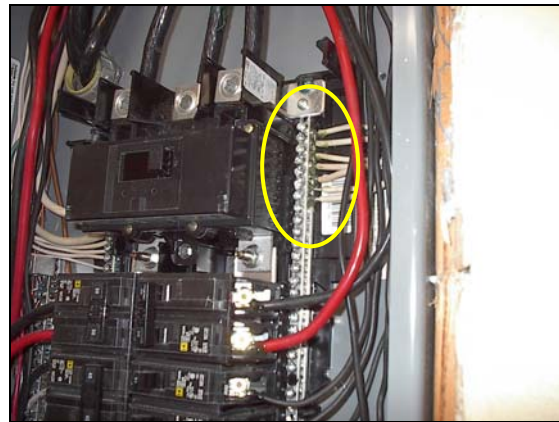
6. I recommend upgrading existing smoke detectors over ten years old and installing smoke detectors per manufacturer specifications and those recommendations of the National Fire Protection Association, [www.nfpa.org](http://www.nfpa.org).



7. I recommend installing at least one carbon monoxide detector on the lower level per manufacturer specifications and as required by law. FYI: Colorado law now requires carbon monoxide detectors for certain dwellings. For more information, go to <http://www.national-inspection.com/hr091091.html>.



Protected outlet (circle) Unprotected (arrow)



Solid aluminum wiring evident



**PLUMBING:**

<b>Type of water supply lines:</b>	Copper
<b>Water pressure and functional flow:</b>	Adequate
<b>Type of waste/vent lines within the house:</b>	Plastic
<b>Fixtures/faucets:</b>	Satisfactory
<b>Main water shut-off valve condition:</b>	Satisfactory
<b>Main water shut-off location:</b>	Near water heater
<b>Overall condition of plumbing:</b>	Fair
<b>Hot water energy source:</b>	Natural gas
<b>Apparent carbon monoxide leaks:</b>	No
<b>Overall condition of water heater:</b>	Satisfactory
<b>Water heater main fuel shut-off location:</b>	On supply line
<b>Water heater size:</b>	50 gallon
<b>Approximated age of water heater:</b>	12 years (based on its Serial Number: RMNG0398 149451) Manufacturer: Richmond Manufactured date: none given on the data plate

**Remarks:**





8. Houses of this age and older and in areas with expansive soils are susceptible to sewer pipes issues. These occur over time or because of other contributing factors. In this instance, this home's sewer pipes may be at risk, and they may not. As a matter of course, I recommend a documented video inspection of the underground pipes by a qualified contractor who uses a sewer camera investigative technique.



## AIR CONDITIONING SYSTEM:

<b>Energy source / type:</b>	Electric (also see Remark #10)
<b>Type:</b>	Exterior condenser unit
<b>Estimated tonnage:</b>	Unable to determine from manufacturer's model number
<b>Cooling equipment, condition:</b>	Unable to determine – see Remark #9
<b>Central cooling:</b>	Yes
<b>Temperature splits:</b>	Unable to determine – see Remark #9
<b>AC unit cooling:</b>	Unable to determine – see Remark #9
<b>Presence of cooling source in each habitable room:</b>	Yes
<b>Approximate age of system:</b>	10 years (based on its Serial Number: 0006525947) Manufacturer: Goodman Manufactured date: none given on the data plate
<b>Operating Controls, condition:</b>	Unable to determine – see Remark #9

### Remarks:

-  9. Due to intermittent cool exterior temperatures prior to and/or during the inspection, performance of the air conditioning system could not be determined by operation. Operation during cool temperature conditions can damage the air conditioner's exterior mechanical components.
-  10. The room air conditioner (wall unit), present in Bedroom 1, did not operate as intended. Strategy for cure should be consistent with intended use and future expectations.

