

MICHAUD engineering

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Residential Building Inspection Report



Prepared for:

John Doe

Property Address:

123 Fourth Street

Anytown, ME

Date: 7/5/06

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SECTION 1 - GENERAL AND LEGAL

1 GENERAL INFORMATION:

1.1 Overall summary of conditions at the time of inspection:

This report summarizes the inspection of the property located at the address below.
On the day of the inspection, the weather was: Sunny, 85 degrees F.

Prepared For:	John Doe
Prepared By:	Robert Michaud
Property Location:	123 Fourth Street Anytown, ME
Inspection Date:	5/29/06
Inspection Start Time:	4:00 PM
Inspection End Time:	5:30 PM
Report Date:	5/30/06
Buyers Agent:	Jane Homeseller - XYZ Realty
Seller:	Joe Homeowner
Sellers Agent:	Sue Broker - ABC Realty
Persons present during inspection:	J. Doe J. Homeseller - XYZ Realty R. Michaud - Michaud Engineering J. Homeowner S. Broker - ABC Realty
Report Reference Number:	RM060529-01

2 DISCLAIMER:

The following report constitutes a typical pre-purchase inspection summary. The scope of this inspection is limited to a VISUAL INSPECTION of the primary structure, as observed during the inspection process. This residential inspection is a non-invasive examination of primary dwelling structure and its components. The purpose of the inspection is to assist in the evaluation of the overall condition of the building. This report covers only observations of apparent condition at the time of the inspection. It is not intended as a comprehensive engineering analysis, or a predictor of future problems.

Michaud Engineering makes every effort, within the context of a visual inspection, to identify and document the conditions found at the time of the inspection. Michaud Engineering will draw upon its past experience and knowledge, combined with the best practices outlined by the National Academy of Building Inspection Engineers (NABIE) to evaluate and report on the conditions of the building for which this report covers.

The information contained in this report is the professional opinion of the inspector who conducted the inspection. All readily visible conditions will be noted, and if any part of the building or component cannot be inspected for any reason, it will be noted, along with the reason for the omission. If a deficiency is found, the inspector may comment on the likely cause if it is apparent, but he / she will not speculate beyond what can be ascertained from the evidence in the inspection. Inspectors shall note if a more thorough evaluation by other professionals that is beyond the scope of this inspection. The inspector will also note if components appear to be at the end of their service life, but this report makes not guarantee, expressed or implied, about the actual life of the structure or any of its components.

3 PRE-INSPECTION AGREEMENT:

Client: John Doe

Inspection location: 123 Fourth Street, Anytown, ME

Inspection Company: Michaud Engineering
Address: 31 Balsam Lane
Wales, ME 04280

Inspector Name: Robert Michaud

The purpose of this inspection is to visually determine the condition of a building and its key components. The inspection not intended to be technically exhaustive and covers only those areas that are readily accessible to the inspector at the time of the inspection. The inspector shall not remove panels, operate or test equipment, move furniture or appliances or stored items to access portions of the building that are not readily accessible. This inspection applies only to the main structure noted on below, and does not include: outbuildings, barns, sheds, pools, detached garages, guest houses, hot tubs, etc. Additionally, unless otherwise noted, no tests are included in this inspection service including: water, water radon, airborne radon, asbestos, mold & lead, or any other tests.

This report shall not be construed as a warranty or guarantee of any kind of the building or its suitability for any purpose. It shall not be used as a guarantee or estimate of expected life.

Excluded items:

The following items are expressly excluded from this inspection report:

Furniture	Appliances	Ceiling fans	Aesthetic appearances	Solar or alternative heating systems
Water softening systems	Central vacuum systems	Sprinkler systems	Septic systems	Alarm systems
Private wells	Intercom systems	Asbestos	Mold	Humidifiers
Dehumidifiers	Recreational equipment	Exercise equipment	Underground utilities	Trees, shrubs and landscaping
Patio furniture and equipment	Personal property	Stored items		

Additionally, the inspector shall exclude (and note in this report) any areas that are inaccessible for safety or other reasons. Roof areas shall be assessed from the ground or closest point of safe access, but are typically not accessed by ladder.

Appliances will be tested for operation, using normal controls, to the extent possible (i.e. if power is on and appliances are connected at the time of inspection). NO appliances, fixtures or services will be re-connected to services for the purposes of testing that are disconnected at the time of inspection. Testing of the appliances and components shall be to determine basic operation only, and shall not constitute a thorough functional test (for instance, ovens will not be tested to determine accuracy of temperature settings). Inspector shall not operate AC systems in the winter (anytime ambient temperature is less than 55 degrees F) to avoid possible damage.

A representative number of windows will be tested for basic operation. A representative number of electrical outlets and wall switches shall be tested for operation.

The heating system shall be visually inspected for condition, and operated using wall thermostatic controls to determine basic operation. Exposed or accessible components of the heating system will be inspected.

