

## **Building Inspection Report**



Rd., Brentwood TN 37027

Inspection Date: February 19, 2007

### **Prepared For:**



Prepared By:
BJK Property inspections, Inc.
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Report Number: RN021907PD

Inspector: Dan Billington TN Lic. #109



### BJK Property Inspections, Inc. 4282 Pate Road Franklin, TN 37064 Off. (615) 591-6870 Fax (615) 591-6875



**Inspection Address:** 

Rd., Brentwood TN 37027

Report Number: RN021907P

February 19, 2007

Dear Rick & Amy,

At your request, an inspection of the above property was performed on February 19, 2007.BJK Property Inspections is pleased to submit the enclosed report. This report is a professional opinion based on a visual inspection of the accessible components of the home. This report is not an exhaustive technical evaluation. An evaluation of this nature would cost many times more.

Please understand that there are limitations to this inspection. Many components of the home are not visible during the inspection and very little historical information is provided in advance of the inspection. While we can reduce your risk of purchasing a home, we cannot eliminate it, nor can we assume it. Even the most comprehensive inspection cannot be expected to reveal every condition you may consider significant to ownership. In addition to those improvements recommended in our report, we recommend that you budget for unexpected repairs. On average, we have found that setting aside roughly one percent of the value of the home on an annual basis is sufficient to cover unexpected repairs.

Your attention is directed to your copy of the Pre-Inspection Agreement. It more specifically explains the scope of the inspection and the limit of our liability in performing this inspection. The Standards of Practice and Code of Ethics of the American Society of Home Inspectors (ASHI®) prohibits us from making any repairs or referring any contractors. We are not associated with any other party to the transaction of this property, except as may be disclosed to you.

The information provided in this report is solely for your use. BJK Property Inspections will not release a copy of this report without your written consent.

Thank you for selecting our company. We appreciate the opportunity to be of service. Should you have any questions about the general condition of the house in the future, we would be happy to answer these. There is no fee for this telephone consulting. Our fees are based on a single visit to the property. If additional visits are required for any reason, additional fees may be assessed.

Sincerely,

Bill Gunther, BJK Property Inspections, Inc.



## **Report Overview**

#### THE HOUSE IN PERSPECTIVE

This is an average quality, 33 year old home (approximate age) that has been lacking maintenance somewhat. Apart from the short term need to deal with this lacking maintenance, *the improvements that are recommended in this report are not considered unusual for a home of this age and location.* Please remember that there is no such thing as a perfect home.

#### **CONVENTIONS USED IN THIS REPORT**

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

**Major Concern:** denotes a system or component which is considered significantly deficient or is unsafe. Significant deficiencies need to be corrected and, except for some safety items, are likely to involve significant expense.

Safety Issue: denotes a condition that is unsafe and in need of prompt attention.

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

**Improve:** denotes improvements which are recommended but not required.

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

**Information:** denotes a detail or condition present, a standard building practice or requirement, a general maintenance tip or suggestion, or other information which does not require action.

Please note that those observations listed under "Discretionary Improvements" are not essential repairs, but represent logical long term improvements.

#### LOCATIONS TO REMEMBER

Water Meter/Main	In the front lawn area	
Water Turn-off In crawl space		
Gas Meter	Right side of house	
Electrical Service	Left side of house	
Electrical Disconnect	In main panel in basement	

- For the purposes of this report outside directions are given as if facing the building.
- For the purpose of this report, it is assumed that the house faces east.

#### **WEATHER CONDITIONS**

Dry weather conditions prevailed at the time of the inspection. The estimated outside temperature was 53 degrees F.

#### RECENT WEATHER CONDITIONS

Winter weather conditions have been experienced in the days leading up to the inspection.

#### PRESENT AT THE INSPECTION

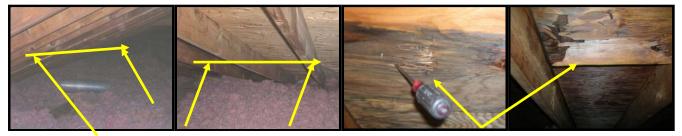
• Dan Billington • The Company of th

#### IMPROVEMENT RECOMMENDATION HIGHLIGHTS / SUMMARY

The following is a synopsis of the potentially significant improvements that should be budgeted for over the short term. Other significant improvements, outside the scope of this inspection, may also be necessary. Please refer to the body of this report for further details on these and other recommendations.

### **Structural Components**

- Major Concern: Repair: Rafter bounce was experienced in several locations while walking of the roof during the inspection. The condition was particularly bad in the locations of the old roof vents. Upon further inspection it is noted that there are no purlins or purlin braces installed under the rafters in the attic. It is recommended that this condition be examined by a qualified contractor to make recommendations for proper repairs.
- **Repair:** Some of the roof decking of the home is deteriorated and should be properly replaced. It is recommended that the roof decking be examined and any damaged decking replaced when the roof is replaced. (See roofing section)



- **Repair:** There is a main valley rafter support that is bowing from the weight. It is recommended that the valley rafter at the back slope of the house be properly supported.
- **Repair:** There are a couple of jack rafters in the same location as the valley rafter that are cracked. It is recommended that all cracked or damaged rafters be properly repaired.







• Repair: Additional block columns were added in various locations in the crawl space to fix what is suspected to be floor

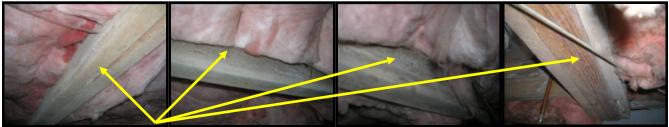
bounce. Generally to eliminate "bounce" in floors it is best to install a support in the center of the span of the joists, thus effectively cutting the span of such joists in half. I usually prefer a beam (2 length of 2" x 8" lumber with a piece of plywood between them nailed together) installed along the middle of the span with a jack-post at each end about 18" in from the end of the beam. The jack-posts should be well founded on a cementacious base. (a solid concrete block will do) A structural





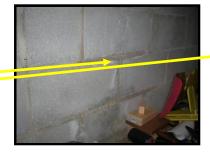
engineer or licensed general contractor should be consulted for details of such repairs. It is recommended that the floor bounce be properly repaired.

• Safety Issue: A mold type growth is visible on some of the floor joists in the crawl space. The level of mold growth is moderate. The presence of certain mold and mold spores in housing can result in mild to severe health effects in humans and pets and can deteriorate the structure of the dwelling resulting in structural damage. Health effects include, but are not limited to: sinus congestion, blurry vision, sore throat, dry cough, aches and pains, skin irritation, bleeding of the lungs, headaches, memory loss and fever. As humans vary greatly in their chemical make-up, so does the individual's reaction to mold exposure. For some people, a small number of mold spores can cause ill effects. In others it may take more. Because mold can adversely affect your health, it is BJK's Company policy to recommend that a sample be taken and sent to the laboratory to determine the type(s) of mold that are present to help determine the proper course of action to be taken. Because of the amount of mold type growth present it is recommended that a professional be engaged to mitigate the mold.



- **Monitor:** There is evidence of minor moisture damage under the end hall bathroom. No moisture was present at the time of this inspection but this area should be monitored for additional damage.
- Improve: Information: Along the back corner wall behind the garage and in places on the block crawl space wall there is evidence of water penetrating the block work and there is some efflorescence on the block work. Efflorescence is a white crystalline or powdery, often fluffy/fuzzy deposit on the surface of masonry materials like concrete, brick, clay tile, etc. It's caused by water seeping through the wall/floor/object. The water dissolves salts inside the object while moving through it, and then evaporates leaving the salt on the surface. This indicates that the grading just above this area should be checked and re-graded or downspouts redirected from this area as necessary.







• Repair: Possible moisture intrusion was observed at the base of the inside corners of the garage. It is suspected that surface water is infiltrating these areas. Addressing the lot and gutter drainage should help to correct the condition. (See roofing section)



- Information: Repair: Floors are generally framed with solid-sawn lumber, floor trusses, or wood I-joists. Joist end-bearing should not be less than 1-1/2" on wood or metal, or 3" on masonry. Joists should be attached to the girders or beams by means of joist hangers, or toe-nailed into girders with a ledger. Face nailing alone is not sufficient to carry the load of the floor joist and it is required that 3- 16D penny nails be installed under each floor joist through the ledger. The ledger boards





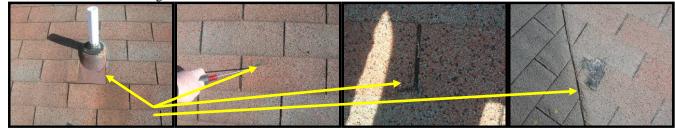
installed under the floor joists in the crawl space were not properly nailed with 3 - 16D penny nails under each joist as required. This condition should be corrected.

