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INTRODUCTION

ALLSAFE HOME INSPECTION SERVICE, INC.
102 N. Water Street,
East Bridgewater, MA 02333
508-378-7170

FINAL NARRATIVE REPORT

INTRODUCTION: Dear Client, Thank you for asking me to inspect your prospective new home. The inspection was performed according to the "**Standards of Practice**" of the **American Society of Home Inspectors (ASHI)** of which I am a certified member #561 and the MA Board of Registration of which I hold license #32. (To view ASHI Standards of Practice go to: ashi.com) (To view MASS Rules & Regulations 266 CMR 6.00, go to: <http://www.state.ma.us/reg/boards/hi/cmr/26606.htm>) ASHI inspectors are professionals who adhere to uniform standards for disclosing building deficiencies and a "**Code of Ethics**" that requires members to discharge their duties with fairness and impartiality to all.

SCOPE OF SERVICE: This is a limited inspection only, conforming to the Commonwealth of Massachusetts 266 CMR 1.00 through 11.00. The **Company** shall only inspect and report on those systems and components that are listed in the Standards of Practice and are readily accessible at time of inspection.

This report supersedes all previous communications and represents a visual evaluation of those "systems" outlined in our Contract that were readily accessible on this day only. The **Report** does not represent an endorsement for or against the purchase of real estate. This **Report** is intended to provide an overview of the existing conditions at time of inspection only and should not be used as an indicator of future performance; no expressed or implied warranties or guarantees of any kind are given in conjunction with the inspection of the premises. A building and its components are subjected to constantly changing conditions and environment and problems can develop immediately upon completion of the inspection. Therefore, we do not issue a guarantee or warranty on our inspection and **Report**.

The contents of this **Report** are CONFIDENTIAL, for the exclusive use of the Client named in the Inspection Agreement. The **Report** is not assignable to third parties or transferable to others. Should this **Report** be sold or transferred to another party, all opinions are null and void and the **Company** disclaims any and all liability which may result from this **Report** and the opinions contained therein. The **Company** reserves the right to institute legal litigation against any party who distributes or shares information contained within this **Report** with other parties not involved in the sales transaction without our written and/or oral approval.

By law (Chapter 112 87YY5), your broker was required to give you a "consumer brochure" on home inspections for your review. Our inspection **Report** is not a substitute for honest disclosure required by real estate agents, property owner/s, and/or the property transferors'. Real Estate Transfer transferors' disclosure statements or forms should be carefully read **NOW** by you and your attorney for any material facts that may influence or effect the desirability, and/or market value of the property. It is the clients sole responsibility to research any and all jurisdictional permits required by the local authorities regarding the property in contract before the close of escrow, and to personally perform a diligent visual inspection of the property after the seller vacates to insure that no "condition" was concealed by personal property and stored items while occupied, or damaged during the seller's evacuation of the structure. Should any "condition" be revealed that was not addressed within this **Report** prior to, or after the close of escrow, please contact our office immediately for an additional evaluation regarding such "condition."

Please read the Home Inspection Agreement and the Home Inspection Final Report in their entirety including all definitions and comments on each page. The Home Inspection **Final Report** contains specific information relative to this home. Make sure that it accurately documents the visual problems that were

disclosed to you during the hours of the home inspection. If you have any questions or require any further clarification, please call my office for free assistance. If you should desire a "return visit inspection," please contact my office for a quotation based on minimum trip charge and hourly rate. If you were absent during this inspection or you do not understand the **Final Report**, you must **call the office immediately** to speak with the inspector who performed the inspection. At that time, the inspector will give you a verbal consultation of the property. The *Company* cannot be held liable for your understanding or misunderstanding of this *report* contents if you choose not to consult with the inspector.

To prevent "false expectations," please understand that the task of a home inspector is to function as a "general practitioner" who is trained to be a professional in the identification of typical home deficiencies. He or she performs a visual examination to identify certain components, states their general condition, locates telltale problems and then recommends that you consult with appropriate tradesmen or other experts for further evaluation and repair estimates. **Be advised that a home inspector will not find every little problem during the several hours spent at the site and that undisclosed problems are often revealed during repairs or after further evaluation by tradesmen.** A home inspector does NOT perform destructive testing, can NOT see through walls, and does NOT move furniture or stored goods or predict the future. **Only problems that are readily accessible at time of inspection will be included in the report.** **MA Regulations prohibit the home inspector from determining the cost of repairs.** If the inspector recommends consulting other specialized experts, any such consultation shall be at the *Client's* sole discretion and expense. Any comments regarding correction or repair are based on typical practices used by contractors in the field and are not made as specific recommendations for the noted problems. In all cases, specialists, in appropriate fields, should be consulted before any work is undertaken. Correction or repair of problems or conditions noted in this **Report** should be done by qualified professionals in accordance with the requirements of the building code. Any work done by the homeowner is strictly at the **Client's** risk.

DISCLAIMER: Those defects hidden or concealed at time of inspection are EXCLUDED from this report. The *Client* understands that only deficiencies which are exposed and *readily accessible* at the time of inspection will be included in the *Final Report* and that all opinions expressed concerning the adequacy of the structure or systems are based on visual examination only and do not involve engineering calculations or testing of any nature. . See **INSPECTION AGREEMENT** for other limitations and exclusions.

Buying real estate is a speculative investment in spite of a limited visual home inspection. While you still incur some risk, the inspection **Report** does represent an educated & impartial second opinion. This **Report** is subject to correction of incorrect statements, typographical errors and addition of items inadvertently left out during **Report** preparation. Please contact us immediately if any discrepancies or errors are noted.

If the **INSPECTION AGREEMENT** is unsigned, delivery and payment for the inspection **Final Report** shall constitute acceptance of all terms on the **INSPECTION AGREEMENT**.

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DEFINITIONS OF TERMS

Please take the time to read this page concerning contingent and limiting conditions and definition of terms so that you can clearly understand the inspector's **observations, analysis and recommendations.**

KEY TO INSPECTION REPORT:

* Items that have an asterisk next to them refer to **CONDITION:**

One • • (*)• asterisk = **FUNCTIONAL**

Two • • (**)• asterisks = **FUNCTIONAL with EXCEPTIONS**

Three • • (***)• asterisks = **NOT FUNCTIONAL**

Four • • (****)• asterisks = **UNSAFE**

* **FUNCTIONAL:** Performing it's intended purpose or function(s) in full. No indications of nonperformance or need for repair were observed at time of inspection. **(Note: An item may work well and be near the end of lifespan and still be rated functional.)**

** **FUNCTIONAL with EXCEPTIONS:** Performing **ONLY PART, BUT NOT ALL** of its intended function. Repairs or corrections are needed to restore its full function &/or normal life expectancy.

*** **NOT FUNCTIONAL:** NOT performing its intended function or having **UNSAFE** conditions. Repairs, corrections or replacement needed to restore safety and function.

**** **UNSAFE:** A condition in a readily accessible, installed system or component, which is judged to be of 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 the accepted residential construction standard. **(URGENT** repair, correction or replacement is needed for safety.)

FULLY DEPRECIATED: Item inspected is no longer under the manufacturer's warrantee and it is suggested that it is reaching the end of its serviceable life.

NOT VISIBLE: Items which cannot be visually examined.

NOT ACCESSIBLE: Items which were concealed at time of inspection and require further research by you.

SHUT DOWN: A piece of equipment or system is shut-down when it the device or control cannot be operated in a manner that a homeowner should normally use to operate it. If the safety switch or circuit breaker is in the "off" position or the fuse is missing or blown, the inspector is not required to reestablish the circuit for the purpose of operating the equipment or system. (Note: The true functional condition of equipment or systems in a shut-down condition is undetermined. Further investigation is advised.)

COST TO CURE: Providing a cost to cure for each defect disclosed by the home inspector is beyond the scope of this inspection and report and is prohibited by Mass. law. The true cost to cure figures should be obtained from a minimum of three appropriate tradesmen or experts in the area of concern using similar specifications and in accordance with the requirements of all applicable codes.

The definitions as listed in 266 CMR 2.00 section 2.01 shall apply to this Report.

CONDITIONS OBSERVED SHALL BE RECORDED IN THE FOLLOWING FORMAT:

OBSERVATION: A verbal description of what the inspector saw.

ANALYSIS: The inspector's opinion.

RECOMMENDATION: Advice intended to give you further direction.

NOTE: THIS IS NOT A CODE COMPLIANCE REPORT. ANY REFERENCE TO THE BUILDING CODE OR CODE INFRACTIONS IS INTENDED TO PROVIDE A PERFORMANCE BENCHMARK OF WHAT CONSTITUTES ACCEPTABLE CONDITIONS. THE HOME INSPECTOR DOES NOT COVER ALL CODE COMPLIANCE ISSUES. YOU SHOULD CONTACT LOCAL OFFICIALS REGARDING CODE ISSUES.

1. THIS REPORT IS PREPARED EXCLUSIVELY FOR:

Matthew Hendrick
22 Main Street
Sometown, MA 02000

Account #RM06D037 Fee: \$595.00
Double radon test kit Fee: \$ 70.00
Total Fee: \$665.00
Paid in full by check #299. Thank you.

2. PROPERTY INSPECTED:

Address:

65 BEST STREET, HAPPYTOWN, MA 02000

Date:

April 13, 2006.

Approximate age:

1 1/2 years old years as attested by the owner.

Main entrance faces:

South.

Building Style:

Wood framed colonial reproduction, with attached 2-car garage. (See Photo #1)



Front View

State of occupancy:

Occupied and fully furnished.



Rear view

3. PEOPLE PRESENT:

Buyers, Listing broker, Selling broker. No owner present for disclosure data.

4. INSPECTOR(S) PRESENT:

Robert Mulloy, President & chief inspector.

5. WEATHER CONDITIONS AT TIME OF INSPECTION:

DATA:

Partly cloudy sky, Drizzle.

Temperature at time of inspection: degrees F.

59 degrees F.

6. UTILITIES, SYSTEMS OF APPLIANCES THAT WERE SHUT-DOWN:

Conditions:

Observation: Often, a mechanical system is determined to be in a **shut-down** condition at time of inspection do to a lack of fuel, no pilot light, mechanical defect, seasonal use or other problems.

Analysis: Be advised that while such shut-down items may appear to have no visual problems, their true operational condition is **UNDETERMINED**. Further investigation is needed. Components or systems not readily accessible due to weather or other shut-down conditions beyond the control of the Company are accepted by the Client without additional burden to the Company.

Recommendation: For your protection, your attorney should be informed and you should request protective language in your purchase agreement until such time that all shut-down systems can be activated and inspected for operational condition and unknown defects. Consult with the owner **NOW** on any known deficiencies, request written assurance that the item / system is functional or place money in an escrow account for an agreed upon time period. If you desire a return visit by the home inspector, contact this office when the systems have been repaired or seasonally activated. The following were **SHUT-DOWN** at time of inspection:

*** The two central AC systems were shut-down.

7. OBSTACLES ENCOUNTERED DURING INSPECTION:

Observation: **OWNER NOT PRESENT - ASK FOR DISCLOSURE DATA.** The owner of the home was not present at time of inspection. I had no opportunity to gather important information about the home. The seller of a home is obligated to disclose known defects. Some states and real estate firms require that a formal seller disclosure statement be completed and presented to the prospective buyer, and some do not.

Analysis: A home inspector will not locate all of the problems during the limited time at the site. Be advised that the owner of record is a valuable reference source regarding the past history of the home, changes and seasonal problems.

Recommendation: For your protection, you should ask if any disclosure information is available and review it very carefully before commitment. I advise that you seek answers to each question listed on line #10 below NOW, prior to commitment.

8. TIME IN:

Time in:

8:30 am.

9. OPTIONS ELECTED BY CLIENT:

Observation: Two radon test devices (**#1633457 & #1633458**) were purchased are to be placed & retrieved by you following manufacturer's instructions. Mark the 48 hour retrieval date & time on your calendar and save the bar code numbers on the test devices so that you can telephone the lab after 24 hours of receipt and obtain the results faster than the mail. Be sure to cap the test devices, fill out the data sheet completely and place both in the post paid return shipping package.

The final data will be mailed to you by AccuStar Labs., P.O. Box 158, 11 Awl Street, Medway, MA 02053, telephone 888-480-8812.

www.accustarlabs.com The test results are also available on-line or by telephone by providing the applicable bar code numbers of the test devices. Questions about radon should be addressed to the lab., or the Mass. State Board of Health. If high radon levels are measured, you should read the information provided in the **Inspection Information Booklet**, given to you at time of inspection, for further advice.

DISCLAIMER: The inspection of this home for radon gas is **EXCLUDED** from this report. The Company retails radon test kits only, for you to place and retrieve. We are NOT licensed, certified or insured to perform radon testing. Please understand that the validity of an unsupervised test site and unsecured test device may not be accurate as each may be tampered with. Nevertheless, testing is advised. Any radon test kits provided by this Company are done so as a courtesy. Placement & retrieval of test kits is your responsibility. For peace of mind, you should retest the home for radon levels after purchase as you were not present to validate the conditions during the test.

For free consumer publications, go to: www.epa.gov/radon/pubs/
<http://www.surgeongeneral.gov/pressreleases/sg01132005.html>

How does radon enter a home?

Four main factors drive radon entry into homes. All of these factors exist in most homes throughout the country.

1. Uranium is present in the soil nearly everywhere in the United States.
2. The soil is permeable enough to allow radon to migrate into the home through the slab, basement or crawl space.

3. There are pathways for the radon to enter the basement, such as small holes, cracks, plumbing penetrations or sumps. All homes have radon entry pathways.

4. An air pressure difference between the basement or crawlspace and the surrounding soil draws radon into the home.



Common Radon Entry Points

10. SELLER DISCLOSURE DATA: (You and your attorney should contact the broker and the owner and request answers to these questions in order to make intelligent decisions prior to commitment).

Disclosure answers
provided by:

Observation: The history of the home was provided to me by a disclosure form filled out by the owner. The form will be attached to the hard copy of this report when mailed. You should keep the form with your records. Facts disclosed were as follows:

Age of building per
owner?

1 1/2 years.

Age of primary roof:

1 1/2 years.

Age of secondary roof:

1 1/2 years.

Age of heating system(s):

1 1/2 years.

Age of hot water heater(s):

1 1/2 years.

Is there any history of water penetration in the basement / crawl space?

Observation: No prior wet basement problems as attested the by the owner.

Is the dwelling on a public or private sewage system?

Observation: The owner attested that a private sewage system is present and that the **Title 5 Inspection** has been scheduled. (Note: You should request a complete copy of the required 11-page inspection report and you should check the validity of the report at the local board of health prior to purchase.)

Has the home previously been inspected or treated for insect infestation?

Observation: The owner attested that no professional chemical treatment for wood boring insects has been done.

Has the home previously been test for radon?

The owner attested that the home has NOT been tested for radon. While there is no requirement for testing at this time, the EPA has recommended that every home be tested during a real estate transfer. I advise that you have the home tested as the results may affect your decision to purchase and excessive radon levels may be harmful to your family.

Has the home previously been tested for LEAD PAINT?

The owner attested that the home HAS NOT been previously tested for lead paint.
NOTICE: The broker is required to give you a document explaining your right to have a lead paint inspection done. Depending on the age of the home and age of any children that may occupy the home, you may be wise to have the home inspected for lead paint prior to purchase. Be advised that deleading a home can quickly represent a SIGNIFICANT EXPENSE and that lead paint is poisonous to children.
NOTICE: Given the 1 1/2 year age of the home, lead paint should NOT be an issue.

**Has the home previously
been inspected by a
home inspector?**

No, as attested by the owner.

**Are there any
underground storage
tanks on the property?**

The owner attested that no underground storage tanks are present.

**NEEDED REPAIRS
DISCLOSED BY
OWNER:**

Observation: According to the owner, no major repairs are needed at this time.

11. MODIFICATIONS DONE DURING OWNER OCCUPANCY:

Observation: The owner disclosed that no major renovations were done during his or her occupancy.

**Additional modifications
by owner:**

**Recommendation: YOU should visit or telephone the local building & conservation departments
NOW and research the permit history of the home yourself prior to commitment.**

REPORT OVERVIEW OR ABSTRACT

THE FOLLOWING IS A PARTIAL OVERVIEW OR ABSTRACT OF THOSE SYSTEMS OR COMPONENTS CONTAINING VISIBLE & READILY ACCESSIBLE PROBLEMS DISCLOSED BY THE HOME INSPECTION. The overview briefly highlights the defects identified during the inspection but does **NOT** represent a complete account of the inspector's findings and opinions. Please read the entire attached report, including the Inspection Agreement or Contract, Standards of Practice and relevant general comments and disclaimers. By reading all of the materials, you will understand the scope of the inspection and the true condition of the property.

The Company recommends that any deficiencies and the components/systems related to said deficiencies noted in this report be further evaluated, inspected or repaired 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 the inspector's findings and inspect the entire system or component for additional concerns that may be beyond the inspector's expertise or the scope of the inspection agreement. If you fail to perform this research, then you will not have all the facts needed for purchase consideration. Concealed problems may be discovered at a later date, and the cost of repairs will remain undetermined.

NOTICE: **ALL DIRECTIONAL REFERENCES** (such as **left side**, **right side**, **front** or **rear**) are oriented as if you were **standing at the street and facing the home.**

STANDARD RECOMMENDATIONS FOR EVERY HOME:

- A. YOU HAVE THE HOME EXAMINED BY A PEST CONTROL COMPANY PRIOR TO PURCHASE.**
- B. IF THE HOME WAS BUILT PRIOR TO 1976, THEN A LEAD PAINT INSPECTION SHOULD BE CONSIDERED.**
- C. THE EPA & SURGEON GENERAL BOTH RECOMMEND THAT EVERY HOME BE TESTED FOR RADON LEVELS AS PART OF THE PURCHASE PROCESS.**
- D. YOU SHOULD REVIEW THIS REPORT WITH YOUR ATTORNEY NOW, PRIOR TO COMMITMENT.**
- E. YOU SHOULD VISIT THE LOCAL BUILDING & CONSERVATION DEPARTMENTS NOW, PRIOR TO COMMITMENT AND REVIEW THE HISTORY OF THE HOME.**

1. EXTERIOR:

**Exterior Common area
problem areas:**

- A. Front entrance handrail post holes not crowned to divert water.
- B. Front entrance molded siding corners are too tight against the concrete stoop.
- C. Missing kickout flashing where the corners of the front entrance roof meet the siding.
- D. Siding / trim in earth contact at right side of home.
- E. Short z-flashing along the top edge of the ledger joist beneath the rear deck, missing solid blocking between joists and slight staining on floor boards.
- F. Request that a pipe cap be installed on the end of the gas line to the exterior grill if the grill is to be removed.
- G. Several window sash are loose at the 2nd floor front center room.
- H. Thin vertical hairline crack in the rear of the foundation.

2. ROOF, CHIMNEY, GUTTERS:

Problem areas of roof, gutters, or chimney:

- A. No visible critical roof covering problems observed with the roof covering.
Slight uplift of rubber roof covering at edge of front entrance.
- B. No visible exterior direct vent problems for venting appliances.
- C. A front downspout discharges onto the driveway, and another discharges near the front of the foundation.
- D. Missing short gutter at the fireplace roof.

3. GARAGE:

Garage problem areas:

- A. Slight dent in front overhead door trim.
- B. Optional self-closing hardware is advised at the inside fire doors.

4. HEATING SYSTEM & COOLING SYSTEMS:

Heating & Cooling system problems:

- A. No visible problems observed with the two gas fired furnaces.
- B. A dirty automatic humidifier needs cleaning.
- C. Dirty filter at the 2nd floor ceiling return register.
- D. The two AC systems were not tested due to the low outside temperature at time of inspection.
- E. The attic furnace and AC fan coil unit was installed on blocks on the attic floor.
- F. The attic AC safe pan has a spill switch but no auxiliary drain.

5. ELECTRICAL SYSTEM:

Electrical system problems:

- A. No visible problems observed.

6. PLUMBING SYSTEM & HOT WATER HEATER:

Problems with plumbing system or hot water heater:

- A. No visible problems observed.
- B. No safe pan with drain beneath the washing machine.
- C. The rubber fill hose for the washing machine is blistered and may burst. Owner was notified.

7. BASEMENT & STRUCTURE:

Basement or structural problems:

- A. Thin hairline cracks in the foundation walls as seen from the basement.
- B. Wood shims in the foundation girder pockets.

8. KITCHEN & APPLIANCES:

Kitchen problem areas:

- A. No visible critical problems observed.
- B. The dishwasher is not secured to the countertop.
- C. A disposer is present with a septic system.

9. BATHROOM(S):

Bathroom problem areas:

- A. Grout maintenance needed at the master bathroom shower stall.

10. LIVING SPACES, FIREPLACE, WOOD STOVE:

Living spaces, fireplace wood stove problems:

- A. Cosmetic cracks in the drywall at wall / ceiling joints.
- B. Missing door stoppers.

11. ATTIC AREA, VENTILATION, INSULATION:

Problems in attic, ventilation & insulation:

- A. No visible problems observed where readily accessible.
- B. Closure of the gable end louver vents is advised for proper ridge vent air movement.

EXTERIOR INSPECTION

SCOPE OF THE EXTERIOR INSPECTION: 266CMR: BOARD OF REGISTRATION OF HOME INSPECTORS 266 CMR 6.00: STANDARDS OF PRACTICE:

6.03: System: Exterior

- (1) The Inspector shall observe the readily accessible:
 - (a) Wall cladding, flashings and trim.
 - (b) Entryway doors and windows.
 - (c) Garage door operators.
 - (d) Decks, balconies, stoops, steps, areaways, and porches including railings.
 - (e) Eaves, soffits, fascias and corner boards.
 - (f) Vegetation, grading, drainage, driveways, walkways and retaining walls with respect to their effect on the condition of the building.
- (2) The Inspector shall:
 - (a) Describe-cladding materials (cementitious siding, asphalt, wood shingles, Aluminum and or vinyl siding, wood clapboards, other) and report on the condition of the exposed wall cladding
 - (b) Report the condition of decks, balconies, stoops, steps, areaways, and porches including railings.
 - (c) Report the condition of eaves, soffits, fascias and corner boards.
 - (d) Operate all entryway doors and representative number of windows including garage doors,
manually or by using permanently installed controls of any garage door operator.
 - (e) Report whether or not any garage door operator will automatically reverse or stop when meeting reasonable resistance during closing
 - (f) Report on slope of earth as it impacts the structure.
- (3) The Inspector is not required to observe:
 - (a) Storm windows, storm doors, screening, shutters, awnings and similar seasonal accessories.
 - (b) Fences, landscaping, trees, swimming pools, patios, sprinkler systems.
 - (c) Safety glazing.
 - (d) Garage door operator remote control transmitters.
 - (e) Geological conditions (Engineering services).
 - (f) Soil conditions (Engineering services).
 - (g) Recreational facilities.
 - (h) Outbuildings and detached garages.

DISCLAIMERS: The following exterior items are EXCLUDED from this report: A. Components covered by SNOW. True conditions are undetermined and require further research by you. B. Paint or stain finishes on siding & trim. C. The condition of unknown underlying siding materials. D. **Detached structures such as sheds, barns, pool house, pump house etc., and all associated plumbing / electrical / heating systems leading to and inside these structures.** E. The location of property lines. F. Swimming pools. G. Underground oil tanks. H. Lawn sprinkler systems. I. Storm windows & storm doors. J. Common elements in multi-unit or condominiums.

GENERAL COMMENTS: A. For safety and reduction in liability, the owner of a dwelling is responsible for maintaining all means of egress in a safe, operable condition at all times; and is required to keep all exterior stairways, fire escapes, egress balconies and bridges free of ice and snow. B. A safe handrail is recommended for every stairway. C. Be advised that all siding materials require maintenance and that those siding materials with Southern exposure usually age at a faster rate. Northern exposed siding is more prone to decay from moisture. Be advised that any source of water penetration or ventilation imbalance can cause interior damage and / or mold. D. I recommend that the finish on all untreated wood siding materials be restored at 3-5 year intervals, and that wood decks be water sealed at 2-year intervals. E. Monitor exterior drainage conditions annually to identify and reduce conditions that may cause wet

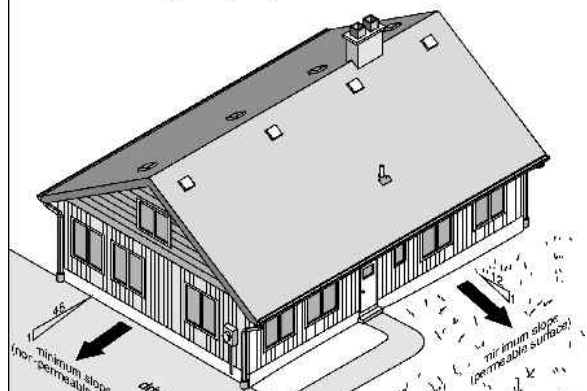
basement problems. Soil along the perimeter of the foundation should direct water away from the home by gravity flow at a pitch of 1"/FT for a distance of ten feet, and perimeter gardens should be at a higher elevation than the lawn. Likewise, downspouts should have base elbows & splashblocks or extensions to discharge roof water far from the home. F. Maintain a 1-2 foot clearance between all shrubbery & siding for proper ventilation, access and maintenance. G. **WARNING - Be advised that before the installation of new thermal replacement windows, old window sash & trim should be tested for LEAD PAINT.**

1. GRADE & DRAINAGE:

CONDITION:

* **FUNCTIONAL.** Observation: Where *readily accessible*, lot grading appears to direct water away from the home at time of inspection. Be advised that as you maintain the landscaping, good drainage control objectives should be followed that create a positive grade for gravity dispersal of both surface water and roof run-off away from the home.

Recommended grading slopes



Monitor grading.

LOT TOPOGRAPHY & DRAINAGE:

A. Observation: The home was built on a low sloped lot with overall drainage flowing from front to rear.

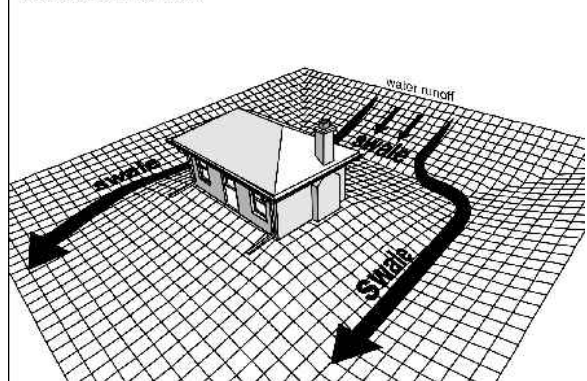
B. Observation: A drainage easement or swale was disclosed by the owner on the disclosure form, and is visible along the rear lot line. (See photo #17)

Analysis: The determination of property lines is beyond the scope of this limited home inspection.

Recommendation: You should ask for more clarification regarding the easement.

Swales

When the overall lot drainage is toward the house, swales can be used to direct surface water away from the foundation.



2. VEGETATION:

Condition:

* **FUNCTIONAL** where *readily accessible*. Be sure to maintain proper clearances between the house & siding for proper ventilation and maintenance access.



3. RETAINING WALLS:

Type(s):

Three mortared field stone walls at the rear yard.

Condition:

* **FUNCTIONAL** where *readily accessible* at time of inspection.

RETAINING WALL

PROBLEMS:

Observation: No visible problems observed where exposed and *readily accessible*.



4. DRIVEWAY:

MATERIALS:

Asphalt. (Note: Asphalt driveways should be seal coated as preventative maintenance every 3 years.)

CONDITION:

* **FUNCTIONAL** where *readily accessible* at time of inspection.

DRIVEWAY PROBLEMS:

Observation: No visible problems observed where exposed and *readily accessible*.

5. WALKS & PATIO:

WALK OR PATIO

MATERIALS:

Concrete front walk present.

Condition:

* **FUNCTIONAL** where *readily accessible* at time of inspection.

WALK OR PATIO

PROBLEMS:

Observation: No visible problems where exposed and *readily accessible*.

6. ENTRANCE COMPONENTS:

STEPS, STOOPS &

HANDRAILS TO

BUILDING:

Stone and brick front steps and stoop.
Rear treated wood steps, wood composite treads and
PVC handrails.



CONDITION:

** **Functional with Exceptions as noted:**



**VISIBLE PROBLEMS
WITH ENTRANCE
COMPONENTS:**

A. Observation: No visible front staircase problems where exposed and *readily accessible*. Entrance components appear functional.
(Note: A homeowner is responsible to maintain a safe means of egress at all times.)
(Note: Monitor the elevation of the top stoop for water retention.)

B. Observation: The rear deck egress staircase has a loose handrail as revealed by applying lateral pressure.

Analysis: **** **UNSAFE** - the railing could fail and cause personal injury by accidental slip, trip or fall.

Recommendation: Perform **urgent safety repairs** as needed to restore the railing so that it will withstand 200 pounds of lateral pressure. Tighten the hardware.

C. Observation: The post holes in the masonry that support the front metal railings were not filled or crowned with cement during installation. (See photo #11 above.)

Analysis: This condition will allow moisture to puddle at the post holes, leading to rust expansion and premature failure of the railings. Repair is needed.

Recommendation: Fill and crown each post hole with hydraulic cement.



7. BASEMENT ENTRANCE:

TYPE:

Walk-in entrance to basement.



CONDITION:

* **FUNCTIONAL** where *readily accessible*.

**BASEMENT ENTRANCE
PROBLEMS:**

Observation: No visible problems observed where exposed and *readily accessible*.

8. DECKS & PORCHES & BALCONIES:

TYPE OF MATERIALS:

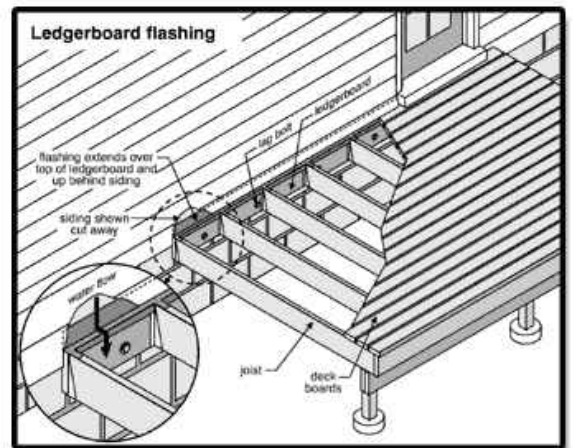
Treated wood frame and wood-polymer material composed of reclaimed plastic and wood fiber. (See photos #2,6,23,24,31,32)



Photo #20, short z-flashing.

CONDITION:

**** FUNCTIONAL with EXCEPTIONS NOTED:**



VISIBLE DECK PROBLEMS:

A. Observation: As seen beneath the deck, the metal z-flashing installed beneath the vinyl siding and over the top edge of the horizontal ledger joist, does not fully lap and bend over the edge of the ledger joist. (See photo #20)

Analysis: This problem is indicative of poor workmanship. The z-flashing should lap the edge of the ledger joist to prevent water from leaking behind the ledger joist and siding. Repair is suggested.

Recommendation: I advise that you hire a carpenter to improve the flashing workmanship. (See illustration above)

B. Observation: The span of the deck floor joists exceeds eight feet and solid blocking is missing between the joists. (See photo #21)

Analysis: For the deck floor frame to provide the required 60 lbs. / SF of load support, solid blocking is needed at mid-span between the joists. Simple but important repair is needed.

Recommendation: Hire a carpenter to install solid blocking between the floor joists as required.

C. Observation: The deck floor boards are stained. (See photo #32)

Analysis: This is a cosmetic problem only.

Recommendation: Wash the deck as needed.

D. Observation: A natural gas fueled outside grill is present on the deck. (See photo #31) YOU informed me that the grill is not remaining with the sale.

Analysis: Be advised that people moving often remove a gas appliance and fail to install a pipe cap on the end of the gas pipe.

Recommendation: Ask for the above for safety.

(Notice: Be advised that gas grills close to the home are conducive for melting vinyl siding and causing fire.)

9. FOUNDATION ABOVE GRADE:

TYPE:

Concrete (1920's to present)

CONDITION:

**** FUNCTIONAL with EXCEPTIONS NOTED:**

FOUNDATION PROBLEMS:

Observation: Inspection of the *readily accessible* portions of the concrete foundation revealed areas of thin hairline vertical cracks.

See rear of foundation.

Analysis: In my opinion, such thin cracks are not of a critical nature and are typically categorized as "shrinkage cracks" caused by the introduction of water during the mixing and pouring of the concrete. Cracks of this type usually occur during the first year of construction and pose no significant risk to the structure. Be advised that hairline cracks are still candidates for low priority repairs as they pose a risk of allowing water infiltration, radon gas entry or insect access. There is a potential that additional cracks may exist behind storage in the basement or finished surfaces.

Recommendation: I advise that you hire a professional concrete repair company to fix all foundation cracks by epoxy injection and that you seek a written warranty. Once repaired, the cracks should be monitored for unpredictable future movement as cracks are time related. (See photo #19)



10. SIDING, FLASHING & TRIM:

TYPE(S) OF SIDING:

VINYL SIDING GENERAL EXPLANATION:

The home has vinyl siding. Vinyl siding represents a durable and fairly maintenance free wall cladding when properly installed. Vinyl siding is a water shedding siding as opposed to a waterproof siding. A moisture barrier is required beneath the vinyl as small amounts of water can leak behind the siding at trim areas and joints. Be advised that vinyl siding is not combustible, but will melt. For that reason, you should never place a gas grill near the siding. The vinyl is hung loosely on nails leaving a 1/4 - 3/8 inch gap between the siding and stops to allow for expansion and contraction.

Vinyl siding is very brittle and vulnerable to damage during accidental bumps, especially during freezing temperatures. Damaged components can be replaced, but new parts may not perfectly match the color or pattern of the existing siding.

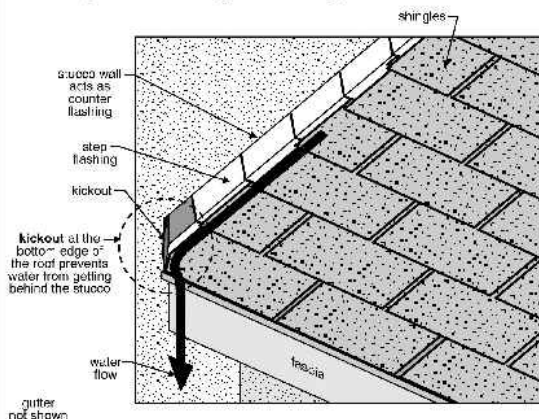
Vinyl siding needs to be regularly cleaned or it will oxidize, requiring more difficult cleaning. Periodic cleaning with household detergent and bleach and a long handled brush is the best method of cleaning the siding. Use a solution of 2/3 cup of household bleach, 1/3 cup powdered detergent and one quart of bleach per gallon of water to clean the siding.

Power washing is possible, but may force water behind the siding or loosen lap joints. Annual inspection is advised to check for warping, loose components, broken parts or worn caulking. Painting vinyl siding is possible, but will void any warranty. A commercial cleanser called "Streak Away," may also be purchased at building supply stores.

(DISCLAIMER: The type and condition of underlying siding and sheathing materials are undetermined as they are not readily accessible for inspection).

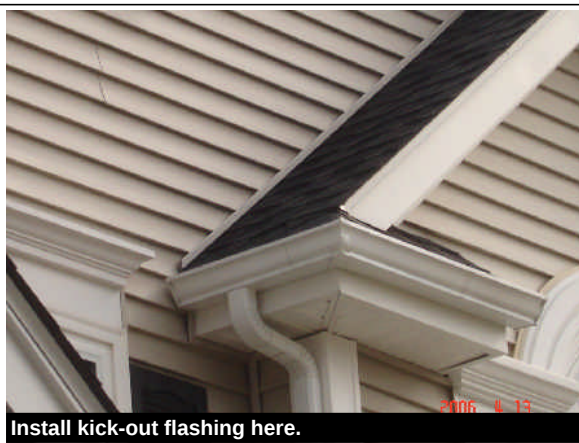
Web resource: www.vsi.com (Vinyl Siding Institute)

Kickout prevents siding/wall damage



CONDITION:

**** FUNCTIONAL with EXCEPTIONS as noted below: (Disclaimer: The type and condition of underlying siding materials is undetermined.)**



Install kick-out flashing here.

SIDING PROBLEMS:

A. Observation: Areas of the siding & trim are in direct soil contact as seen at the right side of the home. (See photo #16)

Analysis: This condition can lead to wood boring insect infestation / damage and / or wood rot. Be advised that closer inspection or exploratory demolition may reveal hidden decay or infestation within the wall frame or siding that was not disclosed in this report. Note: There is a potential for concealed damage. Be advised that any source of water penetration or ventilation imbalance can cause interior damage and / or mold.

Recommendation: The clearance between the earth and the siding should be corrected with a 6 inch minimum space as required. Improve the landscaping as required to fix clearance dimensions while still maintaining gravity flow for water removal away from the foundation.



B. Observation: The cheek wall and pitched roof ledge above front entrance subroof lacks a kick-out piece of flashing. (See photo #27)

Analysis: A kick-out is a piece of metal flashing that extends beyond the edge of the roof to prevent water draining from the roof from rolling back and leaking into the home. Maintenance repair is needed.

Recommendation: Install the missing flashing as required. (See illustration above)

11. EXTERIOR FINISH:

CONDITION OF EXTERIOR FINISH:

**** FUNCTIONAL with EXCEPTIONS:**

Observation: Small voids and knott bleed through were noted where the front entrance wood trim boards along the edge of the flat roof meet the siding.

Analysis: This problem is conducive for water infiltration and decay. Maintenance repair is needed.

Recommendation: Caulk and seal all joints as required. Apply "stain-kills" to the knots and paint the trim boards. (See photo #29)



12. WINDOWS:

TYPE(S) OF PRIMARY WINDOWS:

Double hung

Casement windows present. (Be advised that these types of windows are highly prone to opening & closing problems do to expansion and contraction, paint obstructions and hardware failures.)

Insulated, double-glaze windows are present: "Double-paned windows reduce street noise and improve efficiency of heating/cooling systems. The space between the panes is factory sealed. If a seal is broken, air from the environment may enter the formerly sealed space. This condition may cause condensation or fogging in the window, depending on the climatic conditions. We cannot assure the

seal on each and every window, but we will note in the report the presence of visible condensation at the time of inspection. Unless otherwise noted in the report, no condensation or fogging was present when inspected."

DISCLAIMER: The integrity of self-flashing windows to prevent leakage is undetermined as the flashings are not *readily accessible* for inspection.

CONDITION:

**** FUNCTIONAL with EXCEPTIONS as noted:**

**WAS AT LEAST ONE
WINDOW PER ROOM
OPERATED?**

YES.

**PRIMARY WINDOW
PROBLEMS:**

Observation: Two front 2nd floor double hung windows located above the front entrance, did not remain open when raised.

Analysis: **** **UNSAFE, there is a risk of personal injury. URGENT repair is needed.**

Recommendation: Hire a tradesman to increase the friction fit such that the windows remain open when raised.

13. BASEMENT WINDOW CONDITIONS:

**BASEMENT WINDOW /
AREAWAY PROBLEMS:**

Observation: * **FUNCTIONAL** - no visible problems observed where exposed and *readily accessible*.

14. ENTRANCE DOORS:

**CONDITION -
PROBLEMS:**

* **FUNCTIONAL.** Accessible exterior doors were examined and tested. No visible problems were observed where *readily accessible*.

15. EAVES, SOFFITS, FASCIAS, CORNER BOARDS:

CONDITION:

**** FUNCTIONAL with EXCEPTIONS noted:**

Observation: The two vinyl molded outside corner trim pieces on either side of the front entrance are in tight contact with the entrance stoop, causing the corner trim to buckle. (See photo #30)

Analysis: Vinyl siding and trim need clearance for expansion and contraction.

Recommendation: Trim the bottom edge of each front outside corner.



ROOF, CHIMNEY, GUTTERS INSPECTION

**SCOPE OF THE ROOF INSPECTION: 266CMR: BOARD OF REGISTRATION OF HOME INSPECTORS
266 CMR 6.00: STANDARDS OF PRACTICE:**

6.02: System: Roofing

- (1) The inspector shall observe the readily accessible:
 - (a) Roof coverings.
 - (b) Exposed roof drainage systems.
 - (c) Flashings.
 - (d) Skylights, chimneys and roof penetrations.
 - (e) Signs of leaks on building components.
- (2) The Inspector shall:
 - (a) Report the methods used to observe the roofing.
 - (b) Describe the type of roof covering materials (Asphalt, asbestos cement, slate, metal and or tile shingles; built-up type (Bald asphalt, tar and gravel, mineral covered rolled roofing, ballasted rubber membrane, adhered membrane, other).
 - (c) Report on the condition of the roof, exposed roof drainage systems, exposed flashings, skylights, exterior of chimneys, roof penetrations and any signs of previous leaks.
- (3) The Inspector is not required to:
 - (a) Walk on the roofing unless the client provides safe access and the seller and or the seller's representative provides authorization that relieves the Inspector of a responsibility of possible damage to the roof.
 - (b) Observe attached accessories including but not limited to solar systems, antennae, and lightning arrestors.
 - (c) Inspect the interior of chimney flues.

(PLEASE READ: The Inspector is NOT required to walk on the roof unless the Client provides safe access and the seller and or the seller's representative provides authorization that relieves the Inspector of all responsibility of possible damage to the roof. The method of roof inspection is a judgment call based upon access and the inspector's safety. The Client understands that roof coverings often contain hidden defects and that if this is cause for concern, a professional roofer should be brought in prior to the close of escrow to determine such defects. Unless otherwise stated, All roofing, flashing and chimneys are examined and conditions stated are as visible from ground level. Problems and defects may exist which could not be determined, from ground level, and for which the Company, and its inspectors, cannot and do not assume responsibility. The only way to insure that hidden problems or defects do not exist, is to hire a professional roofer to climb and walk on the roof.)

DISCLAIMERS: A. The true condition of roof components covered by SNOW is undetermined and **EXCLUDED** from this report. B. The inspector is not required to observe attached accessories including but not limited to solar systems, antennae and lightning arrestors. C. Because of the many factors contributing to the adequacy of a roofing installation, the COMPANY cannot warrant such adequacy and can only comment on those installation features that are readily accessible and identifiable by visual inspection - inaccessible areas are **EXCLUDED**. Any additional investigation would require "destructive testing" of the installation to explore roof decking, under underlayments, nailing schedules and many other factors not evident in a visual examination. D. **THIS REPORT IS NOT A GUARANTEE AGAINST ROOF LEAKAGE** as climatic conditions such as high winds, wind driven rain, snow loads, winter ice dams and sun degradation can cause unpredictable leakage with any roof. **NOTICE: UNLESS THE ATTIC WAS VIEWED DURING RAIN, NO GUARANTY AGAINST ROOF LEAKS IS IMPLIED. YOU should monitor the attic area for signs of roof or flashing leakage after heavy rain or snow conditions.** E. **THE INSPECTION AND REPORTING ON THE CONDITION OF CHIMNEY FLUE LINERS IS EXCLUDED FROM THIS REPORT AS A FLUE LINER IS NOT FULLY ACCESSIBLE FOR EVALUATION.** Only the exterior of the chimney is inspected from the ground, from the attic and from the basement when accessible. We recommend installing proper liners in all unlined chimney flues **NOW**. Install

chimney caps on all chimneys **NOW**. You should hire a member of the "Chimney Sweep Guild" to perform a "LEVEL II" inspection of each chimney and fireplace **NOW**, **prior to commitment** for true determination of condition.

GENERAL COMMENTS: A. Most asphalt roof coverings have a 20-year life expectancy. The roof covering is not designed to last the life of the home, future replacement should be budgeted. Estimates for any repairs or replacement should be obtained from a licensed & insured roofing contractor. B. I recommend that all chimneys be inspected annually by a certified member of the chimney sweep guild. Such safety precaution will ensure that harmful combustion gases are safely vented outside. **All chimneys and fireplace flues should be cleaned and inspected by a chimney sweep annually.** C. Gutters should be cleaned and inspected for proper drainage control annually. Each downspout should discharge water away from the foundation to prevent wet basement problems. D. Be advised that any source of water penetration or ventilation imbalance can cause interior damage and / or mold.

1. SHAPE:

Style:

Intersecting gables.

2. HOW ROOF WAS VIEWED?

The roof was viewed
from:

Viewed from ground by eye.
Viewed from a second story window.
Viewed by 10 x 50 Bushnell brand binoculars from the ground.

Recent weather
conditions have been:

Active drizzle at time of inspection.

3. MAIN HOUSE ROOF:

TYPE OF MAIN ROOF
COVERING:

LAMINATED ASPHALT / FIBERGLASS SHINGLES PRESENT: As viewed, the roof structure appears to be covered with laminated asphalt and fiberglass composition shingles.

Analysis: In my opinion, this type of roof covering is the most desirable as it is thicker than average 3-tab shingles and typically provides a longer service life when installed properly and maintained. However, no roof covering is designed to last the life of the home; all will require eventual routine age replacement. Replacement should be a budgeted item and should be scheduled before leakage occurs. The service life of the material varies and depends on variable such as: the initial shingle weight or quality, the steepness or pitch of the roof, the amount of attic ventilation, the number of roofing layers and the orientation of the home to the sun. (Note: Heavy weight laminated shingles have an average service life of 25-30 years.)

During ownership, you should conduct an annual roofing inspection to make sure that the condition of the roof is functional or fulfilling its objective of shedding water before leakage occurs. Look for missing or loose materials, split shingles, areas of storm damage, blown-off shingles, curling shingles, loss of granules, exposed felt mat or other age defects and perform repairs as required to extend service life.

Approximate age of roof:

1 1/2 years of age as attested by: the owner.

CONDITION:

* **FUNCTIONAL** at this time, where *readily accessible*, as viewed, and with wear & tear appropriate for the type of material and estimated age. (Note: A roof covering is a disposable component, not designed to last the life of the home. All homeowners should budget for future roof covering replacement when the material reaches end of service life.)

VISIBLE PROBLEMS:

Observation: The *readily accessible* roof coverings did not exhibit any visible problems.

Analysis: Where accessible and by the method observed, the roof covering appears functional with wear & tear appropriate for its estimated age.

(Note: Every roof should be monitored for seasonal storm damage and you should establish a budget for future age replacement.)

4. ROOF COVERING AREA #2:**LOCATION #2:**

Front entrance flat roof.

TYPE OF ROOF COVERING:

RUBBER ROOFING: Rubber membrane roofing is present on the low sloped roof. (EPDM - Ethylene Propylene Diene Monomer)

Analysis: Rubber membrane or single ply membrane are relatively new products used for flat roof applications. Manufacturer's boast of a 20-30 year design life, but true life expectancy is unknown due to the limited age of the product on site. In my opinion, this is the material of choice for flat roof applications in terms of weather shedding protection, resistance to the elements and longevity.

Most rubber roofs are contact cemented in place in large sheets with few joints. Joints are heat sealed and uncured rubber is used to form corners or cover other difficult areas.

Problems associated with such rubber membrane roofing products are usually due to workmanship and seam failure rather than product failure.

Ethylene Propylene Diene Monomer (EPDM), or rubber roofing is the most popular single-ply roofing system used nationally and may be black or white in color.

Recommendation: Semi annual inspections are advised.

Resource: <http://www.epdmroofs.org>

Approx. age roof #2:

1 1/2 years as attested by the owner.

CONDITION:

** **FUNCTIONAL** with exceptions noted below:

Notice

Potential For
Water Entry

VISIBLE PROBLEMS

ROOF #2:

A. Observation: As seen from outside, the edge of the rubber roof covering has uplifted at the right side of the front entrance roof. (See photo #50) There is also evidence of water ponding on the roof. (See photos #47-48)

Analysis: The uplifted edge of the roof covering is conducive for leakage. Simple maintenance repair is needed. Be advised that water and snow retention on the flat roof are conducive for leakage, even a flat roof should have a slight pitch for water removal.

Recommendation: Hire a roofing contractor to cement the edge of the rubber roof covering to the roof decking as required. Monitor the roof drainage.



Uplifted rubber roofing.

5. ROOF COVERING AREA #3:

Location #3:

Window cap roofs.

Type of roof covering:

LAMINATED ASPHALT / FIBERGLASS SHINGLES PRESENT: As viewed, the roof structure appears to be covered with laminated asphalt and fiberglass composition shingles.

Analysis: In my opinion, this type of roof covering is the most desirable as it is thicker than average 3-tab shingles and typically provides a longer service life when installed properly and maintained. However, no roof covering is designed to last the life of the home; all will require eventual routine age replacement. Replacement should be a budgeted item and should be scheduled before leakage occurs. The service life of the material varies and depends on variable such as: the initial shingle weight or quality, the steepness or pitch of the roof, the amount of attic ventilation, the number of roofing layers and the orientation of the home to the sun. (Note: Heavy weight laminated shingles have an average service life of 25-30 years.)

Approx. age roof #3:

1 1/2 years as attested by the owner.

CONDITION:

* **FUNCTIONAL** where *readily accessible* and as viewed at time of inspection. The roof covering appears normal for the age and type of roofing. Normal roof covering life expectancy is anticipated. (Note: A roof covering is a disposable component NOT intended to last the life of the home. All home owners should budget for future roof covering replacement.)

VISIBLE PROBLEMS

ROOF #3:

Observation: The *readily accessible* roof coverings did not exhibit any visible problems as viewed at time of inspection.

Analysis: Where accessible and by the method observed, the roof covering appears functional with wear & tear appropriate for it's estimated age.

(Note: Every roof should be monitored for seasonal storm damage and you should establish a budget for future age replacement.)

6. GUTTERS & DOWNSPOUTS:

TYPE OF GUTTERS:

METAL. (Note: All gutters should be cleaned annually to protect the home from moisture caused decay, paint failure, soil erosion and wet basement problems.)

CONDITION:

**** FUNCTIONAL with EXCEPTIONS NOTED:**

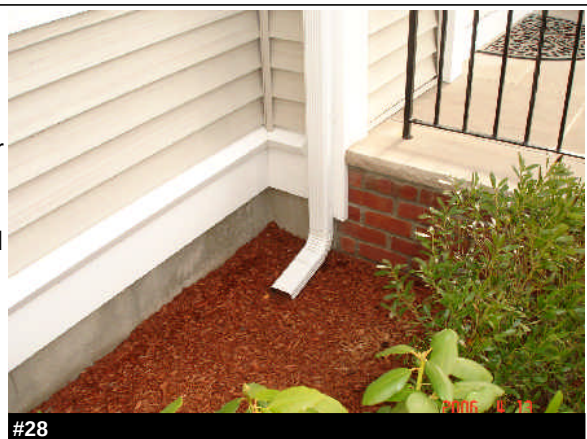


GUTTER PROBLEMS:

A. Observation: A downspout discharges roof water onto the driveway. (See photo #9)

Analysis: ****** UNSAFE.** This condition is undesirable as winter freeze-ups and ice formation could cause vehicle problems or personal injury due to a slip, trip or fall.

Recommendation: For safety, I advise that options for relocation or re-direction of the downspout be explored to alleviate this problem.



B. Observation: A front downspout located left of the front entrance empties roof run-off water near or adjacent to the foundation. (See photo #28)

Analysis: Dumping excessive water near the home may cause wet basement problems, foundation problems or soil erosion. Drainage control repairs are needed NOW.

Recommendation: I advise that each downspout be studied and corrected as required to discharge all roof drainage by gravity flow away from the building. Downspouts should have properly directed elbows, extensions and splash blocks that complement the natural grade of the property.

C. Observation: Downspouts which carry roof run-off water enter the ground near the foundation. Beyond this point, the downspouts pass underground to unknown locations. (See photo #14)

Analysis: **DISCLAIMER: The functional condition of these hidden drains is undetermined as they are not accessible.**

Recommendation: I advise that you question the owner and ask where the downspouts lead and if they satisfactorily handle all of the water from the roof. I further advise that you monitor the drains during several seasonal periods of prolonged and heavy rains. The gutters leading to the underground drains should be screened to prevent clogging. The downspouts may empty into buried dry wells or they may run to the lot boundary or area of lower elevation. (A dry well is a covered pit with either an open jointed lining or filled with stone aggregate through which drainage from the roof seeps and leaches into the surrounding soil.) Note: Be advised that faulty downspouts that discharge near the foundation or buried drainage systems that boil over or retain water near the foundation may contribute to wet basement problems.

7. CHIMNEY #1:

Type of chimney:

(DISCLAIMER: FLUE
LINER EVALUATION IS
EXCLUDED FROM THIS
REPORT.)

Insulated metal pipe chimney above the rear roof, for venting the attic gas furnace. (See photo #2) (Be advised that the metal flashing boot, storm collar and cap should be inspected annually as they are potential leakage points.)

Condition:

* **FUNCTIONAL** - the exterior of the chimney was functional as viewed and where *readily accessible*.

Chimney problems:

Observation: No visible problems where exposed and *readily accessible* and as viewed at time of inspection.

Analysis: Not all parts of the chimney are visible for inspection.

Recommendation: I advise that you have each chimney cleaned and safety inspected at this time and annually thereafter. Consult a member of the chimney sweep guild (www.chimneys.com or www.csia.org).

8. CHIMNEY #2:

Type of chimney #2:

(DISCLAIMER: FLUE
LINER EVALUATION IS
EXCLUDED FROM THIS
REPORT.)

Observation: The home has no other chimneys. The basement furnace and water heater are vented via direct wall PVC vents. (See photos #6,15) The gas fired furnace is vented via a direct wall metal vent. (See photo #25)

Condition of chimney

#2:

* **FUNCTIONAL** - exterior through wall vents.

Problems at chimney #2:

Observation: No visible problems where exposed and *readily accessible*.

9. CHIMNEY #3:

Type of chimney #3:

(DISCLAIMER: FLUE
LINER EVALUATION IS
EXCLUDED FROM THIS
REPORT.)

Not applicable. No third chimney.

10. ROOF PENETRATIONS:

TYPES PRESENT:

Observation: The following items or components penetrate the roof plane: Plumbing vent pipes. Chimney. Skylight. Ridge vent.

CONDITION:

* **FUNCTIONAL** where *readily accessible*.

VISIBLE PROBLEMS:

Observation: No visible problems observed where exposed, as viewed and *readily accessible* at time of inspection. (Be advised that roof penetrations represent a weak link in any roof. Flashings or seals at such points should be monitored for deterioration caused by age and exposure, and repaired as required.)

11. FLASHINGS:

TYPE OF FLASHINGS:

Flashing boot at vent pipe.
Metal flashing is present at the metal chimney / roof intersection.
Metal flashing at the skylight.

CONDITION:

* **FUNCTIONAL** exposed flashings where *readily accessible* and as viewed at time of inspection.

FLASHING PROBLEMS:

Observation: No visible exposed flashing problems observed as viewed, where exposed and *readily accessible* at time of inspection. (Note: Complete flashing evaluation can not be determined without destructive testing as it is partly hidden beneath the roof covering.)

12. SKYLIGHTS:

* **FUNCTIONAL** rear skylight as viewed and where *readily accessible* at time of inspection.

13. SIGNS OF PREVIOUS LEAKS:

ROOF LEAKS OR AREAS OF POTENTIAL PROBLEMS:

Observation: I did not observe any signs of previous leaks where *readily accessible* at time of inspection. (Note: This report is **NOT A GUARANTEE** against roof leakage as climactic conditions, high winds, winter ice dams and normal sun degradation can cause unpredictable leakage with any roof covering. YOU should ask the owner if the home has any previous history of water penetration.)

14. OVERALL CONDITION / RECOMMENDATIONS:

Opinions of inspector:

In my opinion, as viewed the *readily accessible* roof coverings are in an over-all **FUNCTIONAL** condition with no visible critical problems and with wear & tear appropriate for the disclosed or approximated age on this date. You should understand that roof coverings are not designed to last the life of the building. A responsible home owner must monitor the roof coverings and establish a budget for future age replacement when the design life is reached.

Maintenance repair is needed at the edge of the front entrance flat roof.
Several downspout improvements are advised as explained above.

GARAGE INSPECTION

SCOPE OF THE GARAGE INSPECTION: The garage inspection is limited to those areas or components that were visible and accessible at time of inspection only. The inspector shall observe the roof covering, structure, wall coverings, foundation, doors & windows, fireshielding, door operator and electrical outlets. NOTICE: Overhead door openers will NOT be tested if a car is parked beneath, as malfunctions sometimes occur.

DISCLAIMERS: A. Stored goods along the perimeter of the garage walls usually limit access for visual examination of the garage structure. Be advised that hidden or concealed defects may exist that were inaccessible at the time of inspection. B. Locked or inaccessible garages are **EXCLUDED** from this report. C. The true condition of door operators, lights and outlets is undetermined if the electricity is shut-down at time of inspection. D. **(Note: Home inspectors are NOT required to inspect detached garages. Any inspection of the detached garage is done so as a free courtesy only with no consideration.)**

GENERAL COMMENTS: A. For your protection, you should re-examine the garage after the owner has removed all vehicles and storage items as concealed defects may exist. Probing & sounding of the wood sills for hidden decay is especially recommended as their closeness to grade level often invites decay or wood boring insect infestation. Call me if your research reveals hidden concerns. B. All attached garages should have intact fireshielding on the inside surface of the wall adjoining the home and the ceiling if living space is above. C. The garage door operator "safety reversing mechanisms" should be tested monthly to prevent personal injury or property damage. D. For electrical safety, all garage outlets should be equipped with modern ground-fault-circuit-interrupter (GFCI) shock protection. E. Fire doors should have a self-closing piston or spring loaded hinges. F. Overhead door openers should be updated by installing infrared sensors when not present.

1. TYPE OF GARAGE:

Description:

2 car attached garage. (See photo #4)



2. OBSTACLES:

None.

3. GARAGE ROOF COMPONENTS & CONDITION:

TYPE OF ROOF

COVERING:

LAMINATED ASPHALT / FIBERGLASS SHINGLES PRESENT: As viewed, the garage roof structure appears to be covered with the same 1 1/2 year old laminated asphalt and fiberglass composition shingles.

Analysis: In my opinion, this type of roof covering is the most desirable as it is thicker than average 3-tab shingles and typically provides a longer service life when installed properly and maintained. However, no roof covering is designed to last the life of the home; all will require eventual routine age replacement. Replacement should be a budgeted item and should be scheduled before leakage occurs. The service life of the material varies and depends on variable such as: the initial shingle weight or quality, the steepness or pitch of the roof, the amount of attic ventilation, the number of roofing layers and the orientation of the home to the sun. (Note: Heavy weight laminated shingles have an average service life of 25-30 years.)

During ownership, you should conduct an annual roofing inspection to make sure that the condition of the roof is functional or fulfilling it's objective of shedding water before leakage occurs. Look for missing or loose materials, split shingles, areas of storm damage, blown-off shingles, curling shingles, loss of granules, exposed felt mat or other age defects and perform repairs as required to extend service life.

ROOF CONDITION &

PROBLEMS:

* **FUNCTIONAL** condition with wear & tear appropriate for age & materials where *readily accessible* at time of inspection.

4. GARAGE SIDING & CONDITION:

SIDING TYPE &

CONDITION:

**** FUNCTIONAL with EXCEPTIONS noted:**

Observation: The home has vinyl siding identical to the home. A piece of metal trim wrap is dented, as seen to the right side of the left overhead door. The adjacent water table trim is also patched. (See photo #33)

Analysis: Slight abuse is exhibited. Repair is optional.

Recommendation: Hire a vinyl siding contractor to install replacement materials as elected.



Photo #33

5. GARAGE DOORS & WINDOWS:

DOOR & WINDOW CONDITIONS:

* **FUNCTIONAL** doors & windows where *readily accessible* at time of inspection.

6. WAS THE GARAGE DOOR OPERATED?

Type of overhead door:

Observation: YES, the overhead doors were operated and were **FUNCTIONAL** at time of inspection. The safety reversing mechanisms did properly stop and raise the door when reasonable resistance was encountered. Modern infrared sensors are present.

Analysis: No visual problems.

Recommendation: The CPSC advised that you test each door opener safety feature monthly to prevent vehicle damage or personal injury. Clean the lenses on the sensors annually.

Resources: <http://www.cpsc.gov/cpscpub/pubs/523.pdf>

[DASMA - Door and Access Systems Manufacturers Association](#)

[IDA - International Door Association](#)

7. GARAGE STRUCTURE:

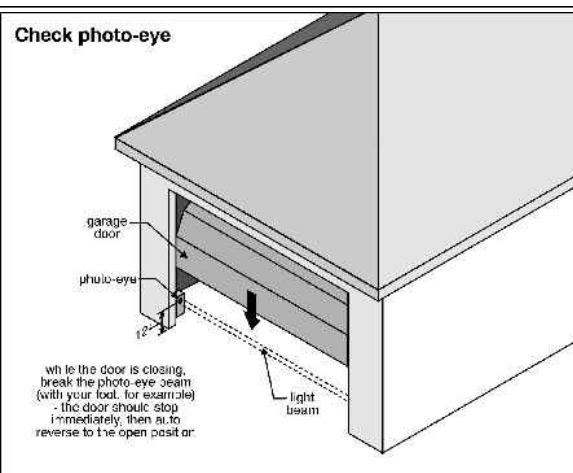
CONDITION OF STRUCTURE:

* **FUNCTIONAL** with wear & tear appropriate for age where *readily accessible* and exposed at time of inspection.

8. GARAGE ELECTRICAL SYSTEM:

GARAGE ELECTRICAL SYSTEM:

* **FUNCTIONAL** where *readily accessible* at time of inspection. A GFCI outlet is present.
Resource: <http://www.cpsc.gov/cpscpub/pubs/523.html>



9. FIRE SAFETY:

CONDITION OF ATTACHED GARAGE FIRE SAFETY:

* **FUNCTIONAL** garage separation components where *readily accessible* at time of inspection.

Observation: The passage fire doors between the home & attached garage & basement stairs each lack an optional piston closer or spring loaded hinges.

Analysis: While no repair is required, the door will NOT provide fire protection unless you remember to close it or it is self-closing. Self-closing hardware will maintain fire shielding and will prevent poisonous exhaust gases from entering the home.

Recommendation: **Optional** updating of the door hardware is advised.

10. OVERALL CONDITION / RECOMMENDATIONS:

GARAGE SUMMARY:

* In my opinion, the garage is fully FUNCTIONAL. No visible critical problems were observed where *readily accessible* at time of inspection.

HEATING SYSTEM & AC INSPECTION

SCOPE OF THE HEATING SYSTEM INSPECTION: 266CMR: BOARD OF REGISTRATION OF HOME INSPECTORS 266 CMR 6.00: STANDARDS OF PRACTICE:

6.07: System: Heating

- (1) The inspector shall *observe* permanently installed exposed readily accessible heating systems including:
 - (a) Heating equipment.
 - (b) Normal operating controls.
 - (c) Automatic safety controls.
 - (d) The exterior of the chimneys and vents.
 - (e) Solid fuel heating devices.
 - (f) Heating distribution systems including fans, pumps, ducts and piping, with supports, dampers, insulation, air filters, registers, radiators, fan coil units, convectors.
 - (g) The presence of an installed heat source in each room.
- (2) The inspector shall:
 - (a) Report on:
 1. The type of energy source (coal, electric, gas, and oil, wood, other).
 2. The type of heating equipment (electric, hot air, hot water, steam, other).
 3. The type of distribution system (piping: black iron, copper, and other. Duct work, aluminum, fiberglass, steel, other).
 - (b) If possible, have the owner and or the owner's representative operate the systems using normal operating controls. If not possible for owner or owner's representative to operate system, home inspector shall operate system using normal operating controls and report on conditions.
 - (c) Open readily accessible and operable access panels provided by the manufacturer or installer for routine homeowner maintenance.
- (3) The inspector is not required to:
 - (a) Test and or inspect the heat exchanger (requires the equipment to be dismantled).
 - (b) Collect engineering data on the size of the heating equipment, the size or length of the distribution systems. (Engineering services).
 - (c) Report on the adequacy of the in place system(s) to heat the dwelling (Engineering services).
 - (d) Operate heating systems when weather conditions or other circumstances may cause equipment damage.
 - (e) Operate automatic safety controls.
 - (f) Ignite or extinguish solid fuel and or gas fires.
 - (g) Observe:
 1. The interior of flues.
 2. Fireplace insert flue connections.
 3. Humidifiers.
 4. Electronic air filters.
 5. The uniformity or adequacies of heat supply to the various rooms.
 6. The heat exchanger (Requires dismantling of the furnace cover and possible removal of controls) HVAC technician work.

6.08 System: Central Air Conditioning

- (1) The Inspector shall observe:
 - (a) Exposed readily accessible central air conditioning including:
 1. Cooling and air handling equipment.
 2. Normal operating controls.
 - (b) Exposed readily accessible distribution systems including:
 - 1.. Fans, pumps, ducts and piping, with supports, dampers, insulation, air filters, registers, fan-coil units, condensers.
 2. The presence of an installed -cooling source in each room.

- (2) The Inspector shall:
- (a) If possible, have the owner and or the owner's representatives operate the systems using normal operating controls and report on conditions.
 - (b) Open readily accessible operable access panels provided by the manufacturer or installer for routine homeowner maintenance and report on conditions.
- (3) The Inspector is not required to:
- (a) Collect engineering data on the size of the cooling equipment, the size or length of the distribution systems.
 - (b) Report on the adequacy of the in place system(s) to cool the dwelling (engineering services).
 - (c) Have the owner's representative operate the cooling systems when weather conditions or other circumstances may cause equipment damage.
 - (d) Observe evaporator coils (Requires dismantling of the plenum cover and possible removal of controls) HVAC technician work.
 - (e) Observe non-central air conditioners.
 - (f) Observe the uniformity or adequacy of cool-air supply to the various rooms.

DISCLAIMERS: A. The inspector is not required to operate systems when weather conditions or other circumstances may cause equipment damage. B. The inspector is not required to operate automatic safety controls. Systems shall be operated using normal operating controls and shall be observed via readily openable access panels. C. The inspector is not required to ignite or extinguish fires or pilots. D. The inspector is not required to observe non-central air conditioners. E. The uniformity of the supply of conditioned air to the various parts of the structure is not calculated. F. No representation is made regarding line integrity or coolant charges since the inspector does not perform pressure tests on coolant systems. G. The inspector does not check the electric draw (current) or the system. H. Testing is only performed on those systems that will respond to user controls during appropriate prevailing temperature, humidity and climate conditions. I. Systems known to be or appearing to be faulty, defective, unsafe or shut-down are not tested. J. The Inspection and Report do NOT include determination of adequacy of any system with regard to personal comfort needs, nor do the Inspection and Report include any determination of the efficiency of any system with regard to energy usage.

******* NOTICE: THE EVALUATION OF HOT AIR FURNACE HEAT EXCHANGERS IS EXPRESSLY EXCLUDED FROM THIS REPORT PER MA RULES & REGULATIONS, AS STATED ABOVE; AS THEY ARE INACCESSIBLE FOR COMPLETE VISUAL EVALUATION. I RECOMMEND THAT ALL HEAT EXCHANGERS BE EVALUATED BY A TECHNICIAN NOW PRIOR TO COMMITTING TO PURCHASE. IF YOU FAIL TO HEED THIS ADVICE, THEN THERE IS A POSSIBILITY THAT THE UTILITY COMPANY WILL DISCOVER A FAILED HEAT EXCHANGER AND "RED TAG" THE APPLIANCE AS BEING UNSAFE AND IN NEED OF COSTLY TOTAL APPLIANCE REPLACEMENT.**

GENERAL COMMENTS: A. Equipment that is "SHUT-DOWN", not seasonally functional, out of fuel or does not respond to normal operating controls cannot be functionally evaluated. Reappraisal by a heating or air conditioning technician is recommended prior to purchase. B. As preventative maintenance, all heating and cooling systems should be inspected and serviced annually by a HVAC technician. Annual service and repair contracts and automatic fuel delivery agreements are recommended. C. If you buy the home, I recommend that you have the heating & cooling systems completely evaluated and fully serviced to establish a base date of good annual maintenance. D. Owners of rental property are required to keep heating systems in good working order and to provide adequate heat between September 15th and June 15th, unless lease agreements define occupant responsibility. E. Today's construction requires that the "emergency shut-off switch" be located outside of the basement or boiler room so that the door remains closed for safety. Updating of older nonconforming switch locations is advised. F. Be advised that when the outside temperature is less than 65 degrees F., the inspector cannot operate the central air conditioning system due to possible damage to the compressor. **G. Be advised of the following average appliance life expectancies: hot air furnace 15-20 years, steel boiler 20 years, cast iron boiler 30-40 years, compressor unit 10-12 years.** **H. Install carbon monoxide detectors prior to occupancy.** I. Consult

with the owner **NOW** on any known underground, abandoned oil tanks or oil leaks within the property. Obtain all proper permits from owner / fire marshal **NOW** for removal of any underground oil tanks. Remove all abandoned underground oil tanks **NOW**.

1. FUEL SOURCE:

TYPE OF FUEL:

Natural gas. (Note: Inexpensive carbon monoxide detectors, similar to smoke detectors, are now available for your protection from potential natural gas hazards). * Steel gas pipes are present.

2. OIL TANK OR GAS PIPING:

TYPE OF TANK & LOCATION:

Observation: The home has functional steel gas pipes as viewed where *readily accessible* at time of inspection.

LOCATION OF MAIN FUEL SHUT-OFF VALVES:

The main fuel shut-off valve is located at the gas meter.

CONDITION OF TANK OR PIPING:

* **FUNCTIONAL** where *readily accessible* at time of inspection.

TANK OR PIPING PROBLEMS:

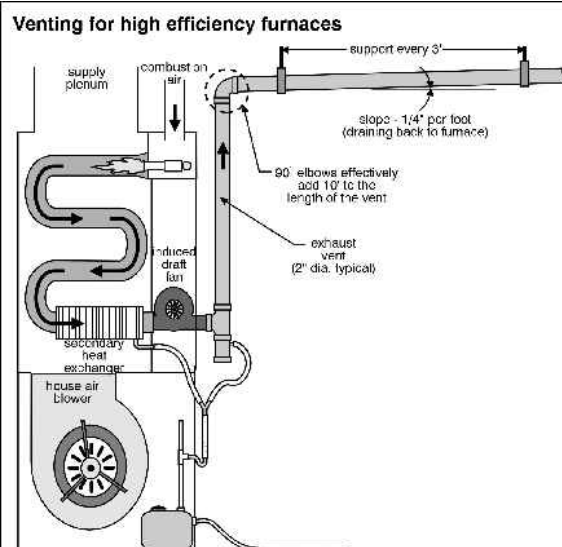
Observation: No visible problems observed where exposed and *readily accessible* at time of inspection.

3. HEATING SYSTEM EQUIPMENT:

TYPE(S) OF HEATING SYSTEMS PRESENT:

FURNACE GENERAL EXPLANATION: The central heating system for this home consist of two forced hot air furnaces, one in the basement for heating the first floor, and one in the attic for heating the second floor. As a responsible home owner, you should understand the simple mechanics that transfers heat from the fuel being burned within the furnace and its distribution to the rooms being heated. Also important is an understanding of maintenance and safety issues, plus the advantages & disadvantages of a furnace ownership.

DESIGN LIFE: Firstly, don't have false expectations. A furnace is not designed to last the life of the home and will require future replacement and occasional repair. Just like an automobile, it is a mechanical device with a variable average service life and a need for maintenance. Most furnaces reach the end of their economic life within 15-20 years, while some may fail sooner. Within the furnace, there are also components that may require parts replacement to maintain the function of the appliance.



OPERATION: The mechanical operation of a furnace is fairly simple to grasp. When the thermostat calls for heat, fuel (gas or oil) is burned within a fire chamber and combustion gases are drafted through the flue pipe to the chimney and exterior. The heat generated by combustion is transferred to a heat exchanger - a large metal hood, drum or box above the fire. The heat exchanger is the heart of the appliance and may be composed of many different materials and may be configured in numerous shapes depending on the manufacture and requirements of the installation. When the heat exchanger reaches a certain temperature, a fan control box instructs a blower unit to turn on directed air around the heat exchanger. Return air is filtered, blown around the hot heat exchanger and then forced through supply ducts to registers providing heat to the living spaces. Return air leaves the living spaces from individual room return ducts or one central return duct to be re-filtered and re-cycled again. The process of air movement will continue until the thermostat is satisfied. The blower unit and burner will cycle on & off in response to pre-set control limits. You may even notice the fan still operating after the burner has shut-down - this is normal. The fan will shut-off when the heat exchanger has cooled to the off setting of the fan control. To prevent fire, an upper high limit control will shut the system down if it should overheat.

As mentioned above, the heat exchanger is the heart of the furnace and is the prime component that limits the over-all service life and safety of the appliance. Unfortunately, **the heat exchanger is mostly hidden by the furnace metal covering and can NOT be fully evaluated by the home inspector without disassembly or specialized testing. Therefore, the true condition of the heat exchanger is undetermined and is EXCLUDED from this report per out contract.** The constant expansion & contraction of the metal heat exchanger as the furnace cycles on & off can cause hidden metal fatigue type cracks. Be advised that one of the by-products of combustion is deadly carbon dioxide. A defective heat exchanger with hidden cracks or holes can allow poisonous combustion gases to enter the living spaces of the home causing death by asphyxiation.

RECOMMENDATION: To determine the true condition of the furnace heat exchanger, specialized testing is advised prior to commitment that is beyond the scope of a limited visual home inspection. **I advise that you hire a heating contractor to perform a diagnostic smoke test on the furnace to evaluate the heat exchanger for hidden cracks, holes and combustion gas leakage.** If you fail to follow this advice, then there is always the risk that the utility company will "red tag" the furnace as UNSAFE do to newly discovered heat exchanger defects and risk of carbon monoxide poisoning. You should further research the condition of the furnace NOW for informed purchase consideration.

Furthermore, you should obtain a service contract that includes annual inspection & testing of the heat exchanger, along with inspection of the flue venting system, cleaning & tune-up of the burner and any other needed maintenance. While cracks in heat exchangers can sometimes be repaired by welding, new cracks may soon appear. For that reason, **a faulty heat exchanger usually calls for furnace replacement.** Be wary of odors, a change in the color of the flame, a flame that leans to one side when the fan is operating and of soot accumulations at registers. For peace of mind, the installation of a carbon monoxide detector is advised regardless of whether the fuel is gas or oil.

MAINTENANCE: Annual maintenance contracts are recommended, including heat exchanger evaluation and inspection of the flue pipe and chimney connections. The filter should be checked annually and should be cleaned or replaced monthly by the owner. Some furnaces utilize washable filters and others use disposable filters. To access the filter, some manufacturers provide a slot in the return duct next to the furnace, while others require the removal of the cover at the blower unit. Filter sizes are printed on the edge of the filter. Notice: Prior to removing the cover of the blower compartment, the electrical service switch at the side of the furnace should be shut-off to prevent contact with the blower unit of fan belt within the cabinet. The furnace should not be operated with the cover removed from the blower unit as combustion gases may be back-drafted from the combustion chamber into the duct system.

For energy conservation, all duct connections should be sealed with aluminum tape (not duct

tape) and supply ducts should be insulated. Ducts themselves should be kept clean to prevent the growth of dust mites that cause respiratory irritation. **Because heating ducts can accumulate dirt and potential contaminants, I advise that every homeowner hire a professional duct cleaning company to further inspect and sanitize their ducts as a wise investment in environmental hygiene.**

FURNACE ADVANTAGES & DISADVANTAGES: In terms of advantages, a forced hot air furnace is cheaper to install initially, it has a fast response to the call for heat, and air can be filtered or air conditioned. A furnace also requires little maintenance and there is no worry about water leaks.

Disadvantages include: dry heat, possible hot & cold spots in living spaces, distracting air movement, difficulty in zoning the building, and potential for heat exchanger failure and entry of poisonous combustion gases into the living spaces.

**WERE THE
MAINTENANCE ACCESS
PANELS REMOVED?**

YES, the *readily accessible* operable access panels provided by the manufacturer or installer for routine homeowner maintenance were opened.



APPROXIMATE AGE(S):

Observation: The estimated age = 1 1/2 years:

Brand: Trane / Trane
Model: XR90
Serial: 4131PY67G



CONDITION:

* **Observation:** Where *readily accessible*, the heating appliances were **FUNCTIONAL** for age of appliances at time of inspection. The heating systems responded to normal operator controls and heat was distributed to those habitable rooms serviced.

Analysis: While operational, understand that a heating system is not designed to last the life of the home.

Recommendation: A home owners should budget for eventual heating system age replacement. Annual cleaning & safety inspection by a licensed HVAC contractor are advised.

HEATING APPLIANCE PROBLEMS:

Observation: No visible problems observed where *readily accessible* at time of inspection. The heating systems responded to normal operational controls and delivered heat to those rooms serviced.



HEATING APPLIANCE PROBLEMS:

A. Observation: The forced hot air furnace in the basement has an attached automatic humidifier that is operational but dirty at this time.

Analysis: Postponed cleaning is evident, maintenance is needed NOW. This appliance should be cleaned monthly for health reasons as they can be a breeding ground for bacteria. Be advised that a humidifier may shorten the design life of the furnace heat exchanger due to excess moisture and resultant corrosion.

Recommendation: Clean the appliance as required and establish a monthly schedule. I advise that the humidifier be removed for health reasons and for a longer lived furnace.



B. Observation: The filter is clogged at the second floor ceiling return grill.

Analysis: This leads to excessive wear, deterioration and reduced efficiency of the furnace.

Recommendation: Replace the filter now and monthly when in use.

4. DISTRIBUTION SYSTEM: TYPE / COMPONENTS:

Observation: The heating distribution systems have both metal ducts and insulated flexible ducts. (Note: Flexible ducts have an 8-10 year service life. Expect future replacement.)

Recommendation: Because heating ducts can accumulate dirt and potential contaminants, I advise that every homeowner hire a professional duct cleaning company to further inspect and sanitize their ducts as a wise investment in environmental hygiene. Resource: www.flexduct.org

CONDITION:

* **FUNCTIONAL** where *readily accessible* at time of inspection. The distribution system carried heat to those habitable rooms serviced.

**CIRCULATOR PUMP OR
BLOWER UNIT
PROBLEMS:**

Observation: No visible problems observed where *readily accessible*.

Analysis: Each furnace blower unit was functional at time of inspection. (Note: blower unit is a replaceable component NOT expected to last the life of the heating system. Depending on it's age, it may or may not have a fan belt that will need annual inspection for age replacement.)

Recommendation: Monitor for future age replacement.

**DISTRIBUTION SYSTEM
PROBLEMS:**

Observation: No visible problems observed where *readily accessible* at time of inspection. The heating systems responded to thermostatic controls and heat was distributed to those habitable rooms serviced.



Humidifier filter cleaning needed.

5. NORMAL OPERATING CONTROLS:

**WAS THE HEATING
SYSTEM OPERATED
USING NORMAL
OPERATING
CONTROLS?**

YES.

**CONDITION OF
CONTROLS:**

* **FUNCTIONAL.** Homeowner operated devices such as a thermostat, wall switch or safety switch appear to be operational where *readily accessible*. I recommend the use of new setback type thermostats for energy conservation and efficiency. (Note: The inspector only verified the presence of an emergency shut-off switch, he did **NOT** test it's function. You should test the emergency shut-off switch when you move into the home.)

6. AUTOMATIC SAFETY CONTROLS:

**CONDITION OF SAFETY
CONTROLS:**

* **FUNCTIONAL.** Automatic safety controls appeared **FUNCTIONAL** where *readily accessible* at time of inspection but are **NOT** tested during a limited visual inspection. You are advised to ask your service company to test all automatic safety controls during regular annual cleaning & tune-ups.

SAFETY CONTROL PROBLEMS:

Observation: Required automatic safety controls are present.

Analysis: No visible problems observed where *readily accessible*.

Recommendation: Be advised that controls are not tested during the inspection. You should ask your heating technician to evaluate the automatic safety controls upon occupancy and annually thereafter.

LOCATION OF EMERGENCY SHUT-OFF SWITCH:

N/A with gas.

7. VENTING:

METHOD OF VENTING:

A. Observation: The high efficiency basement furnace is vented via a draft inducer fan and a plastic pipe connected to an exterior wall vent. (See photo #15)

SAFETY ALERT: Outside wall vents can be blocked by snow, causing deadly carbon monoxide to backup into the home. Be sure to remove snow from such vents and install carbon monoxide detectors in the home for added safety. If not already present, I advise that a sign be installed on the exterior side of the building at a minimum height of 8-feet above grade directly in line with the exhaust vent. The sign should read, in print size no less than 1/2 inch in size, "**GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS.**"

B. Observation: The high efficiency attic furnace is vented via a metal flue pipe extending up and through the rear roof. (See photo #2)

CONDITION OF VENTING:

* **FUNCTIONAL.** Where *readily accessible*, the venting systems appeared **FUNCTIONAL** at time of inspection. Annual inspection is recommended.

VENTING PROBLEMS:

Observation: No visible problems observed where exposed and *readily accessible* at time of inspection.

Recommendation: Annual safety inspection of all venting systems is advised as metal parts and chimney components can fail causing deadly combustion gases to enter any home.

8. COOLING SYSTEM:

Type of equipment:

Observation: **CENTRAL AIR CONDITIONING**

EXPLANATION - the home has two electric powered split-system central air conditioning system. (See photos #12,13)

Analysis: The two prime components of the systems include the two outside compressor units and the evaporator units located in the plenum above or beside the two furnaces. (Notice: The outside compressor unit has an average ten year service life with proper maintenance.) Two refrigerant lines run between the compressor and evaporator. The larger line (vapor line) should always be insulated to maintain temperature and prevent it from sweating. A condensate drain line runs from the indoor evaporator to a drainage point. This drain line may be connected



to a device called a condensate pump if the installation elevation requires lifting the condensate to an outside drain. The central air conditioning system shares the same duct distribution system, blower unit & filter, as the heating furnace to deliver cool conditioned air to the habitable rooms serviced by the system.

Air conditioning efficiency is measured by "Seasonal Energy Efficiency Ratio" or "SEER" value. Higher ratings of 10 or higher give you increased savings.

CARE & TROUBLE SHOOTING TIPS:

1. Monitor the outside compressor unit for levelness. The compressor may not function properly if tilted more than 5 degrees.
2. Keep shrubbery or vegetation several feet away from the compressor unit for proper cooling.
3. The air coming from the outside compressor unit should be slightly warmer than the ambient air temperature.
4. The cool air coming from the registers in each room should have a 15-18 degree F. differential as compared to the air at the return register. This indicates proper function.
5. If the supply & return temperature differential is 25 degrees F. or more, then it should be checked by a technician.
6. Keep male dogs away from the compressor as urine can rot out the cooling coils. Monitor the compressor for salt spray corrosion if the property is near the ocean.
7. Be careful not to bump the compressor cooling coils when mowing the lawn.
8. Monitor the insulation on the larger refrigerant line and replace as needed.
9. Monitor the end of the condensate drain line. It should drip water indicating proper function.
10. Monitor the plenum (large supply duct) at the furnace for signs of rust or leakage.
11. Keep the evaporator coil unit within the furnace plenum clean by replacing or cleaning the furnace filter monthly.
12. Cover the outside compressor unit when shut-down for the winter, and shut-off the electrical disconnect next to the compressor.
13. Have the entire central air conditioning system inspected and serviced annually by a licensed HVAC technician. Service should include:
 - * Check air flow and pressure.
 - * Check condensate pump and drain.
 - * Check control box & electrical connections
 - * Check electrical controls.
 - * Check fan motor and blades.
 - * Check refrigerant charge.
 - * Check cabinet and condenser coil
 - * Check air filters.
 - * Check for leaks & tighten connections.

**WAS THE CENTAL AIR
CONDITIONING SYSTEM
OPERATED?**

Observation: **AIR CONDITIONING NOT TESTED** - at the time of inspection, the central air conditioning systems were visually examined but were NOT operationally tested due to the low outside temperature.

Analysis: Due to the low temperature, the true functional condition of the AC systems is undetermined. When the outside temperature is less than 65 degrees F., the compressor unit may be damaged if operated.

Recommendation: For your protection, I advise that you discuss the shut-down condition of these two appliances with your attorney and the seller prior to purchase and that the system be operationally tested when seasonal temperatures permit. Ask if the seller will provide you with a written guarantee of the AC systems operational integrity. You might consider asking your attorney to hold an agreed upon sum of money in escrow until the AC systems can be tested. Note: Annual maintenance by a HVAC technician is advised. If through your negotiations access becomes possible, components become *readily accessible*, repairs are done or systems are restored, you may desire to schedule a "return visit" inspection with this office, at an additional charge, prior to commitment.



WERE THE MAINTENANCE ACCESS PANELS REMOVED?

YES, the readily accessible operable access panels provided by the manufacturer or installer for routine homeowner maintenance were opened.

AC CONDITION & PROBLEMS:

**** FUNCTIONAL WITH EXCEPTIONS:**

A. Observation: No visible problems at the two exterior compressor units.

B. Observation: The basement condensate drain discharges through a hole and beneath the basement floor. (See photo #34)

Analysis: This problem is conducive for causing erosion of the compacted fill beneath the basement concrete floor.

Recommendation: Ask the builder if the condensate pipe is connected to a hidden drain pipe beneath the floor. If the answer is NO, then I advise that the drain be eliminated and that a condensate pump with an exterior drain tube be installed.

C. Observation: The attic fan / coil unit is not mounted so as to prevent the transmission of noisy vibrations into the attic framing. (See photo #51)

Analysis: An installation of this nature may produce annoying sound and vibration - repair is advised. Usually attic blower coil units are isolated from vibration by suspending the appliance from the roof rafters or by installing it on a rubber or Styrofoam pad.

Recommendation: I advise that the installation be corrected as required to prevent noise and vibration transmission.

D. Observation: A primary condensate drain to the rear gutter is present at the attic fan / coil unit. A metal safe pan and a spill switch are present beneath the appliance.

Analysis: While the installation is acceptable with a spill switch alone, a secondary auxiliary drain at the edge of the safe pan is preferable as an owner would note water leaking and would perform corrective maintenance. Whereas with a spill switch only, stagnant water will accumulate in the safe pan. Repair is optional.

Recommendation: I advise that you hire an HVAC contractor to install an auxiliary drain from the safe

pan to outdoors.

Age of central AC system:

Exterior compressors:

	<u>Front most compressor:</u>	<u>Rear most compressor:</u>
Brand:	Trane	Trane
Model:	2TTB0030A1000AA	2TTB0036A1000AA
Serial:	4264NPU5F	4284PC03F
Age:	6/2004	7/2004

9. OVER-ALL CONDITION / RECOMMENDATIONS:

HEATING SYSTEM /

COOLING SYSTEM

SUMMARY:

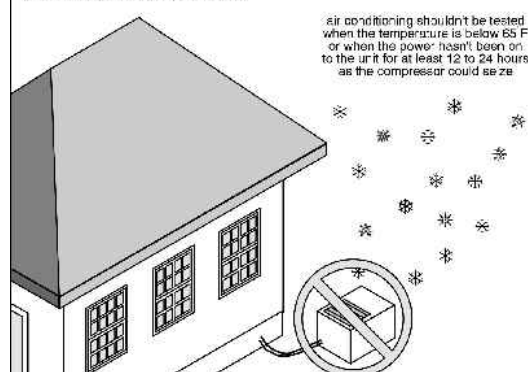
The two heating systems responded to normal operating controls and is in an over-all functional condition where *readily accessible* at time of inspection. Select a heating contractor and secure a maintenance contract for annual appliance cleaning, tune-up, safety inspection, efficiency testing and posting of dated maintenance tag. Install carbon monoxide detectors in the home.

Clean the dehumidifier.

Replace dirty filters.

Consider condensate drain improvements as described above.

Don't test when it's cold



Observation: **AIR CONDITIONING NOT TESTED** - at the time of inspection, the central air conditioning systems were visually examined but were NOT operationally tested due to the low outside temperature.

Analysis: Due to the low temperature, the true functional condition of the AC systems is undetermined. When the outside temperature is less than 65 degrees F., a compressor unit may be damaged if operated or damage may result.

Recommendation: For your protection, I advise that you discuss the shut-down condition of these two appliances with your attorney and the seller prior to purchase and that the systems be operationally tested when seasonal temperatures permit. Ask if the seller will provide you with a written guarantee of the AC systems operational integrity. You might consider asking your attorney to hold an agreed upon sum of money in escrow until the AC systems can be tested. Note: Annual maintenance by a HVAC technician is advised.

ELECTRICAL INSPECTION

SCOPE OF THE ELECTRICAL INSPECTION: 266CMR: BOARD OF REGISTRATION OF HOME INSPECTORS 266 CMR 6.00: STANDARDS OF PRACTICE:

6.05: System: Electrical

- (1) The Inspector shall observe:
 - (a) The exterior of the exposed service entrance conductors.
 - (b) Readily accessible Service equipment, grounding equipment, main overcurrent device, main and distribution panels.
 - (c) Amperage and voltage ratings of the service.
 - (d) The exterior of the readily accessible exposed branch circuit conductors, their over current devices, and the compatibility of their ampacities and voltages.
 - (e) The operation of a representative number of permanently installed lighting fixtures, switches and receptacles located inside the house, garage, and on its exterior walls.
 - (f) The polarity and grounding of all three-prong receptacles within six feet of interior plumbing fixtures and all readily accessible non dedicated receptacles in the garage and on the exterior of inspected structures.
 - (g) The operation of Ground Fault Circuit Interrupters.
- (2) The Inspector shall report on the following:
 - (a) The size and the voltage of the main service disconnect (30, 60, 100, 125, 150 and or 200 amp, other service, 120, 120/240, 120/208-volt system).
 - (b) Service entry conductor materials (copper and or aluminum, if aluminum are the tips coated with a corrosion inhibitor and is the over load device rated for the use of aluminum wire).
 - (c) Service type as being overhead or underground.
 - (d) The number of branch circuits in the panels.
 - (e) The type of branch circuit conductor materials (copper and or aluminum, if aluminum are the tips coated with a corrosion inhibitor and is the over load device rated for the use of aluminum wire).
 - (f) The compatibility of the overload protective devices and the size of the protected conductor.
 - (g) The type of branch circuit wiring (BX, conduit, Romex, knob and tube, wire mold, other).
 - (h) If there is ground fault protection provided.
- (3) The Inspector is not required to:
 - (a) Collect engineering data on the compatibility of the disconnects and individual circuit breakers with the panel and or determine the short circuit interrupting current capacity. (Engineering services).
 - (b) Determine and or report on the adequacy of the in place systems to provide sufficient power to the dwelling, or reflect on the sufficiency of the electric distribution system in the dwelling (Engineering services).
 - (c) Insert any tool, probe, or testing device inside the panels.
 - (d) Test or operate any over current device except Ground Fault Circuit Interrupters.
 - (e) Dismantle any electrical device or control other than to remove the covers of the main and sub-distribution panels, if readily accessible and not painted in place.
 - (f) Observe and or report on:
 1. The quality of the conductor insulation. (Electrical services).
 2. Test for Electro-Magnetic fields. (Electrical Services).
 3. Low voltage systems.
 4. Smoke detectors (Seller's responsibility).
 5. Telephone, security alarms, cable TV, intercoms, or other ancillary wiring that is not a part of the primary electrical distribution system.

DISCLAIMERS: The following items are expressly **EXCLUDED** from this report: low voltage systems, smoke detectors, telephone systems, security systems & alarms, cable TV systems, intercoms, landscape lighting or other ancillary wiring that is not part of the primary electrical distribution system. The home inspector will NOT test all switches, receptacles or fixtures; a representative sample would be tested. The inspector will NOT remove switch or outlet cover plates, nor will he trace wiring origins or destinations. Outside pole lamps are **EXCLUDED** as the wiring is not *readily accessible*.

GENERAL COMMENTS: A. Any electrical repairs attempted by the home owner should be approached with caution as personal injury or fire could result. The power to the entire home should be turned off prior to beginning any repairs, no matter how trivial the repair may seem. B. The MAIN DISCONNECT and individual circuit breakers or fuses were NOT opened or tested during the inspection for to do so would disrupt energized parts of the home and upset the owner. Upon occupancy and twice a year, you should trip the main breaker and circuit breakers as preventative maintenance. **C. Be advised that a 100 amp electrical service is now considered the modern minimum for all single family homes.** I recommend that all 60 amp services be retired unless gas major appliances are utilized. D. While older 2-slot outlets may be typical for an older home, updating to modern U-type receptacles is recommended for grounding safety. E. Be advised that modern homes now have outlets within 6 feet reach to prevent the use of extension cords. **F. Be advised that ground-fault-circuit-interrupters (GFCI) are now required at all water hazard areas such as outside outlets, swimming pools, garage, basement, bathrooms and all outlets above kitchen countertops.** Updating is advised if such devices are not present. **G. Be advised that as of 2002, all new homes must have arc-fault-circuit-interrupters (AFCI) devices to protect all bedroom circuits from causing a fire.** Older homes can be updated with such devices also. H. Be advised that all electrical equipment has a finite life of approximately 40-years, after which all components should be evaluated for age replacement. I. Any flush-mounted ceiling light fixture installed before 1985 has a potential for brittle insulation in the outlet box above the fixture. Further inspection is advised for fire safety.

1. TYPE OF SERVICE:

Type:

Observation: The home has an underground or lateral Edison 3-wire service.

2. SERVICE EQUIPMENT:

**EXPOSED CABLE OR
RACEWAY:**

Observation: The service wires are enclosed in a plastic pipe raceway leading to the meter box. (Note: The service raceway, service wires & meter box belong to the home owner.) In my opinion, a plastic raceway is a sign of better quality electrical service installation.

METER LOCATION:

Observation: The home has an outside meter. (See photo #26)



**MATERIAL OF SERVICE
LINES:**

Observation: The main panel cover was removed revealing that the electrical service wires to the home are **aluminum**, that the ends of the wires are coated with corrosion inhibitor (wire termination compound) and that the overload device is rated for use with aluminum wire.

Analysis: While not as good as copper, aluminum is perfectly acceptable for service wires and is used very often due to the higher cost of copper. For safety, the ends of the aluminum wire connections should be coated with an anti-oxidant paste. For your reference, copper is an indication of a better quality service material than aluminum.

Recommendation: Every five years, you should hire an electrician to clean the aluminum wire terminations with a wire brush, treat them with anti-oxidant compound and re-torque to the foot-pound spec on the terminals.

**LOCATION & TYPE OF
MAIN SERVICE
DISCONNECT:**

Observation: The main circuit breaker disconnect is located at the top of the circuit breaker panel. (Note: The main service switch was NOT tested during the home inspection so as not to disturb the owner's timers, appliances, computers and lifestyle. You should test the main disconnect when you move into the home.)

**AMPERAGE & VOLTAGE
RATING OF MAIN
DISCONNECT:**

200 amps - 115 / 230 volts (Note: 100 amps is the required minimum service size.)

**AMPERAGE RATING OF
MAIN CIRCUIT PANEL:**

200 amps.

**LOCATION OF SERVICE
PANEL:**

Basement. (See photo #43)



**OVERLOAD
PROTECTION DEVICES
(fuses or circuit
breakers):**

Circuit breakers. (Note: Circuit breakers are a sign of a newer electrical panel. Be advised that circuit breakers should be manually switched on & off every six months to lubricate the internal parts.)

**GROUNDING
EQUIPMENT: (All
conductive materials
should be bonded.)**

* **FUNCTIONAL** grounding rod and grounding wire to the water service piping.

**ANY SIGNS OF
UNDERSIZED SERVICE?**

Analysis: In my opinion, the electrical service size appears appropriate for this home.

**ELECTRICAL SERVICE
CONDITIONS:**

* **FUNCTIONAL.** The electrical service equipment appeared functional where *readily accessible* at time of inspection. No major problems or major safety defects were observed. (Note: Any minor electrical defects noted should NOT be taken lightly. Repairs are advised for fire and personal safety.)

**OUTDOOR SERVICE
PROBLEMS:**

Observation: No visible problem observed where accessible.

**SERVICE PANEL
PROBLEMS:**

Observation: * **FUNCTIONAL.** No visible indoor service problems observed where *readily accessible*. The overload protection devices (circuit breakers) are compatible with the size of the conductors reported.

3. SUB-PANELS:

**LOCATION &
CONDITION:**

Observation: No SUB PANEL was seen in the readily accessible parts of this home.

4. BRANCH CIRCUIT CONDUCTORS:

**QUANTITY OF
CIRCUITS:**

Observation: In my opinion, the home has an ample number of circuits for household use:
17 circuits @ 15 amps
10 circuits @ 20 amps
3 circuits @ 30 amps, 220 volts
1 circuit @ 50 amps, 220 volts

**TYPES OF EXPOSED
BRANCH CONDUCTOR
MATERIALS:**

Observation: Copper wiring (non-metallic sheathed cable) romex (1985-present) leading from the main panel to branch circuits was observed.
Analysis: Copper is a desirable type of branch wiring.

CONDITION:

* **FUNCTIONAL** where *readily accessible* and as viewed in unfinished areas. (Please understand that the inspector can NOT fully evaluate the wiring within finished walls, floors & ceilings as it is inaccessible.)

BRANCH CIRCUIT

WIRING HAZARDS:

Observation: NO visible branch wiring problems observed where *readily accessible* in the unfinished areas.

Analysis: Where accessible, the overload protective devices (fuses / breakers) appear to be compatible with the size of the attached conductors (wires). The condition of concealed wiring is undetermined.

5. OUTLETS, SWITCHES, FIXTURES:

TYPES OF OUTLETS:

Observation: The home has modern U-type 3 hole receptacles.

Analysis: This is a positive feature.

CONDITION:

* **FUNCTIONAL.** Observation: Those outlets, switches and fixtures tested by random sampling were FUNCTIONAL.

PROBLEMS:

Observation: A *representative number* (one component per room) of outlets, switches & fixtures tested by random sampling (1 / room) were **FUNCTIONAL** where *readily accessible* at time of inspection.

Analysis: No visible problems were observed at those outlets tested.

6. GFI & AFCI DEVICES:

TYPE & CONDITION:

* **FUNCTIONAL** GFCI breaker in branch circuit panel.

(Note: Test the device monthly.) GFCI RESOURCE:

http://www.codecheck.com/gfci_principal.htm

* **FUNCTIONAL** GFCI protected outlet devices at:

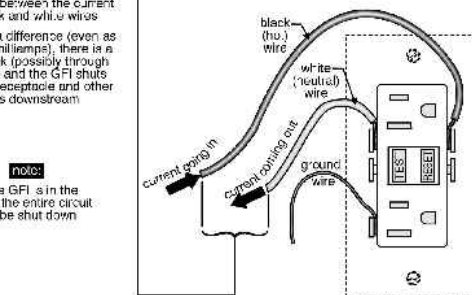
(Note: Test each device monthly.) GFCI RESOURCE:

http://www.codecheck.com/gfci_principal.htm

- * 1/2 Bathroom
- * 2nd floor bathroom
- * Master bathroom
- * Kitchen countertop outlets
- * Basement outlet near main panel
- * Garage
- * Exterior

Ground fault interrupter

The GFI circuitry within the outlet checks constantly for a difference between the current in the black and white wires. If there is a difference (even as little as 5 milliamperes), there is a current leak (possibly through your body) and the GFI shuts down the receptacle and other receptacles downstream.



Test monthly.

Observation: The bedroom circuits in the new home have arc-fault-circuit-interrupters (AFCI) devices within the main breaker panel.

Analysis: An AFCI device is a new 2002 requirement for new construction. Such devices can prevent fires in a bedroom.

Recommendation: See CPSC publication below:

<http://www.cpsc.gov/cpscpub/pubs/afci.html>

<http://www.cpsc.gov/cpscpub/pubs/afcifac8.pdf>

Consumer Product Safety Commission
Preventing Home Fires: Arc Fault Circuit Interrupters (AFCIs)

Problems in home wiring, like arcing and sparking, are associated with more than 40,000 home fires each year. These fires claim over 350 lives and injure 1,400 victims annually.

A new electrical safety device for homes, called an arc fault circuit interrupter or AFCI, is expected to provide enhanced protection from fires resulting from these unsafe home wiring conditions.

Typical household fuses and circuit breakers do not respond to early arcing and sparking conditions in home wiring. By the time a fuse or circuit breaker opens a circuit to defuse these conditions; a fire may already have begun.

Several years ago, a CPSC study identified arc fault detection as a promising new technology. Since then, CPSC electrical engineers have tested the new AFCIs on the market and found these products to be effective.

Requiring AFCIs

AFCIs are already recognized for their effectiveness in preventing fires. The most recent edition of the National Electrical Code, the widely-adopted model code for electrical wiring, will require AFCIs for bedroom circuits in new residential construction, effective January 2002.

Future editions of the code, which is updated every three years, could expand coverage.

AFCIs vs. GFCIs

AFCIs should not be confused with ground fault circuit interrupters or GFCIs. The popular GFCI devices are designed to provide protection from the serious consequences of electric shock.

While both AFCIs and GFCIs are important safety devices, they have different functions. AFCIs are intended to address fire hazards; GFCIs address shock hazards. Combination devices that include both AFCI and GFCI protection in one unit will become available soon.

AFCIs can be installed in any 15 or 20-ampere branch circuit in homes today and are currently available as circuit breakers with built-in AFCI features. In the near future, other types of devices with AFCI protection will be available.

7. OVERALL CONDITION / RECOMMENDATIONS:

ELECTRICAL SUMMARY:

In my opinion, the electrical system is in an over-all functional condition. No critical problems were observed where *readily accessible* at time of inspection.

Recommendation: I advise that you hire an electrician to install a 3-way light switch to power the light at the basement stairs from the garage.

ALARM SYSTEM PRESENT.

DISCLAIMER: Equipment of this type is very specialized in nature and is far beyond the scope of this limited visual home inspection. For reasons of security, the home inspector can not examine or tamper with a private security system. The evaluation of alarm systems is expressly **EXCLUDED** from this report per contract. While I consider an alarm system a positive feature of a home, it's mechanical operation and maintenance is beyond my knowledge. I advise that you discuss the operation and maintenance of the alarm system with the owner and the installer prior to passing.

PLUMBING & HOT WATER HEATER INSPECTION

SCOPE OF THE PLUMBING INSPECTION: 266CMR: BOARD OF REGISTRATION OF HOME INSPECTORS 266 CMR 6.00: STANDARDS OF PRACTICE:

6.06 System: Plumbing.

- (1) The inspector shall observe:
 - (a) The exposed readily accessible interior water supply and distribution system including:
 1. Piping materials, including supports and insulation.
 2. Fixtures and faucets.
 3. Functional Flow.
 4. Leaks.
 5. Cross Connections.
 - (b) The exposed readily accessible interior drain, waste and vent system, including:
 1. Traps; drain, waste, and vent piping; piping supports and pipe insulation.
 2. Leaks.
 3. Functional Drainage.
 - (c) Hot water systems including:
 1. Water heating equipment.
 2. Normal Operating Controls.
 3. Automatic Safety Controls.
 4. The exterior of the chimneys and vents.
 - (d) Sump pump.
- (2) The inspector shall:
 - (a) Report on:
 1. The type of water supply and distribution piping materials (brass, copper, steel, lead, plastic, other).
 2. The types of drain, waste, and vent piping materials (brass, copper, cast iron, lead, plastic, steel, other).
 3. The type of water heating equipment, breaching and capacity (gas, electric, oil, tankless, solar, other).
 - (b) Operate all plumbing fixtures, including their faucets and all exterior faucets attached to the house if readily accessible.
- (3) The inspector is not required to:
 - (a) Collect engineering data on the size of the plumbing equipment, the size or length of water and or waste systems and or remove covering materials (engineering services).
 - (b) Report on the adequacy and or the efficiency of the in place systems to provide sufficient hot water to the dwelling, sufficient water supply or drainage for the dwelling (engineering services).
 - (c) State the effectiveness of anti-siphon devices (Engineering services).
 - (d) Determine whether water supply and waste disposal systems are public or private (owner's responsibility).
 - (e) Operate automatic safety controls.
 - (f) Operate any valve except readily accessible water closet flush valves, fixture faucets, and hose faucets.
 - (g) Observe or report on:
 1. Water conditioning systems.
 2. Fire and lawn sprinkler systems.
 3. On-site or public water supply quantity and quality.
 4. On-site or public waste disposal systems (Title V Inspection).
 5. Foundation sub drainage systems.

6. Spas, except as to functional flow and functional drainage.
7. The interior of flue linings.

DISCLAIMERS: The following items are **EXCLUDED** from this report: underground pipes or pipes within walls, floors and finished ceilings, remaining life, solar systems, the effectiveness of antisiphon devices, determination of public versus private water supply and waste disposal systems, operation of automatic safety controls, operation of any valve except water closet flush valves, fixture faucets, and hose faucets. Also excluded are water conditioning systems, fire and lawn sprinkler systems, on-site water supply quantity and quality, on-site waste disposal systems, foundation irrigation systems, spas and central vacuum systems. The condition of walls behind appliances or floors under appliances is not determined since the units are not moved during this inspection.

GENERAL COMMENTS: A. Area public & private water supplies tend to have a high mineral content that is slightly corrosive to copper pipes, fittings, valves, boilers and hot water heaters. There is always a possibility of future leaks or blockages that did not exist at the time of inspection. You should inspect your plumbing system annually for greenish or whitish signs of corrosion and perform maintenance repairs as required. Expect future repair or replacement of faucet & toilet components through normal wear & tear. B. If your prospective older home has a remaining old steel service pipe, the future replacement will be your financial responsibility. The lifespan of old water service pipes is unpredictable but weak water pressure may be a telltale sign of needed age replacement. C. Be advised that the main shut-off valve was not tested during the inspection as they often can develop maintenance leaks or upset the owner. You should test the valve if you buy the home. D. Be advised that well pumps have an average life expectancy of 10-12 years. E. Be advised that new homes now have 3/4" dia. water lines across the basement and 1/2" dia. piping leading to each fixture. Older 1/2" piping systems or brass or steel water piping are candidates for age replacement. E. Older homes may not have local shut-off valves, P-shaped traps and re-vent connections. While appropriate for an older home, such old plumbing will have to undergo required major updating to comply with current codes during any kitchen or bathroom remodeling. **F. Be advised that hot water heaters have a short 5-12 year lifespan, budget for eventual age replacement.** Set water temperature control no higher than 130 degrees F. max. at the faucets and 112 degrees F. max. at the shower heads to prevent scalding. G. Private waste disposal systems should be pumped out for general maintenance at least every three years to protect the leaching field. H. If your prospective new home has a "tankless coil" at the boiler for domestic hot water production, then updating the system by installing a modern "indirect water heater" is highly recommended to insure adequate hot water. I. **NOTICE: Homes built before 1987 are likely to have 50:50 lead / tin soldered joints in the copper water pipes.** Be advised that lead is a health hazard in high concentrations. There is a controversy that the old lead solder is not a problem as it has been coated by minerals within the pipes over the years that prevent the lead from leaching into the water. Be further advised that this argument may be correct but true lead content in the water supply is undetermined. If you have health concerns, then suggested options include: further testing of the solder for lead content, further testing of the water for lead content or replacement of all old lead soldered joints if present. J. If the home has a public sewage connection, then you should verify the disclosure with the local public waste disposal department. K. If the home has a private waste disposal system, then the owner is required to give you a copy of an 11-page Title 5 inspection report. Be advised that you may also hire your own Title 5 inspector to verify conditions prior to the close of escrow.

1. PROBABLE TYPE OF WATER SERVICE:

TYPE:

<u>Observation:</u> The home has a public water service connection to street main. NOTE: Massachusetts has a sunshine law that allows folks to go to the water supplier and ask for a copy of the most recent water test near their purchase.
--

**PRIVATE WELL
EQUIPMENT &
CONDITION:**

NOT APPLICABLE. Metered public water service present.

**TYPE OF SERVICE
PIPING:**

Observation: The home has a modern plastic water service pipe.

Analysis: This is a desirable and corrosion resistant type of water service piping material that is now often used in place of copper.



CONDITION:

FUNCTIONAL.

**WATER SERVICE
PROBLEMS:**

Observation: No visible problems observed where exposed and *readily accessible* at time of inspection.

(DISCLAIMER: The condition of buried or concealed piping is undetermined.)

2. MAIN VALVE:

LOCATION:

The main shut-off valve is located at the water meter, @ front of basement.

**CONDITION /
PROBLEMS:**

* **FUNCTIONAL** where *readily accessible* at time of inspection. NOTICE: Be advised that the main water shut-off valve was not tested during the home inspection and that its true operational condition is undetermined. The valve was not tested as the inspector would be liable for breakage, leakage or loss of water. Further investigation and testing are needed by YOU or by a plumber.

3. INTERIOR PRESSURE PIPING:

TYPE(S):

A. Observation: The home has copper pressure piping as observed in the unfinished spaces.

Analysis: Copper is a sign of modern pressure piping. However the copper piping will still need to be monitored for corrosion and future maintenance repairs.

B. Observation: The home has areas of plastic pressure piping.

Analysis: Plastic pressure piping is a relatively new product. While resistant to corrosion, it should be monitored for expansion & contraction problems and leaks at compression fittings. Be advised that some polybutylene plastic piping systems have experienced documented problems and class action suits. Be further advised that plastic piping can be a food source for bacteria.

Recommendation: Monitor.

CONDITION:

* **FUNCTIONAL** where exposed and *readily accessible* at time of inspection.
(Note: The condition of piping concealed within walls or finished ceilings is undetermined.)

PRESSURE PIPING

PROBLEMS:

Observation: No visible problems or leaks observed with the *readily accessible* pressure piping at time of inspection. Water pressure was functional at the three highest fixtures during simultaneous testing.
Analysis: While no problems were observed at time of inspection, future leaks can occur in any home. The condition of piping concealed within walls, floors and ceilings is undetermined.
Recommendation: All plumbing systems should be monitored for wear and periodic maintenance repairs.

Are hot water pipes insulated?

Yes.

4. OUTSIDE FAUCETS:

Condition:

* **FUNCTIONAL.** *Readily accessible* faucets operated normally at time of inspection.

5. DRAIN, WASTE & VENT PIPING (DWV):

Types of DWV materials visible:

* Plastic. (Note: Plastic piping is now the most common material used in DWV piping. For your knowledge, plastic waste pipes are a little more noisy but are much more corrosion resistant.)

Condition:

* **FUNCTIONAL.** Observation: No waste piping leaks observed as fixtures drained.
Analysis: While *readily accessible* DWV piping appears functional at time of inspection, the condition of waste piping concealed by floors, walls and ceilings is undetermined.
Recommendation: All plumbing systems must be monitored for maintenance repairs and parts replacement.

Drain, Waste or Vent piping problems:

Observation: No visible drain, waste or vent piping problems or support problems were observed where *readily accessible* at time of inspection.
Analysis: Be advised that future leaks can occur in any piping system.
Recommendation: Plumbing systems should be monitored for needed maintenance repairs.

6. WATER HEATER EQUIPMENT:

FUEL & TYPE OF EQUIPMENT:

Observation: The hot water is produced by a **natural gas** fired hot water heater. The life expectancy of gas water heaters as stated from several sources such as the American Gas Association and the American Society of Gas Engineers, estimate the life expectancy of gas water heaters to be 11-13 years. Several factors in determining the useful life include the brand of the water heater, the lining inside the tank the quality of water and routine maintenance, which may or may not have been performed over the years. There is no way for me to predict how long this unit will continue to operate. Usually, when a unit fails, it will stop heating, or it will leak water. Funds should be set aside and consideration should be given to upgrading the unit before tank failure occurs. (See photos #36,37)

APPROXIMATE CAPACITY:

50 gallons capacity.



Approximate age:

Observation: As indicated by the data plate, the water heater appears to be approximately 3 years old, and has a posted 6-year warranty:

Brand:	Powerflex
Model:	PVG62-S0T63-3NHV
Serial:	0403136370
Temperature:	125 degrees F. at the faucets (130 degrees F. = Safe Maximum)
Temperature:	112 degrees F. at the shower head (112 degrees F. = Safe Maximum)

CONDITION / PROBLEMS:

* **FUNCTIONAL.** Hot water was available at each fixture serviced.

CONTROLS & VENTING:

* **FUNCTIONAL** where *readily accessible*. The required automatic safety devices appear visually **FUNCTIONAL** as designed to protect the hot water systems & components from excessively high or low pressures & temperatures, excessive electrical current, loss of water, loss of ignition, fuel leaks, fire, freezing, or other unsafe conditions. (Controls are NOT tested.)

SAFETY ALERT: The water heater has a draft inducer fan and a PVC direct outside wall vent. Outside wall vents can be blocked by snow, causing deadly carbon monoxide to backup into the home. Be sure to remove snow from such vents and install carbon monoxide detectors in the home for added safety.



7. SECONDARY FIXTURES:

Type & condition:

Observation: No secondary fixtures present. Toilet, tub / shower & sink fixtures will be evaluated under kitchen and bathroom headings.

8. LAUNDRY FACILITIES:

CONDITION / PROBLEMS:

** Observation: Laundry facilities are **FUNCTIONAL** with exceptions noted:

A. Observation: The washing machine has rubber hot & cold water pressure hoses. One hose was blistered and in danger of bursting. The broker present notified the owner.

Analysis: **URGENT repair is needed.** Be advised that rubber hoses eventually deteriorate with age and often burst causing interior water damage.

Recommendation: I advise that you replace the rubber hoses with braided flexible stainless steel "no burst" hoses.

(Note: Insurance companies recommend that all washing machine hoses be replaced every five years regardless of type.)



B. Observation: The washing machine is installed level with or above living space and a protective safe pan is missing beneath the appliance.

Analysis: Without a safe pan under the washing machine, there is a potential for interior water damage if leakage occurs.

Recommendation: The installation of a safe pan with a drain is advised. Consult a plumber.

9. SIGNS OF LEAKS: (DISCLAIMER: The condition of concealed piping is undetermined.)

CONDITIONS:

Observation: No active pressure piping, waste piping or gas piping leaks were visible where *readily accessible* at time of inspection.

Analysis: All piping systems are subject to varying rates of age deterioration. The condition of concealed piping is undetermined.

Recommendation: You should monitor each piping system for future maintenance repairs.

ANY SIGNS OF SUBSTANDARD WORKMANSHIP?

Observation: No signs of amateur workmanship or cross connections were visible where *readily accessible* at time of inspection.

10. WATER FLOW & DRAINAGE:

WATER FLOW:

* Observation: The water flow was **FUNCTIONAL** at all fixtures and during simultaneous testing of the three highest fixtures.

DRAINAGE:

* **FUNCTIONAL.** Observation: The drainage was functional at time of inspection at all accessible plumbing fixtures. (Note: The evaluation of appliance drainage is beyond the scope of this limited home inspection.)

11. WERE ALL FIXTURES AND FAUCETS OPERATED?

YES. All readily accessible fixtures and faucets were operated by the inspector.

12. OVER-ALL CONDITION / RECOMMENDATIONS:

Plumbing system summary:

In my opinion, where *readily accessible*, the plumbing system appears to be in an over-all **FUNCTIONAL** condition. No critical repairs were observed at time of inspection. Nevertheless, all home owners must monitor their plumbing system for needed maintenance repairs as local water quality can be corrosive to copper piping, fittings, valves, boilers & hot water heaters.

Replace the fill hoses at the washing machine.
Consider installing a safe pan beneath the washing machine.

SPRINKLER SYSTEM DISCLAIMER: The home has an underground sprinkler system for watering the lawn.

Analysis: **DISCLAIMER - the inspection of this system is EXCLUDED from this report as it is buried and not accessible for visual evaluation - conditions are undetermined.**

Recommendation: Prior to purchase, you should ask the owner to demonstrate the use of the system, including timers, valves, sprinkler heads, maintenance etc. Be sure to ask where the water pipes are buried so that they are not damaged during future landscaping or gardening. I advise that you hire a sprinkler system tradesman to winterize the system each year by blowing high pressure air through the



lines to prevent freeze-ups and other steps as required, and then to restore the system in the Spring.

NOTICE: Each zone or the main manifold of the sprinkler system must be protected by an antisiphon device known as a vacuum breaker. A vacuum breaker prevents back-flow of potentially contaminated water from the lawn sprinkler heads to the potable water supply. The vacuum breaker must be at least six inches above the highest sprinkler head.

STRUCTURE INSPECTION

SCOPE OF THE STRUCTURAL INSPECTION: 266CMR: BOARD OF REGISTRATION OF HOME INSPECTORS 266 CMR 6.00: STANDARDS OF PRACTICE:

6.04: System: Structural Components

- (1) The inspector shall observe the following exposed readily accessible structural components including:
 - (a) The exposed portions of the foundation.
 - (b) The exposed portions of the basement floor.
 - (c) The exposed portions of the superstructure Floor system (girders, sills, floor joists, headers and bridging).
 - (d) The exposed portions of the columns.
 - (e) The exposed portions of the roof framing rafters, collar ties, trusses, beams and sheathing materials.
- (2) The inspector shall report on the following exposed readily accessible structural components including:
 - (a) The type of foundation materials and the condition of the exposed components (brick, concrete block, concrete, stone, wood, other).
 - (b) The type of basement floor system and the condition of the exposed components (concrete, earth, wood, other).
 - (c) The type of superstructure floor system and the condition of the exposed components (girders, sills, floor joists and bridging).
 - (d) The type of columns and condition (brick, concrete block, concrete, steel, wood).
 - (e) Roof structure (rafters, collar ties, trusses, beams) roof sheathing (boards, plywood, oriented strand board, other).
- (3) The inspector shall:
 - (a) Probe exposed readily accessible structural components where deterioration is suspected. However, probing is NOT required when probing would damage any finished surface.
 - (b) Enter readily accessible under floor crawl spaces and attic spaces only after safe access is provided by the owner and or client except when access is obstructed, when entry could damage the property, or when dangerous or adverse situations are suspected by the inspector.
 - (c) Report the methods used to observe under floor crawl spaces and attics.
 - (d) Report signs of previous water penetration into the building.
- (4) The Inspector shall not be required to:
 - (a) Collect engineering data on the size, span, spacing, species, section modulus, slenderness ratio and or modulus of elasticity of the structural members.
 - (b) Inspect for insect infestation.
 - (c) Remove covering and or finish materials to gain access to the items being inspected.

DISCLAIMERS:

- A. **This report does NOT GUARANTEE A DRY BASEMENT.** (see General Comment #A below)
- B. The inspector is not required to enter under-floor crawl spaces or attics when entry could damage the property, or when dangerous or adverse conditions are suspected. Be advised that areas not entered may contain hidden defects.
- C. **The Client understands that the inspection does not include invasive inspection or exploratory demolition.** Structural components or mechanical systems concealed by finished surfaces or stored goods are inaccessible for visual inspection and are therefore **EXCLUDED** from this Report.. Be advised that hidden problems may exist.
- D. **The Client understands that the inspection & final report do not provide and engineering service or architectural service as assessing structural integrity of a building is beyond the scope of a limited visual inspection.** A certified engineer is recommended when there are structural concerns about the building. No engineering calculations are performed during this inspection.
- E. **The Client understands that the home inspection & Report do NOT INCLUDE A TERMITE OR**

WOOD BORING INFESTATION REPORT. No inspection is made by this **COMPANY** to detect past or present insect or rodent activity. Wood boring insects that can appear anytime, even if there were no signs of infestation or damage at time of inspection. This *Company* is NOT a licensed pest control company or exterminator. The inspection for rot is done by line of sight and is done in conjunction with the responsibility to examine structural condition. **I ADVISE THAT EVERY HOME BE INSPECTED BY A LICENSED PEST CONTROL COMPANY NOW, PRIOR TO THE CLOSE OF ESCROW to protect your right to negotiate for repairs or chemical treatment if needed. I emphasize that your only assurance of arresting or preventing infestation, whether concealed or discovered, is to obtain treatment and a warranty from a state licensed pest control company.**

GENERAL COMMENTS: A. **A dry basement cannot be guaranteed because a basement is a hole in the ground that is vulnerable to infiltration when exposed to prolonged rain, ground saturation, changes in seasonal hydrostatic ground water pressure and fluctuation in the water table. If you want a guaranty of a dry basement, then you should hire a basement waterproofing contractor to install a perimeter French drain system along the perimeter of the basement walls and connected to a sump pump with battery back-up.** Ideally, the site should have hard surfaces and soils that slope away from the residence, functional gutters & downspouts and a difference in elevation between the exterior grade and the interior floors. If the site does not live up to this ideal, then the Company disavows all responsibility for water penetration problems. Be advised that evidence of prior dampness is often concealed by the owner's stored goods, painted surfaces or finished surfaces below grade level. You should ask the owner about honest disclosure of any prior wet basement problems prior to purchase. Most basement dampness can be reduced by directing all surface water and roof run-off away from the foundation. B. **You should request in writing that the basement, garage and attic be emptied and broom swept clean prior to purchase. Then you should return to re-inspect for concealed defects.** C. Owners are required to maintain structural elements in good repair and fit for intended use. D. Be advised that any source of water penetration or ventilation imbalance can cause interior damage and / or mold.

1. DESCRIPTION OF BUILDING:

STYLE:

Fairly new wood framed colonial.

TYPE OF SPACE

BENEATH BUILDING:

Full basement unfinished.

2. OBSTACLES RESTRICTING INSPECTION:

TYPE OF OBSTACLE:

Observation: The basement ceiling and parts of the framed rear wall and right side wall at the stepped foundation are insulated.

Analysis: While this is a good feature, the insulation prevented complete access for evaluation of the floor frame. Hidden defects may exist beneath the insulation that are not documented in this report. If through your negotiations access becomes possible, components become *readily accessible*, repairs are done or systems are restored, you may desire to schedule a "return visit" inspection with this office, at an additional charge, prior to commitment.

3. SIGNS OF WATER PENETRATION:

SIGNS OF BASEMENT / CRAWL SPACE WATER PENETRATION:

Observation: Where *readily accessible* at the basement / crawl space level at time of inspection, no apparent signs of prior water infiltration were visible.

Analysis: **A BEST EFFORT WAS USED TO OBSERVE AND INFORM YOU OF VISIBLE DAMPNES PROBLEMS WITHIN THE READILY ACCESSIBLE PARTS OF THE BASEMENT. HOWEVER, THIS REPORT DOES NOT INSURE NOR GUARANTEE AGAINST FUTURE BASEMENT WATER INFILTRATION.**

All basements are a hole in the ground that may suffer from dampness or seepage depending on seasonal weather conditions, ground saturation and drainage control measures employed or neglected. If ground water tables saturate soil near the foundation, or if negative drainage directs surface water towards the foundation, or if roof drainage lingers near the foundation; then hydrostatic water pressure can overcome foundation water resistance and infiltrate the basement. To prevent false expectations regarding the home inspection, please understand that the inspection only took place on one day of the year. The inspector can NOT anticipate all climatic conditions and drainage conditions and predictions of wet basement difficulties. Stored goods and finished surfaces prevent complete access for viewing symptoms of past seepage.

Recommendations: Due to the above reasons, **YOU** should ask the owner **NOW** to disclose any past history of basement dampness or seepage. He or she is legally obligated to be honest and has the benefit of having experienced seasonal ownership of the home. The use of a dehumidifier is advised in every basement.

To reduce the possibility of wet basement difficulties a number of drainage issues should be understood. Firstly, all soil, lawn and garden areas along the perimeter of the foundation should have a positive slope away from the home to direct surface water away by gravity flow. If any negative drainage areas exist, then the basement is highly vulnerable for seepage. Secondly, all gutters & downspouts must be kept in a functional condition with downspout extensions or splash blocks that direct water away from the home. Once again, faulty gutters & downspouts make the basement vulnerable to seepage.

If wet basement difficulties are disclosed or discovered after occupancy, then each of the above outside drainage control measures should be re-evaluated and repaired as required. Annual drainage inspection is recommended as conditions will change with the passage of time. Remember, no home inspector can guarantee a dry basement. You should try to avoid an expensive waterproofing job by common sense drainage control measures at the source of the water outside. Eliminate or reduce the water near the foundation and the potential for wet basement problems will be reduced.

Lastly, if there is continued seepage after drainage improvements, then a sump pump installation should be considered or other control measures. Finished rooms below grade level should be protected by a drainage system beneath the foundation. As dampness can migrate through concrete without causing visible puddles of water, storage should be done with care by elevating important possessions. The use of a dehumidifier during summer months is advised. **If you want a guaranty of a dry basement, then you should hire a basement waterproofing contractor to install a perimeter French drain system along the perimeter of the basement walls and connected to a sump pump with battery back-up.**

FLOOR DRAIN CONDITION & TYPE:

Observation: No floor drain in this home where *readily accessible* at time of inspection.

**SUMP PUMP &
CONDITION:**

Observation: No sump pump in the *readily accessible* parts of the basement at time of inspection.

4. FOUNDATION SYSTEM:

**TYPE OF EXPOSED
FOUNDATION:**

Poured concrete. (1920's to present)

**TYPE OF EXPOSED
BASEMENT FLOOR:**

CONCRETE where exposed. (Note: The inspector is not required to move storage or floor coverings to examine the basement floor. There is a potential for concealed damage, shrinkage cracks, cold joint separations or hidden water stains).

CONDITION:

**** FUNCTIONAL with EXCEPTIONS: (See visible problems below)**

**FOUNDATION
PROBLEMS:**

Observation: Inspection of the *readily accessible* portions of the concrete foundation revealed areas of thin hairline vertical cracks in the front and rear walls. (See photos #41,42)

Analysis: In my opinion, such thin cracks are not of a critical nature and are typically categorized as "shrinkage cracks" caused by the introduction of water during the mixing and pouring of the concrete. Cracks of this type usually occur during the first year of construction and pose no significant risk to the structure. Be advised that hairline cracks are still candidates for low priority repairs as they pose a risk of allowing water infiltration, radon gas entry or insect access. There is a potential that additional cracks may exist behind storage in the basement or finished surfaces.

Recommendation: I advise that you hire a professional concrete repair company to fix all foundation cracks by epoxy injection and that you seek a written warranty. Once repaired, the cracks should be monitored for unpredictable future movement as cracks are time related.



5. CRAWL SPACE(S):

ACCESSIBILITY:

Observation: No crawl spaces were found with this building. Not applicable.

6. COLUMNS:

TYPES OF EXPOSED COLUMNS:

Steel columns are present.

CONDITION:

* **FUNCTIONAL** where *readily accessible* at time of inspection.

COLUMN PROBLEMS:

Observation: No visible column problems observed where *readily accessible* at time of inspection.

7. FLOOR FRAMES WHERE EXPOSED:

TYPE OF FRAMING & MATERIALS:

Observation: Modern platform & box sill floor frame construction present.

DISCLAIMER: NO ENGINEERING OR LOAD CALCULATIONS ARE EXPRESSED OR IMPLIED BY THE IDENTIFICATION OF THE STRUCTURE OR MATERIALS.

CONDITION:

* **FUNCTIONAL** where *readily accessible* at time of inspection.

Observation: INSULATION between the floor joists or along the sills restricted access for visual inspection of the floor frame.

Analysis: The true condition of hidden components is undetermined. While the insulation is a positive feature, hidden problems could exist.

Recommendation: If through your negotiations access becomes possible, components become *readily accessible*, repairs are done or systems are restored, you may desire to schedule a "return visit" inspection with this office, at an additional charge, prior to commitment.

VISIBLE PROBLEMS

OBSERVED:

A. Observation: Where *readily accessible*, the floor frame(s) appear **FUNCTIONAL** and did not exhibit any defects of a critical nature at time of inspection.

B. Observation: As seen in the basement, there are wood shims in the foundation girder pockets under the ends of the main wood girders that support the floor frame. (See photo #44)

Analysis: Builders frequently must make elevation adjustments to make the floor frame level. The elevation adjustments are achieved by placing shims under the ends of the girder to raise it to a height that is level with the sills. The shims should be considered as temporary in nature as they may decay in the future and allow settlement of the floor frame. The shims

should have been removed and replaced with masonry or steel to provide proper end bearing support for the girder. Repair of this problem is simple but important for the future stability of the floor frame. (Note: Pressure treated shims may be allowed, but are not desirable because of shrinkage.)

Recommendation: I advise the removal of all wood shims at each girder pocket and the installation of cement or steel shims under the girder. (Note: A temporary telescoping column or jack will be needed to eliminate any weight on the shims for removal.)



8. WALL FRAMES:

TYPE & CONDITION:

* **FUNCTIONAL** or visually plumb where *readily accessible*. The 2 x 4 (estimate) wood framed walls did not exhibit any excessive bowing, sagging or other critical defects as viewed from living spaces & unfinished areas. (Note: The actual framing members are covered by drywall or plaster and are not accessible for direct visual evaluation.)

9. STAIRCASES / BALCONIES / TRIM:

CONDITION:

* **FUNCTIONAL** where *readily accessible* at time of inspection.

STAIRCASE

PROBLEMS:

Observation: No visible staircase problems where *readily accessible*.

10. ROOF / CEILING FRAMES:

Roof & ceiling frame

materials:

Functional wood, 2 x 10 rafters and plywood decking.
(See photo #52)



CONDITION -

PROBLEMS:

* **FUNCTIONAL.** No visible problems observed where *readily accessible* and clear of storage only at time of inspection. (Note: If there was storage in the attic at time of inspection, then YOU should examine the roof structure again when the owner has emptied the attic.)

11. Did the inspector probe exposed and readily accessible structural components where deterioration is suspected?

YES - Suspected areas of deterioration were probed.

12. Did the inspector enter readily accessible under floor crawl spaces and attic spaces?

YES - the inspector did enter *readily accessible* attic spaces.

13. OVER-ALL CONDITION / RECOMMENDATIONS:

Structural summary:

Observation: The over-all condition of the building appears FUNCTIONAL and normal for the age & style of the home. The foundation, floor frames, wall frames and roof frames do not exhibit any visible critical deficiencies (such as cracks, sags or deterioration caused by water or insects) where *readily accessible* at time of inspection.

KITCHEN INSPECTION

SCOPE OF THE KITCHEN AND APPLIANCE INSPECTION: The inspector shall observe: counters, a representative sample of cabinets, brief operation of fixed or attached appliances, lights and outlets, walls, floor and ceiling. Appliances are not moved.

NOTICE: No appliance warranty is expressed or implied.

DISCLAIMERS: The following items are **EXCLUDED** from this report: A. Portable appliances. B. Appliance timers & thermostats. C. Water filtration devices, ice makers and instant hot water makers. D. Clothes washer & dryer operation. E. Areas concealed by cabinet storage or appliances. F. The functional evaluation of fixtures or appliances that are "shut-down" is undetermined and **EXCLUDED** from this report.

GENERAL COMMENTS: A. Kitchen appliances are subject to unpredictable life expectancy and may require repair or replacement although functional at the time of inspection. B. Appliances cannot be run through "full cycles" and timers cannot be evaluated during a limited visual home inspection. **C. You should question the owner regarding the age and maintenance of each appliance prior to purchase. (Average appliance lifespans: refrigerator 15-20 yrs., range 10-14 yrs., dishwasher 5-7 yrs., garbage disposer 5-7 yrs.)** D. New homes must now have ground-fault-circuit-interrupter (GFCI) electrical shock protection at all countertop outlets. Updating of the kitchen outlets is advised if GFCI protection is not present. E. Be advised that while functional, the plumbing to older kitchen fixtures or appliances may not conform with modern requirements. During kitchen remodeling, a plumber may be needed to update the fixture supply lines, shut-off valves, and DWV piping. F. Be advised that "a kitchen must contain a kitchen sink, space and proper facilities for the installation of a refrigerator and, unless otherwise stated in the lease, a stove and oven in good repair". G. If any fixtures or appliances were shut-down or not operational at time of inspection, further research is advised. H. **You should examine the interior of ALL cabinets and closets during your pre-passing walk through as you may find defects that were hidden by storage at time of inspection.** I. Self cleaning and continuous cleaning operations, timing devices, clocks, thermostat accuracy and lights are not checked during this inspection. J. The ability of the dishwasher to wash dishes is not tested. The inspector does not test any device requiring the use of special keys, codes or combinations. The inspector does not operate programmable feature of devices. K. You should consult with the owner **NOW** on the location and operation of any kitchen & bathroom exhaust lines and clean and inspect such lines **NOW** and annually.

1. KITCHEN SINK:

CONDITION:

* **FUNCTIONAL.** The sink did not exhibit any problems where *readily accessible*. Both water pressure & drainage were functional at time of inspection. (Note: Stored items within the sink base cabinet may have restricted complete evaluation of the sink base cabinet itself, piping and the wall. During the pre-passing walk through, all sink base cabinets should be re-inspected for defects when emptied.)

2. GARBAGE DISPOSER:

CONDITION:

* **FUNCTIONAL** where *readily accessible* at time of inspection.
Observation: The home has a garbage disposer and a private waste disposal system.
Analysis: Be advised that a garbage disposer is not recommended with a private waste disposal system as the future function of the waste disposal system may be diminished, impaired or damaged.
Recommendation: I advise that you have the garbage disposer removed.

3. DISHWASHER:

CONDITION:

**** FUNCTIONAL with EXCEPTIONS noted below:**

Observation: The dishwasher is not fastened to the underside of the countertop.

Analysis: If a dishwasher is not securely mounted, movement may cause a pipe connection to leak. Simple repair is needed.

Recommendation: Secure the dishwasher to the countertop as required.

4. RANGE:

CONDITION:

*** FUNCTIONAL.** The range was FUNCTIONAL at time of inspection where *readily accessible*. (Note: Timers & self-cleaning features were not evaluated due to the limited nature of the home inspection. Further testing is advised.)

5. RANGE HOOD OR EXHAUST FAN:

CONDITION:

Observation: There is no range hood or wall fan for catching the smoke & grease produced during cooking.

Analysis: Relying only on a window for kitchen ventilation does not conform with modern kitchen design.

Recommendation: The optional installation of a range hood or fan is advised.

6. CABINETS:

CONDITION:

*** FUNCTIONAL.** The kitchen cabinets appear **FUNCTIONAL** for age and style where *readily accessible*. (Note: The inspector is not required to move stored goods to evaluate the inside of cabinets. After the owner has moved out and prior to passing, you should inspect the interior of all cabinets for potential hidden defects not documented in this report.)

7. COUNTER TOPS:

CONDITION:

*** FUNCTIONAL.** The counter tops appear visually FUNCTIONAL where *readily accessible* at time of inspection. (Note: Small appliances, clutter and condiments may have restricted access for inspection.)

8. ELECTRICAL OUTLETS & LIGHTS:

CONDITION:

*** FUNCTIONAL** U-type outlets & functional modern GFCI shock protection at *readily accessible* outlets above the kitchen countertops. Secure the dishwasher to the countertop.

9. FLOOR, WALLS, CEILING:

CONDITION:

*** FUNCTIONAL.** Where *readily accessible*, the kitchen floor, walls and ceiling appear FUNCTIONAL.

10. OVER-ALL CONDITION / RECOMMENDATIONS:

Kitchen summary:

The kitchen is in an over-all **FUNCTIONAL** condition where *readily accessible* at time of inspection. No critical repairs are needed at this time. (Note: The evaluation of mechanical devices is limited in scope to observations made at the time of inspection only, and does NOT imply the future longevity of the component(s). All kitchen appliances have built-in obsolescence and require eventual repair or replacement.)

Secure the dishwasher to the countertop.

Consider removal of the disposer to protect the septic system.

BATHROOMS INSPECTION

SCOPE OF THE BATHROOM INSPECTION: The inspector shall observe: Plumbing fixtures, means of ventilation, functional water pressure & drainage, lights & outlets & cabinets.

DISCLAIMERS: A. The condition of hidden supply, drain, waste and vent piping hidden within wall cavities is undetermined as they are inaccessible for visual inspection. B. If the water service or service to any fixture was shut-down at time of inspection, then the true function of that fixture is undetermined and is **EXCLUDED** from this *report*. C. No warranty against leakage is offered regarding the condition of a **shower stall pan** as it is not *readily accessible* for inspection. D. We do NOT test fixture overflows as they can sometimes be defective and can cause interior water damage. Overflows are **EXCLUDED** from this *report*..

GENERAL COMMENTS: A. A bathroom is required to have either a functional window or exterior vented exhaust fan as a means of ventilation. Fans must be vented outside and NOT into the attic. Be advised that improper bathroom ventilation is often a cause of moisture deficiencies in the home. B. "Bathroom facilities must include a toilet with a toilet seat and a bathtub or shower. These must be situated in a room which allows a person privacy, which is fitted with a door capable of being closed and which is not used for the purpose of living, eating, sleeping or cooking. In addition a washbasin other than the kitchen sink must be located either in the room containing the toilet or near the entrance to that room." C. **Be sure to examine the interior of all cabinets and closets during your pre-passing walk through as you may find defects that were hidden by storage at time of inspection. Call my office for free consultation if additional problems are discovered.**

1. BATHROOMS:

Number of bathrooms:

Two and 1/2.

2. WATER PRESSURE & DRAINAGE CONDITIONS:

Water flow & drainage:

* **FUNCTIONAL.** Observation: The water flow & drainage were FUNCTIONAL at fixtures during simultaneous testing.

3. BATHROOM HEAT SOURCE:

Condition of HEAT
source:

* **FUNCTIONAL** forced hot air heat.

4. BATHROOM VENTILATION:

Ventilation methods:

* **FUNCTIONAL window & fan.** (Note: Investigate the fan discharge point; it should discharge outside and not into the attic.)

5. TOILETS:

Condition of toilets:

* **FUNCTIONAL** where *readily accessible*.

6. SINKS:

Condition sinks-faucets:

* **FUNCTIONAL** bathroom sinks, faucets, pressure, drainage & hot water where *readily accessible*.
(Note: The inspector could not fully examine the interior of the sink base cabinet(s) do to stored goods. All sink base cabinet interiors should be re-examined during the pre-passing walk through inspection, after the owner has moved.)

7. TUBS & SHOWERS:

Condition tubs-showers:

* **FUNCTIONAL.** No visible problems observed where *readily accessible*. The tub / shower fixtures were **FUNCTIONAL** with adequate water pressure & drainage at time of inspection.

WHIRLPOOL BATH DISCLOSURE: As this home has a whirlpool bath, you should fully understand **RECOMMENDED GUIDELINES AND WARNINGS FOR ITS SAFE OPERATION AND MAINTENANCE:**

CONSUMER WARNINGS:

1. FAILURE TO FOLLOW THE MANUFACTURERS MAINTENANCE AND CLEANING PROCEDURES FOR A WHIRLPOOL BATH'S CIRCULATION SYSTEM CAN RESULT IN THE GROWTH AND TRANSMISSION OF BACTERIA.

The warm, dark and humid environment of the bath's circulation system provides an ideal location for the growth of microorganisms that can cause many different types of ailments (e.g. vaginal, kidney, bladder, skin, eye, lung etc.). After use, the suction system may retain up to 1 1/2 ounces of water or more for each jet and suction fitting and water retention may be increased with the addition of bath residue, scale deposits, soap scum etc. Any claims of a "fully draining" whirlpool bath are misleading due to the adherent quality of the water itself.

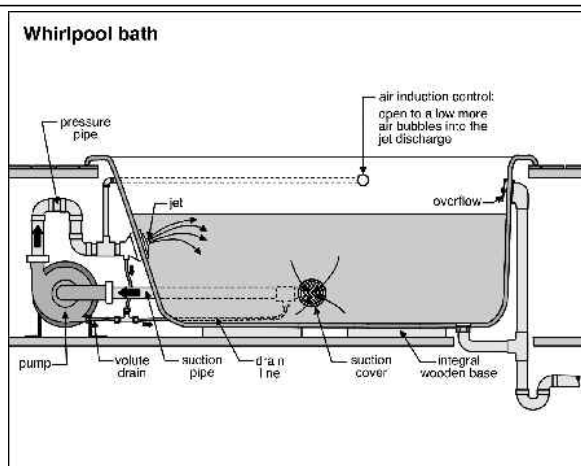
MAINTENANCE PROCEDURES: A residential whirlpool tub should be cleaned and maintained to prevent bacterial infections. After every use, a whirlpool bath should be flushed with a cleaning solution specifically formulated to remove bath residue. Furthermore, a whirlpool tub should be professionally cleaned annually. Professional cleaning will consist of flushing, descaling, and disinfecting the entire circulation system while maintaining an appropriate descaling solution at a proper concentration and temperature that can not be achieved by a home owner.

2. WARNING, DANGER OF DROWNING! HAIR IMMERSION NEAR THE SUCTION DRAIN CAN CAUSE ENTRAPMENT AND RESULT IN DROWNING.

Never allow small children to be unattended while in a whirlpool bath. Never operate a whirlpool bath unless the suction guard is in place.

NOTICE: The following HydraBaths brand suction guards have been recalled due to openings exceeding 1/8 inch which can cause hair entrapment & drowning:
20313X, # 2031XX and # 203. A safe suction cover will have (ANSI or IAPMO listed or UL listed) embossed on the cover and will rest flat against the tub wall leaving no gap greater than 1/16 inch.

For further information contact:
National Council For Whirlpool Bath Health & Safety
3421 M Street, N.W., Suite 315
Washington, D.C. 20007
(202) 362-1534



Observation: The home has a shower stall in the master bathroom.

Analysis: **DISCLAIMER - NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE CONDITION OF THE SHOWER PAN AND LEAKAGE AS THE PAN IS NOT READILY ACCESSIBLE FOR INSPECTION.** Shower stalls have a hidden lead pan beneath the base of the stall or floor covering that prevents leakage. Unfortunately, the shower pan is hidden from view. Lead pans can have a long service life if properly installed, but with time there is a possibility of movement caused by users or building vibration, and of hidden corrosion and leakage. To properly test a lead pan, it is necessary to fill the base of the stall with water from another source (by pail) and then to monitor the level of the water for a 8-12 hour period. Such testing is beyond the scope of a limited visual home inspection.

Recommendation: You should monitor the condition of the shower stall and ceiling below. Make sure that all grout is intact and sealed and that all joints are caulked at all times as preventative maintenance.

8. CABINETS & CLOSETS:

Condition cabinets-closets:

* **FUNCTIONAL.** No visible problems observed where *readily accessible*. (Note: Sink base cabinets & closets containing stored goods were not fully accessible for inspection - hidden problems could exist. You would be wise to re-examine all such area during the pre-passing walk-through inspection after the owner has moved out.)

9. LIGHTS & ELECTRICAL OUTLETS:

Condition lights-outlets:

* **FUNCTIONAL** electrical outlets with GFCI shock protection & functional light fixtures.

10. WALLS, FLOOR, CEILING:

Condition walls-floors-ceiling:

**** FUNCTIONAL with exceptions:**

Observation: The grout between ceramic tiles at the master bathroom shower stall wall has eroded.

Analysis: Grout erosion represents normal wear & tear; maintenance repair is needed. Be advised that further grout erosion may allow water to loosen tiles or cause more serious moisture damage to floors, walls or ceilings.

Recommendation: Re-grout the ceramic tile where needed and apply a silicone liquid sealant.

11. OVER-ALL CONDITION / RECOMMENDATIONS:

Bathroom summary:

Observation: Inspection of the bathroom(s) revealed maintenance problems which need repairs to restore proper function (see notes above).

LIVING SPACES, FIREPLACE, WOODSTOVE.

SCOPE OF THE INTERIORS SYSTEM INSPECTION: 266CMR: BOARD OF REGISTRATION OF HOME INSPECTORS 266 CMR 6.00: STANDARDS OF PRACTICE:

6.09: System: General Interior Conditions

- (1) The Inspector shall observe:
 - (a) Walls, ceiling, and floors.
 - (b) Steps, stairways, balconies, and railings.
 - (c) Counters and a representative number of cabinets.
 - (d) A representative number of doors and windows.
- (e) Separation walls, ceilings, and doors between a dwelling unit and an attached garage or another dwelling unit.
- (2) The Inspector shall:
 - (a) Operate a representative number of primary windows and interior doors.
 - (b) Report signs of water penetration.
- (3) The inspector shall report on:
 - (a) The type of exposed floor material (brick, carpet, ceramic tile, linoleum, slate, vinyl, tile, wood, other).
 - (b) The type of exposed wall finishes (brick, ceramic tile, fiberglass, laminates, paneled, plaster, gypsum wall board, plastic tile, other).
 - (c) The type of exposed ceiling finishes (acoustical tile, gypsum wall board, plaster, wood, other).
- (4) The inspector is not required to observe and or report on:
 - (a) Paint, wallpaper, and other finish treatments on the interior walls, ceilings, and floors.
 - (b) Draperies, blinds, or other window treatments.
 - (c) Household appliances.
- (d) Recreational facilities or another dwelling units.

NOTICE: The inspector is NOT required to move furniture, stored goods or other obstructions to view interior spaces.

DISCLAIMERS: The following items are **EXCLUDED** from the interior inspection: A. Paint, wallpaper or other finish treatments on the interior walls, ceilings and floors. The condition of walls & floors beneath wall or floor coverings or where hidden by furniture. B. Carpeting. C. Draperies, blinds, or other window treatments. D. Portable appliances. E. Recreational facilities. F. Alarm, security, intercom and stereo systems. G. Fire sprinkler or alarm systems & smoke detectors. H. Inaccessible fireplace or chimney flue spaces. I. Vacuum systems. J. Determining odors or stains. K. Determining the condition of thermopane window & exterior glass door seals when the glass is dirty. L. **MOLD AND INDOOR AIR QUALITY.**

GENERAL COMMENTS: A. If major defects are revealed by your pre-passing walk through, you should telephone my office for further advice or schedule an optional "return visit inspection" for additional professional evaluation. B. Fireplace & wood stove flues should be inspected by a member of the chimney sweep guild as not all interior flue areas are *readily accessible* during a limited home inspection. **C. You should ask the owner to provide you with a copy of the wood or coal stove "building permit," documenting that the appliance and the installation meet all fire code, safety and UL requirements. This documentation is needed for your homeowner's insurance file.** **D. The owner of the property is required to have the fire department examine and evaluate smoke detectors and fire alarm systems prior to purchase and provide you with documentation at time of closing.** E. Small cracks & nail pops in walls and ceilings are usually minor cosmetic defects caused in part by the expansion & contraction of the wood frame beneath the drywall or plaster wall covering and by wood frame vibration. Unless the wall or ceiling coverings are in danger of falling, the repairs are of no structural significance and should require maintenance patching, caulking, priming and painting. F. Not all problems are found during a brief inspection. G. The condition of walls and framing behind wallpaper, drywall, paneling, other coverings and

furniture cannot be determined. H. Determining the presence of asbestos in acoustic ceiling tiles or sprayed ceilings is beyond the scope of this inspection. I. The inspector will not determine the origin of odors or stains in carpets. J. The condition of flooring beneath carpets is undetermined. L. Firewall rating determination is beyond the scope of this inspection. M. A "Home Buyer's and Seller's Guide to Radon" is available at: <http://www.epa.gov/iaq/radon/pubs/hmbyguid.html>

We recommend having all fireplace(s) / flue(s), solid burning appliance(s) and gas fireplaces cleaned, inspected and serviced NOW PRIOR TO PURCHASE (a LEVEL II inspection) and annually by a licensed chimney sweep. Obtain ALL proper permits and instruction manuals NOW on the installation and use of solid fuel appliances and gas fireplaces. Do NOT use gas fireplace(s) or solid burning appliance(s) without proper servicing and / or signed installation permits.