Attics and crawl spaces shall be inspected based upon accessibility. Wet crawl spaces or areas of limited access shall be inspected from the access panel or hatch. The inspector's discretion shall determine the extent of the inspection in areas of limited access.

While every effort will be made to conduct a thorough visual inspection, defects may be present that are not covered in this report, or that may not have been visible at the time of the inspection. This report can reduce, but not necessarily eliminate, your risk of a defect in the building or its components. We cannot eliminate all of the risk, and cannot accept responsibility for any and all conditions that may or may not be present in the structure or its components.

Michaud Engineering is not an insurer and therefore does not insure, nor does it make any warranties, expressed or implied, as to the suitability or life of the structure.

RIGHT OF ENTRY: I warrant that I or my agent have made all of the necessary arrangements to lawfully gain access to the property noted in this report for the purposes of this inspection.

SEVERABILITY: If any tribunal or court determines that any portion of this contract to be unenforceable, that tribunal or court shall enforce the remainder of the contract as though the unenforceable portion did not exist.

PARTICIPATION: I have been encouraged to participate in the inspection process and accept responsibility for incomplete information should I not participate. My participation shall be at my own risk for falls, injuries, property damage, etc.

SCOPE OF THE WORK: The intent of this standard inspection is to visually screen for "exposed to view" things which need major repair or further evaluation by a specialist. It is limited to the readily accessible and visible major systems, components, and equipment of the primary premises. Weather limitations affecting the extent of the work are accepted without additional burden to Michaud Engineering. I accept that certain items may need to be randomly sampled, that hidden damages and conditions, public records, codes, engineering analysis, pest and environmental checks are beyond the scope of the VISUAL INSPECTION.

Initial: _____X

RISK ASSESSMENT: I understand this work cannot accurately and completely assess risk, detect all flaws, predict all occurrences, or make assurances. I accept that this will not eliminate my risk and I will not burden the inspector or the company with such risk. I understand this is no warranty, guarantee, or insurance policy though some jurisdictions may imply such. I will purchase such instruments from others if I desire.

Initial: _____X

PRE-SETTLEMENT: I accept that this work is no substitute for a pre-settlement inspection for which I am responsible, since damages, mechanical failures, and symptoms etc. may appear after this work and before my legal acceptance of the property. I waive all claims against the inspector and Michaud Engineering in the absence of diligently performing my pre-settlement inspection and for the lack of more extensive investigation and follow through with a specialist on my problems noted including conformation of any cost approximations.

Initial: _____X

THIRD PARTY LIABILITY: I request this inspection and report for my confidential use only. I promise to indemnify and hold harmless the inspector and Michaud Engineering for any damages and/or expenses involved in addressing or defending claims made by others.

Initial: _____X

DISCLOSURE: This information in this report is the property of the client named on the report only. Expressed permission must be given to disclose this information to other parties (real estate agents, sellers, lenders, or other parties intimate with this transaction).

Permission Granted: YES _____ NO _____

LEGAL FEES: If I make a claim against the inspector or Michaud Engineering for any alleged error, omission or other act arising out of this work and fail to prove such claim, I will pay all attorney / lawyer fees, arbitrator's fees, legal expenses and costs incurred by the inspector or Michaud Engineering in the defense of the claim.

Initial: _____X

STANDARD INSPECTION: I hereby request a standard visual inspection of the property at the above address in full understanding and acceptance that the **total liability of the inspector / inspection company for mistakes, errors, or omissions in this inspection / survey shall be limited to the fee or to the extent allowed by law, whichever is the least.**

Signature: _____ Date: _____

I have read, understand, and agree to be bound by the terms of this contract or have renegotiated them in writing to my satisfaction. I am aware that this is a limitation of liability and a contract between myself and the inspector and Michaud Engineering and I sign of my own free will. In the event of refund of the inspection fee and / or report fee, such refund shall be accepted by the undersigned as full and final settlement of all claims and causes of action, and the inspector or Michaud Engineering as agreed within. Acceptance of this report constitutes acceptance of all contractual terms herein. I agree to pay the charge as specified below. I also agree to pay all charges arising from checks deposited against insufficient funds, plus a \$20 penalty.

CLIENT SIGNATURE: _____ Date: _____

Fee: _____ Payable to: Michaud Engineering
(\$10 for each additional hard copy. Copies to be produced and submitted to the parties noted here, if permission is initialed above):

SECTION 2 - OVERVIEW AND DETAILS

4 OVERVIEW:

This report summarizes the visual inspection of the single family dwelling located at the address noted above. The dwelling is a single story structure with a full basement built approximately around 1940 as reported by the seller. The building was significantly refurbished in 2006 by the current owner. The property around the house is partially landscaped, comprised mostly of grass with lilac bushes and a variety of trees. The land is level immediately around the dwelling, and slopes away from the house to the northeast. The house has a gravel driveway. The property sits at the northern side of the property. There is an existing mobile home on the southern side of the property that is to be disposed of prior to the completion of the transaction. The mobile home is not included in this inspection.

