

Property, Energy & Moisture Intrusion Inspections

Inspection Report

Jim Smith

Property Address: 4455 West Waverly Place Anytown IL 60000



West Elevation

Domicile Consulting

Ross Neag 4145 North Keystone Avenue Chicago IL 60641 708-243-7222 IL Lic #450.004096 exp 12/2012



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Date: 1/27/2011

Time: 09:30 AM

Property: 4455 West Waverly Place Anytown IL 60000

Customer: Jim Smith

Report ID: 1/27/11/01rn

Real Estate Professional:

Comment Key or Definitions

The following definitions of comment descriptions represent this inspection report. All comments by the inspector should be considered before purchasing this home. Any recommendations by the inspector to repair or replace suggests a second opinion or further inspection by a qualified contractor. All costs associated with further inspection fees and repair or replacement of item, component or unit should be considered before you purchase the property.

Inspected (IN) = I visually observed the item, component or unit and if no other comments were made then it appeared to be functioning as intended allowing for normal wear and tear.

Not Inspected (NI)= I did not inspect this item, component or unit and made no representations of whether or not it was functioning as intended and will state a reason for not inspecting.

Not Present (NP) = This item, component or unit is not in this home or building.

<u>Repair or Replace (RR)</u> = The item, component or unit is not functioning as intended or needs further inspection by a qualified contractor. Items, components or units that can be repaired to satisfactory condition may not need replacement.

TYPE OF STRUCTURE:	APPROXIMATE AGE OF STRUCTURE::	HOME FACES::
Single Family Detached Residence	Built in 1994	West
CLIENT PRESENT?:	RADON TEST?:	WATER QUALITY TEST?:
Yes	No	No
WEATHER CONDITIONS::	AMBIENT TEMPERATURE::	NUMBER OF STORIES::
Cloudy	Below 32 deg FA/C not operated due to risk of equipment damage.	Two and a half story
EXTERIOR WALL CONSTRUCTION::	FOUNDATION::	
Wood Frame and Masonry	Crawlspace, Concrete Foundation Walls	
EXTERIOR WALL CLADDING MATERIAL: :	FOUNDATION MATERIAL: : Concrete	
Brick veneer, aluminum siding		

I. 4 POINT Inspection

This home inspection is being conducted in accordance with the State of Illinois Home Inspector Licensing Act and following the American Society of Home Inspectors guidelines. No pest control, lead paint, asbestos, mold, or other types of testing are being performed. This is a visual inspection of readily accessible systems and components of the home. Some items or areas may not be inspected if they are blocked by furniture or stored items. The home inspector makes no guarantees regarding any of the home's systems or components. The inspection is performed in good faith and is a 'snapshot in time'; it is does NOT constitute a prediction that the home will perform adequately in the future. Only non-invasive processes are used in the course of the inspection. Seasonal changes such as wind-driven rain, ice, and humidity may bring some defects to light that were not noted during your home inspection. Basements and attics that were dry at the time of the inspection can be damp or leak in later weeks or months. If you discover any adverse conditions in the home after your Domicile Consulting inspection, please call us immediately for a re-inspection and free consultation. Your inspection fee will be refunded without question if you are unhappy with the inspection for any reason, provided the buyer/client signs a 'hold harmless' agreement when accepting the refunded fee. No guarantees or warranties are provided in connection with the home inspection. Any disputes that cannot be resolved by the inspector and the client will be submitted jointly to the American Arbitration Association for a decision.

Styles & Materials

ROOF COVERINGS: Composition (Asphalt or Fiberglass) Shingles Modified Bitumen	ROOF VIEWED:: Ground Via Binoculars Roof was unable to be viewed due to snow covering	ATTIC VENTILATION: Eave Edge Venting Static Roof Vents
POTABLE WATER SOURCE:: Public	WATER SERVICE PIPING MATERIAL:: Copper Main Water Shut-Off Location: : SW crawlspace, front foyer closet	WATER SUPPLY PIPING MATERIAL:: Copper Water Pressure and Flow: : Good
PLUMBING WASTE PIPING MATERIAL:: PVC Cast iron	GAS SHUT-OFF LOCATION:: NW Exterior Wall	WATER HEATER SIZE IN GALLONS:: 75 Gallons BTU or WATT Input Rating : 76,000 BTU
WATER HEATER BRAND:: Average Gas Water Heater Service Life is 8-12 years Bradford White Serial # and Approximate Age in Years : YD1273975, 2002	ELECTRICAL SERVICE:: 240 volts Aluminum Service Conductors Overhead service	MAIN DISCONNECT LOCATION: Service Panel
SERVICE PANEL AMPACITY:: 200 AMP Adequate Overcurrent Protection Devices: : Circuit Breakers	SERVICE PANEL BRAND:: GENERAL ELECTRIC	BRANCH CIRCUIT CONDUCTORS:: Copper
WIRING METHODS:: Electrical Metallic Tubing EMT (Conduit) Not Fully Visible Armored Cable (BX) Extra Info : 33 of 42 used	HEAT TYPE:: Forced Air Please avoid the use of 1" electrostatic or heavy pleated disposable filters such as 'Allergen' or other highly restrictive filters UNLESS filter pressure drop is measured as acceptable Two units Air Filter Size: : 1st fl- 16 x 25 x 1"; 2nd- 16 x 20 x 1"	HEATING ENERGY SOURCE:: Natural Gas BTU or KW Input per Hour : 1st FI- 80,000 BTU; 2nd FI- 119,000 BTU
HEATING EQUIPMENT MANUFACTURER:: AGED Average Service Life of a Gas-	COOLING EQUIPMENT STYLE:: Split System {Condenser (outside) and Evaporator Coil (inside)} Approximate Cooling Capacity in Tons: : 5.5	COOLING EQUIPMENT MANUFACTURER: Average Service Life of Central A/C Unit is 12-15 Years

Fired Forced-Air Furnace is 18-24 years CARRIER Oversized- Have Heating Load **Calculation Performed** TRANE Serial # and approximate age of unit : 1st FI- Z135ROX1G, 2001; 2nd Fl- 2084C81654, 1984

VENTILATION:

WINDOW STYLES & MATERIALS::

Bathroom- Operable Window Bathroom- ducted mechanical fan Composite (Fiberglass etc.) Kitchen Exhaust- ducted mechanical fan

Casement Double Hung **Glass Block** Slide-by **Thermal Glazing** Wood Frame

Items

A. EXTERIOR WALLS, GROUNDS, CHIMNEYS, ETC.

Comments: Inspected, Not Functioning or in need of repair

(1) Exterior sealant has an approximate lifespan of 3-7 years in our climate. The use of ASTM C 920 compliant exterior rated sealants of good quality and joint preparation is recommended for increased service life, performance, and aesthetics. Several sources regarding caulking preparation can be found online, especially here: Caulking 101.

All caulk joints should be inspected annually and repaired as needed.

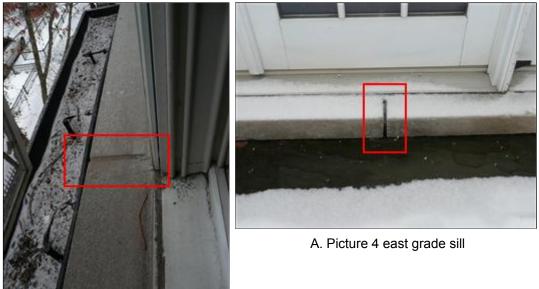


A. Picture 1 multiple, if not all windows, require sealant replacement

BRYANT CARRIER Serial # and Approx. Age of Condensing Unit : Bryant-2003E10190, 2003; Trane-R4452K53F, 2000

A. Picture 2 east door trim

(2) The mortar joints between the stone window/door sills should be sealed with a high-quality masonry caulking compound to reduce the risk of moisture saturation and damage to the brick masonry below.



