

Building Inspection Report

123 Dream Home Lane, Anytown, NC 27000

Prepared For:

Mr. and Mrs. Happy Client

Inspection Date:

December 31, 2010

Report Number:

123110-01

Prepared By:

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Inspector:



Bruce Ramsey

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NC Licensed Home Inspector Association



Scope and Purpose

This home inspection was conducted in accordance with the terms of the Inspection Contract and with the Standards of Practice and Code of Ethics of the North Carolina Home Inspector Licensure Board (NCHILB). Refer to your Contract for additional information about scope and limitations of the inspection. (A copy of the Standards of Practice is available upon request.) The Inspection and Report are for the sole use of the Client(s) named above and are not transferable to, or for the benefit of a third party under any circumstances. Advocate Inspections, Inc. assumes no responsibility for any future usage of the report.

The purpose of this inspection is to give the Client the information that they need to evaluate the overall condition of the property as observed on the date of inspection. The inspector has inspected the systems and components identified in the inspection contract and according to the NCHILB Standards of Practice, unless otherwise excluded. This report documents those systems and components which do not function as intended, allowing for normal usage, and/or which affect the ability of the property to be inhabited. The inspector has included comments and suggestions for improvements when appropriate, but these are intended for the Client(s)' information only and may or may not be repaired under the terms of your Real Estate Purchase and Sale Agreement. We do not offer any warranties or representations as to your rights or obligations under any Real Estate Purchase and Sale Agreement.

The report is based upon the observation of the apparent condition of visible and accessible components during the time of the inspection. Conditions can exist which will not be detected by normal inspection procedures. Components or systems can fail after the date of inspection. Therefore, the results of this home inspection are not intended to make any representations regarding latent or concealed defects that may exist, and no warranty or guarantee is expressed or implied.

Glossary

- **Summary:** This summary is not the entire report. The full report includes additional information of interest or concern to the client. It is strongly recommended that the client promptly read the complete report. For information regarding the negotiability of any item in this report under a real estate purchase contract, contact your North Carolina real estate agent or an attorney.
- **Safety Item:** These are items that are potential hazards to health and safety.
- **Repair Item:** These are systems or components that do not function as intended, allowing for normal wear and tear, or adversely affect the habitability of the dwelling.
- **Further Investigate:** These are items that warrant further investigation by a specialist or require subsequent observation.
- **Maintenance Item:** These are items that require routine upkeep of a system or component to keep it in proper functioning condition.
- **Recommendation:** These are recommendations to upgrade or enhance the function or efficiency of the home.

Summary

This summary page is not the entire report. The complete report may include additional information of interest or concern to you. It is strongly recommended that you promptly read the complete report. For information regarding the negotiability of any item in this report under the real estate purchase contract, contact your North Carolina real estate agent or an attorney. Safety items, Repair items, and Further Investigate items are included in the summary page. Maintenance items and Recommendations can be found in the body of the report. Directions are given as if standing outside looking at the front door.

STRUCTURAL COMPONENTS:

Repair Item: Commonly accepted building practices require spaces between deck components not allow the passage of a sphere 6 inches or more in diameter. There are no risers between the garage and rear deck stairs. The opening is 6 or more inches and is a safety hazard. Repair by a licensed general contractor.

Further Investigate: There is a crack in the front foundation wall under the living room window. The crack extends through the concrete block and matches the crack in the exposed brick veneer. The foundation is cracked. Further investigate by a foundation contractor or professional engineer with structural experience to determine the cause as well as design and implement a repair procedure.

Further Investigate: The vapor barrier does not completely cover the crawlspace floor. In the exposed area at the front wall foundation, the soil is dry and cracked. The cracks are ½ to 1 inch wide and several inches deep. The soil around the foundation has dried and shrunk. This shrinkage may be the cause of the foundation shifting and cracking under the living room window. Further investigate to determine if the soil is the cause of the foundation cracking as well as design and implement a repair procedure.

EXTERIOR:

Safety Item: Commonly accepted building practices require all egress doors be readily openable from inside without the use of keys, special knowledge, or effort. The dead bolt lock on the front door is keyed from the inside. Occupants may become trapped inside during emergencies when the key is removed. Remove or replace the keyed deadbolt with a thumb latch style deadbolt by a locksmith.

Repair Item: The garage door motion sensors are present but are installed too high above the floor. Most manufacturers' installation instructions indicate the eye should be installed 3-8 inches above the floor. The motion sensor eyes are installed more than 8 inches above the floor. Repair.

Repair Item: The driveway is cracked and moved horizontally 1 inch or more. The crack was repaired with a flexible sealant and the sealant has failed. The driveway is out of level and is a trip hazard. The driveway is no longer sloped to drain water away and instead has low spots with pooled water which serves to intensify the problem. Repair or replace the driveway.

Repair Item: The front driveway is broken and sunken ½ to 1 inch from the surrounding driveway. The uneven driveway is a trip hazard to guests and occupants. The driveway has failed and is not functioning as intended. Replace by a professional concrete contractor.

Further Investigate: The garage door does not touch the garage floor on the right side when viewed from the exterior. There is a gap of over 2 inches. This can allow water and vermin access to the garage. This is an indicator of possible settling of the foundation at this location. Further investigate to determine the cause as well as design and implement a repair procedure for the garage floor.

Further Investigate: The brick veneer at the right rear corner is cracked. The vertical crack is almost exactly the width of a single brick from the rear corner. The rear brick veneer wall seems to be moving away from the side wall. There are gutters and downspouts collecting and directing water away from the foundation. Further investigate to determine the cause as well as design and implement a repair procedure.

Further Investigate: There is a significant crack in the brick under the living room window. The crack extends from the soil up to the window sill and is about ¼ inch wide. The homeowner reports the crack appeared in the last 5-6 months since a mature river birch tree was removed within 20 feet of the home. Additionally several mature boxwood shrubs were removed that had been planted directly in front of the crack. The block foundation is visibly cracked at this location when viewed from the crawlspace. The plantings may have been maintaining a specific moisture content in the soil that has changed dramatically since their removal. The soil may have shrunk or swelled causing the foundation to shift forming the crack. Further investigate the crack by a foundation contractor or professional engineer with residential structural experience to determine the cause as well as design and implement a repair procedure.