## LIVING AREAS:

<b>Living room:</b>	Located on the upper level and in satisfactory condition
<b>Dining room:</b>	Located on the upper level and in satisfactory condition
<b>Study / Office:</b>	None
<b>Halls:</b>	Satisfactory condition
<b>Family room:</b>	Located on the lower level and in satisfactory condition

### Remarks:



## ARCHITECTURAL FEATURES:

<b>Walls:</b>	<b>Structure:</b> Wood	<b>Condition:</b> Fair
<b>Ceilings:</b>	<b>Structure:</b> Wood	<b>Condition:</b> Fair
<b>Floors:</b>	<b>Structure:</b> Wood and concrete	<b>Condition:</b> Satisfactory
<b>Counters and cabinets</b>	<b>Condition:</b> Satisfactory	
<b>Windows:</b>	<b>Type:</b> Single pane, metal-framed with exterior storms	
	<b>Condition:</b> Fair – see Remark #12a	
<b>Doors:</b>	<b>Condition:</b> Fair – see Remark #12b	
<b>Attached porches and balconies:</b>	<b>Condition:</b> Satisfactory	
<b>Decks</b>	<b>Condition:</b> Fair – see Remark #13	
<b>Steps:</b>	<b>Condition:</b> Satisfactory	
<b>Railways:</b>	<b>Condition:</b> Satisfactory	
<b>Stairway stability:</b>	<b>Condition:</b> Satisfactory	
<b>Concrete patio, walks and driveway:</b>	<b>Condition:</b> Fair – see Remark #14	

### Remarks:



11. Wall in living room and ceiling between living room and dining room display cracking, which appear to be inconsequential and do not appear to be chronic or degenerative conditions.



- 12a. Window in Bedroom 3 did not latch using normal operating procedures, which requires an adjustment or repair.



- 12b. Hallway closet door did not latch, which requires an adjustment.



13. Wood deck support posts extend below grade or are otherwise in direct contact with the soil. Wood in contact with soil or below grade is problematic in that they historically do not experience a long life, particularly as a structural member. As a result, there are several design challenges with respect to wood piers, such as rot, termites and improper support.

These wood posts are intended to support the deck and are load bearing. This structure would certainly enjoy a longer life and more utility if its supports were not below grade. Adjustments are recommended. With posts below grade, this deck is compromised.



14. Driveway displays cracking with displacement. These cracks may be the result of swelling soil heaving or, alternatively, localized settling due to improper compaction of backfill. These cracks should be caulked to prevent access for water that accelerates the rate of heaving or settlement damage.

*Architectural Features section continues on next page ...*



Visit our website, <http://www.national-inspection.com/concreteproblems.html> for our article entitled: **“Concrete Problems: Crumbling, Cracking, Settling, Heaving and Stains”** for further information about concrete issues.





**PHOTO PAGE: ARCHITECTURAL FEATURES**



**Crack in living room wall**



**Crack in living room/dining room ceiling**



**Wood support post (deck) in contact with soil**



**Cracking of driveway**



## BEDROOMS:

<b>Bedroom 1: (Master)</b>	<b>Location:</b> Upper level	<b>Condition:</b> Satisfactory
<b>Bedroom 2: (NE)</b>	<b>Location:</b> Upper level	<b>Condition:</b> Satisfactory
<b>Bedroom 3: (N)</b>	<b>Location:</b> Upper level	<b>Condition:</b> Satisfactory

*Remarks:*

## KITCHEN:

<b>Ventilation:</b>	Window present: Yes
<b>Exhaust fan:</b>	Yes <b>Type:</b> Vents to exterior
<b>Dishwasher:</b>	Yes    Operated and performed satisfactorily
<b>Disposal:</b>	Yes    Operated and performed satisfactorily
<b>Range:</b>	Yes    Operated and performed satisfactorily
<b>Overall condition of kitchen:</b>	Fair

*Remarks:*



15. In many municipalities, the drain connection from a dishwasher has to be made using an appropriate air gap to prevent backflow; however, different jurisdictions will have their own rules and codes will change over time. In this instance, the drain connection is suspect. While this current configuration may be tolerable; I recommend abandoning this arrangement and installing an air gap fitting or an acceptable alternative connection to prevent contamination in the event that waste backs up through the dishwasher drain hose.



Drain connection for dishwasher



## FIREPLACES OR STOVES:

<b>Damper present:</b>	Yes; however, see Remark #16
<b>Flue condition:</b>	Fair – see Remark #17
<b>Fire chamber condition:</b>	Fair – see Remark #18
<b>Location:</b>	Family room
<b>Type:</b>	Wood burning fireplace with glass doors and screens
<b>Apparent carbon monoxide leaks:</b>	N/A
<b>Apparent fuel gas leaks:</b>	N/A
<b>Overall fireplace condition:</b>	Fair

### Remarks:



16. The fireplace damper did not operate as intended, which requires repair.



17. As a matter of course, chimneys should be swept and further evaluated prior to moving into the house and before using any wood-burning appliance. This wood burning fireplace chimney cannot be thoroughly inspected because the damper was inoperable (see Remark #16).