• **Improve:** Moisture was observed on the crawl space floor. It is recommended that lot and gutter drainage issues be addressed to help maintain a dry crawl space. (See roofing section)



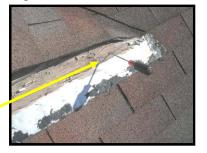
### **Roofing System**

• **Repair:** The roof shingles are 15 years old and have reached the end of their useful life. There are a number of damaged or broken shingle tabs and the plumbing vent boots appear to be deteriorating. It is recommended that it be replaced. It is also recommended that the roof be stripped before installing a new roof surface which will help locate any damaged or deteriorated roof decking.



• **Repair:** The wood roof vents are deteriorated. It is recommended that they be replaced during the roofing process. (See insulation and ventilation section of this report.







• Improve: It is important to divert water away from the foundation of the home with a gutter and downspout system that is kept clean and in good repair. It is recommended that all downspouts be extended with plastic diverter tubes to channel water at least 4 to 5 feet away from the building. This is important for helping to maintain a dry crawl space. Downspouts which discharge onto cement should have splash blocks beneath them.





### **Exterior Components**

• Repair: There are several settlement cracks in the cement driveway and sidewalks. It is recommended that they be filled to prevent moisture from entering and eroding the surface beneath the cement which will lead to additional cracking. Sonneborn and Trimco make some excellent long lasting products to help seal such cracks. Exterior Materials, 665 Wedgewood Ave. Nashville, TN (near the State Fair Grounds) carries Sonneborn and Trimco products. The drive entrance is severely deteriorated and cracked and may have to be replaced.



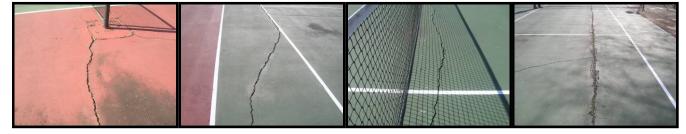
- Safety Issue: Improve: The steps leading to the front porch have settled into the ground significantly resulting in a rather large rise 11 inch between the top step and the porch surface. Generally, the maximum height distance between steps should be no greater than 7 ¾." This is likely caused by poor site preparation and inadequate footing support under this section of concrete. It may be possible to raise this back to near original position by a process called concrete leveling, where stone "slag" is pumped under the step section which lifts the concrete up where needed. A-1 Concrete Leveling can be reached at 931-840-9451 or at www.a1concrete.com for more information.
- **Repair:** There are some settlement cracks in the cement of the garage floor apron. It is recommended that they be filled to prevent moisture from entering and eroding the surface beneath the cement which will lead to additional cracking. Sonneborn and Trimco make some excellent long lasting products to help seal such cracks.

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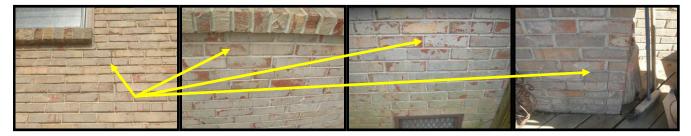




Major Concern: Repair: The asphalt surface of the tennis court is severely cracked and obviously moving. It is recommended that the tennis court be examined by a resurfacing professional to determine the appropriate corrective steps to be taken for proper repairs.



• **Repair:** There were a few minor cracks or deteriorated mortar joints in the brick veneer of the home. This is fairly common and not considered to be structurally significant. Obviously, these cracks should be sealed with caulk or mortar to keep out moisture and monitored for changes in character such as widening or displacement.

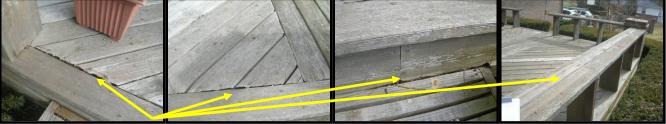


- Repair: The brick and railroad tie steps at the back of the
  house have settled and the ties are deteriorating. It is
  recommended that the brick steps at the back of the house be
  properly repaired.
- **Repair:** The brick at the top of the back left column of the back deck is deteriorated and should be repaired and properly sealed to prevent moisture intrusion for further deterioration.

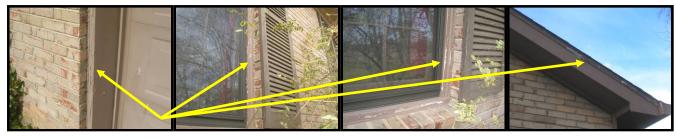




- **Repair:** The decking boards of the back deck are deteriorated in several places. It is recommended that all deteriorated decking boards be properly replaced.
- **Repair:** The ledger board at the back of the deck is deteriorated (by the back steps) and should be properly repaired.
- Improve: The back deck is at the point of needing to be stained to prevent moisture intrusion and further deterioration.
- **Information:** It should be noted that the bottom structural components of the back deck were inaccessible due to the brick foundation wall at its exterior. There may be additional damage that was not observable at the time of this inspection.



- **Repair:** The wood trim around the exterior of the home has reached the point where painting maintenance is required. Exterior wood trim on windows, dormers, chimneys, porch railings and columns, etc., must be kept well painted to prevent decay. Proper preparation including scraping, sanding and painting with a good quality paint will protect the wood and your investment.
- **Repair:** The fascia boards (the wooden board to which the gutter is typically fastened) and soffits (the horizontal wooden board between the building and the fascia) are at the point of needing paint and maintenance. Proper preparation including scraping, sanding and painting with a good quality paint will protect the wood and your investment.



- **Repair:** The left shutter of the far right window is damaged and should be properly repaired.
- Repair: Standard building practices require a grippable handrail where there is a rise of 30 inches or more, or 2 or more risers on stairs. Such handrail should be 34"- 38" high with a grippable rail that is between 1 1/4 and 2 5/8 wide. A proper handrail should be installed on the wood steps from the back deck to the driveway.
- **Repair:** The wood steps from the back deck to the lower driveway are deteriorated and should be properly repaired or replaced.
- **Monitor:** The brick wall at the back right side of the house is cracked at the joint to the house and is displaced. It is recommended that this crack be sealed and monitored for changes in character such as widening or further displacement.



- **Improve:** All shrubs and vegetation should be cut back away from the building at least 12 -24" to promote proper air circulation around the walls. Vines and other climbing plants can cause damage to exterior surfaces and should not be allowed to grow on the building. Such vegetation also prevents proper drying of the siding and provides a pathway for insect life which can cause damage to your home.
- **Repair:** The right garage door spring is damaged and the cables are loose and lying on the floor. It is recommended that the garage door be properly repaired and tested with the garage door opener. The left garage door was not operated due to personal belongings stacked against it. It is recommended that proper operation of this door be confirmed before closing.









### **Electrical System**

- Safety Issue: Improve: Since 1971 it has been a standard building practice for bathroom and exterior outlets to be GFCI protected. The exterior outlets are not protected as required.
- Safety Issue: Improve: Since 1975 it has been a standard building practice to have garage outlets be GFCI protected. The garage outlets are not so protected as required.
- Repair: Safety Issue: The ground fault circuit interrupter (GFCI) outlet in the kitchen did not trip when the test button was depressed or when a fault was placed on the line. The outlet is either defective or improperly wired. The outlet should be repaired or replaced as necessary.

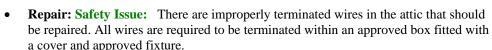


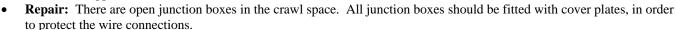




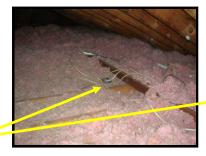
**Improve:** The main electrical panel does not have an appropriate legend (A list which identifies what each fuse or breaker protects.) Such legends help when repairs are

necessary or emergencies arise. The legend should be completed as soon as you occupy the home.