A. Picture 3 master BR window, i.e.

(3) The aluminum window casings have not been sealed with appropriate materials to retard weather. This can lead to shortened life of building components including but not limited to the existing masonry, framing and window as well as interior finishes.

NOTE- Contractors differ on this subject because many times the existing wood window casings are in substantially good shape and don't require repairs but are covered anyway out of reduced maintenance and appearance. The Inspector's OPINION is that it is better to seal the gap between the metal window capping and masonry to reduce moisture loads at known entry points.



A. Picture 5 seal window trim gaps

(4) The use of a head flashing versus relying on sealant is recommended at the office door head casing for maximum protection.



A. Picture 6 install head flashing, replace/repaire aged trim

(5) The aged wood rake trim should be replaced, preferably with a composite type of material for prolonged service life.

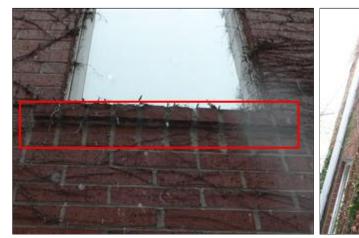


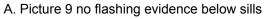
A. Picture 7 replace rake fascia

A. Picture 8

(6) The masonry wall flashings are either missing or improperly installed. The flashings should protrude from the wall by at least 1/4" at the following locations: the top of the foundation wall; above the masonry pockets where the floor joists are set into the concrete block; tops of parapet walls and decorative capstones; and **above and below every window and door**. Missing or improperly installed wall flashing can allow moisture to enter the home and cause rot, mold growth, and structural damage. If replacement of the flashings is to commence, the use of copper or similar metal flashing or high quality rubberized/elastomeric material and stainless steel drip edge is highly recommended to prevent UV degradation of the flashing material and to prolong its service life as well as keep water from saturating the masonry walls and contributing to excess moisture loads. The exterior masonry walls of this structure should be evaluated and repaired by a licensed and competent masonry contractor.

From Brick Industry Association, Technical Notes #7: "Flashing Extension Through Wall: When possible, flashing should extend beyond the face of the wall to form a drip edge. When using a flashing that deteriorates with UV exposure, a metal or stainless steel drip edge can accomplish this. It is imperative that flashing be extended at least to the face of the brickwork."





A. Picture 10 sealed lintels increase risk of moisture retention, structural damage



A. Picture 11 rusting lintel, north kitchen window

A. Picture 12 east door system header improperly installed/flashed; repair

(7) The following article by the Brick Industry Association should be reviewed in consideration of the existing ivy presence at the subject home. Differing opinions exist as to its acceptance or removal. Further evaluation by a qualified masonry contractor may be desired by the Client. <u>Ivy Growth</u>



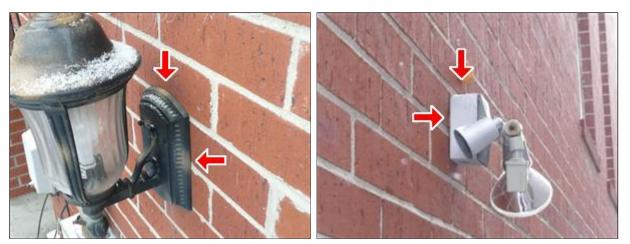
A. Picture 13 ivy presence

(8) The downspout connection to subsurface drainage should be sealed to prevent foreign object entry and clogging.



A. Picture 14 seal connection

(9) Caulking is recommended at the top and sides of the exterior electrical lighting fixtures, equipment and outlets in order to prevent moisture penetration into the home and/or moisture contact with energized electrical equipment.



A. Picture 15

A. Picture 16 seal tops and sides of fixtures and outlets

B. GARAGES & OUTBUILDINGS

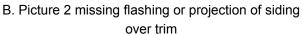
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Comments: Inspected, Not Functioning or in need of repair

(1) The base garage trim is missing a z-type flashing between it and the aluminum siding above for proper moisture management and should be repaired by a qualified contractor. The base trim should be replaced at that time, preferably with composite material for longer service life and rot resistance.



B. Picture 1 aged trim, west garage





B. Picture 3 aged alley side fascia board



B. Picture 4 north alley side



B. Picture 5 repair south siding

(2) All tree limbs should kept at least 3 feet from garage surfaces to avoid abrasion as well as pest access.



B. Picture 6 trim branches

(3) The north downspout should be connected to an additional downspout and routed away from the garage slab where accessible to avoid unnecessary soil saturation and risk of damage to garage framing.



B. Picture 7



B. Picture 8 missing east downspout(s)

(4) Containment cables should be installed through the garage door extension springs in order to reduce the risk of injury in the event of a catastrophic spring failure.



B. Picture 9 missing containment cables

(5) The split wall stud at the north wall should be repaired or replaced for proper wall support and function.

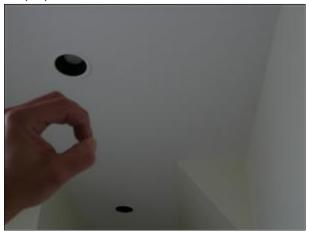


B. Picture 10 split and rotated stud, north wall

C. ROOF, ROOF COVERING SYSTEM, AND ATTIC

Comments: Inspected, Not Functioning or in need of repair

(1) No access to the attic plenum was located at the time of inspection. Recommend installing attic/plenum access for periodic inspections and maintenance purposes.



C. Picture 1 no attic access

(2) A covering of snow on the roof prevented a thorough evaluation of its condition. It is recommended that a complete inspection be performed when weather permits. It may be advisable to have an escrow holdback agreed to at closing if a full evaluation is not practical before the property changes hands.



C. Picture 2 snow covered roof

(3) It is poor practice to mount satellite dishes to roof surfaces. These penetrations can introduce leaks or damage to roof sheathing, especially in high winds. The dish should be relocated to a structural portion of the building other than the roof.



C. Picture 3 recommend relocation

(4) The west metal chimney crown is rusted and was unable to be inspected. Its replacement appears likely and should be budgeted for by the Client.



C. Picture 4 heavy rust of west metal crown

D. ELECTRICAL SYSTEM, GROUNDING, CONNECTED DEVICES AND FIXTURES

Comments: Inspected, Not Functioning or in need of repair (1) PLEASE MAKE ELECTRICAL REPAIRS A HIGH PRIORITY ITEM

ALL ELECTRICAL REPAIRS SHOULD BE PERFORMED BY QUALIFIED ELECTRICIANS

It is recommended that **ALL** electrical receptacles in the bathrooms, wet bars, kitchen and food service counters, garage, and all exterior locations be upgraded to GFCI protected receptacles by a licensed and electrician in order to reduce the risk of electrical shock and injury.



D. Picture 1 upgrade aged exterior outlets

D. Picture 2 upgrade kitchen 'nook' outlets



D. Picture 3 upgrade garage outlet(s)

(2) NOTE- Many can lights were noted in the units that were not air-tight. These can provide a pathway for conditioned (heated or cooled) air to escape and possibly condense against non-conditioned building surfaces, raise energy costs and decrease indoor comfort as well as air quality. It is recommended that the Client replace these can light inserts with the appropriate compatible air tight inserts to reduce these conditions. The Inspector may be reached for further comment.



D. Picture 4 recommend air tight inserts

(3) The bare bulb light fixtures in the closets should be replaced with low-profile fluorescent fixtures in order to reduce the fire hazard associated with their hot surfaces and also in order to reduce the risk of bulb breakage.