18. Cracked mortar and cracked fire chamber brick is evident. This fireplace requires repair.



## BATHROOMS AND LAUNDRY:

<b>Bath 1: (Master)</b>		<b>Type:</b> Full	<b>Location:</b> Upper level
	<b>Ventilation:</b>	<b>Window present:</b> Yes	
	<b>Overall condition:</b>	<b>Exhaust fan:</b> Yes	<b>Vented to exterior:</b> Yes
		Fair	
<b>Bath 2:</b>		<b>Type:</b> ¾	<b>Location:</b> Lower level
	<b>Ventilation:</b>	<b>Window present:</b> Yes	
	<b>Overall condition:</b>	<b>Exhaust fan:</b> No	<b>Vented to exterior:</b> N/A
		Fair	
<b>Laundry:</b>			<b>Location:</b> Main level
	<b>Ventilation:</b>	<b>Window present:</b> Yes	
	<b>Overall condition:</b>	<b>Exhaust fan:</b> No	<b>Vented to exterior:</b> N/A
		Satisfactory	

**Remarks:**




-  19. Slow draining Bath 1 sink requires chemical treatment, plunger or snaked with drain-and-trap auger by professional.
-  20. Bath 1 tub stopper did not operate as intended, which requires an adjustment or repair.
-  21. Hand-operated isolating cold-water valve, located under the Bath 2 sink, did not operate as intended. Isolating valves, i.e., shut-off valves, should operate freely in the event of an emergency and in this instance, require adjustments or repair by a qualified contractor.



**ATTIC:**

<b>Method of inspection:</b>	Area entered <sup>(2)</sup>
<b>Adequate ventilation:</b>	Yes
<b>Easily accessible:</b>	Yes
<b>Location of access panel:</b>	Hallway
<b>Vapor barrier present:</b>	No
<b>Insulation present:</b>	Yes
<b>Insulation type:</b>	Cellulose loose fill over some Fiberglass loose fill with intermittent Fiberglass batts
<b>Insulation levels:</b>	Average levels: 8 inches      Marginally adequate
<b>Framing type:</b>	Trusses
<b>Framing condition:</b>	Satisfactory
<b>Sheathing / Decking type:</b>	Plywood with OSB patched repairs
<b>Sheathing / Decking condition:</b>	Fair
<b>Conditioned surfaces with no insulation evident:</b>	No
<b>Evidence of water penetration:</b>	No

**Remarks:**

-  22. The attic access hatch is not insulated. The implication is increased heating and/or cooling costs. I recommend insulating this hatch.
-  23. Installation of an extension is recommended for the Bath 1 exhaust fan. Currently, this exhaust fan appliance terminates inside the attic, resulting in a potential for structural damage caused by moisture. This assembly also creates a potential for mold colonization, although no mold-like substances were observed. I recommend installing a flexible duct so that moisture created from normal bathroom use is properly vented to the exterior.
-  24. There is inadequate clearance of the water heater vent from combustible materials, which is considered a fire hazard. Many authorities consider fiberglass batts (because of its paper surfacing) and cellulose insulation combustible. In this instance, fiberglass batts and cellulose insulation were in direct contact with the vent. Typically a one-inch clearance from B-vents is required; therefore, an adjustment is recommended or appropriate retaining well installed.

*Attic section continues on next page ...*





**PHOTO PAGE: ATTIC**



**Repair to sheathing**



**Exhaust duct terminates in attic**



**Paper backed batt lying against chimney vent**



**EXTERIOR:**

<b>Exterior walls, type:</b>	Composition and brick
<b>Overall condition:</b>	Satisfactory
<b>Exterior vegetation affecting building:</b>	No
<b>Exterior bibcocks, i.e. faucets, operating:</b>	Yes (front); however, rear faucet - unable to determine because it was inaccessible due to an insulating cover

*Remarks:*

**GRADING:**

<b>Front:</b>	Adequate
<b>Rear:</b>	Adequate
<b>Sides:</b>	Adequate
<b>Retaining walls present:</b>	Yes – displaced due to erosion from roof runoff

*Remarks:*



## ROOFING:

<b>Roof type and material:</b>	Gable	Asphalt composition
<b>Material type, Layers and Approximated age of roof:</b>	High profile	1 layer (newer) years old
<b>Method of inspection:</b>	Accessed by ladder	
<b>Flashing and joints condition:</b>	Satisfactory	
<b>Roof vents condition:</b>	Satisfactory	
<b>General condition of roof:</b>	Satisfactory	
<b>Soffits and fascias condition:</b>	Satisfactory	
<b>Skylights and other roof accessories:</b>	None	