### **Heating System**

NOTE: Some *gas furnaces* have had problems with the heat exchanger getting holes and allowing flue gas, carbon monoxide etc., into the home. For units over 5 years old, it is recommended that before closing, an HVAC service company be engaged to check the heat exchanger for safety in the Rheem gas package unit, as we do not inspect heat exchangers. (Complete inspection requires disassembly on most units)

- **Information:** When operated in the heating mode of operation the Rheem gas package unit produced a temperature of 129 degrees and brought the ambient temperature to 66.6 degrees. This temperature differential indicated adequate performance.
- Major Concern, Monitor: Given the age of the Rheem gas package unit, it may be near the end of its useful life. You should reserve funds to be ready to purchase a new furnace.
- **Repair:** The skirt or cowl covering the ducts from the exterior HVAC unit is beginning to rust and deteriorate. This skirt should also be caulked to the exterior wall of the house and sealed to the HVAC unit. It is recommended that the HVAC

skirt be examined at the time the heat exchanger is checked and repaired or replaced as necessary.

• Safety Issue: Monitor: Rust was observed on the bottom of the heat exchanger in the Rheem gas package unit at the right side of the house. This is further evidence that the heat exchanger should be examined by an HVAC contractor.



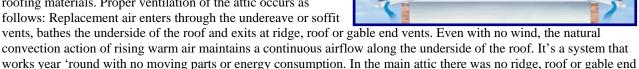


### Cooling/Heat Pump System

• **Information:** The Rheem package AC unit at the right side of the house was not operated in the cooling mode as the outside temperature was below recommended operating temperature. It may be wise to have the unit services and tested by a licensed HVAC contractor.

### Insulation / Ventilation

• Repair: The level of ventilation should be improved. It is generally recommended that one (1) square foot of free vent area be provided for every one hundred and fifty (150) square feet of ceiling area. Proper ventilation will help to keep the house cooler during warm weather and extend the life of roofing materials. Proper ventilation of the attic occurs as follows: Replacement air enters through the undereave or soffit



• Monitor: The power ventilators in the attic were not operated as there were no variable controls to operate. It is recommended that proper operation be verified when attic temperature allows.

vent for the hot air to escape from the attic.

- **Improve:** There is downed insulation in the crawl space which needs to be reinstalled.
- Improve: The moisture (vapor) barrier on the crawl space floor should be adjusted or improved to cover all areas of exposed soil. It currently covers only 85% of the ground.
- Repair: The gas range down draft pipe is extended through the front exterior wall vent of the crawl space effectively reducing the crawl space ventilation. It is recommended that the range top down draft be rerouted and the exterior wall vent repaired.



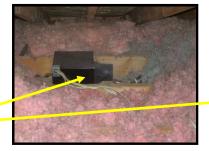






• **Repair:** All 3 of the bathroom ceiling vent fans vent into the attic. It is recommended that the vent fans be properly vented to the exterior of the house.







### Plumbing System

• Monitor: The Mor-Flo water heater in the basement is an old unit that may be approaching the end of its useful life. It would be wise to budget for a new unit. One cannot predict with certainty when replacement will become necessary.

• **Repair, Safety Issue: Information:** In houses which are built extremely tight (for energy conservation), ALL flame-heating systems should use outside combustion air. This includes the conventional house furnaces and water heaters. What this means is that the fire will use air that came from outdoors rather than air which came from inside



the house, which used to be the common procedure. In super-tight new houses, using house air doesn't work, because in order to use up some house air (and make it go up the chimney), OTHER, OUTSIDE air would have to get into the house to replace it. And the tight construction doesn't allow enough air leakage in to do this. The net effect could be that smoke wouldn't go UP the chimney, and if somebody turns on a bathroom ventilator or a kitchen exhaust fan, smoke may actually come back DOWN the chimney to replace THAT air that was leaving the house! There is no outside source of combustion air for the gas water heater located the back of the first floor closet. This is unsafe and needs immediate action. An adequate supply of combustion air is necessary for all fuel-burning appliances. Most appliances vent by gravity (their flue gasses are lighter than the air in



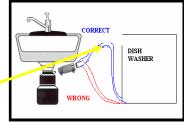
the environment where combustion takes place) so they naturally rise up a flue. Open draft hoods allow the intake of additional air to dilute the flue gasses. Air is also needed to vent and cool the appliances themselves. Three functions are then included in the topic of combustion air. They are air for combustion, dilution and ventilation. About 10 cubic feet of air is needed for combustion of one cubic foot of natural gas, in addition to the air needed for dilution and ventilation. The products of natural gas (methane) combustion are carbon dioxide and water vapor. An inadequate supply of combustion air can be very hazardous. If there is insufficient oxygen to fully burn the fuel at the correct temperature, deadly carbon monoxide will also be a product of combustion. If the air pressure in the appliance space is lower than that in the flue pipe, products of combustion might "spill" out of a draft hood and enter the interior environment. As houses are built tighter and to higher emergency-efficient standards, the building interiors do not have enough infiltration of fresh air to supply our combustion air, and an external source of supply becomes necessary. It is recommended that two openings, one within the upper 12 inches and one within the lower 12" of the room, to a source of exterior air be installed. Additional combustion air can usually be provided without difficulty or expense.

- **Repair:** There is no drip leg on the gas water heater in the back closet. A "drip leg" is normally required for gas appliance connections. This should be investigated.
- **Improve:** The sink in the end hall bath was observed to drain slowly, suggesting that an obstruction may exist. It is recommended that the sink be improved to drain properly.
- **Repair:** The faucet in the sink in the end family room is leaking. It is recommended that the faucet be repaired or
- **Improve:** It is important to maintain the caulking in and around the tub, along wall corners, floor and wall seams and around faucets and spouts to prevent moisture from getting into the subwall and floor. Damage can be caused if these areas are not well sealed and maintained. Presently some caulking improvements are necessary in the tub in the end hall bathroom.



**Improve:** The drain, from the dishwasher which connects to the drain under the kitchen sink, needs to be modified. Presently the drain rises up from the dishwasher to the drain. It needs to be re-routed to first run up above the drain and then downward to the drain. This rise is necessary to prevent water draining from the sink from backing up into the dishwasher.





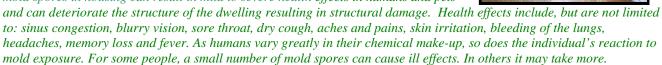
• **Repair:** Safety Issue: The fireplace in the back family room has cracks between the firebox and the stone face. There is also a crack between the hearth and the stone face and firebox. It is recommended that the chimney and fireplace be cleaned and inspected by a certified chimney sweep. It is additionally recommended that the fireplace be properly repaired to ensure safe operation. It is recommended that the fireplace not be used until the proper repairs are made.







- Repair: The wood floor in the entry way is damaged and should be properly repaired.
- **Repair:** Walls have been moved in the back middle bedroom leaving the wood floors un-repaired. It is recommended that the floors in the back bedroom be properly repaired.
- Safety Issue: There appears to be mold on the ceiling of the back bathroom by the shower. The growth appears to be minor. The presence of certain mold and mold spores in housing can result in mild to severe health effects in humans and pets



• **Repair:** Moisture stains were observed on the ceiling by the water heater vent. It is recommended that the roof flashing be checked and repaired and the ceiling properly repaired.



- Safety Issue: Improve: The back bedroom closet window did not open because they may be painted shut or do not fit properly in their frames. All windows should be brought to proper working order. In cases of emergency windows are often called upon to serve as a means of egress and should function as required.
- **Safety Issue: Improve:** The end window in the end family room and the kitchen windows did not stay open when raised. Some will drop swiftly toward the window sill. This can create a hazard for children and can impede the use of such windows as a means of egress in case of a fire. It is recommended that the tensioning springs be adjusted or replaced to bring the windows into proper working order.

• **Information:** It should be noted that the closet in the end family room is locked and should be opened and the condition of the closet inspected before closing.







- Safety Issue: Improve: All stairways are required to have grippable handrails installed. When they are partially open on
  - one or both sides, they are required to have a banister with balusters spaced no more that 4" apart to prevent a child from falling off the stairs to the ground. The railing on the steps to the basement should be improved.
- Repair: The upper oven in the kitchen is in poor condition and should be replaced.





#### 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 inspection follows the guidelines of the Standards of Practice required by the State of Tennessee Home Inspecting Licensing Act and the ASHI Standards of Practice and will also comment on certain items which may be addressed by the UBC, CABO, SBCCI, IRC, UPC, NEC or local codes which may or may not have been adopted for inclusion by your local codes.