D. Picture 5 upgrade bare bulb fixtures @ closets

(4) Several of the child proof outlet protectors are loose and should be secured to provide proper plug alignment and insertion efforts.



- D. Picture 6 align and secure child safety covers
- D. Picture 7 hallway outlet outside childrens' bath



D. Picture 8 reverse switch in child's bedroom

(5) Missing grounding conductors were noted at the a/c disconnect boxes. The grounding conductors should be installed for proper operation in the event of an electrical fault.

NOTE- 240 volt appliances do not require a separate grounding conductor but it is considered best practice due to the vibration and stresses that a/c condensing units experience while in operation which can loosen electrical bonding connections, especially flexible metallic conduit.



D. Picture 9 recommend grounding conductor

(6) The alarm company information should be made available to the new owner in order to avoid delayed activation of the system if service is transferred.



D. Picture 10 provide alarm info, manual

(7) The GFCI protected breaker, presumably for the master hydromassage tub as labeled, is not energized. The Client may wish to have the circuit energized versus a local GFCI outlet at the tub for safety purposes.



D. Picture 11 breaker in OFF position

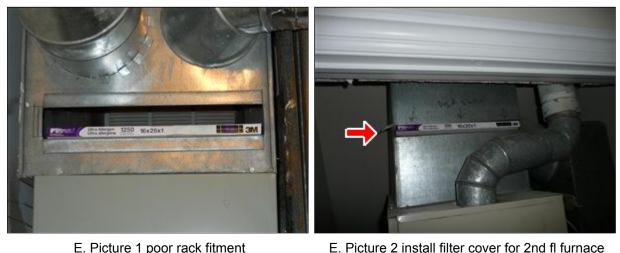
E. HEATING, AIR CONDITIONING, VENTILATION, AND GAS APPLIANCE SYSTEMS

Comments: Inspected, Not Functioning or in need of repair

(1) The first floor furnace filter rack is poorly fitted and allows the bypass of filtered air into the conditioned air stream. The filter rack should be retrofit for substantially tight fitment included with a filter cover.

The first floor furnace is also excessively loud while in operation, typically an indication of poorly designed/installed ductwork, oversized air handler, leaks and general lack of care in installation. The distribution and return ductwork should be evaluated for repairs and balancing by a qualified HVAC contractor.

Gaps were noted in the supply and return air duct work and/or in the HVAC plenums. These gaps create air leaks which can reduce the efficiency of the HVAC unit, and which can negatively impact both indoor air comfort and indoor air quality. The supply and return air ducts should be sealed using approved materials and industry-standard methods-typically UL approved foil tape or duct mastic. The use of cloth duct tape is NOT recommended due to its 100% failure rate.



E. Picture 1 poor rack fitment



E. Picture 3 large plenum gap @ 2nd fl furnace



E. Picture 4 high noise from 1st fl furnace

(2) The humidifier pads should be replaced twice during the heating season to avoid mineral and biological growth build up and improved performance and indoor air quality of the humidifier. An indoor hygrometer of decent quality is recommended to effectively evaluate indoor humidity levels in order to adjust the moisture levels on the humidistat and keep within comfort range during winter, typically between 35-45% relative humidity. Summer humidity levels should not exceed 50% if possible. Note, during periods of very cold weather, the humidity scale on the humidistat may provide too much moisture as the furnace will be cycling much more frequently, thus adding more moisture to the air. Care should be taken to "throttle" back moisture levels during these times.



E. Picture 5 large gap at 2nd fl furnace

(3) The HVAC register boots/grilles are poorly fitted to their rough openings. This increases the likelihood of energy losses and diminished temperature delivery of conditioned air. The boots should be sealed to their openings with proper methods and materials for maximum energy savings and occupant comfort. A qualified contractor should repair as needed.

All of the HVAC ducts should be cleaned professionally to avoid the circulation of unwanted odors, debris and pollutants throughout the conditioned airstream and living quarters. It is also good practice to seal the register "boots" to their openings using foil tape, spray foam or caulk. The use of a National Air Duct Cleaning Association (NADCA) member is recommended.



E. Picture 6 note boot gap



E. Picture 7 registers should be readily removable



E. Picture 8 master BR vent, east

(4) The furnace closet is not adequately protected from fire spread. The combustion closet and penetrations should have 5/8" fire rated drywall or equivalent, taped at all edges, installed and/or intumescent foam or caulking to prevent flame spread to the framing members which abut attic framing members. A qualified contractor should repair.



E. Picture 9 seal 2nd fl furnace closet

E. Picture 10 seal opening in HWH closet

(5) The bath fan(s) within the shower enclosure may not be rated for wet location operation and increase the risk of shock injuries due to moisture and vapor presence and travel. The fan(s) should be repaired or replaced with properly rated units by a qualified electrician for safe operation and shock avoidance.



E. Picture 11 2nd fl bath fan



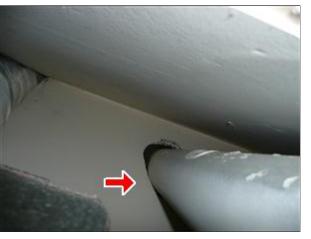
E. Picture 12 dirty fan interior, clean for increased fan performance

(6) The mechanical closets have insufficient access to combustion/dilution air for the gas-fired appliances that are located inside. Evaluation and repair by a licensed and competent HVAC contractor is recommended in order to reduce the risk of equipment damage, inefficient combustion, and infiltration of carbon monoxide to the living space.

Combustion make up air is required for the natural gas supplied dryer, typically 100 square inches of net free area (local codes may require more or less). A qualified contractor should provide the required net free area for safe combustion during operation







E. Picture 14 B vent clearance needs 1" airspace from combustibles



E. Picture 15 seal gaps at drywall penetrations

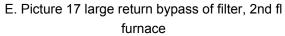


E. Picture 16 hot water heater closet

(7) The 2nd floor furnace is approximately 27 years old and beyond its statistical life. Very high supply temperatures in excess of 150F were noted at several supply registers indicating unbalanced distribution and improper performance. The furnace should be replaced with a properly sized unit of the highest efficiency affordable (preferably sealed combustion, 90% AFUE or greater) and the airflow balanced by a qualified HVAC contractor certified or educated in air balancing.

The thermostat should be relocated to a more centralized location for more accurate temperature sensing.







E. Picture 18 relocate t-stat of 2nd fl



E. Picture 19 very high supply temps, child's BR

(8) Since the ambient temperature did not allow for the safe operation of the air-conditioning system, it is recommended that an escrow holdback be provided at closing in order to protect the purchaser in the event that the air-conditioning system is defective or inoperative. Further evaluation of the air-conditioning system by a licensed and competent HVAC contractor is recommended when weather permits.

It is good practice to cover condensing units when not in use (Fall-Spring). The cooling fins were full of dust and debris and should be thoroughly cleaned prior to cooling season. It is recommended that the service disconnect be pulled and stored to prevent accidental operation of a covered unit and potential damage.



E. Picture 20 unable to test air conditioning; cover units when not in use

(9) The 2nd floor furnace (and kitchen fireplace chimney) exhaust vent does not meet the 2, 3, 10 rule which requires chimneys to terminate at least 3 feet higher than its roof penetration or be 2' higher than any building horizontal surface within 10'. If the furnace is to be replaced the proper clearances should be adhered to. Recommend repair of existing furnace vent.



E. Picture 21 2nd fl furnace vent



E. Picture 22 kitchen chimney prone to downdrafts but may be within acceptable installation limits

(10) Some of the return ductwork in the home is "panned". While allowable by some codes, panned ductwork is not ideal as it uses the framing cavities instead of dedicated ductwork for its return or supply path. This can introduce allergens and particulates as well as unconditioned air from adjoining interstitial spaces into the conditioned airstream and increase energy costs. The use of dedicated ductwork is recommended and should be evaluated by a qualified HVAC contractor.