**Remarks:**

## ROOF DRAINAGE:

<b>Drainage type:</b>	Galvanized
<b>Adequate number of downspouts:</b>	Yes
<b>Adequate extensions:</b>	Yes; however, see related comments in Exterior section
<b>Adequate splash blocks:</b>	Yes
<b>Overall drainage system condition:</b>	Fair

**Remarks:**



25. Some rusting of gutters is evident, which requires continued monitoring of drainage system and repairs as needed as rusting eventually results in leaking.



## CHIMNEYS:

**Furnace and water heater chimney type:** Plastic (furnace) and metal (water heater) chimneys  
**Furnace and water heater chimney condition:** Satisfactory  
**Fireplace chimney type:** Tile chimney  
**Fireplace chimney condition:** Unable to determine due to chimney storm cap

**Remarks:**



26. Mortar cap displays cracking, which requires repair/sealing. The implications of cracking mortar caps are water leakage into the masonry components and deterioration of the top part of the chimney or structural components below.



Mortar cap requires caulking

## GARAGE:

**Garage with continuous firewall separation to house:** Yes  
**Garage type:** Attached  
**Garage size and door style:** 2 car      2 single overhead doors  
**Electric door opener with photoelectric eyes and auto reverse:** Yes  
**Overall condition of garage:** Satisfactory

**Remarks:**



## HIGHLIGHTS and SUMMARY:

This "Highlights and Summary" page is provided to allow the reader a brief overview of the report. This page is not encompassing, mutually exclusive and is not intended to indicate degree of importance. Reading this page alone is not a substitute for reading the report in its entirety. The entire Building Inspection Report, including the report Addendums, Scope of Inspection, limitations, and pre-inspection Authorization must be carefully read to fully assess the findings of the inspection. This list is not intended to determine which items may need to be addressed per the contractual requirement of the sale of the property.



1. Cracking evident in the concrete foundation walls and slab floor. These cracks do not appear to be indicative of a chronic or degenerative condition but should be monitored.



2. This house has an active radon mitigation system that utilizes a Sub-Slab Depressurization (SSD) technique. Selection, sizing and layout of the system should be further evaluated\*.

Representation about the functional condition of the radon mitigation system cannot be made since National Inspection Services did not test the concentration of radon gas levels in the air. We recommend further evaluation and testing measures be conducted by a NEHA ([www.neha-nrpp.org](http://www.neha-nrpp.org)) certified tester, such as National Inspection Services, to confirm whether the SSD system is adequately reducing the levels of radon gas within the home.

\*(Pursuant to \*EPA's Radon Mitigation Standards (EPA 402-R-93-078, Revised April 1994), the Model Standards and Techniques for Control of Radon in New Residential Buildings (EPA 402-R-94-009, March 1994), and proper radon control methods contained in residential construction rules.)



3. I recommend GFCI (ground fault circuit interrupter) protection for receptacles located in bathrooms, garages, kitchens, crawlspaces, and unfinished basements; and in certain locations such as near outdoor spas or hot tubs.



4. A receptacle in Bath 2 apparently has had heavy use. As a result, this outlet's slots don't hold plugs tightly. Plugs that tend to move or fall out of worn outlets are dangerous because of the poor connection and overheating that can result. These outlets are also dangerous because live part of the plug blades may be exposed if the plug is not tight in the outlet. This outlet should be replaced.



5. In many jurisdictions, stranded aluminum wiring is commonly used for service entrance conductors and for larger appliance wires. However, solid aluminum conductors are problematic because they expand and contract more dramatically than copper and tend to loosen, which creates a fire hazard. In this instance, solid aluminum distribution wiring was evident. Because circuits that use single solid aluminum wiring are considered a significantly higher fire risk than copper wired circuits, I recommend a detailed inspection by a qualified *master* electrician and adjustments pursuant to this advised evaluation. Only a qualified electrician who *specializes* in repairing aluminum wiring\* should perform evaluations and/or repair.