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 better position to make a buying decision. Not all improvements will be identified during this inspection. Unexpected repairs should still be anticipated. The inspection should not be considered a guarantee or warranty of any kind.

The inspection report, including the limitations, Scope of Inspection, and the Pre-inspection Agreement must be carefully read to fully assess the findings of the inspection. This list is not intended to determine which items may need to be addressed per the contractual requirements of the sale of the property. Any areas of uncertainty regarding the contract should be clarified by consulting with an attorney or real estate agent. It is recommended that any deficiencies and the components/systems related to these deficiencies noted in the report be evaluated/inspected and repaired as needed by licensed contractors/professionals prior to closing of escrow. Further evaluation prior to close of escrow is recommended so a properly licensed professional can evaluate our concerns further and inspect the remainder of the system or component for additional concerns that may be outside our area of expertise or the scope of our inspection. Please call our office for any clarifications or further questions.

It is important to understand that the "Report Overview" is just that, an overview. It is important the entire report be read. Please read the entire report.



## **Structural Components**

#### **DESCRIPTION OF STRUCTURE**

Foundation: •Concrete Footer •Concrete Block •Basement and Crawl Space Configuration

**Columns:** •Steel •Concrete Block

Visible Drainage Components: 
•None Visible

Floor Structure: •Wood Joist • 2x10@16oc

Sillplate Anchors: • Appears to predate the requirement

Sub Flooring: •Plywood

**Wall Structure:** •Wood Frame, Brick Veneer

**Ceiling Structure:** •Joist • 2x6@16oc

**Roof Structure:** •Rafters • 2x6@16oc •Plywood Sheathing

Attic Access Location: •Pull Down Steps

#### STRUCTURE OBSERVATIONS

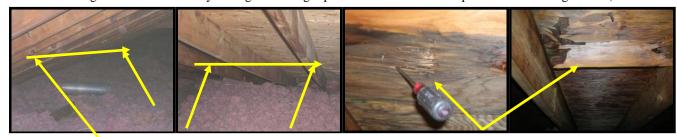
The construction of the home is considered to be average quality. The materials and workmanship, where visible, are average for this age home. The spans of all visible joists appear to be within acceptable limits.

Typical minor flaws were detected in the structural components of the building.

It is recommended the following issue(s) and related systems be further evaluated and addressed by a certified professional engineer or licensed general contractor.

#### **RECOMMENDATIONS / OBSERVATIONS**

- Major Concern: Repair: Rafter bounce was experienced in several locations while walking of the roof during the inspection. The condition was particularly bad in the locations of the old roof vents. Upon further inspection it is noted that there are no purlins or purlin braces installed under the rafters in the attic. It is recommended that this condition be examined by a qualified contractor to make recommendations for proper repairs.
- **Repair:** Some of the roof decking of the home is deteriorated and should be properly replaced. It is recommended that the roof decking be examined and any damaged decking replaced when the roof is replaced. See roofing section)

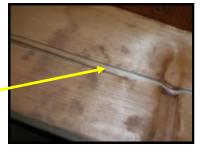


• **Repair:** There is a main valley rafter support that is bowing from the weight. It is recommended that the valley rafter at the back slope of the house be properly supported.

• **Repair:** There are a couple of jack rafters in the same location as the valley rafter that are cracked. It is recommended that all cracked or damaged rafters be properly repaired.





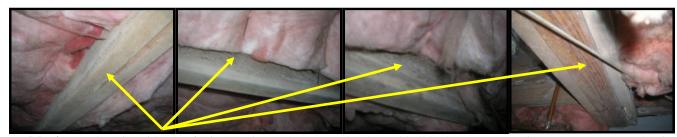


- **Repair:** Additional block columns were added in various locations in the crawl space to fix what is suspected to be floor bounce. Generally to eliminate "bounce" in floors it is best to install a support in the center of the span of the joists, thus
  - effectively cutting the span of such joists in half. I usually prefer a beam (2 length of 2" x 8" lumber with a piece of plywood between them nailed together) installed along the middle of the span with a jack-post at each end about 18" in from the end of the beam. The jack-posts should be well founded on a cementacious base. (a solid concrete block will do) A structural engineer or licensed general contractor should be consulted for details of such repairs. It is recommended that the floor bounce be properly repaired.





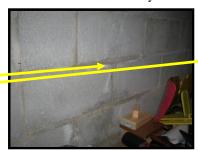
• Safety Issue: A mold type growth is visible on some of the floor joists in the crawl space. The level of mold growth is moderate. The presence of certain mold and mold spores in housing can result in mild to severe health effects in humans and pets and can deteriorate the structure of the dwelling resulting in structural damage. Health effects include, but are not limited to: sinus congestion, blurry vision, sore throat, dry cough, aches and pains, skin irritation, bleeding of the lungs, headaches, memory loss and fever. As humans vary greatly in their chemical make-up, so does the individual's reaction to mold exposure. For some people, a small number of mold spores can cause ill effects. In others it may take more. Because mold can adversely affect your health, it is BJK's Company policy to recommend that a sample be taken and sent to the laboratory to determine the type(s) of mold that are present to help determine the proper course of action to be taken. Because of the amount of mold type growth present it is recommended that a professional be engaged to mitigate the mold.



• **Monitor:** There is evidence of minor moisture damage under the end hall bathroom. No moisture was present at the time of this inspection but this area should be monitored for additional damage.

• Improve: Information: Along the back corner wall behind the garage and in places on the block crawl space wall there is evidence of water penetrating the blockwork and there is some efflorescence on the blockwork. Efflorescence is a white crystalline or powdery, often fluffy/fuzzy deposit on the surface of masonry materials like concrete, brick, clay tile, etc. It's caused by water seeping through the wall/floor/object. The water dissolves salts inside the object while moving through it, and then evaporates leaving the salt on the surface. This indicates that the grading just above this area should be checked and re-graded or downspouts redirected from this area as necessary.







• **Repair:** Possible moisture intrusion was observed at the base of the inside corners of the garage. It is suspected that surface water is infiltrating these areas. Addressing the lot and gutter drainage should help to correct the condition. (See roofing section)





- Information: Repair: Floors are generally framed with solid-sawn lumber, floor trusses, or wood I-joists. Joist end-bearing should not be less than 1-1/2" on wood or metal, or 3" on masonry. Joists should be attached to the girders or beams by means of joist hangers, or toe-nailed into girders with a ledger. Face nailing alone is not sufficient to carry the load of the floor joist and it is required that 3-16D penny nails be installed under each floor joist through the ledger. The ledger boards installed under the floor joists in the crawl space were not properly nailed with 3-16D penny nails under each joist as required. This condition should be corrected.
- Improve: Moisture was observed on the crawl space floor. It is recommended that lot and gutter drainage issues be addressed to help maintain a dry crawl space. (See roofing section)





#### LIMITATIONS OF STRUCTURE INSPECTION

As prescribed in the pre-inspection contract, this is a visual inspection only. Assessing the structural integrity of a building is beyond the scope of a typical home inspection. A certified professional engineer is recommended where there are structural concerns about the building. Inspection of structural components was limited by (but not restricted to) the following conditions:



- Structural components concealed behind finished surfaces could not be inspected.
- Only representative samplings of visible structural components were inspected.
- Furniture and/or storage restricted access to some structural components.
- Engineering or architectural services such as calculation of structural capacities, adequacy, or integrity are not part of a home inspection.

## **Roofing System**

#### **DESCRIPTION OF ROOFING**

**Roof Covering:** ●Asphalt Shingle ● Roll Roofing on front porch

Roof Slope:

Layers:

•Medium

•One Layer

Roof Flashings: •Metal •Plastic/rubber boots

Chimneys: •Masonry

**Roof Drainage System:**•Metal •Downspouts discharge above grade

Method of Inspection: •Walked on roof

#### **ROOFING OBSERVATIONS**

The roof coverings are considered to be in generally poor condition and should be replaced. In all, the roof coverings show evidence of normal wear and tear for a home of this age and location.

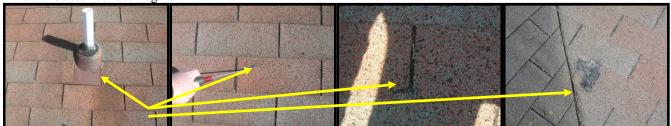
Composition asphalt roofs commonly last from 12 to 16 years in this area. Roofs with dormers, valleys, chimneys, skylight, etc., should be checked at least every two years and annually as they approach the end of their life, by a licensed roofer. Due to constantly changing environmental conditions and other factors, there is no guarantee a roof will not leak at any time.