E. Picture 23 central hallway, 1st fl

(11) The kitchen range hood is excessively loud during operation and should be serviced for acceptable sound levels while in operation. Commercial hoods such as these operate at higher than normal sound levels due to increased airflow.



E. Picture 24 loud hood operation

F. FIREPLACES, WOODSTOVES, ETC.

Comments: Inspected, Not Functioning or in need of repair

E. Picture 25 repair dimmer switch

The metal wood burning fireplace is aged. The National Fire Protection Association recommends that all wood burning fireplaces be thoroughly inspected (known as a Level II inspection) by a certified chimney sweep when a home changes ownership. Evaluation of the chimney and firebox by a qualified contractor, preferably one who is a member of the Chimney Safety Institute of America (CSIA) is recommended.

The gaps around the log lighter's penetration through the fireplace firebox should be sealed with intumescent caulk in order to prevent flames or superheated gases from entering the framing spaces.



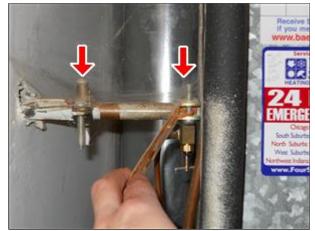
F. Picture 1 seal all log lighter openings

F. Picture 2 master BR fireplace

G. PLUMBING SUPPLY, DRAINS, FIXTURES AND VENTS

Comments: Inspected, Not Functioning or in need of repair

(1) The inexpensive, unreliable and illegal saddle valve that supplies water to the furnace-mounted humidifier should be replaced with a high-quality fixture valve in order to reduce the risk of leaking and damage. Any other remaining needle valves in operation should be upgraded as stated above.



G. Picture 1 upgrade needle valves

(2) Several plumbing deficiencies or repairs are required in the home. The following were noted and should be addressed by a qualified plumbing contractor or handyman should the repair be basic.



G. Picture 2 leaking 2nd fl showerhead



G. Picture 3 adjust 2nd fl pop up and drain



G. Picture 4 adjust master tub drain for full stoppage (water escapes in shut pos.)

G. Picture 5 secure utility laundry sink to wall



G. Picture 6 childrens' shower head



G. Picture 7 childrens' handheld sprayer bracket



G. Picture 8 adjust childrens' bath pop-up and drain G. Picture 9 clean powder room aerator or replace



G. Picture 10 repair kitchen fireplace gas escutcheon

(3) The toilet is not adequately secured to the floor. This can result in deformation of the wax ring seal, leaking, and other damage. The toilet should be evaluated by a licensed and competent plumber in order to determine if removal and reinstallation as necessary.



G. Picture 12 not seated toilet bolt

G. Picture 11 2nd fl toilet



G. Picture 13 master toilet loose



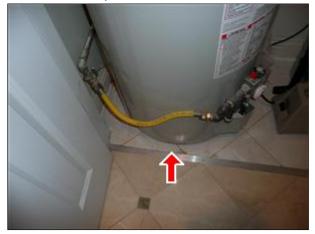
G. Picture 14 powder room toilet

(4) The flexible and corrugated drain piping at the laundry sink should be replaced with rigid and smooth walled piping for optimal drain performance and clog prevention.



G. Picture 15 replace corrugated drain pipe

(5) A drain pan is required to be placed underneath the water heater when one is installed above living space. A drain pan should be installed and connected to the nearby floor drain in order to reduce the risk of leaking and damage.



G. Picture 16 install drain pan for HWH

(6) The house has copper supply piping throughout. This increases the potential early failure of the hot water heater dielectric unions (they become 'sacrificial') which separate iron based pipe from copper. Conversations with several reputable plumbers in the Chicago area have yielded a proactive approach and the Inspection Firm recommends replacing the unions with a quality full port brass union for maximum safety and performance.



G. Picture 17 corroded union; may also be larger indication of poor draft due to lack of combustion

air

(7) The termination point of the extension piping for the water heater's Temperature and Pressure Relief Valve (TPR) is hidden from view. The end of the extension piping should be visible so the leaks in the TPR valve can be repaired before the leak leads to mineral buildup inside the valve which can prevent it from releasing pressure in an emergency. It is recommended that the extension piping be removed from the existing drain and that it be altered so that it terminates within 6 inches of the floor directly below the TPR valve.



G. Picture 18 TPR piping should NOT route upward G. Picture 19 hidden TPR termination at south side of heater

(8) The water supply piping should be insulated to reduce the risk of condensation and moisture leaks in the front foyer closet. All penetrations should be sealed to reduce drafts and energy losses.





G. Picture 20 install well fitted pipe insulation, sea gaps/openings

G. Picture 20 install well fitted pipe insulation, seal G. Picture 21 insulate access box with rigid foam

(9) The illegal S trap should be replaced with proper P trap to avoid self siphoning and potential sewer gas entry into living spaces.



G. Picture 22 kitchen sink s trap

H. INTERIORS AND FINISHES

Comments: Inspected, Not Functioning or in need of repair

(1) Multiple interior blemishes or required repairs exist, some of which are omitted from this report and considered maintenance. A qualified drywall, plaster or painting contractor, or handyman is recommended to repair these areas as needed for proper appearance. Finish painting may be required which may 'flash' over the existing finish.

NOTE: Caulk is a temporary building material and will require repairs or replacement, especially in wet environments such as bath and tub areas. The highest quality sealant affordable is recommended for lasting service.

Minor repairs are listed here.

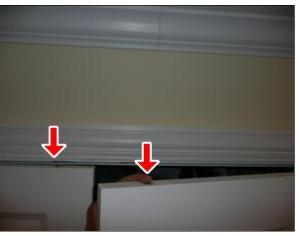


H. Picture 1 skylight trim buckling

H. Picture 2 top floor drywall junction repairs required



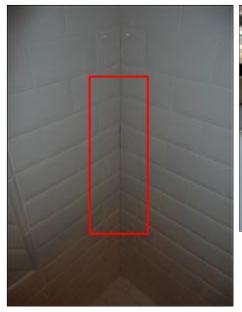
H. Picture 3 install astragal gasket at 2nd fl shower



H. Picture 4 adjust closet ball catches for door fitment



H. Picture 6 seal tile intersections, master shower



H. Picture 7 seal childrens' bath junctions



H. Picture 8 seal kitchen sink to counter gaps

(2) Rubber bump stops or stop hinges should be installed in any location where door to door, door to wall or door to object contact exits and may cause unneeded damage to the finishes.



H. Picture 9 door to railing, i.e.

(3) INFORMATIONAL: It is poor practice to tile sills in wet locations. A monolithic piece of stone, tile, or manufactured stone (Corian, etc) is recommended to inhibit moisture intrusion and premature component failure.

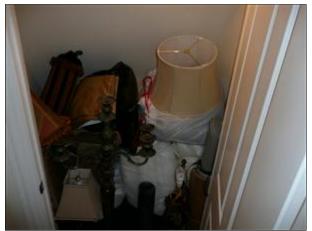




H. Picture 10 recommend one piece stone or similar

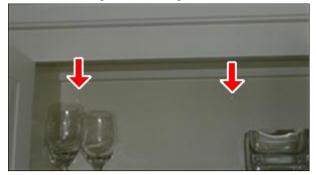
H. Picture 11 moisture staining at 2nd fl bath likely moisture control issue, not leaking

(4) Stored items throughout the entire building prevent the Inspector from evaluating all finishes and components of the building. Not all deficiencies or safety items may have been discovered and should be reviewed by the Client at final walk through prior to closing.