\* Suggested websites for information on solid aluminum wiring, (not a comprehensive list):

<http://www.cpsc.gov/cpsc/pub/prereel/prhtml74/74040.html>;












<http://www.hsb.com/thelocomotive/Story/FullStory/ST-FS-ALUM2.html>; and [www.alwirerepair.com](http://www.alwirerepair.com)











6. I recommend upgrading existing smoke detectors over ten years old and installing smoke detectors per manufacturer specifications and those recommendations of the National Fire Protection Association, [www.nfpa.org](http://www.nfpa.org).



7. I recommend installing at least one carbon monoxide detector on the lower level per manufacturer specifications and as required by law. FYI: Colorado law now requires carbon monoxide detectors for certain dwellings. For more information, go to <http://www.national-inspection.com/hr091091.html>.

-  8. Houses of this age and older and in areas with expansive soils are susceptible to sewer pipes issues. These occur over time or because of other contributing factors. In this instance, this home's sewer pipes may be at risk, and they may not. As a matter of course, I recommend a documented video inspection of the underground pipes by a qualified contractor who uses a sewer camera investigative technique.
-  9. Due to intermittent cool exterior temperatures prior to and/or during the inspection, performance of the air conditioning system could not be determined by operation. Operation during cool temperature conditions can damage the air conditioner's exterior mechanical components.
-  10. The room air conditioner (wall unit), present in Bedroom 1, did not operate as intended. Strategy for cure should be consistent with intended use and future expectations.
-  11. Wall in living room and ceiling between living room and dining room display cracking, which appear to be inconsequential and do not appear to be chronic or degenerative conditions.
-  12a. Window in Bedroom 3 did not latch using normal operating procedures, which requires an adjustment or repair.
-  12b. Hallway closet door did not latch, which requires an adjustment.
-  13. Wood deck support posts extend below grade or are otherwise in direct contact with the soil. Wood in contact with soil or below grade is problematic in that they historically do not experience a long life, particularly as a structural member. As a result, there are several design challenges with respect to wood piers, such as rot, termites and improper support.  
These wood posts are intended to support the deck and are load bearing. This structure would certainly enjoy a longer life and more utility if its supports were not below grade. Adjustments are recommended. With posts below grade, this deck is compromised.
-  14. Driveway displays cracking with displacement. These cracks may be the result of swelling soil heaving or, alternatively, localized settling due to improper compaction of backfill. These cracks should be caulked to prevent access for water that accelerates the rate of heaving or settlement damage.
-  15. In many municipalities, the drain connection from a dishwasher has to be made using an appropriate air gap to prevent backflow; however, different jurisdictions will have their own rules and codes will change over time. In this instance, the drain connection is suspect. While this current configuration may be tolerable; I recommend abandoning this arrangement and installing an air gap fitting or an acceptable alternative connection to prevent contamination in the event that waste backs up through the dishwasher drain hose.
-  16. The fireplace damper did not operate as intended, which requires repair.
-  17. As a matter of course, chimneys should be swept and further evaluated prior to moving into the house and before using any wood-burning appliance. This wood burning fireplace chimney cannot be thoroughly inspected because the damper was inoperable (see Remark #16).
-  18. Cracked mortar and cracked fire chamber brick is evident. This fireplace requires repair.








-  19. Slow draining Bath 1 sink requires chemical treatment, plunger or snaked with drain-and-trap auger by professional.
-  20. Bath 1 tub stopper did not operate as intended, which requires an adjustment or repair.
-  21. Hand-operated isolating cold-water valve, located under the Bath 2 sink, did not operate as intended. Isolating valves, i.e., shut-off valves, should operate freely in the event of an emergency and in this instance, require adjustments or repair by a qualified contractor.
-  22. The attic access hatch is not insulated. The implication is increased heating and/or cooling costs. I recommend insulating this hatch.
-  23. Installation of an extension is recommended for the Bath 1 exhaust fan. Currently, this exhaust fan appliance terminates inside the attic, resulting in a potential for structural damage caused by moisture. This assembly also creates a potential for mold colonization, although no mold-like substances were observed. I recommend installing a flexible duct so that moisture created from normal bathroom use is properly vented to the exterior.
-  24. There is inadequate clearance of the water heater vent from combustible materials, which is considered a fire hazard. Many authorities consider fiberglass batts (because of its paper surfacing) and cellulose insulation combustible. In this instance, fiberglass batts and cellulose insulation were in direct contact with the vent. Typically a one-inch clearance from B-vents is required; therefore, an adjustment is recommended or appropriate retaining well installed.
-  25. Some rusting of gutters is evident, which requires continued monitoring of drainage system and repairs as needed as rusting eventually results in leaking.
-  26. Mortar cap displays cracking, which requires repair/sealing. The implications of cracking mortar caps are water leakage into the masonry components and deterioration of the top part of the chimney or structural components below.