Repair Item: There is a gap between the copper roof over the dining room and the brick exterior. The hole is about the size of a dime and is at the upper edge of the copper roof where it meets the brick work. A bunch of caulk is applied around the seam between the roof and the brickwork. The hole is too large to be filled with caulk. The roof should ideally be let into the mortar joint to properly seal against moisture. Caulk is a temporary fix lasting 5-7 years. Copper roofs can last 75-150 years with proper maintenance. Remove the caulk and properly seal the roof to the building.

Further Investigate: There is a hairline crack in the brickwork over the garage door opening. The crack is about 4 feet right of center and extends from the metal lintel upwards about 2 feet. Subsequently observe to determine if the crack increase in length or width.

ROOFING:

Further Investigate: There is flashing and counter flashing along the roofline between the garage and exterior wall of the main house. The counter flashing is cut incorrectly exposing the upper edges of the counter flashing and is not cut at the same angle as the slope of the roof. The counter flashing is installed very poorly and incorrectly. Repair or replace.

Repair Item: There is black water staining on the roof sheathing around the metal exhaust flue in the attic. The flashing is no longer functioning as intended. The roof sheathing was dry during the inspection. Repair the flashing around the exhaust flue.

Repair Item: The roof shingles on the screen porch were damaged on the left rear corner. There were numerous locations where dime sized areas of granules were missing from the shingles. The granules protect the fiberglass and composition matt of the shingle. When the granules are removed, the matt is exposed to sun and weather which deteriorate and cause the shingle to fail. Replace the damaged shingles on the screen porch roof.

PLUMBING:

Repair Item: Commonly accepted plumbing practices require drain lines from a dishwasher to rise above the level of the sink drain before dropping down and connecting to the garbage disposal or waste line. This high loop prevents dirty water from the kitchen sink or garbage disposal accidentally flowing back into the dishwasher. The drain line for the dishwasher enters the cabinet at the bottom and rises to the garbage disposal. The current configuration does not provide the necessary high loop. Repair or replace by a licensed plumbing contractor.

Repair Item: The left sink in the master bathroom is a slow drain. Likely it is just clogged with toothpaste and hair. Initially apply over the counter drain cleaning products to treat the problem. If problem persists, repair by a licensed plumbing contractor.

Repair Item: Commonly accepted building practices require sediment traps at all gas appliances. There is no sediment trap installed in the gas line supplying the gas water heater or attic furnace. Sediment traps are 3 inch pipe sections connected via a T pipe fitting after the appliance shutoff valve but before the gas appliance to allow sediment and moisture to fall out of the gas line to prevent clogs or damage to the gas controller of the appliance. Repair or replace by a licensed plumbing contractor.

Repair Item: Commonly accepted plumbing practices require horizontal pipes be supported every 4 feet. The rigid black metal gas pipe supplying the water heater and attic furnace was not secured over a 15 foot run. Accidental kicking of the gas pipe could cause it to fail. Properly support and secure the gas pipe in the attic.

Further Investigate: Polybutylene plumbing supply lines are installed in this house at the water heater. Polybutylene was used as water distribution piping in many homes built from the mid 1980's until the mid 1990's. The piping and associated fittings have had a failure rate and subsequent leakage sufficient to have been the subject of several nationwide class action lawsuits. Copper and brass fittings used in later years seem to have reduced the failure rate, but the piping may still fail due to problems with poor installation, improper handling, or chemical reaction with the water supply. For further details about the piping and your rights under the class action lawsuit settlements contact 1-800-392-7591 or visit the Website <http://www.pbpipe.com>. You may wish to have the plumbing system further evaluated by a licensed plumbing contractor.

ELECTRICAL:

Safety Item: Commonly accepted electrical practices require all receptacles over kitchen countertops have GFCI protection. The receptacles over the countertop beside the refrigerator do not have GFCI protection. Install GFCI protection at this location as a safety precaution by a licensed electrical contractor.

Safety Item: Commonly accepted electrical practices require a smoke detector in each bedroom, one outside each common sleeping area, and one on each floor of living space that are interconnected so all will alarm if one alarms. A smoke detector is installed on each level of the house but they are not interconnected. They do not have battery backup. There are no smoke detectors in bedrooms. Repair or replace by a licensed electrical contractor.

Repair Item: The National Fire Protection Association recommends that smoke detectors be replaced every 7-10 years. Smoke detectors become less effective over time. The existing detectors are nearing or already past the recommended replacement period. Replace the smoke detectors by a licensed electrical contractor.

Safety Item: There is no receptacle in the center kitchen island. Commonly accepted electrical practices require one GFCI protected receptacle in kitchen islands. Without a receptacle on the island, people often place appliances on the island and drape the power cord across the walkway to the a nearby receptacle creating a trip hazard as well as the possibility of pulling the appliance off the island counter and crashing to the floor. Repair or replace by a licensed electrical contractor.

Repair Item: Commonly accepted electrical practices require surface mounted incandescent light fixtures in clothes closets have fully enclosed bulbs and be at least 12 inches from storage. The light fixtures in the clothes closets have exposed bulbs. Exposed bulbs can cause stored items to catch fire. Repair or replace by a licensed electrical contractor.

HEATING:

Further Investigate: The HVAC components were manufactured in 200/2006 and are approximately 5 years old. HVAC systems have a statistical life of about 12-15 years. The HVAC systems did not have any service maintenance labels indicating regular service. Heat exchangers should be regularly checked for cracks that can allow carbon monoxide to escape from the burn chamber and be distributed throughout the home via the duct system. Have an invasive inspection including, but not limited to the heat exchanger to determine the integrity of any and all components by a licensed mechanical contractor as well as design and implement repairs or replacement.

AIR CONDITIONING:

Repair Item: The overflow pan under the HVAC unit in the attic is rusty. This indicates the overflow pan contained water in the past. The corrosion and deterioration will continue until some point the pan will not hold water. Repair or replace.