The house appears to occupy about 1/3 of the lot upon which it sits. The remaining 2/3 (approx) is not landscaped and consists of some grass mixed with sand and gravel. The north, east and south sides of the property are enclosed with a wire fence, which appears to follow the property lines. However, the property pins were not clearly visible or identifiable.

5 SITE CHARACTERISTICS:

5.1 SURFACE DRAINAGE:

The lot surrounding the home is generally flat, but slopes slightly away from the road and house to the northeast. There is a slight depression in the back yard that appears to be created intentionally, although the purpose is not clear. There is no evidence of pooling around the house that might pose a hazard to the structure. There was no evidence of surface erosion anywhere around the property.

5.2 WALKWAYS AND EXTERIOR STAIRS:

There is a gravel walkway that leads from the driveway to the front and side steps and entrances. The walkway is level and is in good repair. The steps to the front entrance are pressure treated wood and in good repair, and appears to be part of the recent upgrades. The side deck is a mix of existing and new pressure treated lumber. Both the new and existing portions of the deck appear to be in good repair and sound condition.



5.3 DRIVEWAY AND OTHER PAVED AREAS:

There are no paved areas around the primary dwelling. A short paved driveway exists next to the mobile home.

6 STRUCTURE:

6.1 FOUNDATION:

Foundation Type: Poured concrete

General condition and notes:

The foundation appears to be in sound condition. No visible cracks from settling or deterioration were evident.

6.2 FLOOR FRAMING:

The floors that were visible from the underside were framed with 2"x 6" full dimension rough hewn lumber, on 16" centers, with 1" x 8" sub-floor planks. The floor appears to be structurally sound - no defects or sagging were noted.

6.3 ROOF FRAMING:

The portions of the roof that were visible showed that 2"x6" full dimension lumber on 20" centers was used to construct the roof truss system. The roof deck is 1"x6" and 1"x8" full dimension planks. There was no evidence of sagging or broken truss members.



6.4 STRUCTURAL PERFORMANCE BASED ON VISIBLE DETECTABLE MOVEMENT:

There is no evidence of any detectable movement throughout the structure.

6.5 STRUCTURAL SOUNDNESS BASED ON VISUAL INSPECTION:

Overall, the structure appears to be in sound condition. No evidence of damage, fatigue, overloading, or other problems were found.

6.6 VISIBLE EVIDENCE OF WOOD ROT, INSECT DAMAGE, OR OTHER DETERIORATION:

No evidence of rot, deterioration or insect damage was found.

6.7 VISIBLE EVIDENCE OF STRUCTURAL DISTRESS OR DAMAGE:

None visible.

6.8 VISIBLE EVIDENCE OF FAILURE OR DETERIORATION OF THE FOUNDATION SYSTEM:

The visible portion of the foundation appeared to be in sound condition.

7 BASEMENT / CRAWL SPACE WATER ENTRY

This building has a full finished basement.

7.1 EVIDENCE OF WATER ENTRY INTO THE CRAWL SPACE OR BASEMENT:

There was no evidence of water entry into the basement.

7.2 WATER CONTROL SYSTEMS SUCH AS SUMPS, SUMP PUMPS, DRAINS:

Sump Sump Pump Drain None

General condition of water control systems:

A basement floor drain, which appears to lead to a former “gray water” system, is installed on the south side of the basement. It is in good condition and appears functional.

7.3 PROPER DISCHARGE OF MECHANICAL WATER CONTROL SYSTEMS:

N/A

7.4 OBSTRUCTIONS TO PROPER OPERATION:

None

7.5 ROOF DRAIN WATER RUNOFF SYSTEM, INCL: GUTTERS, DOWNSPOUTS, ETC. RELATED TO WATER ENTRY INTO CRAWL SPACE AND BASEMENT:

The house is not equipped with gutters or other water runoff systems. However, there appears to be no negative effects from runoff in the basement with the current configuration.

7.6 RELEVANCE OF EXTERIOR SURFACE DRAINAGE TO BASEMENT / CRAWL SPACE INGRESS:

See 7.5.