H. Picture 12 stored items

(5) The screws used to fasten the cabinets to the wall framing are not the recommended washer head screws. ALL non cabinet rated screws should be removed and replaced at ALL UPPER cabinets in order to reduce the risk of the cabinets pulling through the existing fasteners and loosening or becoming detached.

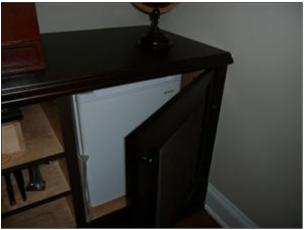


H. Picture 13 upgrade fasteners

I. INSTALLED APPLIANCES

Comments: Inspected, Not Functioning or in need of repair

(1) The ventilation requirements of the office refrigerator may not be sufficient for optimum performance and efficiency. The manufacturer installation instructions should be consulted for accepted installation procedures.



I. Picture 1 confirm clearances and ventilation

(2) It is recommended that the existing rubber water supply hoses at the clothes washer be replaced with braided stainless steel hoses for increased insurance against leaks and water damage.

It is recommended that a pan be installed under the washer with no less than a 3/4 inch drain piped to the existing floor drain (if applicable) to prevent spills or moisture damage to the unit or unit below in the event of an accident or mechanical malfunction.



I. Picture 2 upgrade hoses

I. Picture 3 recommend drain pan

(3) The corrugated plastic vent hose for the clothes dryer is prohibited by all appliance manufacturers due to it's poor airflow characteristics. This can result in increased drying times, reduced equipment life, and an increased risk of fire from lint build-up. The existing vent hose should be replaced with smooth wall metal vent piping. No sheet metal screws or fasteners are allowed in the duct interior.

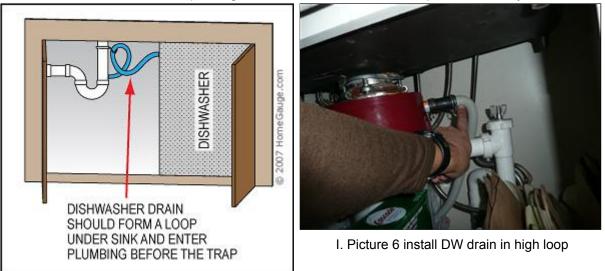
The gas supply routing penetrates the dryer venting and is unsafe and should be repaired as soon as possible for safe operation of the dryer and gas supply.



I. Picture 4 replace venting and gas supply routing

(4).

(5) The dishwasher drain hose should be configured into a 'high loop' position and secured at the underside of the counter in order to reduce the risk of drain water siphoning and cross contamination of the potable water system.



I. Picture 5

(6) Lint build-up was noted inside the vent passages of the clothes dryer. These passages and any vent piping should be cleaned in order to reduce the risk of dryer fire, reduce drying times, and to maximize the service life of the clothes dryer.



I. Picture 7 clean lint passages

J. WINDOWS & DOORS

Comments: Inspected, Not Functioning or in need of repair

(1) The east skylight hinges are shot and should be replaced for adequate skylight operation and elevation during use.



J. Picture 1

(2) Several of the exterior doors require fitment repairs and improved weatherstripping to reduce drafts and energy losses.

The addition of a rain or drip cap is recommended for the office exterior door to reduce moisture loads and convey to the exterior. Similar items such as this are found at better building material stores or online. Drip Cap This is generally recommended for any exterior door without a storm door or large overhang.





J. Picture 3 recommend drip caps

J. Picture 2 gaps at 2nd fl office door



J. Picture 4 front entry door, install drip cap



J. Picture 5 loose weatherstripping and fitment 1st fl rear

(3) Multiple windows require adjustment, repairs to hardware or glass, and overall maintenance to ensure easy operation and performance. A qualified repair contractor should evaluate.



J. Picture 6 stiff and 'swollen' master bath slider



J. Picture 7 ivy growth prevented safe operation, trim or remove



J. Picture 8 missing hardware, east BR



J. Picture 9 stripped casement operators



J. Picture 10 loose trim, south window @ gangway

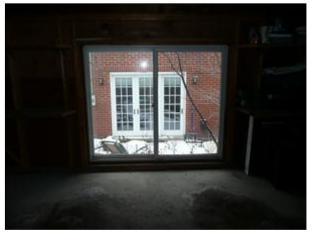
(4) Multiple windows in the home terminate less than 18" from the floor and are not of tempered glass which greatly increases the risk of laceration injuries, especially for children. All of the windows at these areas should be upgraded to tempered safety glass for safety purposes.



J. Picture 11 repair glass for safety purposes



J. Picture 12 south windows along gangway



J. Picture 13 non tempered garage glass

K. INSULATION, VENTILATION & AIR-SEALING

Comments: Inspected, Not Functioning or in need of repair

Several large plumbing bypasses were noted from the basement into the interstitial wall cavities above and can negatively affect building performance and energy costs. These should be sealed at top and bottom by a qualified contractor to increase building efficiency and comfort as well as minimizing fire spread potential.

L. OTHER

Comments: Inspected, Not Functioning or in need of repair

(1) The crawlspace does not conform to modern building and energy saving practices. The insulation is inadequate for our climate nor does it make contact with the "warmed" side of the joist cavity. The crawlspace should be thoroughly cleaned and the appropriate levels of insulation, as well as air sealing, installed to increase the comfort of the first floor which the Clients have indicated is often cold during heating efforts and winter-time exterior temperatures. Due to access limitations, the use of expanding spray foam at the exterior foundation walls and rim joist is recommended. All ductwork should be insulated to a minimum of R-8 as determined by the Department of Energy for our climate (can also be spray foamed AFTER duct revisions or repairs made). An adequate amount of supply air should also be added to the crawlspace to help condition the space and minimize moisture elevation and temperature differentials. The Client may reach the Inspector for more information. The crawlspace should be retrofitted by a qualified specialty or insulation contractor.

Recent studies have also indicated that insulating the floor/ceiling cavity--in conjunction with wall insulation--yields greater energy savings than just the walls and rim joists alone (Home Energy magazine, summer 2009).



L. Picture 1 ineffective insulation



L. Picture 3 seal all duct joints with mastic or UL approved foil tape (spray foaming eliminates this step fyi)

L. Picture 2 large gaps, no insulation contact



L. Picture 4 weatherstrip access hatch

(2) Some of the smoke detectors noted in the home appeared to be at or beyond the end of their service lives, typically taken to be 10 years. It is recommended that the smoke detector and carbon monoxide detector systems be upgraded to reflect current life safety codes which include; smoke detectors on each level of living space and in each sleeping room, hard-wired 120 V smoke detectors that are interconnected in order to alarm simultaneously when any individual smoke detector responds, and low level carbon monoxide detectors on every level of living space and within 15 feet of a sleeping room. The installation of these critical life safety devices by a licensed and competent electrician is recommended.



L. Picture 5 upgrade safety detectors

All of the recommendations for repairs or alterations that are contained in this report should be performed by licensed and competent contractors with expertise in the appropriate trade or specialty. It is recommended that the repairs/alterations be completed prior to closing. The contractor/s who perform the recommended repairs at the seller's direction should provide the buyer/client with all appropriate documentation regarding the materials and methods used in the work. A list of contractors who have been rated and recommended by consumers can be found at www.angieslist.com

Prepared Using HomeGauge http://www.HomeGauge.com : Licensed To Domicile Consulting

Summary

domicile consulting

Property, Energy & Moisture Intrusion Inspections

Domicile Consulting

4145 North Keystone Avenue Chicago IL 60641 708-243-7222 IL Lic #450.004096 exp 12/2012

> Customer Jim Smith

Address 4455 West Waverly Place Anytown IL 60000

The following items or discoveries indicate that these systems or components do not function as intended or adversely affects the habitability of the dwelling; or appear to warrant further investigation by a specialist, or requires subsequent observation. This summary shall not contain recommendations for routine upkeep of a system or component to keep it in proper functioning condition or recommendations to upgrade or enhance the function, efficiency, or safety of the home. This Summary is not the entire report. The complete report may include additional information of concern to the customer. It is recommended that the customer read the complete report.