Further Investigate: The air conditioner components were manufactured in 2005/2006 and are approximately 5 years old. HVAC systems have a statistical life of about 12-15 years. The HVAC systems did not have any service maintenance labels indicating regular service. Have an invasive inspection to determine the integrity of any and all components by a licensed mechanical contractor.

INTERIORS:

Further Investigate: There is water staining and discolored wood at the bottom left corner of the living room window sill. Moisture meter readings indicated a slightly higher than normal moisture content. Further investigate to determine the source of the water intrusion as well as design and implement a repair procedure.

Further Investigate: The right lower sash of the living room window did not fit squarely in the frame. As the sash was moved up and down, a gap would appear between the sash and frame at different locations. The sash operated but does not make a complete seal and is not square to the frame. Further investigate to determine if the frame, track or sash is out of square and repair or replace.

Repair Item: The windows in the second story music room that overlook the backyard have two failed seals. The lower sash of one window and the upper sash of the other window have failed seals. The windows are not functioning as intended. Replace the failed windows.

Repair Item: The window sash lock of the front window of the bedroom to the right of the top of the stairs is damaged. The sash lock has been torn and is damaged. Replace damaged window sash lock.

Repair Item: There are several doors throughout the house that bind at the door knob side top. Included are the second story hall bathroom door and the closet door in the music room. Repair or replace.

Further Investigate: There is a water stain in the ceiling of the first story bathroom near the exhaust fan. The exhaust hood on the roof has been recently repaired and may have corrected the problem. Subsequently observe the ceiling for darkening or additional rings of water stains indicating the leak is continuing.

Further Investigate: There is a water stain in the master closet ceiling. The water stain is directly under the plumbing vent stack where it penetrates the roof. The insulation was stained and matted at this location. There was no water staining of the roof sheathing or on the plumbing vent stack. Further investigate to determine the source of the water intrusion as well as design and implement a repair.

Repair Item: The door to the first story bathroom does not latch. The door closes but the door bolt does not properly seat into the striker plate. The door latch system is not functioning as intended. Repair or replace by a licensed general contractor.

Further Investigate: There were several locations throughout the home where the walls or ceiling were cracked. Some had been previously repaired and cracked again. The kitchen ceiling was cracked at the corner near the wall oven. The dining room walls were cracked at the inside angled wall. The bedroom over the dining room has minor cracking directly over the dining room crack. The wall is cracked in the entrance foyer just past the living room. Most cracks followed joints between sections of drywall. Additional cracks were scattered throughout the home. Further investigate the foundation system to determine if it is stable.

Repair Item: All the windows tested in the house are difficult to operate. Bedroom windows are considered emergency egress and should operate freely. Windows that do not operate could trap occupants inside during an emergency. Repair or replace all windows so that they operate freely the full length of travel.

Repair Item: The interior door to the music room is too long. It touches the carpet. There should be approximately a 1 inch gap at the bottom to allow the HVAC systems to pull return air back to the system. The doors need to be trimmed to provide the necessary air flow via the gap at the bottom of the door. Repair or replace by a licensed general contractor.

INSULATION AND VENTILATION:

Repair Item: The duct for the second story hall bath exhaust fan does not terminate at the exterior. The hall bath duct has fallen and it exhausting directly into the attic. The ducts should terminate outside the attic. Repair or replace by a licensed mechanical or general contractor.

Repair Item: The duct for the kitchen down draft exhaust fan is disconnected where it passes through the foundation wall to the exterior. The exhaust is being deposited in the crawlspace rather than exterior. This will coat the crawlspace with grease and increase the moisture level. The duct is not functioning as intended. Repair the duct.

Further Investigate: The thermostatically controlled attic ventilation fan has been removed from the housing. The housing and exterior cover has become a passive ventilation system. The fan is not functioning as intended by the manufacturer but does not leak at this time. When house is re-roofed, remove the remainder of the fan and repair hole in sheathing.

Repair Item: The insulation in the attic is primarily loose fill fiberglass insulation. There are numerous locations where the insulation had been compressed. Compressed insulation is not effective and is not functioning as intended. Repair the existing insulation by fluffing to match the surrounding insulation or add insulation to bring compressed areas up to required depth.

Repair Item: The crawl space vapor barrier either barely overlapped or almost touched the adjoining section. Commonly accepted building practices require a vapor barrier be installed to cover all areas of the exposed earth in the crawl space and the joints be overlapped by 12 inches. Vapor barriers limit moisture intrusion into the house. Repair vapor barrier installation by a professional insulation contractor.

Repair Item: The insulation between the pull down attic stairs treads is damaged, compressed or missing. This creates a large hole in the insulation blanket allowing conditioned air to escape the living space into the attic and allow unconditioned air from the attic space into the living space. Repair the insulation in the attic pull down stairs.

BUILT-IN KITCHEN APPLIANCES:

No summary items.

General Information and Conditions:

Address: 123 Dream Home Lane

Anytown, North Carolina 27000

Approximate Square Footage: 2661

Approximate Age: 16 years

Structure Occupied: Yes

Structure type: Single family detached

Weather Conditions: Sunny, 80-90 degrees

Persons present during inspection: Inspector Bruce Ramsey, Owner Lynn Glassock

Directions are given as if standing outside at the curb looking at the front door.

STRUCTURAL COMPONENTS¹:

The foundation, floors, walls, columns, piers, ceilings and roof structural components were inspected. Structural components were probed where deterioration was suspected. The structure was inspected for abnormal or harmful water penetration into the building and signs of abnormal or harmful condensation on building components.

Crawlspace: Entered with standard flashlight **Access:** Left rear corner

Foundation Type & Material: Brick and concrete block.

Floor Structure: Conventionally framed dimensional lumber **Subflooring:** Plywood

Wall Structure: Not visible due to finish materials

Piers & Columns: Brick and concrete block, pressure treated posts for rear deck

Ceiling Structure:

- The lower story ceiling structure is not visible due to finish materials.
- The upper story ceiling is conventionally framed dimensional lumber.

Roof Structure: Conventionally framed dimensional lumber **Roof Sheathing:** Plywood

Method to inspect Attic: Entered with standard flashlight. Inspection limited to the floored area only.