7.7 OPERATIONS TEST OF WATER CONTROL SYSTEMS (WHERE POSSIBLE):

N/A

8 VENTILATION:

8.1 BASEMENT / CRAWL SPACE VENTILATION:

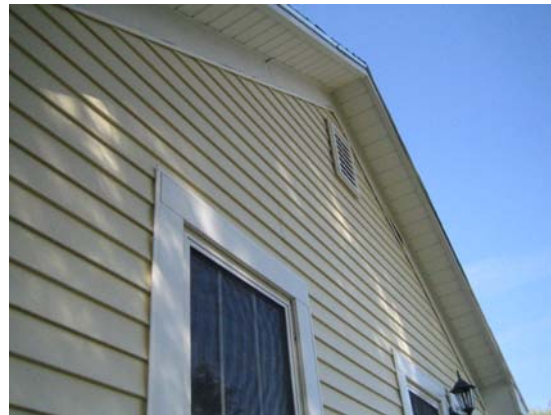
The basement is equipped with fixed basement type windows. These are not operable for basement ventilation, but at least two were found to be broken during the inspection. These could be replaced with operable windows for ventilation in the future.

8.2 ATTIC VENTILATION:

Ridge vent present Gable vent(s) present Power vent

The roof employs both ridge and gable vents for ventilation. Access to the attic space was limited, and it was not clear if the soffit vents were correctly opened for proper air flow. The ridge and gable vents should provide sufficient ventilation for the attic.

Note: If further insulation is added to the attic, care should be taken not to cover the soffit vents.



8.3 MECHANICAL VENTILATION FOR KITCHEN AND BATHROOMS:

Range Hood Bathroom fans in each bathroom

A bathroom fan was not observed, but the bathroom has an operable outside window, which is sufficient for ventilation. There is also a fume hood over the range.

8.4 LAUNDRY ROOM VENTILATION:

The laundry room is in the basement and is adequately ventilated. A drier exhaust vent was not noted during the inspection, but it appears that one of the bathroom window panes was removed for this purpose. This would be sufficient, or a more permanent port could be installed.

8.5 EVIDENCE OF CONDENSATION AND OTHER CONSEQUENCES OF INADEQUATE VENTILATION:

There was no evidence of excessive condensation.

9 HEATING:

9.1 TYPE OF HEAT:

- Hot Water Base Board Forced Hot Air Radiant Floor Electric
 Other

The primary heat source for this dwelling is a HWBB system.



9.2 TYPE OF FUEL OR ENERGY USED:

- Oil Natural Gas Propane Wood Other _____

9.3 TYPE OF HEATING UNIT, MANUFACTURER AND RATED OUTPUT:

Type: HWBB Manuf: Burnham/ Beckett burner

Output: 70 MBH water.

Input: unk

9.4 PHYSICAL CONDITION OF THE HEATING EQUIPMENT:

The boiler is new to the building and appears to be in excellent condition. It appears to be sized appropriately for the building.

9.5 ZONING / DISTRIBUTION:

There are 1 heating zone supplied by the boiler.

9.6 CONDITION OF VISIBLE COMPONENTS:

All of the components in and around the boiler appear to in new condition.

9.7 OPERATIONS TEST OF HEATING EQUIPMENT (WHERE POSSIBLE):

The boiler was operated via wall thermostat located in the living room. It reacted promptly to a call for heat, and fired rapidly after the pump started. No excessive or abnormal noise was noted during the boiler operation, and it functioned as expected.

10 CENTRAL AIR CONDITIONING:

This dwelling is not equipped with air conditioning.

10.1 COOLING AND AIR HANDLING EQUIPMENT TYPE:

Split system Fixed through the wall Window units Other_____

Description:

The building is not equipped with air conditioning.

10.2 PHYSICAL CONDITION OF THE COOLING EQUIPMENT:

N/A

10.3 ZONING / DISTRIBUTION:

N/A

10.4 OPERATIONS TEST OF COOLING EQUIPMENT (WHERE AND WHEN POSSIBLE):

N/A

11 ENERGY EFFICIENCY:

11.1 PRESENCE OR ABSENCE OF INSULATION IN CRAWL SPACES, BASEMENT AND ATTIC AND APPROPRIATE VAPOR BARRIER:

Type of insulation used:

Fiberglass Blown-in cellulose

Other _____

Attic insulation thickness: 6-8"

R value: ~20

Wall insulation thickness: 4"

R value: ~11



11.2 PRESENCE OF STORM WINDOWS / DOORS:

Primary type of windows: Double hung Casement Awning

Combination Other _____

Primary window construction: Wood Metal Vinyl

Storm windows present? Yes No

Storm doors present? Yes No

General condition of doors, windows, weather stripping, etc.:

All doors and windows appeared to be in good working condition. The windows are new. The doors are older, but work properly. The weather stripping appeared to be aged and missing in places.



11.3 RECOMMENDATIONS FOR REDUCING ENERGY LOSSES (WHERE APPROPRIATE):

The doors appear to be in good repair and well maintained. With the exception of the door gaskets, no components appear to need replacement at this time. To maintain energy efficiency, it is recommended that the door and window seals be checked every six months to make sure they are not aged, cracked or worn. Replace any seals or gaskets as needed.