I. 4 POINT Inspection

General Summary

EXTERIOR WALLS, GROUNDS, CHIMNEYS, ETC.

Inspected, Not Functioning or in need of repair

1. (1) Exterior sealant has an approximate lifespan of 3-7 years in our climate. The use of ASTM C 920 compliant exterior rated sealants of good quality and joint preparation is recommended for increased service life, performance, and aesthetics. Several sources regarding caulking preparation can be found online, especially here: <u>Caulking 101.</u>

All caulk joints should be inspected annually and repaired as needed.

- **2.** (2) The mortar joints between the stone window/door sills should be sealed with a high-quality masonry caulking compound to reduce the risk of moisture saturation and damage to the brick masonry below.
- **3.** (3) The aluminum window casings have not been sealed with appropriate materials to retard weather. This can lead to shortened life of building components including but not limited to the existing masonry, framing and window as well as interior finishes.

NOTE- Contractors differ on this subject because many times the existing wood window casings are in substantially good shape and don't require repairs but are covered anyway out of reduced maintenance and appearance. The Inspector's OPINION is that it is better to seal the gap between the metal window capping and masonry to reduce moisture loads at known entry points.

- **4.** (4) The use of a head flashing versus relying on sealant is recommended at the office door head casing for maximum protection.
- **5.** (5) The aged wood rake trim should be replaced, preferably with a composite type of material for prolonged service life.
- **6.** (6) The masonry wall flashings are either missing or improperly installed. The flashings should protrude from the wall by at least 1/4" at the following locations: the top of the foundation wall; above the masonry pockets where the floor joists are set into the concrete block; tops of parapet walls and decorative capstones; and **above and below every window and door**. Missing or improperly installed wall flashing can allow moisture to enter the home and cause rot, mold growth, and structural damage. If replacement of the flashings is to commence, the use of copper or similar metal flashing or high quality rubberized/elastomeric material and stainless steel drip edge is highly recommended to prevent UV degradation of the flashing material and to prolong its service life as well as keep water from saturating the masonry walls and contributing to excess moisture loads. The exterior masonry walls of this structure should be evaluated and repaired by a licensed and competent masonry contractor.

From Brick Industry Association, Technical Notes #7: "Flashing Extension Through Wall: When possible, flashing should extend beyond the face of the wall to form a drip edge. When using a flashing that deteriorates with UV exposure, a metal or stainless steel drip edge can accomplish this. It is imperative that flashing be extended at least to the face of the brickwork."

- 7. (7) The following article by the Brick Industry Association should be reviewed in consideration of the existing ivy presence at the subject home. Differing opinions exist as to its acceptance or removal. Further evaluation by a qualified masonry contractor may be desired by the Client. <u>Ivy Growth</u>
- 8. (8) The downspout connection to subsurface drainage should be sealed to prevent foreign object entry and clogging.
- **9.** (9) Caulking is recommended at the top and sides of the exterior electrical lighting fixtures, equipment and outlets in order to prevent moisture penetration into the home and/or moisture contact with energized electrical equipment.

GARAGES & OUTBUILDINGS

Inspected, Not Functioning or in need of repair

- **10.** (1) The base garage trim is missing a z-type flashing between it and the aluminum siding above for proper moisture management and should be repaired by a qualified contractor. The base trim should be replaced at that time, preferably with composite material for longer service life and rot resistance.
- **11.** (2) All tree limbs should kept at least 3 feet from garage surfaces to avoid abrasion as well as pest access.
- **12.** (3) The north downspout should be connected to an additional downspout and routed away from the garage slab where accessible to avoid unnecessary soil saturation and risk of damage to garage framing.
- **13.** (4) Containment cables should be installed through the garage door extension springs in order to reduce the risk of injury in the event of a catastrophic spring failure.
- **14.** (5) The split wall stud at the north wall should be repaired or replaced for proper wall support and function.

ROOF, ROOF COVERING SYSTEM, AND ATTIC

Inspected, Not Functioning or in need of repair

- **15.** (1) No access to the attic plenum was located at the time of inspection. Recommend installing attic/plenum access for periodic inspections and maintenance purposes.
- **16.** (2) A covering of snow on the roof prevented a thorough evaluation of its condition. It is recommended that a complete inspection be performed when weather permits. It may be advisable to have an escrow holdback agreed to at closing if a full evaluation is not practical before the property changes hands.
- **17.** (3) It is poor practice to mount satellite dishes to roof surfaces. These penetrations can introduce leaks or damage to roof sheathing, especially in high winds. The dish should be relocated to a structural portion of the building other than the roof.

18. (4) The west metal chimney crown is rusted and was unable to be inspected. Its replacement appears likely and should be budgeted for by the Client.

ELECTRICAL SYSTEM, GROUNDING, CONNECTED DEVICES AND FIXTURES

Inspected, Not Functioning or in need of repair

19. (1) PLEASE MAKE ELECTRICAL REPAIRS A HIGH PRIORITY ITEM

ALL ELECTRICAL REPAIRS SHOULD BE PERFORMED BY QUALIFIED ELECTRICIANS

It is recommended that **ALL** electrical receptacles in the bathrooms, wet bars, kitchen and food service counters, garage, and all exterior locations be upgraded to GFCI protected receptacles by a licensed and electrician in order to reduce the risk of electrical shock and injury.

- 20. (2) NOTE- Many can lights were noted in the units that were not air-tight. These can provide a pathway for conditioned (heated or cooled) air to escape and possibly condense against non-conditioned building surfaces, raise energy costs and decrease indoor comfort as well as air quality. It is recommended that the Client replace these can light inserts with the appropriate compatible air tight inserts to reduce these conditions. The Inspector may be reached for further comment.
- **21.** (3) The bare bulb light fixtures in the closets should be replaced with low-profile fluorescent fixtures in order to reduce the fire hazard associated with their hot surfaces and also in order to reduce the risk of bulb breakage.
- **22.** (4) Several of the child proof outlet protectors are loose and should be secured to provide proper plug alignment and insertion efforts.
- **23.** (5) Missing grounding conductors were noted at the a/c disconnect boxes. The grounding conductors should be installed for proper operation in the event of an electrical fault.

NOTE- 240 volt appliances do not require a separate grounding conductor but it is considered best practice due to the vibration and stresses that a/c condensing units experience while in operation which can loosen electrical bonding connections, especially flexible metallic conduit.

- **24.** (6) The alarm company information should be made available to the new owner in order to avoid delayed activation of the system if service is transferred.
- **25.** (7) The GFCI protected breaker, presumably for the master hydromassage tub as labeled, is not energized. The Client may wish to have the circuit energized versus a local GFCI outlet at the tub for safety purposes.

HEATING, AIR CONDITIONING, VENTILATION, AND GAS APPLIANCE SYSTEMS

Inspected, Not Functioning or in need of repair

26. (1) The first floor furnace filter rack is poorly fitted and allows the bypass of filtered air into the conditioned air stream. The filter rack should be retrofit for substantially tight fitment included with a filter cover.

The first floor furnace is also excessively loud while in operation, typically an indication of poorly designed/installed ductwork, oversized air handler, leaks and general lack of care in installation. The distribution and return ductwork should be evaluated for repairs and balancing by a qualified HVAC contractor.

