

Building Inspection Report

New Construction Address

Inspection Date:
July 6, 2009

Prepared For:
Cornerstone Client

Prepared By:
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Report Overview

THE HOUSE IN PERSPECTIVE

This is a new house, which appears to be well constructed. Several repairs are needed for code compliance and for the proper operation of the systems. Please be aware that this report does not address "cosmetic" or finish items. We recommend conducting a final walk-through with the builder to determine if all finishes are satisfactory. Make sure you obtain a written outline of the terms and conditions of the builder's warranty program including any extended structural or mechanical warranties that may be available. Obtain all manuals and extended warranty information on all mechanical equipment, appliances, roofing material, and any other material that may be guaranteed longer than one year by the manufacturer. We also recommend requesting from the builder a complete list of all subs and vendors performing work on the job for future repairs that may be needed.

All code references noted herein refer to International Residential Code (IRC) 2006 edition. Local codes may vary somewhat. Obtain the Certificate of Occupancy from the builder, which certifies that all final inspections have been made by the local municipality. The gas service to the house was shut off/not connected, which prevented the testing of the furnaces, fireplace components, and all other gas appliances.

CONVENTIONS USED IN THIS REPORT

For your convenience, the following conventions have been used in this report:

Major Concern / Concern: a system or component, which is considered to be significantly deficient or is unsafe. These deficiencies should be corrected immediately and may involve significant expense.

Safety Issue: a condition that relates to the overall safety of occupants, which may require prompt attention.

Repair: a system or component which is missing or which needs corrective action to assure proper and reliable function.

Improve: denotes improvements or repairs, which are recommended but are not immediate in nature.

Monitor: a system or component needing further investigation and/or monitoring in order to determine if repairs are necessary.

Please note that these designations are assigned based on visual observations only at the time of the inspection. After further investigation, these conditions may be more serious than previously assessed. They are given as a guideline only and should not be used solely for the purpose of determining repairs that may or may not be performed by the seller. The observations listed under "Discretionary Improvements" are not essential repairs, but represent logical long term improvements. The directions given in this report (i.e. left side, rear, etc.) are as you are facing the building from the street.

REPAIR RECOMMENDATION HIGHLIGHTS / SUMMARY

The following is a synopsis of the immediate and/or more costly repairs needed for the building, some of which may be significant. Other repairs and improvements may also be necessary. Please refer to the body of this report for further details on these and other recommendations.

STRUCTURAL REPAIR RECOMMENDATIONS / OBSERVATIONS

1. **Repair:** Fairly typical framing repairs are needed, which should be performed by a qualified carpenter.
 - a. Blocking is required for all load bearing interior partitions as required by code (See Sec.602.4 and 602.10) to prevent future settlement and bowing of the studs (see photo #1 – at arrows). This can be achieved by installing wood blocks between the studs or metal straps installed horizontally along one side of the stud walls.

- b. *Anchor bolts are required every 6' and no more than 12" from the ends of all sill plates under exterior and interior load bearing walls as required by code (See Figure R403.1(1)). Other types of fasteners may be acceptable depending on the approval of the local building official. These fasteners were missing at the interior load bearing walls (see also photo #1 – at circled area) and should be installed as necessary. Have the builder check all sills of supporting walls for proper compliance since all exterior walls were not totally visible.*
- c. *All holes in joist hangers should be filled with nails or screws per manufacturer's recommendations. These were missing at the hangers attached to the triple LVL located at the back right area of the basement (see photo #2). Triple LVL's are also typically required to be bolted together instead of nailed (refer to manufacturer's recommendations), which should be performed to properly insure the stability of the beam(s).*
- 2. **Monitor, Possible Repair:** *Signs of possible leaks through the foundation walls were noted at the rear of the basement (see photo #3). This area should be cleaned and then monitored for future activity and repaired by a qualified waterproofing contractor, if necessary. Refer to the "Exterior" and/or "Roofing" Section concerning recommended measures to prevent water accumulation near the foundation, which can cause conditions, which are conducive for moisture infiltration into the basement.*

EXTERIOR REPAIR RECOMMENDATIONS / OBSERVATIONS

- 3. **Repair:** *All utility penetrations and outlet boxes should be caulked and sealed to prevent moisture intrusion into the structure and to protect the wiring (e.g. as noted at A/C disconnects on right side – see photo # 5). Make sure all other penetrations in the exterior veneer are well caulked and sealed.*

ELECTRICAL REPAIR RECOMMENDATIONS / OBSERVATIONS

- 4. **Repair, Safety Issues:** *Electrical repairs are needed, which should be performed by a licensed electrician for improved safety.*
 - a. *A ground fault circuit interrupter (GFCI) outlet as noted at the lower left basement door (at the exterior) did not reset properly with the reset button on the outlet. The receptacle should be replaced as necessary for proper protection and operation of the affected outlet(s).*
 - b. *The installation of "arc-fault" breakers for the bedroom circuits is now required by present day codes, which provides added protection against faulty wiring (see NEC 210-12b). The outlets in the master bedroom area did not shut off when the "arc-fault" breakers in the panel were tripped. Consult with the electrician concerning the installation of these devices for proper protection of these circuits.*