Additional insulation could be added to the attic to reduce heat loss. Blown in cellulose would be recommended, with an R value of around 2.2 per inch of insulation. Fiberglass batting could also be used, and could be installed by the homeowner. Care should be taken not to block the soffit vents, which would restrict air flow in the attic. Additionally, fiberglass batting should be installed above the basement sill plate between the joists in the basement where it is missing.



12 PLUMBING SYSTEMS:

12.1 GENERAL DESCRIPTION:

Location of main: Southwest side of the house, in the basement

Water supply: Private well (shallow or drilled) Public water supply

Water pressure (at main): 45-60 psi

Backflow or anti-siphon devices present? Yes No Location: _____

Septic System: Private septic Public

The domestic water supply enters the building via a 1 inch copper line to the water meter.

12.2 INTERIOR WATER SUPPLY DISTRIBUTION SYSTEM:

Water piping material(s) of construction: copper and PEX (poly ethylene tubing)

Water piping that was visible appeared to be in good condition, and much of the distribution lines have been recently replaced. The plumbing appears to be working properly. Most of the domestic water supply system has been recently replaced, according to the owner. This is consistent with the observations.

The external hose bibb is the frost free type with an anti-siphon device. Frost free hose bibbs protect against pipes bursting due to cold weather and anti-siphon devices prevent water used in the hoses from backing up into the potable water supply.



12.3 INTERIOR DRAIN, WASTE AND VENT SYSTEM:

Drain piping material(s) of construction: PVC, and some hub type cast iron

All drain piping appeared to be in good condition. The main drain line exited the building from the southwest side of the house. There was no evidence of leaks.

Cleanouts were present and appeared serviceable in key locations. The remaining hub type cast iron is aged, but appears to be in sound condition and no leaks were noted.

12.4 DOMESTIC HOT WATER SYSTEMS:

Off boiler Electric HW heater Gas or LP HW heater Other _____

Hot water is supplied throughout the house by a tankless heat exchanger system off the boiler. There is a mixing valve installed on the hot water supply line to adjust the temperature of the water reaching the taps throughout the house.

12.5 FUEL STORAGE AND DISTRIBUTION SYSTEMS:

A 275 gal. oil tank is used for fuel storage. The tank is located in the unfinished basement in the southwest corner approximately 10' from the boiler.

12.6 OPERATIONS TEST OF INTERIOR FIXTURES:

Sufficient hot and cold water was evident at each sink and shower throughout the house.

12.7 OPERATIONS TEST OF INTERIOR FIXTURES FOR DRAINAGE:

Adequate drainage from all interior fixtures was observed.

12.8 OPERATIONS TEST OF INTERIOR FIXTURES FOR SIGNS OF LEAKAGE:

There were no signs of leakage at any of the fixtures.

13 ELECTRICAL:

13.1 SERVICE ENTRANCE CONDUCTORS:

The house is serviced by overhead conductors. The meter is mounted on the north west corner of the building. A proper ground wire next to the meter was noted.

13.2 SERVICE EQUIPMENT, GROUNDING, MAIN OVER CURRENT DEVICE, AND DISTRIBUTION PANEL:

Circuit breaker Fuse

Notes:

The main distribution panel (MDP) is fed by conductors from the meter. The MDP is a Murray brand panel. It is a new 100 A panel with new breakers.



13.3 AMPERAGE AND VOLTAGE RATINGS:

100 Amps 220/110 Volts

220 V (single phase) is available and services the electric range, oven, and electric clothes dryer

13.4 BRANCH CIRCUIT OVER CURRENT DEVICES:

Circuit breakers Fuses

The MDP has 20 branch breaker positions, with 5 open positions. No breakers were tripped on overload, or shut off.

13.5 GROUND FAULT CIRCUIT INTERRUPTER (GFCI) DEVICES:

A GFCI were present and tested next to the kitchen sink, and the bathroom sink. However, the outlet for the washing machine was not supplied with a GFCI outlet. Per 2003 IRC E3802.5, unfinished basement receptacles shall have GFCI protection.

Note: Replace existing outlets in the basement with a GFCI outlet.



13.6 NEED FOR IMMEDIATE OR IMMINENT REPAIRS AND / OR UPGRADING:

See 13.5. and 13.8

13.7 ANY OBSERVED ALUMINUM OR COPPER CLAD ALUMINUM BRANCH CIRCUIT WIRING:

None visible

13.8 OPERATIONS TEST OF A REPRESENTATIVE NUMBER OF OUTLETS AND FIXTURES:

Several light switches were operated, and the grounding of several outlets was tested. Some minor problems were discovered with the outlets. One outlet in the living room in the northwest corner was not grounded properly. None of the outlets in the master bedroom tested correctly for grounding. Lastly, the outlet to the left of the bathroom door failed the test for proper operation.

Note: Replace the outlet next to the bathroom. The outlets that are improperly grounded should be investigated further, and properly grounded. The majority of the branch wiring throughout the house has been replaced, but a couple of circuits appear to be older and my not support grounded outlets.

13.9 OPERATIONS TEST OF GFCI DEVICES:

The GFCI breakers and outlets were all tested and all worked properly.

14 INTERIOR:

14.1 WALLS, CEILINGS, AND FLOORS:

Description of materials of construction and condition:

The interior walls throughout the house are primarily painted gypsum board. The interior paint appeared to be in good condition, and most rooms appeared to have been repainted recently. The wood trim - baseboards, door frames, crown molding - all appear to be in good condition. Ceilings are all painted, and in good condition. Flooring included sheet vinyl in the kitchen and first bathroom, aged but refinished hardwood in the living room, ceramic tile in the bathroom, and carpet elsewhere. All flooring was in good condition. The carpeting and ceramic tile appears to be new.

14.2 STEPS, STAIRWAYS, BALCONIES AND RAILINGS:

Steps: Are railings present for all stairways? Yes No

Balconies: Do balconies have suitable railings? Yes No N/A

Spacing between balusters less than 4"? Yes No N/A

Notes:

The only staircase is the one leading to the basement. It has a railing against the outside wall.

14.3 CABINETS AND COUNTERS:

Description and Notes:

Cabinets and counters appeared to be in good condition, with many new replacements. Doors were hung squarely, and operated properly. Countertops are high pressure laminate on a wood substrate, and are also new.



14.4 REPRESENTATIVE NUMBER OF WINDOWS AND DOORS INCLUDING HARDWARE:

Do windows and doors open and close properly? Yes No

Comments:

All windows are new. Doors were aged, but checked for operability, and all worked properly.

14.5 SEPARATION WALLS, CEILINGS, AND DOORS BETWEEN DWELLING AND ATTACHED GARAGE OR ADJOINING DWELLING:

Fire rated doors & walls between dwelling and garage or other dwelling?

Yes No N/A

15 EXTERIOR:

15.1 EXTERIOR WALL COVERINGS, FLASHING AND TRIM:

Material(s) of construction: vinyl

Description and Comments:

The vinyl siding on the house is intact and in good condition. The owner noted that the previous siding had been removed, and the new siding installed recently.

15.2 PRIMARY WINDOWS AND DOORS

All primary windows and doors appear to be in good working order.

15.3 GARAGE DOOR OPERATORS INCLUDING AUTOMATIC REVERSING OPERATION:

Type of garage door opener: Manually operated Automatic (electric)

Does automatic reversing operation work? Yes No

General condition and comments:

N/A

15.4 DECKS, BALCONIES, STOOPS, STEPS, AND PORCHES INCLUDING RAILINGS:

Material(s) of construction: Pressure treated stairs in the front and pressure treated deck and stairs to the back.

Railings on porch or deck? Yes No - N/A

Baluster spacing < 4"? Yes No - on stair railings

General condition and comments:

The stairs and railings were in good condition, solidly attached, and stable.

15.5 EAVES, SOFFITS AND FASCIAS:

General condition and comments:

The eaves and soffits appear to be in good condition.

16 ROOFING:

Roof was only accessible from the ground. The following are observations made from ground level.

16.1 ROOF SURFACING:

Roof material(s) of construction: Asphalt shingle

General condition and comments:

The roof shingles appear to be in good condition. Per the owner, the roof has been recently replaced. No cracked or curling shingles were noted.



16.2 ROOF DRAINAGE SYSTEMS:

The house is not equipped with gutters.

16.3 FLASHING:

Metal flashing around the vent piping and chimney appear to be in good condition.

16.4 SKYLIGHTS, CHIMNEYS, AND ROOF PENETRATIONS:

See item 16.3

16.5 EVIDENCE OF LEAKS OR CONDENSATION:

None

17 CHIMNEYS:

17.1 CHIMNEY FLUE LINERS WHERE VISIBLE (FROM GRADE LEVEL):

The single flue chimney supports the oil fired furnace in the basement. The chimney has been recently relined with a stainless steel liner per the owner.

17.2 FLUE CONNECTIONS:

Connections to the flue is by uninsulated metal flues from the furnace. The connection appeared to be sound and was installed with the furnace.

17.3 STRUCTURAL INTEGRITY OF CHIMNEY:

The chimneys appeared to be structurally sound. No evidence of cracking or settling.

17.4 CONFIGURATION / LOCATION OF CHIMNEYS:

The chimney is located approximately in the center of the main portion of the house.

17.5 FIREPLACE DAMPERS:

N/A

17.6 FIREPLACES:

N/A

18 SAFETY:

18.1 CONDITION AND ADEQUACY OF HANDRAILS AND GUARDRAILS:

All are in good condition and adequate for this dwelling.

18.2 CONDITION OF STAIRWAYS:

Stairs were found to be in good condition.

18.3 GLASS VULNERABLE TO HUMAN IMPACT:

The only glass that is vulnerable to human impact is the exterior doors. No recommendations.

18.4 SMOKE ALARMS / CARBON MONOXIDE DETECTORS:

Number of smoke detectors: 0 Number of CO detectors: 1

Locations of smoke and CO detectors:

The carbon monoxide detector was located on a floor joist close to the furnace. A smoke detector was not noted.



Recommendation: Install a smoke detector at the top of the stairs. Test smoke detector monthly. Replace batteries annually. Replace non-functional detector as needed.

18.5 FIRE SEPARATION AT CHIMNEYS AND GARAGES:

Fire separations appeared adequate.

18.6 SOLID FUEL APPLIANCE INSTALLATION (WOOD STOVE):

N/A

19 ENVIRONMENTAL:

19.1 PRESENCE OF SUSPECTED ASBESTOS CONTAINING MATERIAL (ACM):

There was no pipe insulation observed throughout the house. No other potential sources of ACM were noted.

19.2 EVIDENCE OF UNDERGROUND STORAGE TANKS (UST):

There is no evidence of a UST on site.

19.3 EVIDENCE OF UREA FORMALDEHYDE FOAM INSULATION (UFFI):

There was no evidence of UFFI in the house.

SECTION 3 - LIMITATIONS & EXCLUSIONS

20 LIMITATIONS / EXCLUSIONS:

Unless expressly noted herein, the following limitations and exclusions apply to the scope of this inspection and contents of this report. The inspector is not required to:

1. Prepare calculations to determine capacity, adequacy, flow rates, etc. of any system
2. Remove materials, furnishings, personal property, or any other obstructions (snow, ice, debris, suspended ceiling tiles, secured shut access panels, etc.)
3. Operate equipment not typically operated by normal layman user controls
4. Conduct any exploratory probing or testing
5. Report on architectural and cosmetic incidentals (carpeting, wallpaper, draperies, blinds, built-in furniture, trim)
6. Report on security systems, intercoms, sound systems, fire alarm systems, cable TV, telephone or other low voltage ancillary wiring
7. Discover or evaluate underground systems, tanks, lawn sprinklers, subsurface soil conditions, streams, groundwater levels, well casing, wells and pumps, septic and on-site waste disposal systems
8. Provide research for code violations, report on code compliance, ordinances, restrictive covenants, Certificate of Occupancy or Completion, verify building department approvals, title surveys, zoning, environmental compliance, and land use, or review drawings
9. Provide an appraisal of the property
10. Comment on whether the property should be purchased leased, rented, etc.
11. Perform any procedure or enter any area which has the potential to damage the property or its components or be dangerous to the engineer or other persons
12. Attempt to repair or operate any system or component which does not respond to normal layman user controls or which is shut down or otherwise inoperative
13. Report on items not permanently installed (household appliance, personal property)
14. Report on the presence or absence of pests such as wood damaging organisms, rodents, birds, droppings or insects, etc., except as it may relate to the structural soundness and adequacy of the building
15. Perform an environmental assessment or laboratory testing to determine the presence or absence of any hazardous substance including, but not limited to: toxins, carcinogens, noise, contaminants of soil, water and air
16. Perform a wind, earthquake, seismic or flood insurance study
17. Test items requiring a special permit or training (radon, lead, asbestos, etc.)
18. Evaluate or determine the effectiveness of any system installed to control or remove suspected or known hazardous materials
19. Perform acoustical or vibration testing or evaluation of noise or vibration characteristics of any system or component
20. Determine the material of which components or systems are made
21. Perform electromagnetic field testing

22. Provide policies of insurance for building failure
23. Provide opinions regarding handicap characteristics or health characteristics of the premises in so far as allergies, disease or disabilities are concerned
24. Provide opinions regarding historic aspects of the premises report on any device or system which has not been specifically indicated herein, this includes but is not limited to solar heating systems, geothermal systems, outdoor barbecues, saunas, steam baths, satellite dishes, intercom systems, alarm systems, lawn sprinkler systems, etc.

SECTION 4 - DEFINITIONS

21 DEFINITIONS:

Access Panel- A panel used for the purpose of gaining access to a piece of equipment for maintenance, repair, or cleaning of the equipment; a panel used to gain access to an area such as a crawl space or attic cavity

Activate- To turn on or operate a piece of equipment by normal means such as turning on the furnace with the thermostat controls

Automatic safety controls- a device used to protect people and equipment from malfunction caused by excessive pressure, temperature, or other hazardous operating conditions

Central air-conditioning- A system used to cool and/or dehumidify the space of a building in one or more room(s) by means of duct or chilled water pipe distribution; and is built into the structure of the building with direct wiring from electrical control panel

Central heating- a system used to warm the space of a building in more than one room by means of duct or pipe distribution; it is built into the structure of the building; individual room electric heaters throughout the premises could also heat a building