Gaps were noted in the supply and return air duct work and/or in the HVAC plenums. These gaps create air leaks which can reduce the efficiency of the HVAC unit, and which can negatively impact both indoor air comfort and indoor air quality. The supply and return air ducts should be sealed using approved materials and industry-standard methods--typically UL approved foil tape or duct mastic. The use of cloth duct tape is NOT recommended due to its 100% failure rate.

27. (2) The humidifier pads should be replaced twice during the heating season to avoid mineral and biological growth build up and improved performance and indoor air quality of the humidifier. An indoor hygrometer of decent quality is recommended to effectively evaluate indoor humidity levels in order to adjust the moisture levels on the humidistat and keep within comfort range during winter, typically between 35-45% relative humidity. Summer humidity levels should not exceed 50% if possible. Note, during periods of very cold weather, the humidity scale on the humidistat may provide too much moisture as the furnace will be cycling much more frequently, thus adding more moisture to the air. Care should be taken to "throttle" back moisture levels during these times.

28. (3) The HVAC register boots/grilles are poorly fitted to their rough openings. This increases the likelihood of energy losses and diminished temperature delivery of conditioned air. The boots should be sealed to their openings with proper methods and materials for maximum energy savings and occupant comfort. A qualified contractor should repair as needed.

All of the HVAC ducts should be cleaned professionally to avoid the circulation of unwanted odors, debris and pollutants throughout the conditioned airstream and living quarters. It is also good practice to seal the register "boots" to their openings using foil tape, spray foam or caulk. The use of a National Air Duct Cleaning Association (NADCA) member is recommended.

- **29.** (4) The furnace closet is not adequately protected from fire spread. The combustion closet and penetrations should have 5/8" fire rated drywall or equivalent, taped at all edges, installed and/or intumescent foam or caulking to prevent flame spread to the framing members which abut attic framing members. A qualified contractor should repair.
- **30.** (5) The bath fan(s) within the shower enclosure may not be rated for wet location operation and increase the risk of shock injuries due to moisture and vapor presence and travel. The fan(s) should be repaired or replaced with properly rated units by a qualified electrician for safe operation and shock avoidance.
- 31. (6) The mechanical closets have insufficient access to combustion/dilution air for the gas-fired appliances that are located inside. Evaluation and repair by a licensed and competent HVAC contractor is recommended in order to reduce the risk of equipment damage, inefficient combustion, and infiltration of carbon monoxide to the living space.

Combustion make up air is required for the natural gas supplied dryer, typically 100 square inches of net free area (local codes may require more or less). A qualified contractor should provide the required net free area for safe combustion during operation

32. (7) The 2nd floor furnace is approximately 27 years old and beyond its statistical life. Very high supply temperatures in excess of 150F were noted at several supply registers indicating unbalanced distribution and improper performance. The furnace should be replaced with a properly sized unit of the highest efficiency affordable (preferably sealed combustion, 90% AFUE or greater) and the airflow balanced by a qualified HVAC contractor certified or educated in air balancing.

The thermostat should be relocated to a more centralized location for more accurate temperature sensing.

33. (8) Since the ambient temperature did not allow for the safe operation of the air-conditioning system, it is recommended that an escrow holdback be provided at closing in order to protect the purchaser in the event that the air-conditioning system is defective or inoperative. Further evaluation of the air-conditioning system by a licensed and competent HVAC contractor is recommended when weather permits.

It is good practice to cover condensing units when not in use (Fall-Spring). The cooling fins were full of dust and debris and should be thoroughly cleaned prior to cooling season. It is recommended that the service disconnect be pulled and stored to prevent accidental operation of a covered unit and potential damage.

- **34.** (9) The 2nd floor furnace (and kitchen fireplace chimney) exhaust vent does not meet the 2, 3, 10 rule which requires chimneys to terminate at least 3 feet higher than its roof penetration or be 2' higher than any building horizontal surface within 10'. If the furnace is to be replaced the proper clearances should be adhered to. Recommend repair of existing furnace vent.
- **35.** (10) Some of the return ductwork in the home is "panned". While allowable by some codes, panned ductwork is not ideal as it uses the framing cavities instead of dedicated ductwork for its return or supply path. This can introduce allergens and particulates as well as unconditioned air from adjoining interstitial spaces into the conditioned airstream and increase energy costs. The use of dedicated ductwork is recommended and should be evaluated by a qualified HVAC contractor.
- **36.** (11) The kitchen range hood is excessively loud during operation and should be serviced for acceptable sound levels while in operation. Commercial hoods such as these operate at higher than normal sound levels due to increased airflow.

FIREPLACES, WOODSTOVES, ETC.

Inspected, Not Functioning or in need of repair

37. The metal wood burning fireplace is aged. The National Fire Protection Association recommends that all wood burning fireplaces be thoroughly inspected (known as a Level II inspection) by a certified chimney sweep when a home changes

ownership. Evaluation of the chimney and firebox by a qualified contractor, preferably one who is a member of the Chimney Safety Institute of America (CSIA) is recommended.

The gaps around the log lighter's penetration through the fireplace firebox should be sealed with intumescent caulk in order to prevent flames or superheated gases from entering the framing spaces.

PLUMBING SUPPLY, DRAINS, FIXTURES AND VENTS

Inspected, Not Functioning or in need of repair

- **38.** (1) The inexpensive, unreliable and illegal saddle valve that supplies water to the furnace-mounted humidifier should be replaced with a high-quality fixture valve in order to reduce the risk of leaking and damage. Any other remaining needle valves in operation should be upgraded as stated above.
- **39.** (2) Several plumbing deficiencies or repairs are required in the home. The following were noted and should be addressed by a qualified plumbing contractor or handyman should the repair be basic.
- **40.** (3) The toilet is not adequately secured to the floor. This can result in deformation of the wax ring seal, leaking, and other damage. The toilet should be evaluated by a licensed and competent plumber in order to determine if removal and reinstallation as necessary.
- **41.** (4) The flexible and corrugated drain piping at the laundry sink should be replaced with rigid and smooth walled piping for optimal drain performance and clog prevention.
- **42.** (5) A drain pan is required to be placed underneath the water heater when one is installed above living space. A drain pan should be installed and connected to the nearby floor drain in order to reduce the risk of leaking and damage.
- **43.** (6) The house has copper supply piping throughout. This increases the potential early failure of the hot water heater dielectric unions (they become 'sacrificial') which separate iron based pipe from copper. Conversations with several reputable plumbers in the Chicago area have yielded a proactive approach and the Inspection Firm recommends replacing the unions with a quality full port brass union for maximum safety and performance.
- **44.** (7) The termination point of the extension piping for the water heater's Temperature and Pressure Relief Valve (TPR) is hidden from view. The end of the extension piping should be visible so the leaks in the TPR valve can be repaired before the leak leads to mineral buildup inside the valve which can prevent it from releasing pressure in an emergency. It is recommended that the extension piping be removed from the existing drain and that it be altered so that it terminates within 6 inches of the floor directly below the TPR valve.
- **45.** (8) The water supply piping should be insulated to reduce the risk of condensation and moisture leaks in the front foyer closet. All penetrations should be sealed to reduce drafts and energy losses.
- **46.** (9) The illegal S trap should be replaced with proper P trap to avoid self siphoning and potential sewer gas entry into living spaces.

INTERIORS AND FINISHES

Inspected, Not Functioning or in need of repair

47. (1) Multiple interior blemishes or required repairs exist, some of which are omitted from this report and considered maintenance. A qualified drywall, plaster or painting contractor, or handyman is recommended to repair these areas as needed for proper appearance. Finish painting may be required which may 'flash' over the existing finish.