Repair Item: Commonly accepted building practices require spaces between deck components not allow the passage of a sphere 6 inches or more in diameter. There are

¹ Conditions such as cracking, poor workmanship, water damage and/or insect damage should be further evaluated or repaired by a qualified professional. Non-treated wood may promote water or insect damage.

no risers between the garage and rear deck stairs. The opening is 6 or more inches and is a safety hazard. Repair by a licensed general contractor.



Oversized opening in garage stair

Further Investigate: There is a crack in the front foundation wall under the living room window. The crack extends through the concrete block and matches the crack in the exposed brick veneer. The foundation is cracked. Further investigate by a foundation contractor or professional engineer with structural experience to determine the cause as well as design and implement a repair procedure.



Crack in front foundation wall under living room

Further Investigate: The vapor barrier does not completely cover the crawlspace floor. In the exposed area at the front wall foundation, the soil is dry and cracked. The cracks are 1/2 to 1 inch wide and several inches deep. The soil around the foundation has dried and shrunk. This shrinkage may be the cause of the foundation shifting and cracking under the living room window. Further investigate to determine if the soil is the cause of the foundation cracking as well as design and implement a repair procedure.



Finger width cracks in crawlspace soil under exterior living room foundation wall

Recommendation: The house is not bolted to the foundation. Commonly accepted building practices require the house be bolted to the foundation with 1/2 inch hot dipped galvanized bolts set at least 7 inches into the foundation wall approximately every 4 feet. The bolts prevent the house from falling off the foundation during seismic events,

hurricanes, floods and other catastrophic events. They may not have been required when the house was built. Consider upgrading the house to meet current building requirements.

EXTERIOR²:

Wall cladding, flashings and trim were inspected. Eaves, soffits and fascias were inspected. The exterior was inspected for abnormal or harmful water penetration into the building and signs of abnormal or harmful condensation on building components. Exterior wood components were probed where deterioration was suspected. The entryway doors and a representative number of windows were operated and inspected. When present, garage door openers were inspected and operated. Decks, balconies, stoops, steps, areaways, porches, and applicable railings were inspected. Driveways, patios, walkways, and retaining walls were inspected. Vegetation, grading and drainage with respect to their effect on the condition of the building were inspected.

Exterior Cladding: Hardboard lap siding

Exterior Doors: Front door fiberglass, rear door metal with glass panel

Windows: Double pane, vinyl frame, double hung **Screens:** Stored in garage

Deck: Bolted to house, flashing present, railings inspected

Garage Door Operators: Reversed upon meeting resistance, motion sensors inspected

Driveway: Concrete slab on grade **Walkway:** Concrete slab on grade

Patio: Not present **Retaining Wall:** Not present

Safety Item: Commonly accepted building practices require all egress doors be readily openable from inside without the use of keys, special knowledge, or effort. The dead bolt lock on the front door is keyed from the inside. Occupants may become trapped inside during emergencies when the key is removed. Remove or replace the keyed deadbolt with a thumb latch style deadbolt by a locksmith.



Keyed deadbolt at front door



Garage motion sensor too high

² Storm windows, storm doors, screening, shutters, awnings, the presence of safety glazing in windows and doors, fences, geological conditions, soil conditions and recreational facilities including spas, saunas, steam baths, swimming pools, tennis courts, playground equipment are not inspected and are excluded. Detached buildings and structures are not inspected and are excluded. The presence or conditions of buried fuel storage tanks are excluded.

Repair Item: The garage door motion sensors are present but are installed too high above the floor. Most manufacturers' installation instructions indicate the eye should be installed 3-8 inches above the floor. The motion sensor eyes are installed more than 8 inches above the floor. Repair.

Repair Item: The driveway is cracked and moved horizontally 1 inch or more. The crack was repaired with a flexible sealant and the sealant has failed. The driveway is out of level and is a trip hazard. The driveway is no longer sloped to drain water away and instead has low spots with pooled water which serves to intensify the problem. Repair or replace the driveway.



Driveway crack with failed sealant



Driveway over an inch out of level

Repair Item: The front driveway is broken and sunken 1/2 to 1 inch from the surrounding driveway. The uneven driveway is a trip hazard to guests and occupants. The driveway has failed and is not functioning as intended. Replace by a professional concrete contractor.

Further Investigate: The garage door does not touch the garage floor on the right side when viewed from the exterior. There is a gap of over 2 inches. This can allow water and vermin access to the garage. This is an indicator of possible settling of the foundation at this location. Further investigate to determine the cause as well as design and implement a repair procedure for the garage floor.



Gap at right side of garage door



Wide angle photo of garage door gap

Further Investigate: The brick veneer at the right rear corner is cracked. The vertical crack is almost exactly the width of a single brick from the rear corner. The rear brick veneer wall seems to be moving away from the side wall. There are gutters and downspouts collecting and directing water away from the foundation. Further investigate to determine the cause as well as design and implement a repair procedure.



Step crack at top 4 courses



Vertical crack at left rear corner

Further Investigate: There is a significant crack in the brick under the living room window. The crack extends from the soil up to the window sill and is about ¼ inch wide. The homeowner reports the crack appeared in the last 5-6 months since a mature river birch tree was removed within 20 feet of the home. Additionally several mature boxwood shrubs were removed that had been planted directly in front of the crack. The block foundation is visibly cracked at this location when viewed from the crawlspace. The plantings may have been maintaining a specific moisture content in the soil that has changed dramatically since their removal. The soil may have shrunk or swelled causing the foundation to shift forming the crack. Further investigate the crack by a foundation contractor or professional engineer with residential structural experience to determine the cause as well as design and implement a repair procedure.



Crack in brick under living room window

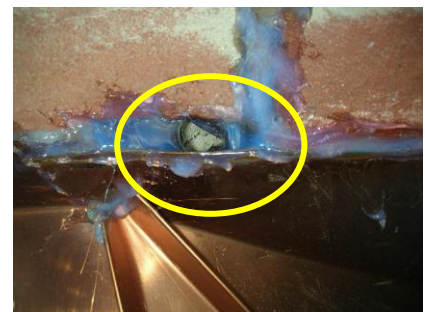


Close up photo of cracked brick

Repair Item: There is a gap between the copper roof over the dining room and the brick exterior. The hole is about the size of a dime and is at the upper edge of the copper roof where it meets the brick work. A bunch of caulk is applied around the seam between the roof and the brickwork. The hole is too large to be filled with caulk. The roof should ideally be let into the mortar joint to properly seal against moisture. Caulk is a temporary fix lasting 5-7 years. Copper roofs can last 75-150 years with proper maintenance. Remove the caulk and properly seal the roof to the building.

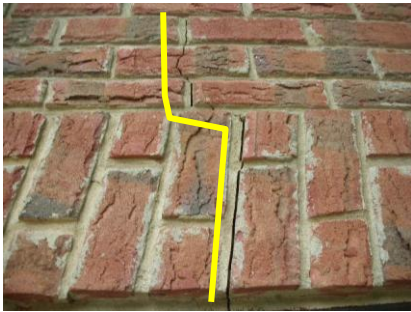


Dime sized hole over copper roof.

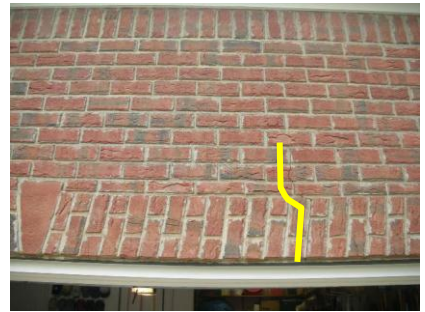


Close up photo of hole

Further Investigate: There is a hairline crack in the brickwork over the garage door opening. The crack is about 4 feet right of center and extends from the metal lintel upwards about 2 feet. Subsequently observe to determine if the crack increase in length or width.



Hairline crack over garage door



Wide angle photo of crack over garage

ROOFING & ATTIC³:

Roof coverings, drainage systems, flashings, skylights, chimneys and roof penetrations were inspected. The roof was inspected for readily visible and accessible signs of leaks or abnormal condensation on building components.

Method to inspect roof: Main roof - from ground with binoculars, walked on porch roofs, viewed from overlooking windows

Roof Material: Composition asphalt shingles

Roof Drainage: Gutters & downspouts into ground drainage system

Further Investigate: There is flashing and counter flashing along the roofline between the garage and exterior wall of the main house. The counter flashing is cut incorrectly exposing the upper edges of the counter flashing and is not cut at the same angle as the slope of the roof. The counter flashing is installed very poorly and incorrectly. Repair or replace.



Upper edge of flashing exposed



Water stains on roof sheathing

³ Weather conditions may limit the inspector's ability to detect certain leaks. Client should ask the seller to disclose the presence of any known roof leaks. Conclusions made by the inspector do not constitute a warranty, guaranty or policy of insurance. Roofs nearing the end of serviceable life or difficult to access should be evaluated by a qualified roofing contractor. Attic areas should be checked annually for water penetration.

Repair Item: There is black water staining on the roof sheathing around the metal exhaust flue in the attic. The flashing is no longer functioning as intended. The roof sheathing was dry during the inspection. Repair the flashing around the exhaust flue.

Repair Item: The roof shingles on the screen porch were damaged on the left rear corner. There were numerous locations where dime sized areas of granules were missing from the shingles. The granules protect the fiberglass and composition matt of the shingle. When the granules are removed, the matt is exposed to sun and weather which deteriorate and cause the shingle to fail. Replace the damaged shingles on the screen porch roof.



Black dots are dime sized areas of missing granules on porch roof

PLUMBING⁴:

Readily visible and accessible interior water supply and distribution systems including piping materials, supports, pipe insulation, fixtures, faucets, functional flow, leaks, and possible cross connections were inspected. Readily visible and accessible interior traps, drain, waste and vent piping including piping supports, pipe insulation, leaks, and functional drainage were inspected. All plumbing fixtures, including their faucets and all exterior faucets attached to the house, except where the flow end of the faucets was connected to an appliance were operated. Water heating equipment, normal operating controls, automatic safety controls, chimneys, flues and vents were inspected. Readily visible and accessible fuel storage and distribution systems including interior fuel storage equipment, supply piping, venting, supports, and leaks were inspected.

Water Supply & Distribution Piping: Copper, Polybutylene

Drain, Waste & Vent Piping: PVC

Main Water Shutoff Location: Not located

Water Heater Fuel: Gas

Capacity: 50 Gal

Location: Attic

Manufacturer: Penfield

Mfg Date: 2001

Approx. Age: 9 yrs

Model #: 650NRRT

Serial #: B01135484

⁴ Inspection is limited to a representative sample of visible and accessible plumbing components only. Water conditioning systems, fire and lawn sprinkler systems, on-site water quantity and quality, on-site waste disposal systems, foundation irrigation systems, swimming pools, and solar heating equipment are not inspected. The plumbing system was not inspected for proper sizing, design or use of proper materials. Any and all repairs should be performed by a licensed plumbing contractor. This report is not an assurance that leaks will not occur in the future.

Temp. Pressure Relief Valve: Present

Thermal Expansion Tank: Not Present

Sump Pump: Not present

Hose Bib Vacuum Breakers: Present

Main Gas Shutoff: Meter

Gas Meter Location: Left exterior wall

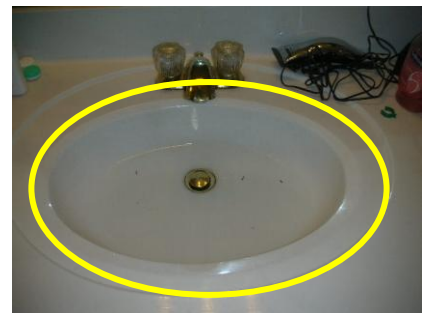
Gas Piping: Steel pipe

Gas Pipe Electrically Bonded: No

Repair Item: Commonly accepted plumbing practices require drain lines from a dishwasher to rise above the level of the sink drain before dropping down and connecting to the garbage disposal or waste line. This high loop prevents dirty water from the kitchen sink or garbage disposal accidentally flowing back into the dishwasher. The drain line for the dishwasher enters the cabinet at the bottom and rises to the garbage disposal. The current configuration does not provide the necessary high loop. Repair or replace by a licensed plumbing contractor.



Dishwasher drain missing high loop



Slow draining master bath sink

Repair Item: The left sink in the master bathroom is a slow drain. Likely it is just clogged with toothpaste and hair. Initially apply over the counter drain cleaning products to treat the problem. If problem persists, repair by a licensed plumbing contractor.

Repair Item: Commonly accepted building practices require sediment traps at all gas appliances. There is no sediment trap installed in the gas line supplying the gas water heater or attic furnace. Sediment traps are 3 inch pipe sections connected via a T pipe fitting after the appliance shutoff valve but before the gas appliance to allow sediment and moisture to fall out of the gas line to prevent clogs or damage to the gas controller of the appliance. Repair or replace by a licensed plumbing contractor.



Missing sediment leg at water heater



Missing sediment leg at attic furnace

Repair Item: Commonly accepted plumbing practices require horizontal pipes be supported every 4 feet. The rigid black metal gas pipe supplying the water heater and attic furnace was not secured over a 15 foot run. Accidental kicking of the gas pipe could cause it to fail. Properly support and secure the gas pipe in the attic.



Polybutylene plumbing at water heater

Further Investigate: Polybutylene plumbing supply lines are installed in this house at the water heater. Polybutylene was used as water distribution piping in many homes built from the mid 1980's until the mid 1990's. The piping and associated fittings have had a failure rate and subsequent leakage sufficient to have been the subject of several nationwide class action lawsuits. Copper and brass fittings used in later years seem to have reduced the failure rate, but the piping may still fail due to problems with poor installation, improper handling, or chemical reaction with the water supply. For further details about the piping and your rights under the class action lawsuit settlements contact 1-800-392-7591 or visit the Website <http://www.pbpipe.com>. You may wish to have the plumbing system further evaluated by a licensed plumbing contractor.

Recommendation: Water supply hoses for clothes washing machine are commonly rubber construction. Rubber hoses are only intended for approximately five years of continuous service. The hoses deteriorate and develop leaks over time. Replace the rubber hoses every five years or upgrade to braided metal hoses as a preventive measure.

ELECTRICAL⁵:

Service entrance conductors, service equipment, grounding equipment, main over current device, as well as the main and distribution panels were inspected. Amperage and voltage rating of the service was inspected. The branch circuit conductors, their over current devices and the compatibility of their amperage was inspected. The polarity and grounding of all receptacles within six feet of interior plumbing fixtures, in the garage or carport, and the exterior of the structure were inspected. The operation of a representative number of installed ceiling fans, lighting fixtures, switches, and receptacles located inside the house, garage, and exterior walls were inspected.

Service Amp/Volt: 200 amps 120/240 volt

Main Disconnect: Exterior panel

Service Entry Conductor: Aluminum

Over Current Devices: Breakers

Service Feed: Underground

Meter Location: Right rear exterior

Service Panel: Right rear exterior

Distribution Panel: Interior closet

⁵ Inspection is limited to a representative sample of readily visible and accessible electrical wiring and components only. Built-in vacuum equipment, low voltage systems, security system devices, heat detectors, carbon monoxide detectors, telephone, security, cable TV, intercoms, and other ancillary wiring that is not part of the primary electrical distribution system is not inspected and excluded. Smoke detectors that are part of a central system are not tested or inspected. Any and all repairs should be performed by a licensed electrical contractor.

Wiring Materials: Copper

Aluminum Branch Wiring: No

Smoke Detectors: Present & operated

Grounding: Bare copper wire to soil

GFCI: Inspected and operated

AFCI: Not present

Safety Item: Commonly accepted electrical practices require all receptacles over kitchen countertops have GFCI protection. The receptacles over the countertop beside the refrigerator do not have GFCI protection. Install GFCI protection at this location as a safety precaution by a licensed electrical contractor.

Safety Item: Commonly accepted electrical practices require a smoke detector in each bedroom, one outside each common sleeping area, and one on each floor of living space that are interconnected so all will alarm if one alarms. A smoke detector is installed on each level of the house but they are not interconnected. They do not have battery backup. There are no smoke detectors in bedrooms. Repair or replace by a licensed electrical contractor.

Repair Item: The National Fire Protection Association recommends that smoke detectors be replaced every 7-10 years. Smoke detectors become less effective over time. The existing detectors are nearing or already past the recommended replacement period. Replace the smoke detectors by a licensed electrical contractor.

Safety Item: There is no receptacle in the center kitchen island. Commonly accepted electrical practices require one GFCI protected receptacle in kitchen islands. Without a receptacle on the island, people often place appliances on the island and drape the power cord across the walkway to the a nearby receptacle creating a trip hazard as well as the possibility of pulling the appliance off the island counter and crashing to the floor. Repair or replace by a licensed electrical contractor.



Kitchen island has no receptacle



Closet light not enclosed

Repair Item: Commonly accepted electrical practices require surface mounted incandescent light fixtures in clothes closets have fully enclosed bulbs and be at least 12 inches from storage. The light fixtures in the clothes closets have exposed bulbs. Exposed bulbs can cause stored items to catch fire. Repair or replace by a licensed electrical contractor.

HEATING⁶

The heating equipment, normal operating controls, automatic safety controls, chimneys, flues, and vents were inspected. Solid fuel heating devices were inspected if present. The readily visible and accessible distribution systems including fans, pumps, ducts, piping, supports, insulation, air filters, registers, radiators, fan coil units, and convectors were inspected. The heating system was operated using normal controls. Readily openable access panels provided by the manufacturer for routine homeowner maintenance were opened and inspected.

The heat for the first floor of the house is supplied by a forced air, gas furnace located in the crawlspace using insulated metal and flexible ductwork. The heat for the second floor is supplied by a forced air, gas furnace located in the attic using insulated metal and flexible ductwork. There is an installed heat source in each habitable space.

Manufacturer: Trane, Model number: TUY060R9V3W6, Serial number: 6222K207G
Manufacturer: Trane, Model number: TDD080C936A2, Serial number: JO6504759

There is a vented solid fuel fireplace in the den.

Further Investigate: The HVAC components were manufactured in 200/2006 and are approximately 5 years old. HVAC systems have a statistical life of about 12-15 years. The HVAC systems did not have any service maintenance labels indicating regular service. Heat exchangers should be regularly checked for cracks that can allow carbon monoxide to escape from the burn chamber and be distributed throughout the home via the duct system. Have an invasive inspection including, but not limited to the heat exchanger to determine the integrity of any and all components by a licensed mechanical contractor as well as design and implement repairs or replacement.

Maintenance Item: The solid fuel burning fireplace and chimney could not be fully inspected due to the chimney cap. Have a level II inspection of the fireplace and chimney performed by a professional chimney sweep prior to closing to determine the condition of the fireplace and chimney.

Maintenance Item: Disposable filters for the HVAC systems will get dirty in the return air ducts. Recommend that appropriately sized, clean filters be replaced routinely to maintain the efficiency of the HVAC systems. Install the filters so the arrow on the filter is pointing towards the duct system.

Recommendation: The house has a gas water heater, solid fuel fireplace, and two gas furnaces. The products of combustion include carbon monoxide (CO); a clear, odorless, non-irritating gas that can cause health problems at low concentrations and death at high levels. Recommend installing CO detectors on each level of the house near the ceiling.

⁶ Permanently installed heating systems are inspected using normal controls and no remaining life expectancy is implied and no warranty is given. Heating systems are not operated when weather conditions or other circumstances may damage equipment. The uniformity or adequacy of heat supply to various rooms is not inspected. Automatic safety controls are not tested. Solid fuel fires are not ignited or extinguished. Pilot lights are not lit. The interior of flues, fireplace insert flue connections, heat exchangers, humidifiers, electronic air filters, and solar space heating equipment is not inspected.

AIR CONDITIONING⁷:

The central air conditioning and through-the-wall install systems including cooling and air handling equipment and normal operating controls were inspected. The readily visible and accessible distribution systems including fans, pumps, ducts, piping, associated supports, dampers, insulation, air filters, registers, and fan coil units were inspected. Readily openable access panels provided by the manufacturer for routine homeowner maintenance were opened and inspected. There is an installed cooling source in each habitable space.

The first floor of the home is cooled by an electric, split style air conditioning system using insulated metal and flexible ductwork. The coils and air handler are located in the crawl space. The interior unit is sitting on masonry blocks. The condenser compressor unit is located on the exterior of the home.

Exterior Unit: Trane, Model number: 4TTX4024B1000AA, Serial number: 62435S61F, Mfg Date: 6/2006

Interior Unit: Trane, Model number: 4TXCB025AC3HCAA, Serial number: 6153W1S5G, Mfg Date: 4/2006

The second floor of the home is cooled by an electric, split style air conditioning system using insulated metal and flexible ductwork. The coils and air handler are located in the attic. The interior unit is sitting on masonry blocks in an overflow pan with an automatic safety overflow prevention device. The condenser compressor unit is located on the exterior of the home.

Exterior Unit: Trane, Model number: 4TTX4030B1000AA, Serial number: 5345YSS2F, Mfg Date: 8/2005

Interior Unit: Trane, Model number: 4TXFH033AS3HHAA, Serial number: 6194RUE7H, Mfg Date: 5/2006

The air conditioning systems were operated using normal operating controls.

Repair Item: The overflow pan under the HVAC unit in the attic is rusty. This indicates the overflow pan contained water in the past. The corrosion and deterioration will continue until some point the pan will not hold water. Repair or replace.

Further Investigate: The air conditioner components were manufactured in 2005/2006 and are approximately 5 years old. HVAC systems have a statistical life of about 12-15 years. The HVAC systems did not have any service maintenance labels indicating regular service. Have an invasive inspection to determine the integrity of any and all components by a licensed mechanical contractor.

⁷ Central air conditioners are inspected using normal controls and no remaining life expectancy is implied and no warranty is given. Cooling systems are not operated when weather conditions or other circumstances may damage equipment. Window air conditioners are excluded. The uniformity or adequacy of cool-air supply to various rooms is not inspected.

INTERIORS⁸:

Walls, ceilings, and floors were inspected. Steps, stairs, balconies and railings were inspected. Counters and a representative number of built-in cabinets were inspected. A representative number of doors and windows were operated and inspected. The interior was inspected for water penetration into the building and signs of abnormal or harmful condensation on building components.

Further Investigate: There is water staining and discolored wood at the bottom left corner of the living room window sill. Moisture meter readings indicated a slightly higher than normal moisture content. Further investigate to determine the source of the water intrusion as well as design and implement a repair procedure.



Water stained window sill living room



Lower sash not square in frame

Further Investigate: The right lower sash of the living room window did not fit squarely in the frame. As the sash was moved up and down, a gap would appear between the sash and frame at different locations. The sash operated but does not make a complete seal and is not square to the frame. Further investigate to determine if the frame, track or sash is out of square and repair or replace.

Repair Item: The windows in the second story music room that overlook the backyard have two failed seals. The lower sash of one window and the upper sash of the other window have failed seals. The windows are not functioning as intended. Replace the failed windows.



Double pane seals failed



Broken window sash lock front bedroom

Repair Item: The window sash lock of the front window of the bedroom to the right of the top of the stairs is damaged. The sash lock has been torn and is damaged. Replace damaged window sash lock.

⁸ Inspection is limited to a representative sample of visible and accessible components only. Inspections do not include cosmetic defects including paint, wallpaper, and other finish treatments on the interior walls, ceilings, and floor. Draperies, blinds, and other window treatments are excluded. The condition of floors underneath carpet and other floor coverings cannot be determined and is excluded.

Repair Item: There are several doors throughout the house that bind at the door knob side top. Included are the second story hall bathroom door and the closet door in the music room. Repair or replace.



Hall bathroom door binds



Music room closet door binds

Further Investigate: There is a water stain in the ceiling of the first story bathroom near the exhaust fan. The exhaust hood on the roof has been recently repaired and may have corrected the problem. Subsequently observe the ceiling for darkening or additional rings of water stains indicating the leak is continuing.