Splash blocks or tubes must be maintained under downspouts to direct water *away from* the foundation areas. This helps in maintaining a dry crawl space or basement.

It is recommended that the following issue(s) and roof be further evaluated and addressed as needed by a licensed roofer.

#### **RECOMMENDATIONS / OBSERVATIONS**

• **Repair:** The roof shingles are 15 years old and have reached the end of their useful life. There are a number of damaged or broken shingle tabs and the plumbing vent boots appear to be deteriorating. It is recommended that it be replaced. It is also recommended that the roof be stripped before installing a new roof surface which will help locate any damaged or deteriorated roof decking.



• **Repair:** The wood roof vents are deteriorated. It is recommended that they be replaced during the roofing process. (See insulation and ventilation section of this report.







**Improve:** It is important to divert water away from the foundation of the home with a gutter and downspout system that is kept clean and in good repair. It is recommended that all downspouts be extended with plastic diverter tubes to channel water at least 4 to 5 feet away from the building. This is important for helping to maintain a dry crawl space. Downspouts which discharge onto cement should have splash blocks beneath them.





#### LIMITATIONS OF ROOFING INSPECTION

As we have discussed and/or 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 is 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.
- Antennae, chimney/flue interiors which are not readily accessible are not inspected and could require repair.
- Roof inspection may be limited by access, condition, weather, or other safety concerns.

## **Exterior Components**

#### **DESCRIPTION OF EXTERIOR**

Wall Covering: •Brick •Wood Siding

Eaves, Soffits, and Fascias: •Wood

Exterior Doors: •Solid Wood •Sliding Glass

Window/Door Frames and Trim:

•Wood

Entry Driveways:

•Concrete

Entry Walkways and Patios: •Concrete •Brick

Porches, Decks, Steps, Railings:

Overhead Garage Door(s):

●Treated Wood ●Brick ●Concrete

•Steel ●Automatic Opener Installed

Surface Drainage: •Graded Away From House

Retaining Walls: •Brid

Fencing: •Brick columns•Wood fencing•Chain Link

#### **EXTERIOR OBSERVATIONS**

There is no wood/soil contact around the perimeter of the house, thereby reducing the risk of insect infestation or rot. Wood decks which have wood posts in the ground are normally pressure treated wood.

Shrubs and vegetation should be kept trimmed at least 10 -12 inches from the structure to eliminate an avenue of insect travel and to allow air flow to the siding.

Exterior wood trim on windows, doorframes, dormers, chimneys, porch railings, etc., must be kept well painted to prevent decay.

Large concrete areas, garage floors, driveways, walks, patios, etc., will usually have some minor cracks. These should be watched and repaired when necessary.

It is not uncommon for brick veneer to have some minor cracks. These are not usually significant but should be repaired if open 1/8" or more. Larger cracks should be checked to be sure it is not significant. Brick veneer is normally not structural.

Treated wood decks should not be carpeted or painted as this can cause premature decay. Cleaning and treating them with a good wood preservative about every 3 years will keep them in good condition.

Garage door hinges and rollers should be lubricated about every six months or so, to provide quiet and smooth operation. Generally speaking, the exterior of the home is in average condition

It is recommended the following issue(s) and related systems be further evaluated by an appropriate licensed contractor or professional.

#### **RECOMMENDATIONS / OBSERVATIONS**

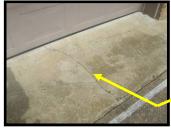
Repair: There are several settlement cracks in the cement driveway and sidewalks. It is recommended that they be filled
to prevent moisture from entering and eroding the surface beneath the cement which will lead to additional cracking.
Sonneborn and Trimco make some excellent long lasting products to help seal such cracks. Exterior Materials, 665
 Wedgewood Ave. Nashville, TN (near the State Fair Grounds) carries Sonneborn and Trimco products. The drive entrance
is severely deteriorated and cracked and may have to be replaced.



• Safety Issue: Improve: The steps leading to the front porch have settled into the ground significantly resulting in a rather large rise 11 inch between the top step and the porch surface. Generally, the maximum height distance between steps should be no greater than 7 3/4." This is likely caused by poor site preparation and inadequate footing support under this section of concrete. It may be possible to raise this back to near original position by a process called concrete leveling, where stone "slag" is pumped under the step section which lifts the concrete up where needed. A-1 Concrete Leveling can be reached at 931-840-9451 or at www.a1concrete.com for more information.

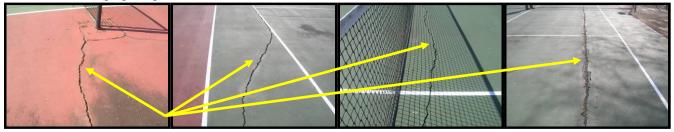


• Repair: There are some settlement cracks in the cement of the garage floor apron. It is recommended that they be filled to prevent moisture from entering and eroding the surface beneath the cement which will lead to additional cracking. Sonneborn and Trimco make some excellent long lasting products to help seal such cracks. Exterior Materials, 665 Wedgewood Ave. Nashville, TN (near the State Fair Grounds) carries Sonneborn and Trimco products.

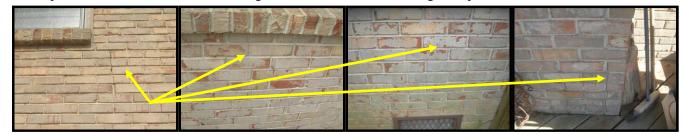




• Major Concern: Repair: The asphalt surface of the tennis court is severely cracked and obviously moving. It is recommended that the tennis court be examined by a resurfacing professional to determine the appropriate corrective steps to be taken for proper repairs.



• **Repair:** There were a few minor cracks or deteriorated mortar joints in the brick veneer of the home. This is fairly common and not considered to be structurally significant. Obviously, these cracks should be sealed with caulk or mortar to keep out moisture and monitored for changes in character such as widening or displacement.



- **Repair:** The brick and railroad tie steps at the back of the house have settled and the ties are deteriorating. It is recommended that the brick steps at the back of the house be properly repaired.
- Repair: The brick at the top of the back left column of the back deck is deteriorated and should be repaired and properly sealed to prevent moisture intrusion and further deterioration.

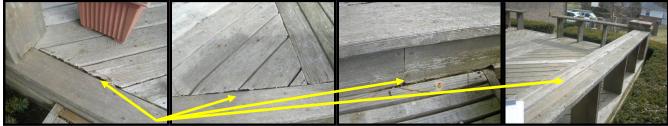




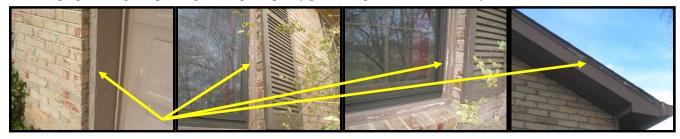
decking boards be properly replaced.

- **Repair:** The ledger board at the back of the deck is deteriorated (by the back steps) and should be properly repaired. **Improve:** The back deck is at the point of needing to be stained to prevent moisture intrusion and further deterioration.
- **Information:** It should be noted that the bottom structural components of the back deck were inaccessible due to the brick foundation wall at its exterior. There may be additional damage that was not observable at the time of this inspection.

**Repair:** The decking boards of the back deck are deteriorated in several places. It is recommended that all deteriorated



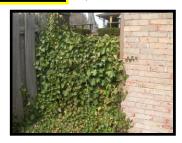
- **Repair:** The wood trim around the exterior of the home has reached the point where painting maintenance is required. Exterior wood trim on windows, dormers, chimneys, porch railings and columns, etc., must be kept well painted to prevent decay. Proper preparation including scraping, sanding and painting with a good quality paint will protect the wood and your investment.
- Repair: The fascia boards (the wooden board to which the gutter is typically fastened) and soffits (the horizontal wooden board between the building and the fascia.) are at the point of needing paint and maintenance. Proper preparation including scraping, sanding and painting with a good quality paint will protect the wood and your investment.