HEATING AND COOLING REPAIR RECOMMENDATIONS / OBSERVATIONS

- 5. **Repair:** *The heating and air conditioning systems should be serviced, cleaned, and checked by the HVAC subcontractor before closing (see comment in "Cooling" Section). The gas heating system has not been started up and could not be tested due to the lack of gas service. The heat pump system should also be serviced and cleaned (this system also could not be tested – see comment in "Limitations"). The furnaces and A/C coils should be cleaned for proper efficiency.*
- 6. **Repair:** *The temperature drop measured across the evaporator coil of the upstairs air conditioning system was lower than normal (input was 80 degrees, output was 70 degrees, 15-20 degree differential is normal). This usually indicates that final servicing is needed. The heating and cooling technician should be consulted to further evaluate this condition and the remedies available. The freon levels in both systems should be checked and the systems tested for leaks.*
- 7. **Repair:** *The outdoor unit of the air conditioning system is out of level (larger unit – see photo # 7). This condition should be corrected to allow for proper operation of the fan motor and compressor.*

PLUMBING REPAIR RECOMMENDATIONS / OBSERVATIONS

8. **Repair:** *The kitchen sink and main floor bathtub appear to drain slowly, suggesting that obstructions may exist in the lines. These should be checked and cleaned by the plumber as necessary for proper flow.*
9. **Monitor, Possible Repair:** *It appears that there is no supply control handle for the hot water supply for the dishwasher (see photo #10 – at arrow). The dishwasher did not function properly possibly due to this condition (see “Appliance/ Fireplace” Section). The plumber should investigate and repair as necessary.*

INTERIOR REPAIR RECOMMENDATIONS / OBSERVATIONS

10. **Repair:** *Escutcheon plates, sealed and caulked, are needed under the cabinets at all pipe penetrations to prevent moisture intrusion into the structure (see photo #10 – at circled area). Make sure all escutcheons in the bath and shower surrounds are also caulked and sealed.*
11. **Repair:** *Damage and/or holes were noted in the walls (e.g. at the back wall of the kitchen – see photo #11), which should be repaired and repainted.*
12. **Repair:** *Some of the windows are painted or otherwise stuck shut. Causing the windows to open properly throughout the house will improve ventilation and functionality. The builder should check all windows for proper operation and function before closing.*
13. **Repair:** *The shower door in the master bathroom scrapes at the bottom and needs adjustment.*

APPLIANCE AND FIREPLACE REPAIR RECOMMENDATIONS / OBSERVATIONS

14. **Repair, Safety Issue:** *The gas piping at the fireplaces should be grouted and sealed where it passes through the outside walls of the fire chamber according to manufacturer's recommendations. All openings and gaps at the hearth and surround materials should also be grouted and sealed to the metal facing of the fireplace. Check with the builder concerning the proper operation of the gas starter as the gas was not on at the time of the inspection, which prevented the testing of this appliance.*
15. **Repair:** *Several kitchen appliance repairs are needed. The dishwasher did not cycle properly (does not appear to be getting hot water – see “Plumbing” Section) and should be checked and repaired as necessary. The waste disposal appears to be frozen. The unit should be checked and repaired or replaced as necessary. The gas cook-top could not be tested (no gas).*
16. **Repair:** *The knock-out for the drain line at the washing machine hook-up needs to be removed for proper insertion of the drain hose.*

THE SCOPE OF THE INSPECTION

All components designated for inspection in the ASHI® Standards of Practice are inspected, except as may be noted in the “Limitations of Inspection” sections within this report. The interior of the unit only was inspected. The exterior and structural components are assumed to be owned by the association and are not inspected.

This inspection is visual only. A representative sample of building components are viewed in areas that are accessible at the time of the inspection. No destructive testing or dismantling of building components is performed.

It is the goal of the inspection to put a home buyer in a more informed position to make a buying decision. All potential repairs may not be identified during this inspection. Unexpected repairs should still be anticipated. The inspection should not be considered a guarantee or warranty of any kind.

Use of this report for any reason constitutes acceptance of the terms contained in the “Inspection Agreement”, a copy of which is attached as Appendix B. Please refer to this contract for a full explanation of the scope of the inspection.

WEATHER CONDITIONS

Warm and cloudy weather conditions prevailed at the time of the inspection. The estimated outside temperature was 80-85 degrees F. Occasional rain has been experienced in the days leading up to the inspection.