Visit our website, <http://www.national-inspection.com/anounceofprevention.html> for our article entitled: **"An Ounce of Prevention: preventative maintenance checklist"** for information about regular preventative home maintenance as well as several other articles that provide answers to questions on all subjects pertaining to home ownership.

**How to Read this Report**

*This report is organized by the property's functional areas. Report Terminology: Component marked **SATISFACTORY** – was functional at the time of inspection or in visible working or operating order and its condition was at least sufficient for its minimum required function; **FAIR** – requires, or has a probability of requiring, monitoring, maintenance, repair, replacement, and/or other remedial work now or in the near future; **POOR** – requires immediate repair, replacement, or other remedial work, or has a high probability of requiring such work in the immediate future, or requires further evaluation.*

	<b>Safety Issues</b>	A condition in a readily accessible, installed system or component that is judged to be a significant risk of personal injury during normal, day-to-day use. The risk may be due to damage, deterioration, improper installation or a change in accepted residential construction standards. Deficiency may lead to injury or death.
	<b>Significantly Deficient</b>	A condition that has a material defect that could affect the use or function of a structural system or component and/or cause consequential damage. Further evaluation by a specialized contractor may result in significant repair or replacement costs.
	<b>Repair / Replace</b>	An issue that requires repair or ongoing maintenance, is missing, or requires replacement.
	<b>Further Evaluation</b>	Examination and analysis by a qualified professional, tradesman or service technician beyond that provided by the home inspection and/or beyond the scope of the inspection as defined by National Inspection Services' Authorization and Contract for Residential Real Estate Inspection Services.
	<b>Monitor</b>	Denotes a system or component needing ongoing monitoring either by the customer or a qualified contractor, tradesman or structural engineer.
	<b>Comment</b>	Denotes a system or component that requires regular maintenance to assure safe, reliable operation or is just a comment that may be of special interest to the customer.
	<b>Photo</b>	A photograph is available or has been included with the report to help to visually identify an issue.

**FOOTNOTES and DISCLAIMERS ⓘ**

Foundation: <sup>(1)</sup> Pursuant to inspection procedures that meet ASHI standards, the area was not entered due to circumstances, which created potentially unsafe conditions for the inspector. This limitation is addressed within our Authorization and Contract agreement.

Heating: This inspection does not include any evaluation of heat exchangers, which should be examined regularly by utility company personnel or a licensed heating contractor. We will not assume responsibility for any carbon monoxide leaks, which are not detected at time of inspection.

Electrical: Low voltage wiring and systems are not part of this inspection. We make no representations whatsoever about the characteristics of aluminum wiring. A certain amount of aluminum cable is typically found in any electrical system.

Plumbing: Performance of underground sprinkler systems, including cross connection devices, hot water heaters, water treatment systems, sewer lines, water lines & septic systems, and recreational facilities such as pools, saunas and spas, are not covered in this inspection and report. Also, concealed fittings, e.g., sillcocks, cannot be evaluated for latent defects.

Living Areas: General condition of walls and floors cannot be fully determined if they are covered by carpeting, wall hangings, paintings, wallpaper, etc., and defects are hidden.

Architectural Features: The intent is to inspect and operate a representative number of windows, doors, cabinetry, and other features.

Kitchen: Performance of household appliances is not covered in the inspection and this report.

Bathrooms: Moisture behind tiled surfaces may not be evident at time of inspection.

Attic: <sup>(2)</sup> Pursuant to inspection procedures that meet ASHI standards, attic was not walked or not walked in its entirety due to circumstances, which created potentially unsafe conditions for the inspector. This limitation is addressed within our Authorization and Contract agreement.

Roofing: intersections, where different roof surfaces and different materials meet, require periodical resealing and refastening. Roof features that were not inspected will not be described in this report. Inclement weather will prevent inspection of roofing. We do not certify roof longevity or the presence of "soft spots", and do not necessarily report on previous hail or weather occurrences. Skylights, if any, are susceptible to leakage and should be inspected periodically.

Roof Drainage: Gutter seams require periodical resealing and refastening. Gutters need to be re-sloped periodically for proper flow. Gutter rust is not evaluated.