- **Repair:** The left shutter of the far right window is damaged and should be properly repaired.
- Repair: Standard building practices require a grippable handrail where there is a rise of 30 inches or more, or 2 or more risers on stairs. Such handrail should be 34"- 38" high with a grippable rail that is between 1 1/4 and 2 5/8 wide. A proper handrail should be installed on the wood steps from the back deck to the drive way.
- **Repair:** The wood steps from the back deck to the lower driveway are deteriorated and should be properly repaired or replaced.
- **Monitor:** The brick wall at the back right side of the house is cracked at the joint to the house and is displaced. It is recommended that this crack be sealed and monitored for changes in character such as widening or further displacement.



**Improve:** All shrubs and vegetation should be cut back away from the building at least 12 -24" to promote proper air circulation around the walls. Vines and other climbing plants can cause damage to exterior surfaces and should not be allowed to grow on the building. Such vegetation also prevents proper drying of the siding and provides a pathway for insect life which can cause damage to your home.





Repair: The right garage door spring is damaged and
the cables are loose and lying on the floor. It is
recommended that the garage door be properly repaired
and tested with the garage door opener. The left garage
door was not operated due to personal belongings
stacked against it. It is recommended that proper
operation of this door be confirmed before closing.





#### LIMITATIONS OF EXTERIOR INSPECTION

As we have discussed and/or 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, geotechnical, or hydrological conditions, or environmental hazards.
- Screening, shutters, awnings, or similar seasonal accessories, fences, recreational facilities, outbuildings, seawalls, breakwalls, docks, erosion control and earth stabilization measures are not inspected unless specifically agreed-upon and documented in this report.

## **Electrical System**

#### **DESCRIPTION OF ELECTRICAL**

Service Entrance Wires: •Overhead •Aluminum

Size of Electrical Service:

•120/240 Volt Main Service - Service Size: 200

•200 amp breaker at main panel in garage

Service Grounding: •Ground Rod Connection •Water Pipe Connection

Branch/Auxiliary Panel(s):

• Disconnect panels at the heat and air units

Distribution Wiring: •Copper •Aluminum-Multi-Strand • Non-Metallic Cable "Romex"

Switches & Receptacles: •Grounded

 $\textbf{Ground Fault Circuit Interrupters:} \qquad \bullet Bathroom(s) \bullet Kitchen$ 

Smoke Detector(s) •Present

#### **ELECTRICAL OBSERVATIONS**

The size of the electrical service is sufficient for typical single family needs.

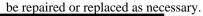
Generally speaking, the electrical system is in average condition.

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. GFI breakers/outlets should be 'tripped and reset' occasionally, to be sure they are working properly and to extend their life. If not working properly, they should be replaced.

It is recommended the following issue(s) and related systems be further evaluated and addressed as needed by a licensed electrician.

#### **RECOMMENDATIONS / OBSERVATIONS**

- Safety Issue: Improve: Since 1971 it has been a standard building practice for bathroom and exterior outlets to be GFCI protected. The exterior outlets are not protected as required.
- Safety Issue: Improve: Since 1975 it has been a standard building practice to have garage outlets be GFCI protected. The garage outlets are not so protected as required.
- **Repair: Safety Issue:** The ground fault circuit interrupter (GFCI) outlet in the kitchen did not trip when the test button was depressed or when a fault was placed on the line. The outlet is either defective or improperly wired. The outlet should be repaired on replaced as passesses.









• Improve: The main electrical panel does not have an appropriate legend (A list which identifies what each fuse or breaker protects.) Such legends help when repairs are necessary or emergencies arise. The legend should be completed as soon as you occupy the home.



- **Repair: Safety Issue:** There are improperly terminated wires in the attic that should be repaired. All wires are required to be terminated within an approved box fitted with a cover and approved fixture.
- **Repair:** There are open junction boxes in the crawl space. All junction boxes should be fitted with cover plates, in order to protect the wire connections.







#### LIMITATIONS OF ELECTRICAL INSPECTION

As we have discussed and/or 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.
- Furniture and/or storage restricted access to some electrical components which may not be inspected.
- The inspection does not include remote control devices, alarm systems and components, low voltage wiring, systems, and components, ancillary wiring, systems, and other components which are not part of the primary electrical power distribution system.

# **Heating System**

#### **DESCRIPTION OF HEATING**

Energy Source: •Gas

Heating System Type:

Vents, Flues, Chimneys:

Heat Distribution Methods:

•Forced Air Furnace

•Metal-Multi Wall

•Ductwork

Other Components: •Thermostat

#### **HEATING OBSERVATIONS**

Make	Туре	Age or SN	Location
Rheem	Gas Package Unit	1972	Right side of house

Central heat and air units should be serviced annually, for proper performance and life

It is recommended the following issue(s) and related systems be further evaluated and addressed as needed by a licensed HVAC contractor.

#### **RECOMMENDATIONS / OBSERVATIONS**

NOTE: Some *gas furnaces* have had problems with the heat exchanger getting holes and allowing flue gas, carbon monoxide etc., into the home. For units over 5 years old, it is recommended that before closing, an HVAC service company be engaged to check the heat exchanger for safety in the Rheem gas package unit, as we do not inspect heat exchangers. (Complete inspection requires disassembly on most units)

- **Information:** When operated in the heating mode of operation the Rheem gas package unit produced a temperature of 129 degrees and brought the ambient temperature to 66.6 degrees. This temperature differential indicated adequate performance.
- Major Concern, Monitor: Given the age of the Rheem gas package unit, it may be near the end of its useful life. You should reserve funds to be ready to purchase a new furnace.
- **Repair:** The skirt or cowl covering the ducts from the exterior HVAC unit is beginning to rust and deteriorate. This skirt should also be caulked to the exterior wall of the house and sealed to the HVAC unit. It is recommended that the HVAC

skirt be examined at the time the heat exchanger is checked and repaired or replaced as necessary.

 Safety Issue: Monitor: Rust was observed on the bottom of the heat exchanger in the Rheem gas package unit at the right side of the house. This is further evidence that the heat exchanger should be examined by an HVAC contractor.





#### LIMITATIONS OF HEATING INSPECTION

As we have discussed and/or 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 inspected.
- The interior of flues or chimneys which are not readily accessible are not inspected.
- The furnace heat exchanger, humidifier, or dehumidifier, and electronic air filters are not inspected.
- Solar space heating equipment/systems are not inspected.

# **Cooling / Heat Pump System**

#### **DESCRIPTION OF COOLING / HEAT PUMPS**

Energy Source: •Electricity

Central System Type: •Air Cooled Central Air Conditioning

Through-Wall Equipment:

Other Components:

• Not Present
• Thermostat

#### **COOLING / HEAT PUMPS OBSERVATIONS**

Make	Type	Age or SN	Size	Location
Rheem	Package A/C	1972	4 Tons	Right side of house

Central cooling units should be serviced annually for efficiency and normal life.

Air Filters should be checked at least every 30 days. See maintenance information in back of this report.

It is recommended the following issue(s) and related systems be further evaluated and addressed as needed by a licensed HVAC contractor.

#### **RECOMMENDATIONS / OBSERVATIONS**

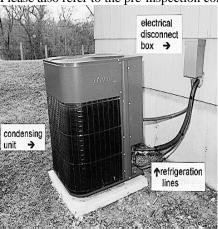
• **Information:** The Rheem package AC unit at the right side of the house was not operated in the cooling mode as the outside temperature was below recommended operating temperature. It may be wise to have the unit services and tested by a licensed HVAC contractor.

#### LIMITATIONS OF COOLING / HEAT PUMPS INSPECTION

As we have discussed and/or as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Window mounted air conditioning units are not inspected.
- The cooling supply adequacy or distribution balance is not inspected.

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



Condenser grills/fins should be kept clean and free of debris for proper operation of the units. Also all plants and shrubs should be kept trimmed at least 2 feet away from the units to allow adequate air flow and access to the units.

ILLUSTRATION ONLY

## **Insulation / Ventilation**

#### **DESCRIPTION OF INSULATION / VENTILATION**

Attic Insulation: •Loose Fill•Fiberglass

Exterior Wall Insulation:

•Not Visible

•None Visible

Crawl Space Insulation:

●None

Floor Cavity Insulation:

●Fiberglass

Vapor Retarders: •Plastic •Kraft Paper

**Roof Ventilation:** •Roof Vents •Soffit Vents •Power Ventilator

Crawl Space Ventilation: •Exterior Wall Vents

Exhaust Fan/vent Locations: •Bathroom •Dryer •Cooktop down draft

### **INSULATION / VENTILATION OBSERVATIONS**

Insulation levels appear about typical for this type and age home.