Structural Components

DESCRIPTION OF STRUCTURAL COMPONENTS

Foundation:	<ul style="list-style-type: none"> •Poured Concrete •Basement Configuration •Foundation Was Not Visible (see (see comment below) •Slab on Grade (Basement and Garage Slab)
Columns / Piers:	<ul style="list-style-type: none"> •None (Load Bearing Walls – See Below)
Floor Structure:	<ul style="list-style-type: none"> •"I-Joist" Floor Trusses •Waferboard Floor Decking
Wall Structure:	<ul style="list-style-type: none"> •Wood Frame, Brick Veneer •Stud Size: 2x4 (2x6 in Basement)
Ceiling Structure:	<ul style="list-style-type: none"> •Joists – Size: 2x8
Roof Structure:	<ul style="list-style-type: none"> •Rafters – Size: 2x6 •Composite Sheathing •Cross-Ties / Purlins
Attic Access:	<ul style="list-style-type: none"> •Pull-Down Stairs •Located: Hallway

STRUCTURAL COMPONENT OBSERVATIONS

The framed construction of the home is of good quality. The materials and workmanship, where visible, are within acceptable standards. The concrete walls as noted in the basement of this structure serve as a durable foundation. Several repairs are recommended, however, which should be performed by a qualified framing contractor.

RECOMMENDATIONS / OBSERVATIONS

- **Repair:** Fairly typical framing repairs are needed, which should be performed by a qualified carpenter.
 - Blocking is required for all load bearing interior partitions as required by code (See Sec.602.4 and 602.10) to prevent future settlement and bowing of the studs (see photo #1 – at arrows). This can be achieved by installing wood blocks between the studs or metal straps installed horizontally along one side of the stud walls.
 - Anchor bolts are required every 6' and no more than 12" from the ends of all sill plates under exterior and interior load bearing walls as required by code (See Figure R403.1(1)). Other types of fasteners may be acceptable depending on the approval of the local building official. These fasteners were missing at the interior load bearing walls (see also photo #1 – at circled area) and should be installed as necessary. Have the builder check all sills of supporting walls for proper compliance since all exterior walls were not totally visible.
 - All holes in joist hangers should be filled with nails or screws per manufacturer's recommendations. These were missing at the hangers attached to the triple LVL located at the back right area of the basement (see photo #2). Triple LVL's are also typically required to be bolted together instead of nailed (refer to manufacturer's recommendations), which should be performed to properly insure the stability of the beam(s).
- **Monitor, Possible Repair:** Signs of possible leaks through the foundation walls were noted at the rear of the basement (see photo #3). This area should be cleaned and then monitored for future activity and repaired by a qualified waterproofing contractor, if necessary. Refer to the "Exterior" and/or "Roofing" Section concerning recommended measures to prevent water accumulation near the foundation, which can cause conditions, which are conducive for moisture infiltration into the basement.
- **Monitor:** Consult with the builder concerning the location of the ends of the french drains which should surround the perimeter footings (appear to be located at right side). Monitoring these are important for insuring that the system is draining properly. Make sure they are not tied to an underground piping system for the downspouts. This condition could allow water to become trapped next to the foundation should the piping become clogged with debris.

Discretionary Improvements

If the property has not already been treated for termites, a licensed pest control company should be engaged to evaluate the structure and prescribe necessary treatments. Recommend obtaining a "Structural Repair" bond for proper protection of the structure against damage from wood destroying insects.

LIMITATIONS OF STRUCTURAL COMPONENT INSPECTION

As described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Structural components concealed behind finished surfaces could not be inspected. Only a representative sampling of visible structural components were inspected.
- Engineering or architectural services such as calculation of structural capacities, adequacy, or integrity are not part of a home inspection.
- The framing components in the attic were not totally visible due to the insulation and floor decking in place, which obscures the view of these members. The exterior wall studs, band boards, and concrete foundation walls in the basement were also not totally visible due to insulation in place.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Roofing System

DESCRIPTION OF ROOFING SYSTEM

Roof Covering:	•Composition Shingle – Standard Weight •Metal (at bay window / front stoop)
Roof Flashings:	•Metal •Vinyl (at plumbing stacks)
Chimneys:	•Metal Flue / Siding Veneer •Rain Pan
Roof Drainage System:	•Aluminum Gutters / Downspouts •Downspouts discharge onto Splash Blocks
Method of Inspection:	•Viewed with binoculars

ROOFING OBSERVATIONS

The new roof coverings are considered to be in generally good condition. The typical overall life for this material is 15-20 years. No visible signs of active leakage were noted in the accessible areas of the roof decking. Obtain extended warranty information from the builder for the shingles.

RECOMMENDATIONS / OBSERVATIONS

- **Improve:** The downspouts should be piped away from the foundation so that they discharge water at least ten (10) feet from the house or into an underground drainage system to prevent moisture infiltration into the basement and settlement of the foundation (see photo #4). Recommend using smooth wall piping as opposed to the black ribbed piping, which is more prone to blockages. Storm water should be encouraged to flow away from the building at the point of discharge.
- **Improve:** It is recommended that a gutter and downspout (or discharge spout) be installed around the edge of the front bay roofing to avoid letting water run over the front face of the wood trim and windows, which poses a risk for future wood rot and leaks.

LIMITATIONS OF ROOFING INSPECTION

As described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Not all of the underside of the roof sheathing can be inspected for evidence of leaks. Evidence of prior leaks may be disguised by interior finishes.
- Estimates of remaining roof life are approximations only and do not preclude the possibility of leakage. Leakage can develop at any time and may depend on rain intensity, wind direction, ice build up, and other factors.
- Roof inspection may be limited by access, condition, weather, or other safety concerns.
- Portions of the roof were viewed from the ground using binoculars. Some sections of the roof could not be viewed.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Exterior Components

DESCRIPTION OF EXTERIOR

Wall Covering:	•Brick •Fiber Cement Siding
Exterior Doors:	•Composite •Raised Panel •Metal •French Doors •Dead Bolts
Window/Door Frames and Trim:	•Wood
Entry Driveways, Walkways, Patios:	•Concrete
Porches, Decks, Steps, Railings:	•Concrete / Brick (at front stoop) •Covered Wood Deck – Treated Pine (at rear) •Wood Handrailings
Overhead Garage Door(s):	•Steel •Automatic Opener Installed (electric eye reversing mechanism)
Surface Drainage:	•Graded Away From House
Retaining Walls:	•Brick •Concrete (Assumed – Not Visible)
Fencing:	•None

EXTERIOR OBSERVATIONS

Overall, the exterior of the home appears to be well constructed with only minor repairs/improvements recommended. The exterior fiber cement siding that has been installed on the house is relatively low maintenance. The rear wood deck appears to be well-built and is in good condition (roofing structure for the deck was under construction at the time of the inspection). The lot drainage was good, conducting surface water away from the building. The driveway and walkways are in good condition.

The steel garage doors as noted are low maintenance units and provide good protection against weather damage. The auto reverse mechanism on the overhead garage door responded properly to testing. This safety feature should be tested regularly as a door that doesn't reverse can injure someone or damage vehicles. Refer to the owner's manual or contact the manufacturer for more information.

RECOMMENDATIONS / OBSERVATIONS

- **Repair:** All utility penetrations and outlet boxes should be caulked and sealed to prevent moisture intrusion into the structure and to protect the wiring (e.g. as noted at A/C disconnects on right side – see photo # 5). Make sure all other penetrations in the exterior veneer are well caulked and sealed.
- **Improve:** There was no flashing over the column caps at the front roof structure to protect the woodwork from moisture infiltration and damage. Recommend installing this flashing to cover all wood trim as needed. All railing components in this area should be kept well painted as they are highly susceptible to weather damage in the future.
- **Improve:** The grade is in contact with the base of the support wood posts for the deck, which can cause moisture and termite damage in the long term. Make sure the footings for the posts are in place and extend at least 2" above the ground to keep the bottoms of the posts dry and free from soil contact.

Discretionary Improvements

The lawn irrigation system was turned on only briefly (a complete testing of the system is not within the scope of this inspection). Recommend having the system fully tested by the lawn irrigation installation company to make adjustments as necessary for a full coverage of all landscaping components. Make sure all heads next to the foundation are directed away from the structure to prevent damage to wood components and to prevent moisture infiltration into the basement. Consider relocating heads away from the foundation altogether.

LIMITATIONS OF EXTERIOR INSPECTION

As described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- A representative sample of exterior components was inspected rather than every occurrence of components.
- The inspection does not include an assessment of geological, or hydrological conditions, or environmental hazards.
- The identification and inspection of possible underground facilities such as underground storage or fuel tanks and underground service lines or piping is not included in this inspection.
- Screening, shutters, awnings, or similar seasonal accessories, fences, recreational facilities, and outbuildings are not inspected unless specifically agreed-upon and documented in this report. Access below the rear deck was restricted due to low headroom.
- Keys were not available for the testing of all locks and dead bolts.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Electrical System

DESCRIPTION OF ELECTRICAL SYSTEM

Size of Electrical Service:	•120/240 Volt Main Service - Service Size: 200 Amps
Service Drop:	•Underground
Service Entrance Conductors:	•Aluminum - 4/0 AWG
Service Equipment & Main Disconnects:	•Main Service Rating 200 Amps •Breaker •Located: Next to the Meter
Service Grounding:	•Copper •Ground Rod Connection
Service Panel & Overcurrent Protection:	•Panel Rating: 200 Amps •Breakers •Located: In the Basement
Sub-Panel(s):	•Panel Rating: 100 Amps •Breakers •Located: At outdoor A/C units •Service Size: 60 Amps
Distribution Wiring:	•Copper •Aluminum-Multi-Strand (240v circuits only)
Wiring Method:	•Non-Metallic Cable "Romex"
Switches & Receptacles:	•Grounded
Ground Fault Circuit Interrupters:	•Bathrooms •Exterior •Garage •Kitchen •Basement
Smoke Detectors:	•Present (Hard Wired)

ELECTRICAL OBSERVATIONS

The size of the service (200 amps) appears to be sufficient for typical electrical requirements. Ground fault circuit interrupter (GFCI) devices have been provided in some areas of the home. These devices are extremely valuable, as they offer an extra level of shock protection. "Arc-fault" breakers have also been installed on the bedroom circuits, which provide added protection against faulty wiring. In all, the electrical system appears to be in good condition, with final repairs and completion needed by the electrician.

RECOMMENDATIONS / OBSERVATIONS

- **Repair, Safety Issues:** *Electrical repairs are needed, which should be performed by a licensed electrician for improved safety.*
 - *A ground fault circuit interrupter (GFCI) outlet as noted at the lower left basement door (at the exterior) did not reset properly with the reset button on the outlet. The receptacle should be replaced as necessary for proper protection and operation of the affected outlet(s).*
 - *The installation of "arc-fault" breakers for the bedroom circuits is now required by present day codes, which provides added protection against faulty wiring (see NEC 210-12b). The outlets in the master bedroom area did not shut off when the "arc-fault" breakers in the panel were tripped. Consult with the electrician concerning the installation of these devices for proper protection of these circuits.*
- **Improve, Safety Issue:** Current codes now require carbon monoxide alarms in all sleeping areas and are recommended for proper safety.
- **Monitor:** The reset button for the GFCI outlets located in the upstairs bathrooms is located in the main floor powder room.

LIMITATIONS OF ELECTRICAL INSPECTION

As described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Electrical components concealed behind finished surfaces are not inspected. Only a representative sampling of outlets and light fixtures were tested. Exterior lighting can not always be fully tested due to the lack of clear identification of the switches and/or motion detectors that may control the lights.
- The inspection does not include remote control devices, alarm systems, telephone and cable TV wiring, low voltage lighting, stereo wiring, and other components which are not part of the primary electrical power distribution system.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Heating System

DESCRIPTION OF HEATING SYSTEM

Energy Source:	•Gas •Electricity
Heating System Type:	•Forced Air Gas Furnace (for main floor) •Electronic Ignition •BTUh Input: 60,000 •Heat Pump (for second floor) •2 Systems total (1 per floor) •Manufacturer: Carrier
Vents, Flues, Chimneys:	•Plastic
Heat Distribution Methods:	•Ductwork
Other Components:	•Attic Furnace Overflow Pan with Drain/Float Switch

HEATING OBSERVATIONS

The new furnaces appear to be in good condition. The typical life for units such as this is 15-20 years based on proper maintenance scheduling. Obtain operating and extended warranty information for this equipment from the builder. Final cleaning and servicing is needed by the HVAC contractor.

The heating for the second floor is provided by a “heat pump” system. This system uses only electricity for its power source and employs the outdoor air compressor and freon piping systems to generate its heat. The supply air provided by heat pumps may feel cooler than a gas fired furnace, however, this does not necessarily indicate that the system is not functioning properly. Most systems provide “emergency” electric resistance heating for back-up heating in extreme conditions. As with all heating systems, heat pumps should be checked and serviced on a regular basis.

RECOMMENDATIONS / OBSERVATIONS

- **Repair:** *The heating and air conditioning systems should be serviced, cleaned, and checked by the HVAC subcontractor before closing (see comment in “Cooling” Section). The gas heating system has not been started up and could not be tested due to the lack of gas service. The heat pump system should also be serviced and cleaned (this system also could not be tested – see comment in “Limitations”). The furnaces and A/C coils should be cleaned for proper efficiency.*

Discretionary Improvements

The installation of a more efficient air filtration system (i.e. the “Space-Gard” system) would help keep the air cleaner and freer from dust and allergy causing agents.

LIMITATIONS OF HEATING INSPECTION

As described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- The adequacy of heat supply or distribution balance is not analyzed. The interior of the ductwork is not analyzed for air quality control purposes.
- The interiors of flues or chimneys, which are not readily accessible, are not inspected.
- The heat exchanger on a gas furnace is only partly visible and cannot be fully inspected.
- The proper operation of humidifiers, float switches, condensate pumps, electronic dampers, and electronic air filters cannot be verified in a one time visit.
- The gas heating system was shut off and could not be operated at the time of the inspection. The heat pump for the second floor was operated in the cooling mode only to avoid stress on the system.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Cooling System

DESCRIPTION OF COOLING SYSTEM

Energy Source:	•Electricity •240 Volt Power Supply
Central System Type:	•Air Cooled Central Air Conditioning •Manufacturer: Carrier
	•Location of Outdoor Condensing Unit(s): Right Yard
	•Tonnage Capacity: 4.5 Tons Total (1 ton serves approximately 500-600 SF)
Other Components:	•Condensate Pump

SYSTEM OBSERVATIONS

The air conditioning components appear to be in good order and should last approximately 12-15 years. Regular maintenance will, of course, be necessary. Obtain all warranty and maintenance information from the builder. Servicing and repairs are need for the air conditioning components, which should be performed by the heating and air conditioning service company.

RECOMMENDATIONS / OBSERVATIONS

- **Repair:** *The temperature drop measured across the evaporator coil of the upstairs air conditioning system was lower than normal (input was 80 degrees, output was 70 degrees, 15-20 degree differential is normal). This usually indicates that final servicing is needed. The heating and cooling technician should be consulted to further evaluate this condition and the remedies available. The freon levels in both systems should be checked and the systems tested for leaks.*
- **Repair:** *The outdoor unit of the air conditioning system is out of level (larger unit – see photo # 7). This condition should be corrected to allow for proper operation of the fan motor and compressor.*
- **Improve:** The discharge location of the condensate line as noted at the outdoor unit(s) should be improved so that it discharges at least 10 feet from the foundations to prevent damage to the unit(s) and unnecessary moisture near the structure (see photo #8).

LIMITATIONS OF COOLING SYSTEM INSPECTION

As described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- The cooling supply adequacy or distribution balance is not analyzed.
- Freon levels and pressure balances are not checked.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Insulation / Ventilation

DESCRIPTION OF INSULATION / VENTILATION

Attic Insulation:	•R30 Fiberglass in Main Attic
Exterior Wall Insulation:	•Not Visible (R13 assumed)
Basement Insulation:	•R13 Fiberglass
Vapor Retarders:	•Unknown
Roof Ventilation:	•Gable Vents •Soffit Vents •Roof Vents
Exhaust Fan/vent Locations:	•Bathroom •Dryer

INSULATION / VENTILATION OBSERVATIONS

As is the case with most newer construction, this is a well insulated home. A certificate of insulation values was noted in the attic. Insulated windows and doors as noted help in preventing excessive heat gain and loss through these components.

RECOMMENDATIONS / ENERGY SAVING SUGGESTIONS

- **Improve:** Consider improving the attic insulation to R38, for better heating and cooling efficiency in the future.

LIMITATIONS OF INSULATION / VENTILATION INSPECTION

As described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Insulation/ventilation type and levels in concealed areas are not inspected. Insulation and vapor barriers are not disturbed and no destructive tests (such as cutting openings in walls to look for insulation) are performed.
- Potentially hazardous materials such as Asbestos and Urea Formaldehyde Foam Insulation (UFFI) cannot be positively identified without a detailed inspection and laboratory analysis. This is beyond the scope of the inspection.
- An analysis of indoor air quality is not part of our inspection unless explicitly contracted-for and discussed in this or a separate report.
- Any estimates of insulation R values or depths are rough average values.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Plumbing System

DESCRIPTION OF PLUMBING SYSTEM

Water Supply Source:	•Public Water Supply
Service Pipe to House:	•Plastic (as noted at front foundation wall only)
Main Water Valve Location:	•Front Wall of Basement (see photo # 9)
Interior Supply Piping:	•Copper •Plastic (PEX) •Pressure Reducing Valve (PRV): Located at Main Water Shut-off
Waste System:	•Water Pressure (at exterior faucet): 60 psi (40-80 psi is normal)
Drain, Waste, & Vent Piping:	•Public Sewer System (assumed - consult with seller) •Plastic •Cleanout Location: Lower Right Yard
Water Heater(s):	•Electric •Approximate Capacity (in gallons): 66 •Manufacturer: State •Age: 1 year (typical life is 7-12 years) •Location: Basement •Expansion Tank
Fuel Shut-Off Valves:	•Natural Gas Main Valve At Gas Meter (located: Left Side Yard)

PLUMBING OBSERVATIONS

The plumbing fixtures within the home are of good quality, which improves the function of the fixtures while reducing maintenance. The water pressure supplied to the fixtures is reasonably good. A typical drop in flow was experienced when two fixtures were operated simultaneously. No visible signs of leakage were noted in the plumbing system.

RECOMMENDATIONS / OBSERVATIONS

- **Repair:** *The kitchen sink and main floor bathtub appear to drain slowly, suggesting that obstructions may exist in the lines. These should be checked and cleaned by the plumber as necessary for proper flow.*
- **Monitor, Possible Repair:** *It appears that there is no supply control handle for the hot water supply for the dishwasher (see photo #10 – at arrow). The dishwasher did not function properly possibly due to this condition (see “Appliance/ Fireplace” Section). The plumber should investigate and repair as necessary.*

LIMITATIONS OF PLUMBING INSPECTION

As described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Portions of the plumbing system concealed by finishes, below the structure, or beneath the ground surface are not inspected.
- Water quantity and quality standards are contingent on local municipality systems and are not tested.
- Water conditioning systems, solar water heaters, fire and lawn sprinkler systems, and private waste disposal (septic tank) and water (well) systems are not inspected.
- With new construction such as this, latent plumbing leaks and blockages in the sewer lines cannot always be identified at the time of the inspection.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Interior Components

DESCRIPTION OF INTERIOR

Wall And Ceiling Materials:	•Drywall •Wainscoat Paneling (in Dining Room)
Floor Surfaces:	•Carpet •Tile •Vinyl/Resilient •Wood
Window Type(s) & Glazing:	•Double/Single Hung •Fixed Pane •Double Glazed •Tilt-out Sashes
Doors:	•Masonite-Hollow Core •Raised Panel

INTERIOR OBSERVATIONS

On the whole, the interior finishes of the home are in generally good condition. The condition of the floor and bath/shower surround tile is good and is generally well sealed to prevent damage to floor and wall structures. The kitchen cabinets and counters are of generally good quality.

The interior finishes need final punch out and completion, especially drywall and painting finishes. Conduct a walkthrough with the builder to assure that all finishes are satisfactory.

RECOMMENDATIONS / OBSERVATIONS

- **Repair:** Escutcheon plates, sealed and caulked, are needed under the cabinets at all pipe penetrations to prevent moisture intrusion into the structure (see photo #10 – at circled area). Make sure all escutcheons in the bath and shower surrounds are also caulked and sealed.
- **Repair:** Damage and/or holes were noted in the walls (e.g. at the back wall of the kitchen – see photo #11), which should be repaired and repainted.
- **Repair:** Some of the windows are painted or otherwise stuck shut. Causing the windows to open properly throughout the house will improve ventilation and functionality. The builder should check all windows for proper operation and function before closing.
- **Repair:** The shower door in the master bathroom scrapes at the bottom and needs adjustment.
- **Improve:** Keys were not available to test the locks. Be sure to obtain all keys for proper operation of the locks. Also obtain all automatic garage door openers (if available). Consider re-keying all exterior locksets upon taking possession of the home.
- **Improve:** Recommend operating a dehumidifier in the basement area 24/7 to reduce unwanted humidity build-up, which can cause mold and mildew growth.

LIMITATIONS OF INTERIOR INSPECTION

As described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions

- Construction storage and/or debris and appliances are not moved to permit inspection and may block defects.
- Carpeting, window treatments, central vacuum systems, household appliances, recreational facilities, paint, wallpaper, and other finish treatments are not inspected.
- Recent interior painting concealed historical evidence of leaks and settlement.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Appliances / Fireplaces

DESCRIPTION OF APPLIANCES / FIREPLACES

Appliances Tested:	•Gas Cooktop (could not test – no gas) •Microwave Oven
Laundry Facility:	•Built-in Electric Oven(s) •Dishwasher •Waste Disposal •240 Volt Circuit for Dryer (4 Pronged Plug) •Dryer Vented to Building Exterior •Waste Standpipe for Washer •Laundry Sink Stub-in (not installed)
Fireplace(s):	•Steel Firebox with Masonry Insert •Gas Starter(s) •Damper(s)
Other Components:	•Door Bell

APPLIANCE / FIREPLACE OBSERVATIONS

The appliances that have been installed in the kitchen are good quality and appear to be in good condition. Several repairs for the appliances are recommended, which should be performed by a qualified appliance repair company. Obtain manufacturer's extended warranties on all appliances.

RECOMMENDATIONS / OBSERVATIONS

- **Repair, Safety Issue:** *The gas piping at the fireplaces should be grouted and sealed where it passes through the outside walls of the fire chamber according to manufacturer's recommendations. All openings and gaps at the hearth and surround materials should also be grouted and sealed to the metal facing of the fireplace. Check with the builder concerning the proper operation of the gas starter as the gas was not on at the time of the inspection, which prevented the testing of this appliance.*
- **Repair:** *Several kitchen appliance repairs are needed. The dishwasher did not cycle properly (does not appear to be getting hot water – see "Plumbing" Section) and should be checked and repaired as necessary. The waste disposal appears to be frozen. The unit should be checked and repaired or replaced as necessary. The gas cook-top could not be tested (no gas).*
- **Repair:** *The knock-out for the drain line at the washing machine hook-up needs to be removed for proper insertion of the drain hose.*
- **Improve:** Recommend installing a metal overflow pan connected to a drain line under the washing machine to prevent damage to interior finishes from possible leaks at the washing machine. A better solution would be to install a tiled floor with a curb and floor drain. Recommend installing metal braided hoses for the water connections for added protection.

LIMITATIONS OF APPLIANCE / FIREPLACE INSPECTION

As described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions

- Thermostats, timers and other specialized features (e.g. self-cleaning mechanisms) and controls are not tested. The temperature calibration, functionality of timers, effectiveness, efficiency and overall performance of appliances is outside the scope of this inspection.
- Dishwashers (if tested - see above) are checked by running these appliances through their normal cycles and inspecting for leaks only. There was no washing machine or dryer available to test the vent and drain lines.
- The interiors of flues or chimneys are not inspected. Wood and ashes in the firebox may restrict the inspection.
- The inspection does not involve igniting or extinguishing fires nor the determination of draft.
- There was no washing machine or dryer available to test the vent and drain lines.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Appendix A - Maintenance Advice

UPON TAKING OWNERSHIP

After taking possession of a new home, there are some maintenance and safety issues that should be addressed immediately. The following checklist should help you undertake these improvements:

- Change the locks on all exterior entrances, for improved security.
- Check that all windows and doors are secure. Improve window hardware as necessary. Security rods can be added to sliding windows and doors. Consideration could also be given to a security system.
- Install smoke detectors on each level of the home. Ensure that there is a smoke detector outside all sleeping areas. Replace batteries on any existing smoke detectors and test them. Make a note to replace batteries again in one year.
- Create a plan of action in the event of a fire in your home. Ensure that there is an operable window or door in every room of the house. Consult with your local fire department regarding fire safety issues and what to do in the event of fire.
- Install carbon monoxide detectors near all furnaces, water heaters, gas ovens, and any other gas appliances to warn occupants of possible carbon monoxide emissions.
- Examine driveways and walkways for trip hazards. Undertake repairs where necessary.
- Examine the interior of the home for trip hazards. Loose or torn carpeting and flooring should be repaired.
- Undertake improvements to all stairways, decks, porches and landings where there is a risk of falling or stumbling.
- Label all furnace shut-off switches (switch closest to the furnace) to prevent someone from shutting off the furnace by accident. Label all plumbing shut-off valves for proper identification (consult with seller concerning exact locations).
- Install rain caps and vermin screens on all chimney flues, as necessary.
- Check all dryer flue vents for lint build-up in the line, which can cause damage and possible fires at the dryer element. Flexible piping should be replaced with rigid smooth wall piping, which is less prone to blockages.
- Investigate the location of the main shut-offs for the plumbing, heating and electrical systems. If you attended the home inspection, these items would have been pointed out to you. If you are leaving the home for extended periods of time (i.e. during vacations), it is recommended that the water to the house be shut off to prevent damage to interior finishes from possible plumbing leaks.

REGULAR MAINTENANCE

EVERY MONTH

- Check that fire extinguisher(s) are fully charged. Re-charge if necessary.
- Examine heating/cooling air filters and replace or clean as necessary. Inspect and clean humidifiers and electronic air cleaners, if present.
- Clean gutters and downspouts. Ensure that downspouts are secure, and that the discharge of the downspouts is appropriate (i.e. ten feet away from the foundation). Remove debris from window wells, if present.
- Carefully inspect the condition of shower enclosures. Repair or replace deteriorated grout and caulk. Ensure that water is not escaping the enclosure during showering.
- Clean and sanitize all whirlpool tub jet supply piping to reduce the chance of bacteria growth in the lines, which can cause infections. This can be achieved by running bleach through the system (refer to manufacturer's recommendations).
- Check below all plumbing fixtures for evidence of leakage. Repair or replace leaking faucets or shower heads. Secure loose toilets, or repair flush mechanisms that become troublesome.

SPRING AND FALL

- Have the heating and/or cooling and water heater systems cleaned and serviced. Have all furnace heat exchangers checked for cracks and damage. Consider having the ductwork cleaned and sanitized for better air quality.
- Examine the roof for evidence of damage to roof coverings, flashings and chimneys.
- Look in the attic (if accessible) to ensure that roof vents are not obstructed. Check for evidence of leakage, condensation or vermin activity. Level out insulation if needed.
- Trim back tree branches and shrubs to ensure that they are not in contact with the house.
- Inspect the exterior walls and foundation for evidence of damage, cracking or movement.
- Watch for bird nests in vents and flues and other signs of vermin or insect activity within the attic, crawlspace, or basement. Survey the basement and/or crawl space walls for evidence of moisture seepage.
- Look at overhead wires coming to the house. They should be secure and clear of trees or other obstructions.
- Ensure that the grade of the land around the house encourages water to flow away from the foundation.
- Inspect all driveways, walkways, decks, porches, and landscape components for evidence of deterioration, movement or safety hazards.
- Clean windows and test their operation. Improve caulking and weather-stripping as necessary. Watch for evidence of rot in wood window frames. Paint and repair windowsills and frames as necessary.
- Test all ground fault circuit interrupter (GFCI) devices, as identified in the inspection report.
- Shut off isolating valves for exterior hose bibs in the fall, if below freezing temperatures are anticipated.
- Test the Temperature and Pressure Relief (TPR) Valve on water heaters.
- Inspect for evidence of wood boring insect activity. Eliminate any wood/soil contact around the perimeter of the home.
- Test the overhead garage door opener, to ensure that the auto-reverse mechanism is responding properly. Clean and lubricate hinges, rollers and tracks on overhead doors.
- Replace or clean exhaust hood filters. Clean, inspect and/or service all appliances as per the manufacturer's recommendations.

ANNUALLY

- Replace smoke detector batteries.
- Have chimneys inspected and cleaned. Ensure that rain caps and vermin screens are secure.
- Examine the electrical panels, wiring and electrical components for evidence of overheating. Ensure that all components are secure. Flip the breakers on and off to ensure that they are not sticky.
- If the property has a septic system, have the tank inspected (and pumped as needed).
- If your home is in an area prone to wood destroying insects (termites, carpenter ants, etc.), have the home inspected by a licensed specialist. Preventative treatments may be recommended in some cases. Put in place a "Structural Repair" bond on the home, which will cover any structural damage caused by wood destroying insects.

PREVENTION IS THE BEST APPROACH

Preventative maintenance is the best way to keep your house in great shape. It also reduces the risk of unexpected repairs and improves the odds of selling your house at fair market value, when the time comes.

Please feel free to contact our office should you have any questions regarding the operation or maintenance of any components within the house. We at The Cornerstone Inspection Group hope you enjoy your home!

Appendix C - Photographs



Sample - Front View



Sample - Rear View



Sample (1)



Sample (2)



Sample (3)



Sample (4)



Sample (5)



Sample (6)



Sample (7)



Sample (8)



Sample (9)



Sample (10)



Sample (11)



Sample (12)