Water stain 1st floor bath ceiling



Water stain master closet ceiling

Further Investigate: There is a water stain in the master closet ceiling. The water stain is directly under the plumbing vent stack where it penetrates the roof. The insulation was stained and matted at this location. There was no water staining of the roof sheathing or on the plumbing vent stack. Further investigate to determine the source of the water intrusion as well as design and implement a repair.

Repair Item: The door to the first story bathroom does not latch. The door closes but the door bolt does not properly seat into the striker plate. The door latch system is not functioning as intended. Repair or replace by a licensed general contractor.

Further Investigate: There were several locations throughout the home where the walls or ceiling were cracked. Some had been previously repaired and cracked again. The kitchen ceiling was cracked at the corner near the wall oven. The dining room walls were cracked at the inside angled wall. The bedroom over the dining room has minor cracking directly over the dining room crack. The wall is cracked in the entrance foyer just past the living room. Most cracks followed joints between sections of drywall. Additional cracks were scattered throughout the home. Further investigate the foundation system to determine if it is stable.

Repair Item: All the windows tested in the house are difficult to operate. Bedroom windows are considered emergency egress and should operate freely. Windows that do not operate could trap occupants inside during an emergency. Repair or replace all windows so that they operate freely the full length of travel.

Repair Item: The interior door to the music room is too long. It touches the carpet. There should be approximately a 1 inch gap at the bottom to allow the HVAC systems to pull return air back to the system. The doors need to be trimmed to provide the necessary air flow via the gap at the bottom of the door. Repair or replace by a licensed general contractor.

INSULATION AND VENTILATION⁹:

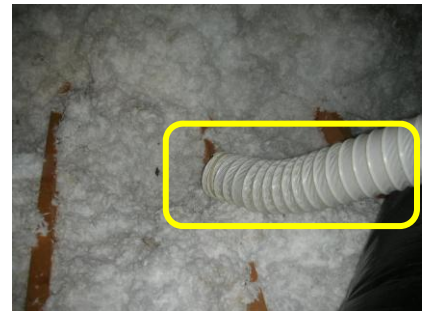
Readily visible and accessible insulation and vapor retarders in unfinished spaces were inspected. Ventilation of attics and foundation areas was inspected. Kitchen, bath and laundry venting systems were inspected. Readily accessible attic ventilation fans and thermostatic controls were inspected and operated when temperature permitted. Insulation was moved where readily visible evidence indicated the possibility of a problem and where plumbing drain and waste pipes penetrated floors.

Roof ventilation is via gable, ridge and soffit vents. Insulation in the attic is loose fill approximately 10 inches deep. There is fiberglass batt insulation installed over vaulted ceilings and fiberglass batt insulation installed on framed walls in the attic space. Wall insulation is not accessible for inspection due to finish materials. First floor insulation is fiberglass batt insulation. Crawlspace ventilation is via foundation wall vents. There is a plastic vapor retarder over the crawl space floor.

Repair Item: The duct for the second story hall bath exhaust fan does not terminate at the exterior. The hall bath duct has fallen and it exhausting directly into the attic. The ducts should terminate outside the attic. Repair or replace by a licensed mechanical or general contractor.



Metal Y missing hall bath duct



Hall bath exhaust fan duct into attic insulation

Repair Item: The duct for the kitchen down draft exhaust fan is disconnected where it passes through the foundation wall to the exterior. The exhaust is being deposited in the crawlspace rather than exterior. This will coat the crawlspace with grease and increase the moisture level. The duct is not functioning as intended. Repair the duct.

⁹ Inspection is limited to a representative sample of visible and accessible components only. Concealed insulation and vapor retarders are not inspected and are excluded. Any estimates of insulation R values or depths are rough average values. Select and use only metal dryer ducts.



Down draft kitchen exhaust duct disconnected



Attic fan removed

Further Investigate: The thermostatically controlled attic ventilation fan has been removed from the housing. The housing and exterior cover has become a passive ventilation system. The fan is not functioning as intended by the manufacturer but does not leak at this time. When house is re-roofed, remove the remainder of the fan and repair hole in sheathing.

Repair Item: The insulation in the attic is primarily loose fill fiberglass insulation. There are numerous locations where the insulation had been compressed. Compressed insulation is not effective and is not functioning as intended. Repair the existing insulation by fluffing to match the surrounding insulation or add insulation to bring compressed areas up to required depth.

Repair Item: The crawl space vapor barrier either barely overlapped or almost touched the adjoining section. Commonly accepted building practices require a vapor barrier be installed to cover all areas of the exposed earth in the crawl space and the joints be overlapped by 12 inches. Vapor barriers limit moisture intrusion into the house. Repair vapor barrier installation by a professional insulation contractor.

Repair Item: The insulation between the pull down attic stairs treads is damaged, compressed or missing. This creates a large hole in the insulation blanket allowing conditioned air to escape the living space into the attic and allow unconditioned air from the attic space into the living space. Repair the insulation in the attic pull down stairs.

Recommendation: The pull down attic stairs did not have weather stripping around the pull down portion of the stairs or the surrounding frame. This gap can allow heat transfer and drafts between the living space the attic. Recommend installing weather stripping around the attic pull down stairs.

BUILT-IN KITCHEN APPLIANCES¹⁰:

The following built-in appliances were inspected and the basic functions operated:

Dishwasher: Inspected but not operated through a normal cycle at owner's request.

Range: Not present.

Cook Top: (Electric) Inspected and operated.

¹⁰ Appliances were operated using normal controls for basic functions only. Clocks, timers, self-cleaning oven functions, calibration of thermostats and automatic functions were not inspected and are excluded. Non built-in appliances are not inspected and are excluded. Appliances shut down or otherwise inoperable are not operated and are excluded. No life expectancy or warranty is implied or given.

Wall Oven: (Electric) Inspected and operated.

Trash Compactor: Not present.

Garbage Disposal: Inspected and operated.

Kitchen Ventilation Equipment or Range Hood: Inspected and operated.

Permanently Installed Microwave Oven: Inspected and operated.

Maintenance item: Filters for the kitchen exhaust fan will collect grease and get dirty. Recommend that filters be routinely cleaned or replaced to maintain the efficiency of the exhaust system and reduce potential fire hazard.



Inspector: Bruce Ramsey

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