Loose fill insulation in the attic is the normal type used in this area. This insulation should be kept as 'level' as possible, except for ceiling lights, which should have no insulation over them.

Floor insulation is not required in this area but if seen it is usually R-11 batt type installed between floor joists. Wall insulation normally cannot be determined by a home inspection as we cannot see inside the walls.

Exterior foundation vents should be open unless the outside temperature is below about 40 degrees.

It is recommended the following issue(s) and related systems be further evaluated and addressed as needed by a licensed contractor.

#### **RECOMMENDATIONS / ENERGY SAVING SUGGESTIONS**

• Repair: The level of ventilation should be improved. It is generally recommended that one (1) square foot of free vent area be provided for every one hundred and fifty (150) square feet of ceiling area. Proper ventilation will help to keep the house cooler during warm weather and extend the life of roofing materials. Proper ventilation of the attic occurs as follows: Replacement air enters through the undereave or soffit vents, bathes the underside of the roof and exits at ridge, roof or



gable end vents. Even with no wind, the natural convection action of rising warm air maintains a continuous airflow along the underside of the roof. It's a system that works year 'round with no moving parts or energy consumption. In the main attic there was no ridge, roof or gable end vent for the hot air to escape from the attic.

- Monitor: The power ventilators in the attic were not operated as there were no variable controls to operate.
   It is recommended that proper operation be verified when attic temperature allows.
- **Improve:** There is downed insulation in the crawl space which needs to be reinstalled.





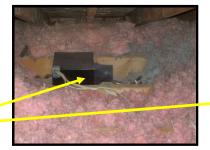
- Improve: The moisture (vapor) barrier on the crawl space floor should be adjusted or improved to cover all areas of exposed soil. It currently covers only 85% of the ground.
- Repair: The gas range down draft pipe is extended through the front exterior wall vent of the crawl space effectively reducing the crawl space ventilation. It is recommended that the range top down draft be re-routed and the exterior wall vent repaired.

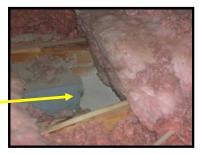




• **Repair:** All 3 of the bathroom ceiling vent fans, vent into the attic. It is recommended that the vent fans be properly vented to the exterior of the house.







### LIMITATIONS OF INSULATION / VENTILATION INSPECTION

As we have discussed and/or 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.

# **Plumbing System**

#### **DESCRIPTION OF PLUMBING**

Water Supply Source: 
• Public Water Supply

Service Pipe to House:

Main Water Valve Location:

Interior Supply Piping:

•Not Visible

•Crawl Space

•Copper

Waste System: •Public Sewer System

**Drain, Waste, & Vent Piping:** • Plastic • PVC (polyvinyl chloride) • PB(Polybutylene)

Water Heater: •Manufacturer: Envi-Ro-Temp •Age: 1998 •Approximate Capacity (in gallons):40

•Manufacturer: Mor-Flo •Age: 1993 •Approximate Capacity (in gallons): 50

Fuel Shut-Off Valves: •Natural Gas Main Valve at meter

**Other Components:**• Ice machine in end family room - Not tested switch in off position

#### PLUMBING OBSERVATIONS

The plumbing system is in generally average condition.

The water pressure supplied to the home is approximately 75 lbs. A typical drop in flow was experienced when two fixtures were operated simultaneously.

It is a good idea to check the water pipes going into the top of the water heater from time to time. This is a common area for leaks which may go unnoticed until there is serious damage to the water heater.

Caulking should be maintained around all tubs/showers to prevent water from leaking through. These can cause structural damage. It only takes 1/100th of an inch opening for water to leak through

It is recommended the following issue(s) and related systems be further evaluated and addressed as needed by a licensed plumbing contractor.

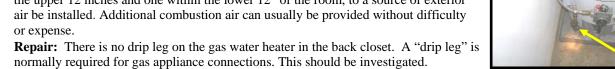
#### **RECOMMENDATIONS / OBSERVATIONS**

- **Monitor:** The Mor-Flo water heater in the basement is an old unit that may be approaching the end of its useful life. It would be wise to budget for a new unit. One cannot predict with certainty when replacement will become necessary.
- Repair, Safety Issue: Information: In houses which are built extremely tight (for energy conservation), ALL flame-heating systems should use outside combustion air. This includes the conventional house furnaces and water heaters. What this means is that the fire will use air that came from outdoors rather than air which came from inside the house, which used to be the common procedure. In super-tight new houses, using house air doesn't work, because in order to use up some house air (and make it go up the chimney), OTHER, OUTSIDE air would have to get into the house to replace it. And the tight construction doesn't allow enough air leakage in to do this. The net effect could be that smoke wouldn't go UP the chimney, and if somebody turns



on a bathroom ventilator or a kitchen exhaust fan, smoke may actually come back DOWN the chimney to replace THAT air that was leaving the house! There is no outside source of combustion air for the gas water heater located the back of the first floor closet. This is unsafe and needs immediate action An adequate supply of combustion air is necessary for all fuel-burning appliances. Most appliances vent by gravity (their flue gasses are lighter than the air in the environment where combustion takes place) so they naturally rise up a flue. Open draft hoods allow the intake of additional air to dilute the flue gasses. Air is also needed to vent and cool the appliances themselves. Three functions are then included in the topic of combustion air. They are air for combustion, dilution and ventilation. About 10 cubic feet of air is needed for combustion of one cubic foot of natural gas, in addition to the air needed for dilution and ventilation. The products of natural gas (methane) combustion are carbon dioxide and water vapor. An inadequate supply of combustion air can be very hazardous. If there is insufficient oxygen to fully burn the fuel at the correct temperature, deadly carbon monoxide will also be a

might "spill" out of a draft hood and enter the interior environment. As houses are built tighter and to higher emergency–efficient standards, the building interiors do not have enough infiltration of fresh air to supply our combustion air, and an external source of supply becomes necessary. It is recommended that two openings, one within the upper 12 inches and one within the lower 12" of the room, to a source of exterior air be installed. Additional combustion air can usually be provided without difficulty or expense.



- **Improve:** The sink in the end hall bath was observed to drain slowly, suggesting that an obstruction may exist. It is recommended that the sink be improved to drain properly.
- **Repair:** The faucet in the sink in the end family room is leaking. It is recommended that the faucet be repaired or replaced.
- Improve: It is important to maintain the caulking in and around the tub, along wall corners, floor and wall seams and around faucets and spouts to prevent moisture from getting into the subwall and floor. Damage can be caused if these areas are not well sealed and maintained. Presently some caulking improvements are necessary in the tub in the end hall bathroom.



• Improve: The drain, from the dishwasher which connects to the drain under the kitchen sink, needs to be modified. Presently the drain rises up from the dishwasher to the drain. It needs to be re-routed to first run up above the drain and then downward to the drain. This rise is necessary to prevent water draining from the sink from backing up into the dishwasher.



#### LIMITATIONS OF PLUMBING INSPECTION

As we have discussed and/or 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 and/or storage (below sinks, etc.), below the structure, or beneath the ground surface are not inspected.
- Water quantity and water quality are not tested unless explicitly contracted-for and discussed in this or a separate report.
- Clothes washing machine connections are not inspected.
- Interiors of flues or chimneys which are not readily accessible are not inspected.
- Water conditioning systems, solar water heaters, fire and lawn sprinkler systems, and private waste disposal systems are not inspected unless explicitly contracted-for and discussed in this or a separate report.

# **Interior Components**

#### **DESCRIPTION OF INTERIOR**

Wall and Ceiling Materials:

•Drywall •Paneling •Tile

Floor Surfaces:

•Carpet •Tile •Wood

Window Type(s) & Glazing: •Single Hung•Single Pane with Storm Window

**Doors:** •Wood-Solid Core •Sliding Glass • Double pane insulating

Fireplace(s): •Masonry w/damper •Gas logs (manual light)

Kitchen Appliances: •Gas Range Top•Double Wall Oven•Garbage Disposal•Dishwasher

**Laundry Appliances:** •Hot/Cold water w/drain•220 Volt Connection•Gas Connection•Dryer Vent

Security System: •No System Present

Other: •Smoke Detector(s) •Door Bell

#### INTERIOR OBSERVATIONS

On the whole, the interior finishes of the home are considered to be in fair condition.

Typical flaws were observed in some areas.

The majority of the doors and windows are average quality.