Component- a unit part of a system such as the gas valve in the furnace or a rafter of a roofing system

Cosmetic- A condition that affects the appearance of an item rather than the structural integrity or intended function thereof

Crawl space- An area under a home enclosed by the foundation walls and generally 3 to 4 feet high which can only be examined by crawling or being bent over; this space usually will have plumbing supply and drain lines, electrical wiring, and mechanical systems; a crawl space with a clearance of less than 30" is considered

Cross connection- any physical connection or arrangement between potable water and any other water of unknown or questionable source of possible contamination

Dangerous or adverse condition- Any condition or situation which has the possibility of causing injury or health threats to the inspection engineer; these conditions may require special protective clothing or safety equipment and in certain cases, such as crawl spaces areas, cannot be entered until the condition is corrected

Detached buildings- any structure apart from the main structure and under a separate roof and foundation system

Direct wired components- a device, which is connected to the electrical system and cannot be readily unplugged or disconnected

Engineering- The profession of putting scientific knowledge to practical use by utilizing mathematics, chemistry, physics, and the engineering sciences for analytic or design work

Flue pipe- the pipe connecting the firing chamber exhaust of a hydrocarbon fueled device such as a heating unit or water heater to a chimney

Heat source- any device used for the purpose of adding heat to an area

Household appliance- A device, either freestanding or built in, used to provide an ongoing function by providing a specific household duty such as a dishwasher, oven, range, garbage disposal, washer, dryer, etc.

Installed- An item that is physically attached to the home with nails, screws, etc., and could not be removed by unplugging or disconnecting by hand

Normal user operating controls- Controls such as a thermostat of the heating and cooling system used to operate equipment by a layman homeowner or tenant

Observe- To make a visual study of a component without removing covers, finished surfaces, blocked access panels, debris, belongings

Operate- To activate a device by the normal user operating controls

On-site water supply quality- Water quality is based on the bacterial, chemical, mineral, metal, and solids content of the water

On-site water supply quantity- Water quantity is the accumulated water volume resulting from the rate of water flow

Proper fixture drainage- the rate of a drainage flow sufficient to prevent overflowing or backing up during normal operating and use

Proper water pressure- Pressure needed to produce a rate of water flow of a plumbing fixture that provides sufficient flow when another fixture is operated at the same time

Readily accessible- Having the ability to inspect an item or equipment with out having to move or relocate furniture or stored items or damage paint finishes; ability to enter through access panels large enough for an average size person; panels are not considered accessible if they cannot be reached with the aid of a four foot ladder or require tools to open; minimal access opening is 18" x 24".

Representative number- A defined number of items to be inspected when there is a number of like items in a facility, building, or home such as electrical switches, outlets and windows; this number will be one per room or one per side of the exterior

Roof drainage system- the system used to carry rainwater from a roof away from the foundation of the structure; this system consists of guttering, downspouts, splash blocks, and proper grade for drainage

Safety glazing- Tempered glass or plastics

Shut down- When an item cannot be operated by normal controls it is considered to be shut down; the engineer is not required to light pilot lights, turn on gas supply, switch breakers, replace fuses or light bulbs, plug in equipment, open closed water valves, etc.; all items intended to be a part of the inspection shall be in operation prior to the inspection.

Structure- any construction designed and used to provided support against natural forces in additional to live and dead loads

Structural component- a member used for the purpose of supporting certain design loads

System- A specific part of a building composed of several components used for a specific purpose such as the electrical system, HVAC, system, plumbing system, etc.

Technically exhaustive- A building inspection as covered by these standards of practice is comprised of a visual inspection and brief operation of equipment; an inspection is technically exhaustive when it involves the extensive use of measurements, instruments, testing calculation, exploratory destructive probing when justified, and other means to develop scientific or engineering findings, conclusions and recommendation

SECTION 5 - CODE OF ETHICS

22 CODE OF ETHICS FOR ENGINEERS:

An Excerpt From the National Society of Professional Engineers (NSPE) Code of Ethics
for Engineers

(To view the full text, visit www.nspe.org)

Engineering is an important and learned profession. As members of this profession, engineers are expected to exhibit the highest standards of honesty and integrity. Engineering has a direct and vital impact on the quality of life for all people. Accordingly, the services provided by engineers require honesty, impartiality, fairness and equity, and must be dedicated to the protection of the public health, safety, and welfare. Engineers must perform under a standard of professional behavior that requires adherence to the highest principles of ethical conduct....
Engineers, in the fulfillment of their professional duties, shall:

1. Hold paramount the safety, health and welfare of the public.
2. Perform services only in areas of their competence.
3. Issue public statements only in an objective and truthful manner.
4. Act for each employer or client as faithful agents or trustees.
5. Avoid deceptive acts.
6. Conduct themselves honorably, responsibly, ethically, and lawfully so as to enhance the honor, reputation, and usefulness of the profession....