NOTICE: We recommend "indoor air quality testing" NOW, prior to purchase if you have the slightest concern about mold, mildew or any other potential respiratory irritant. Any potential contaminant or environmental hygiene problem that may effect health is a deeply personal responsibility that requires further investigation by specialists. Such testing is beyond the scope of this limited visual inspection.

The inspection and reporting of minor, easily correctable, or cosmetic defects and deficiencies is not the intent or focus of the inspection; if such conditions are reported it is as a courtesy only. If certain conditions are mentioned, verbally or in the report, it is not meant to imply that there are not other unreported conditions.

NOTICE: Please understand that the inspection of the living spaces is greatly restricted by the owner's furniture, window treatments, carpeting and stored goods. Be advised that hidden defects could exist that were not *readily accessible* at time of inspection. For that reason, you should schedule a "pre-passing walk through inspection" to examine the home after the owner has removed furniture and storage. You may elect to perform this inspection yourself or request that the inspector return. (Call for fee schedule.)

1. FLOOR COVERINGS:

TYPES OF EXPOSED

FLOOR MATERIALS:

Areas of wood laminate.
Areas of wall to wall carpeting. (Note: A home inspector cannot remove carpeting and is unable to see through carpeting or padding. The condition of hidden floor surfaces or subfloor materials is undetermined. There is a potential for concealed damage.)
Areas of ceramic tile.

CONDITION:

*** FUNCTIONAL.**

FLOOR PROBLEMS:

Observation: Other than normal wear & tear, the exposed floor coverings did not exhibit any visible problems where *readily accessible* at time of inspection.
(Note: The inspector is **NOT** required to move furniture, carpeting or stored goods to examine the floors - hidden or concealed problems could still exist. For your full protection, you should request a pre-passing return visit to examine the home after the owner has moved out and removed furniture and storage.)

2. WALL COVERINGS:

TYPES OR EXPOSED

MATERIALS:

Gypsum board (drywall).

CONDITION:

**** FUNCTIONAL with EXCEPTIONS noted:**

WALL PROBLEMS:

Observation: Minor blemishes were seen at walls of some interior rooms at wall / ceiling joints or trim. (See photo #45)

Analysis: Not all defects are documented in this report. The walls require maintenance repairs.

Recommendation: Further inspect all walls and perform maintenance patching as required to restore finish.

3. CEILINGS:

TYPES OF EXPOSED

CEILING MATERIALS:

Gypsum wallboard.

CONDITION:

*** FUNCTIONAL.**

CEILING PROBLEMS:

Observation: The exposed ceilings did not exhibit any problems where *readily accessible* at time of inspection. (Note: Cosmetic defects may not be documented in this report.) **"NOTICE regarding water or moisture problems: "I did NOT have the opportunity to inspect the home for visible leaks or water penetration because it was not raining at time of inspection. While I may not have disclosed any evidence of leakage or water penetration problems, there could be problems when it rains." You should monitor the roof coverings, flashings, gutters, chimneys, eaves, doors and windows and basement for water penetration and moisture related problems." Note: The Company makes no guarantee expressed or implied against future water penetration.**

4. HALLWAYS:

CONDITION &

PROBLEMS:

*** FUNCTIONAL.** Observation - No visible problems observed where exposed or *readily accessible*.

5. CLOSETS:

CONDITION &

PROBLEMS:

*** FUNCTIONAL.** Observation - The exposed portions of the closets appear **FUNCTIONAL**. No visible problems where *readily accessible*. (Note: Be advised that stored goods prevented complete access for inspection. Hidden closet problems could exist. Be sure to examine all closets when empty during your pre-passing inspection.)

6. DOORS:

CONDITION & PROBLEMS:

**** FUNCTIONAL with EXCEPTIONS noted:**

Observation: Interior doors lack door stoppers or hinge pins. Pocket doors and swinging doors were otherwise functional.

Analysis: Unless a door swing is shielded by a hinge mounted door stopper or a mop board door stopper, there is a potential for the door knob to strike the wall and cause a hole in the drywall or plaster.

Recommendation: Install door stoppers or hinge pins where missing.

WAS AT LEAST ONE INTERIOR DOOR PER ROOM OPERATED?

YES.

7. FIREPLACE(S):

DISCLAIMER:

*** DISCLAIMER: THE INSPECTION AND REPORTING ON CHIMNEY FLUE LINERS IS BEYOND THE SCOPE OF THIS LIMITED VISUAL INSPECTION. FLUE LINERS ARE EXCLUDED FROM THIS REPORT PER CONTRACT. FURTHER INSPECTION BY A CHIMNEY SWEEP IS ADVISED.**

TYPE & CONDITION:

Gas fired, direct wall vented fireplace present.

FIREPLACE PROBLEMS:

Observation: No visible fireplace problems observed where *readily accessible* at time of inspection. The appliance responded to a remote control device, the gas burner ignited and combustion gases were vented outside through the direct wall vent. (See photo #25)



8. WOOD / COAL STOVE:

TYPE & CONDITION:

Observation: No wood / coal stove at this home.

9. SIGNS OF WATER PENETRATION:

Signs of water
penetration on interior
surfaces?

Observation: Where exposed and *readily accessible*, there were no signs of water penetration within the general interior spaces at time of inspection.

Analysis: The above statement should NOT be considered as a guaranty against water penetration problems as not all surfaces are accessible for inspection and all homes are vulnerable to water penetration from roof leaks, ice dam leaks, flashing leaks, chimney leaks, skylight leaks, window leaks, door leaks, siding leaks, plumbing leaks and heating system leaks.

Recommendation: Each of the above listed components or systems, along with the interior surfaces of each room should be monitored for signs of water penetration. Areas that were concealed by furniture should be investigated by YOU during a "pre-passing walk-through inspection." YOU should also ask the owner to disclose any knowledge or past water penetration problems.

10. OVER-ALL CONDITION / RECOMMENDATIONS:

Interior summary:

* **FUNCTIONAL.** Observation: The exposed interior spaces of the home were visually FUNCTIONAL at time of inspection. No critical floor, wall or ceiling deficiencies, leaks or signs of stress were observed where *readily accessible*. (Note: No effort was made to move furniture or stored goods. A pre-purchase inspection is recommended immediately prior to closing. This will provide you with one last opportunity to view areas that were hidden by furniture and stored goods during the home inspection. Be sure to view all closets, sink cabinets, basement spaces and attics after the owner has removed all stored goods.

INSULATION AND VENTILATION

SCOPE OF THE INSULATION & VENTILATION INSPECTION: 266CMR: BOARD OF REGISTRATION OF HOME INSPECTORS 266 CMR 6.00: STANDARDS OF PRACTICE:

6.10: System: Insulation and Ventilation

- (1) The inspector shall observe:
 - (a) Exposed insulation in unfinished spaces.
 - (b) Ventilation of attics and foundation areas.
 - (c) Kitchen and bathroom venting systems.
- (2) The inspector shall report:
 - (a) The existence of insulation in unfinished spaces.
 - (b) Absence of it in unfinished space at conditioned surfaces.
- (3) The inspector is not required to report on:
 - (a) The type of insulation.
 - (b) Concealed insulation and vapor retarders.
 - (c) Venting equipment which is integral with household appliances.

DISCLAIMERS: The following items are **EXCLUDED** from this report: A. Concealed insulation and vapor retarders. B. Venting equipment which is integral with household appliances. C. Inaccessible unfinished spaces. D. Spaces or problems concealed by stored goods.

GENERAL COMMENTS: A. FREE or inexpensive **ENERGY AUDITS** by local utility companies are recommended to further identify & estimate areas in need of energy saving improvements. B. YOU should re-inspect the attic space after the owner has removed all possessions as hidden problems may exist. C. New homes are now required to have a light in the attic. D. New homes are required to have a vapor barrier of 1.0 perm or less installed on the warm side of walls, ceilings and floors enclosing a conditioned space. E. Typical insulation requirements for residential applications include: Ceilings (R = 30) 9" fiberglass or equivalent, walls & basement (R = 12.5) 3 1/2" fiberglass or equivalent. F. Typical ventilation requirements for new residential applications include: Attics with a ceiling vapor barrier shall have a screened opening of at least 1 SF of free vent area for each 300 SF of ceiling space. Attics without a ceiling vapor barrier shall have a screened opening of at least 1 SF for each 150 SF of ceiling area. G. **Buyers should ask the owner about any prior roof leakage and should monitor the attic to determine if corrective action is needed.** Be advised that active roof or flashing leaks can occur at anytime regardless of the age or condition of the roof coverings and flashings. H. **DISCLAIMER: Inspection for MOLD is EXCLUDED from this report..** I. **NOTICE: UNLESS THE ATTIC WAS VIEWED DURING RAIN, NO GUARANTY AGAINST ROOF LEAKS IS IMPLIED.** YOU should monitor the attic area for signs of roof or flashing leakage after heavy rain or snow conditions. The Massachusetts Standards require that the inspector "Enter *readily accessible* under floor crawl spaces and attic spaces only after safe access has been provided by the owner and or client except when access is obstructed, when entry could damage the property, or when dangerous or adverse situations are suspected by the inspector."

1. ACCESS:

METHOD USED TO OBSERVE ATTIC:

A. Observation: The attic was entered via pull-down stairs.

Analysis: Pull-down stairs are a great convenience, but the hardware can loosen up with age and the opening for the stairs can allow excessive heat loss if not properly insulated and weatherstripped.

Recommendation: Insulating & weatherstripping the stairs will prevent moisture migration into the attic and condensation on the underside of the roof. Such moisture migration and condensation often promotes the formation of mildew in the attic. Check all nuts, bolts & springs for safety. Consider installing an optional gallery railing in the attic to prevent a fall into the opening.

Limitation

**Stored Items
Prevent Access**

B. Observation: The attic only has a partial plywood floor that prevented the inspector from safely entering the entire area.

Analysis: **** **UNSAFE** - Safety repair is needed.

Recommendation: Further investigation is advised when secure walk-ways are installed. If you would like us to examine the attic in total, we can make suitable arrangements after the owner of the property has signed a waiver allowing us access and waiving all liability for property damage and claims.

2. SIGNS OF ATTIC WATER PENETRATION:

EVIDENCE OF LEAKS

OR CONDENSATION

PROBLEMS:

Observation: No moisture stains were visible as viewed in the *readily accessible* parts of the attic at time of inspection.

Analysis: **This is NOT a guarantee against future leakage.**

Recommendation: Monitor. Ask the owner if the home has any areas of water infiltration?

3. VENTILATION:

TYPE OF ATTIC

VENTILATION:

Observation: The attic space is vented by the following means:

Ridge & soffit vent (Note: This is an indication of a modern attic ventilation system).

Gable end louver vents

CONDITION:

**** FUNCTIONAL with the EXCEPTIONS noted below:**

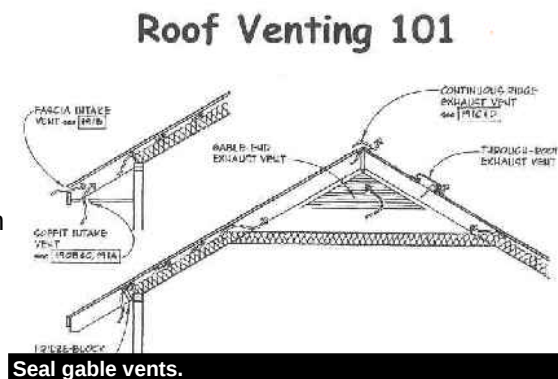
ATTIC VENTILATION

PROBLEMS:

Observation: Where *readily accessible* at time of inspection, the attic is vented by a modern ridge and soffit vent system plus louver vents at the gable ends of the home.

Analysis: State of the art in most new home construction consist of a balanced ridge & soffit ventilation system. Balanced means that the square surface area of the ridge & soffit vent are fairly equal in size to create a positive natural draft. Cool air should enter the attic space through the soffit vent and exit through the ridge vent at the peak of the roof. As louvered vents are present at the gable ends of the home, the proper positive air movement of the ridge vent system from soffit to ridge will be impaired. The gable vents should NOT be present. Repair is needed.

Recommendation: I advise that each gable end vent be blocked or sealed.



CONDITION OF

FOUNDATION / CRAWL

SPACE VENTILATION:

* **FUNCTIONAL.** Observation: No visible major problems observed where *readily accessible* at time of inspection. The home has an operational basement automatic dehumidification and fresh air intake system. (See photos #39,40) You should review this system with the owner.



**CONDITION OF
KITCHEN VENTILATION:**

* **FUNCTIONAL.** Observation: No visible major problems observed where *readily accessible*.

**CONDITION OF
BATHROOM
VENTILATION:**

* **FUNCTIONAL.** Observation: No visible major problems observed where *readily accessible*.

**CONDITION OF DRYER
VENTILATION:**

* **FUNCTIONAL.** Observation: No visible problems observed where *readily accessible*.

4. INSULATION IN UNFINISHED SPACES:

ATTIC:

Types of exposed and readily accessible attic insulation:

Fiberglass batt type insulation present.

* **FUNCTIONAL** where *readily accessible* at time of inspection. No visible insulation problems.

**BASEMENT / CRAWL
SPACE:**

TYPES of insulation where exposed and *readily accessible*:

Fiberglass batt type insulation is present.

* **FUNCTIONAL** basement insulation where exposed and *readily accessible* at time of inspection.

WALLS where exposed:

TYPES of insulation where exposed and readily accessible:

Batt type fiberglass insulation.

* **FUNCTIONAL** where *readily accessible* at time of inspection. No visible insulation problems.

5. VAPOR BARRIERS IN UNFINISHED SPACES:

**VAPOR BARRIER
PRESENT OR ABSENT
IN UNFINISHED
SPACES?**

Observation: Where exposed and *readily accessible*, a vapor barrier is present in the following locations:

ATTIC

Basement ceiling

Partial basement walls where framed

* **FUNCTIONAL** vapor barrier where exposed and *readily accessible*.

6. OVER-ALL CONDITION / RECOMMENDATIONS:

Insulation / ventilation

summary:

Observation: The insulation and ventilation appear to be **FUNCTIONAL** where exposed and *readily accessible* at time of inspection. Consider contacting the local utility company for a free or inexpensive "energy audit" to see what additional improvements are suggested and what the projected fuel savings may be anticipated.

TRADESMEN TO CONTACT FOR REAPPRAISAL:

CONCLUSIONS: As you compare & contrast the issues disclosed by the home inspection, you should keep them in perspective relative to the age of the home and its sale price. The task of a home inspector is to function as a "general practitioner" who identifies visible major structural & major mechanical system problems and then refers clients to applicable tradesmen to determine the scope and estimated repair cost.

(NOTE: MASS. REGULATIONS 266 CMR 6.11.2C.5 PROHIBITS HOME INSPECTORS FROM DETERMINING THE COST OF REPAIRS. ALL REPAIRS SHOULD BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS OF THE BUILDING CODE, ELECTRICAL CODE, PLUMBING & GAS CODE OR APPLICABLE REGULATIONS.

NOTICE: In Massachusetts, a broker is NOT required to provide you with a formal "seller disclosure document". If such an optional document is available, then you and your attorney should carefully review it **NOW**, prior to commitment.

I advise that **YOU** perform the following research at the local town or city offices **NOW**, prior to commitment.

- [x] Visit the local building department **NOW** and research the permit history of the home.
- [x] Visit the local conservation commission **NOW** and ask if any portion of the property is considered to be on or near wet lands as the presence of wet lands could seriously effect the present & future use of the property.
- [x] If any suspected **MOLD** was observed, then you should hire a microbiology laboratory to take swaps and air samples for analysis prior to commitment. Many homes have excessive moisture issues which might lead to mold, but the ability to detect mold is beyond the scope of this home inspection and is **EXCLUDED** from this report.

Web sources:

- * A Massachusetts Consumer Guide: Buying and Selling a Home in Massachusetts
<http://www.state.ma.us/consumer/Pubs/buysell.htm>
- * A Massachusetts Consumer Guide: Guide To Home Improvement
<http://www.state.ma.us/consumer/Pubs/homeimp.htm>

Optional or elected reinspection (at an hourly rate) is only performed on items not *readily accessible* or shut-down at the time of original inspection. Should you negotiate with the owner to have items repaired, I suggest they be performed by a licensed or qualified professional and NOT the homeowner as they can not offer a warranty on their work. All work must comply with applicable Law, including governmental permit, inspection, and approval requirements. Buyer should obtain from seller receipts for **Repairs** performed by others. Documentation should include a written statement indicating the date of **Repairs** performed by Seller and Copies of receipts and statements of seller prior to final verification of condition.

It is your job to judge what the house needs after the home inspection, what it can become and if you are prepared for the work ahead. It is up to you to determine if the cost of needed repairs will add measurably to the cost of the home and if those costs are manageable in your budget. You should obtain cost estimates for repairs identified by your home inspector as soon as possible after the home inspection, and when necessary, you should request extensions to allow enough time to complete needed research prior to closing. These costs when added to the purchase price will reflect the true cost of the home. I hope that the inspection and report will help you understand the property you are buying and will help you enjoy your purchase in the future. If through your negotiations access becomes possible, components become *readily accessible*, repairs are done or systems are restored, you may desire to schedule a "return visit" inspection with this office, at an additional charge, prior to commitment.

The inspection of all EXCLUDED items in our Contract and the Standards of Practice should be performed, directed and evaluated by other specialists of your choice of hire prior to commitment. Based on my observations during the home inspection, YOU should contact the following specialists

for further investigation of the ENTIRE SYSTEM and cost estimates for repairs NOW before close of escrow:

1. TRADESMAN OR PROFESSIONALS TO CONSULT:

Trade or specialty:

Siding contractor (minimal trim & flashing repairs).

Expert to consult for
further inspection:

Pest control inspector, Security / alarm specialist.

Recommendation: You should consult the local building & conservation departments NOW and research the prior permit history for this home.

2. Time out:

11:15 am.

3. Addendum:

COMMENTS:

NOTICE: Please read the INSPECTION INFORMATION BOOKLET for further assistance as it is part of this report.

CLOSING STATEMENTS

Dear Client,

This impartial report provides you with documentation of the *readily accessible* & visible problems in the home that were disclosed to you during the home inspection. An earnest effort was made to provide you with the facts needed for intelligent decision making during the real estate purchasing process. To prevent any surprises, you should consult applicable licensed tradesmen regarding each concern. Request that the entire system of concern be further investigated for additional problems not included in this report, and that repair or replacement cost estimates be provided as determined. **Gather all the facts NOW, prior to commitment!**

Be assured that as your professional representative, I fully understand your nervousness and the stress associated with the biggest purchase of your life. Therefore, I urge you to telephone me for free consultation should you require any further clarification or guidance. ("The only stupid question is one that is not asked!")

In closing, **it is not my intention to influence your decision to purchase or not to purchase real estate - that decision is yours alone!** But, I do urge you to use your head as well as your heart.

I hope that my services have been helpful and educational, and that I have gained your respect and friendship; for your referral is my greatest source of marketing and a recognition of my professionalism. Everyone seems to know someone who is buying or selling a home. **THE GREATEST COMPLIMENT YOU COULD GIVE ME IS TO PLEASE PASS MY NAME ALONG TO FRIENDS & RELATIVES.**

Thank you for hiring me as your home inspector. I hope that I have earned your respect and gained a new friend!

Sincerely,

Robert F. Mulloy, President

ASHI New England Chapter 2002 MEMBER OF THE YEAR

Commonwealth of Mass Licensed Home Inspector #32

Commonwealth of Mass. Board approved MRC education provider.

Certified member #561 of the American Society of Home Inspectors (ASHI)

Certified member of ASHI, New England Chapter

Past treasurer of ASHI, New England Chapter

Past executive board member of ASHI, New England Chapter

Certificate in Building Inspections, Northeastern University

Teacher in Building Inspections, Northeastern University

Massasoit Community College, continuing education teacher

New England Training Academy instructor

Cape Cod Community College, continuing education teacher

Editor in Chief, ASHI New England Chapter Newsletter

Teacher, B.S., M. Ed.

Licensed Mass. Construction Supervisor #CS 043289

Licensed Mass. Real Estate Salesman #38810 (expired

ASHI NE Chapter Member of the Year 2002 award

ASHI NE Chapter Mel Chalfen award 2004

ASHI NE Chapter President's Award 2005

Member of the Historical Building Inspectors Association

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