All smoke detectors should be tested when you first move in. Carbon Monoxide detectors are recommended if using a gas furnace and or a wood burning fireplace.

It is recommended the following issue(s) and related systems be further evaluated and addressed as needed by a licensed contractor.

#### **RECOMMENDATIONS / OBSERVATIONS**

• **Repair:** Safety Issue: The fireplace in the back family room has cracks between the firebox and the stone face. There is also a crack between the hearth and the stone face and firebox. It is recommended that the chimney and fireplace be cleaned and inspected by a certified chimney sweep. It is additionally recommended that the fireplace be properly repaired to ensure safe operation. It is recommended that the fireplace not be used until the proper repairs are made.







Repair: The wood floor in the entry way is damaged and should be properly repaired.



- **Repair:** Walls have been moved in the back middle bedroom leaving the wood floors un-repaired. It is recommended that the floors in the back bedroom be properly repaired.
- Safety Issue: There appears to be mold on the ceiling of the back bathroom by the shower. The growth appears to be minor. The presence of certain mold and mold spores in housing can result in mild to severe health effects in humans and pets and can deteriorate the structure of the dwelling resulting in structural damage. Health effects include, but are not limited to: sinus congestion, blurry vision, sore throat, dry cough, aches and pains, skin irritation, bleeding of the lungs, headaches, memory loss and fever. As humans vary greatly in their chemical make-up, so does the individual's reaction to mold exposure. For some people, a small number of mold spores can cause ill effects. In others it may take more.
- **Repair:** Moisture stains were observed on the ceiling by the water heater vent. It is recommended that the roof flashing be checked and repaired and the ceiling properly repaired.



- Safety Issue: Improve: The back bedroom closet window did not open because it may be painted shut or do not fit properly in their frames. All windows should be brought to proper working order. In cases of emergency windows are often called upon to serve as a means of egress and should function as required.
- Safety Issue: Improve: The end window in the end family room and the kitchen windows did not stay open when raised. Some will drop swiftly toward the window sill. This can create a hazard for children and can impede the use of such windows as a means of egress in case of a fire. It is recommended that the tensioning springs be adjusted or replaced to bring the windows into proper working order.

Information: It should be noted that the closet in the end family room is locked and should be opened and the condition of the closet inspected before closing.







- Safety Issue: Improve: All stairways are required to have grippable handrails installed. When they are partially open on one or both sides, they are required to have a banister with balusters spaced no more that 4" apart to prevent a child from falling off the stairs to the ground. The railing on the steps to the basement should be improved.
- **Repair:** The upper oven in the kitchen is in poor condition and should be replaced.





#### LIMITATIONS OF INTERIOR INSPECTION

As we have discussed and/or as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions

- Furniture, storage, appliances and/or wall hangings 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.
- During a home inspection it is not always possible to identify windows which have had seal failure. Temperature and relative humidity play a significant role in the manifestation of the condition. BJK inspectors will record instances of seal failure when they are observed but does not guarantee that all failed windows seals will be identified and will not be responsible for such defects.

## **Environmental Survey**

#### (No testing done. May indicate the possibility only)

- 5) Radon Warning (Geographical Indication): •Yes (EPA listed high zone for parts of Middle Tennessee)

Radon gas is naturally occurring in our environment in harmless quantities. The danger occurs when the gas percolates through the ground and enters a tightly enclosed structure through fissures or cracks in a foundation. The gas can become concentrated, due to lack of ventilation. The EPA states that a reading of more than 4.0 picocuries per liter of air is reason for concern. It is widely accepted that some geographical areas have a propensity to higher radon levels. This geographical indication in no way implies this homes specific radon level, but is used for information in which to further evaluate your environment. Your inspection service can provide additional information and testing in accordance with EPA protocols, if desired

- 6) Lead in Material Warning (prior 1978): •No
- 7) Lead in Water Warning: •No The EPA has determined that some water faucets contain lead. They recommend you let the water run for several seconds before drinking, where the faucet has not been used for several hours and/or overnight.
- 8) U.F.F.I Suspected: •No (Urea Formaldehyde Foam Insulation)
- 9) Describe Suspected U.F.F.I. Location/Material: •N/A
  No other specific environmental concerns were noted at this time.
- 10) Noise, Pollution, Odors, etc.,:

  •None known. Many sources can contribute to these conditions, some of which can be transient, only occurring at specific times or occasionally and may not be discovered during this inspection.

**NOTE:** The Environmental Protection Agency (EPA), has determined that some buildings *and homes* may be affected by unhealthy <u>indoor air contamination</u>. We do not test for this and cannot provide you with an opinion about the indoor air quality (IAQ) of this structure. -Should any conditions or symptoms arise which you suspect may be related to indoor air quality, we recommend that you have a qualified company to do testing for this condition. This type test should be conducted over a 24 hour period and should discover and disclose trouble spots. Such conditions can come from chemicals and off gassing of building materials, mold, mildew, and other sources. Symptoms can be manifested as prolonged colds, rashes, headaches, and other symptoms, generally more common as more time is spent in the home.

# **Maintenance Advice**

### **UPON TAKING OWNERSHIP**

		er taking possession of a new home, there are some maintenance and safety issues that should be addressed immediately. E 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 your local fire department regarding fire safety issues and what to do in the event of fire.
		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.
		Review you home inspection report for any items that require immediate improvement or further investigation. Address these areas as required.
		Install rain caps and vermin screens on all chimney flues, as necessary.
		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 and are noted in this report.
REG	UL	AR MAINTENANCE
	ΕV	ERY 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 the house has hot water heating, bleed radiator valves.
		Clean gutters and downspouts. Ensure that downspouts are secure, and that the discharge of the downspouts is appropriate Remove debris from window wells.
		Carefully inspect the condition of shower enclosures and bath tubs. Repair or replace deteriorated grout and caulk. Ensure that water is not escaping the enclosure during showering. Water seeping through floors around tubs and showers can cause structural damage.
		Repair or replace leaking faucets or shower heads.
		Secure loose toilets, or repair flush mechanisms that become troublesome.
	SP	RING AND FALL
		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 or other vermin or insect activity.

	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 window sills and frames as necessary. At least one window in each bedroom must open, for safety.
	Test all ground fault circuit interrupter (GFCI) devices, as identified in the inspection report. Do this by pushing the 'test' button on the outlet, or by pushing the button on the breaker, if in the electric panel. Replace if not working properly.
	Shut off isolating valves for exterior hose bibs in the fall, if below freezing temperatures are anticipated. Disconnect all hose pipes from exterior water faucets in the winter, to prevent damage to the faucet.
	Test the Temperature and Pressure Relief (TPR) Valve on water heaters. Best time is early in the day as they sometimes do not shut off completely, due to infrequent use.
	Drain the water heater to reduce the amount of sediment buildup in the tank.
	Inspect for evidence of wood boring insect activity. Eliminate any wood/soil contact around the perimeter of the home and remove any wood debris in the crawl space.
	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 for easier and quieter operation.
	Replace or clean exhaust hood filters over the kitchen cooking range.
	Clean, inspect and/or service all appliances as per the manufacturer's recommendations.
AN	NUALLY
	Replace smoke detector batteries when you first move in, and annually or when needed thereafter.
	Have the heating, cooling and water heater systems cleaned and serviced, annually.
	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 house utilizes a well, check and service the pump and holding tank. Have the water quality tested. If the property has a septic system, have the tank inspected (and pumped as needed, about every 3-5 years).
	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.

#### PREVENTION IS THE BEST APPROACH

Although we've heard it many times, nothing could be truer than the old cliché "an ounce of prevention is worth a pound of cure." 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 your home. Enjoy your home!

**Tools to Keep Handy for emergencies:** An adjustable wrench to shut off the main gas valve if you have gas. A water meter wrench to shut off the main water valve, which is usually in the meter box, in the ground (cost about \$7 - \$10 at hardware store).



### BJK Property Inspections, Inc. 4282 Pate Road

Franklin, TN 37064 Off. (615) 591-6870 Fax (615) 591-6875



425.00

## **Invoice**

INVOICE NO.:
Inspection
DATE: and TIME

RN021907P 13:00:00 Monday 02/19/2007



Description	Amount
Base Inspection Fee	300.00
Radon Testing	125.00
D-111	
Paid by check	

Thank you for your business

Payment of this invoice is due upon receipt. Please make checks payable to BJK.

**TOTAL**