NOTE: Caulk is a temporary building material and will require repairs or replacement, especially in wet environments such as bath and tub areas. The highest quality sealant affordable is recommended for lasting service.

Minor repairs are listed here.

- **48.** (2) Rubber bump stops or stop hinges should be installed in any location where door to door, door to wall or door to object contact exits and may cause unneeded damage to the finishes.
- **49.** (3) INFORMATIONAL: It is poor practice to tile sills in wet locations. A monolithic piece of stone, tile, or manufactured stone (Corian, etc) is recommended to inhibit moisture intrusion and premature component failure.
- **50.** (4) Stored items throughout the entire building prevent the Inspector from evaluating all finishes and components of the building. Not all deficiencies or safety items may have been discovered and should be reviewed by the Client at final walk through prior to closing.
- **51.** (5) The screws used to fasten the cabinets to the wall framing are not the recommended washer head screws. ALL non cabinet rated screws should be removed and replaced at ALL UPPER cabinets in order to reduce the risk of the cabinets pulling through the existing fasteners and loosening or becoming detached.

INSTALLED APPLIANCES

Inspected, Not Functioning or in need of repair

- **52.** (1) The ventilation requirements of the office refrigerator may not be sufficient for optimum performance and efficiency. The manufacturer installation instructions should be consulted for accepted installation procedures.
- **53.** (2) It is recommended that the existing rubber water supply hoses at the clothes washer be replaced with braided stainless steel hoses for increased insurance against leaks and water damage.

It is recommended that a pan be installed under the washer with no less than a 3/4 inch drain piped to the existing floor drain (if applicable) to prevent spills or moisture damage to the unit or unit below in the event of an accident or mechanical malfunction.

54. (3) The corrugated plastic vent hose for the clothes dryer is prohibited by all appliance manufacturers due to it's poor airflow characteristics. This can result in increased drying times, reduced equipment life, and an increased risk of fire from lint build-up. The existing vent hose should be replaced with smooth wall metal vent piping. No sheet metal screws or fasteners are allowed in the duct interior.

The gas supply routing penetrates the dryer venting and is unsafe and should be repaired as soon as possible for safe operation of the dryer and gas supply.

55. (4) .

- **56.** (5) The dishwasher drain hose should be configured into a 'high loop' position and secured at the underside of the counter in order to reduce the risk of drain water siphoning and cross contamination of the potable water system.
- **57.** (6) Lint build-up was noted inside the vent passages of the clothes dryer. These passages and any vent piping should be cleaned in order to reduce the risk of dryer fire, reduce drying times, and to maximize the service life of the clothes dryer.

WINDOWS & DOORS

Inspected, Not Functioning or in need of repair

- **58.** (1) The east skylight hinges are shot and should be replaced for adequate skylight operation and elevation during use.
- **59.** (2) Several of the exterior doors require fitment repairs and improved weatherstripping to reduce drafts and energy losses.

The addition of a rain or drip cap is recommended for the office exterior door to reduce moisture loads and convey to the exterior. Similar items such as this are found at better building material stores or online. Drip Cap This is generally recommended for any exterior door without a storm door or large overhang.

- **60.** (3) Multiple windows require adjustment, repairs to hardware or glass, and overall maintenance to ensure easy operation and performance. A qualified repair contractor should evaluate.
- **61.** (4) Multiple windows in the home terminate less than 18" from the floor and are not of tempered glass which greatly increases the risk of laceration injuries, especially for children. All of the windows at these areas should be upgraded to tempered safety glass for safety purposes.

INSULATION, VENTILATION & AIR-SEALING

Inspected, Not Functioning or in need of repair

62. Several large plumbing bypasses were noted from the basement into the interstitial wall cavities above and can negatively affect building performance and energy costs. These should be sealed at top and bottom by a qualified contractor to increase building efficiency and comfort as well as minimizing fire spread potential.

OTHER

Inspected, Not Functioning or in need of repair

63. (1) The crawlspace does not conform to modern building and energy saving practices. The insulation is inadequate for our climate nor does it make contact with the "warmed" side of the joist cavity. The crawlspace should be thoroughly cleaned and the appropriate levels of insulation, as well as air sealing, installed to increase the comfort of the first floor which the Clients have indicated is often cold during heating efforts and winter-time exterior temperatures. Due to access limitations, the use of expanding spray foam at the exterior foundation walls and rim joist is recommended. All ductwork should be insulated to a minimum of R-8 as determined by the Department of Energy for our climate (can also be spray foamed AFTER duct revisions or repairs made). An adequate amount of supply air should also be added to the crawlspace to help condition the space and minimize moisture elevation and temperature differentials. The Client may reach the Inspector for more information. The crawlspace should be retrofitted by a qualified specialty or insulation contractor.

Recent studies have also indicated that insulating the floor/ceiling cavity--in conjunction with wall insulation--yields greater energy savings than just the walls and rim joists alone (Home Energy magazine, summer 2009).

64. (2) Some of the smoke detectors noted in the home appeared to be at or beyond the end of their service lives, typically taken to be 10 years. It is recommended that the smoke detector and carbon monoxide detector systems be upgraded to reflect current life safety codes which include; smoke detectors on each level of living space and in each sleeping room, hard-wired 120 V smoke detectors that are interconnected in order to alarm simultaneously when any individual smoke detector responds, and low level carbon monoxide detectors on every level of living space and within 15 feet of a sleeping room. The installation of these critical life safety devices by a licensed and competent electrician is recommended.

Home inspectors are not required to report on the following: Life expectancy of any component or system; The causes of the need for a repair; The methods, materials, and costs of corrections; The suitability of the property for any specialized use; Compliance or non-compliance with codes, ordinances, statutes, regulatory requirements or restrictions; The market value of the property or its marketability; The advisability or inadvisability of purchase of the property; Any component or system that was not observed; The presence or absence of pests such as wood damaging organisms, rodents, or insects; or Cosmetic items, underground items, or items not permanently installed. Home inspectors are not required to: Offer warranties or guarantees of any kind; Calculate the strength, adequacy, or efficiency of any system or component; Enter any area or perform any procedure that may damage the property or its components or be dangerous to the home inspector or other persons: Operate any system or component that is shut down or otherwise inoperable: Operate any system or component that does not respond to normal operating controls; Disturb insulation, move personal items, panels, furniture, equipment, plant life, soil, snow, ice, or debris that obstructs access or visibility; Determine the presence or absence of any suspected adverse environmental condition or hazardous substance, including but not limited to mold, toxins, carcinogens, noise, contaminants in the building or in soil, water, and air; Determine the effectiveness of any system installed to control or remove suspected hazardous substances; Predict future condition, including but not limited to failure of components; Since this report is provided for the specific benefit of the customer(s), secondary readers of this information should hire a licensed inspector to perform an inspection to meet their specific needs and to obtain current information concerning this property.

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domicile



Property, Energy & Moisture Intrusion Inspections

Domicile Consulting 4145 North Keystone Avenue Chicago IL 60641 708-243-7222 IL Lic #450.004096 exp 12/2012 Inspected By: Ross Neag

Inspection Date: 1/27/2011 Report ID: 1/27/11/01rn

Customer Info:	Inspection Property	Inspection Property:4455 West Waverly PlaceAnytown IL 60000		
Jim Smith				
Customer's Real Estate Professional:				
Inspection Fee:				
Service	Price	Amount	Sub-Total	
4 Bdrm. Single Family/Townhome	575.00	1	575.00	
			Tax \$0.00	

Tax \$0.00 Total Price \$575.00

Payment Method: Credit Card Payment Status: Paid Note: