Grounds Remarks

Service Walks/Driveways

Spalling concrete cannot be patched with concrete because the new will not bond with the old. Water will freeze between the two layers, or the concrete will break up from movement or wear. Replacement of the damaged section is recommended. Walks or driveways that are close to the property should be properly pitched away to direct water away from the foundation. Asphalt driveways should be kept sealed and larger cracks filled.

PATIOS

Patios that have settled towards the structure should be mudjacked or replaced to assure proper pitch. Improperly pitched patios are one source of wet basements/crawlspaces.

All surfaces of untreated wood need regular applications of paint or special chemicals to resist damage. Porch or deck columns and fence posts which are buried in the ground and made of untreated wood will become damaged within a year or two.

Decks that are not painted or stained should be treated with a water sealer as needed.

GRADING AND DRAINAGE

Any system of grading or landscaping that creates positive drainage (moving water away from the foundation walls) will help to keep a basement and crawlspace dry. Where negative grade exists and additional backfill is suggested, it may require digging out around the property to get a proper pitch. Dirt shall be approximately 6" below the bottom sill and should not touch wood surfaces.

Flower beds, loose mulched areas, railroad ties and other such landscaping items close to the foundation trap moisture and contribute to wet basements. To establish a positive grade, a proper slope away from the house is 1" per foot for approximately 5-6 feet. Recommend ground cover planting or grass up to foundation.

ROOF AND SURFACE WATER CONTROL

Roof and surface water must be controlled to maintain a dry basement and crawlspace. This means keeping gutters cleaned out, maintaining proper slope, extending downspouts, installing splashblocks, and building up the grade so that roof and surface water is diverted away from the building.

WINDOW WELLS

The amount of water which enters a window well from falling rain is generally slight, but water will accumulate in window wells if the yard is improperly graded. Plastic window well covers are useful in keeping out leaves and debris.

RETAINING WALLS

Retaining walls deteriorate because of excessive pressure buildup behind them, generally due to water accumulation. Conditions can often be improved by excavating a trench behind the retaining wall and filling it with coarse gravel. Drain holes through the wall will then be able to relieve the water pressure.

Retaining walls sometime suffer from tree root pressure or from general movement of topsoil down the slope. Normally, these conditions require rebuilding the retaining wall.

RAILINGS

It is recommended that railings be installed for any stairway over 3 steps and porches over 30" for safety reasons. Balusters for porches, balconies, and stairs should be close enough to assure children cannot squeeze through. Building standards are a maximum of 4'' spacing between balusters.

Roof Remarks

Valleys and Flashings that are covered with shingles and/or tar or any other material are considered not visible.

Tar and Gravel Roofs - This type of covering on a pitched roof requires ongoing annual maintenance. We recommend that a roofing contractor evaluate this type of roof. Infra-red photography is best used to determine areas of potential leaks.

Flat roofs are very vulnerable to leaking. It is very important to maintain proper drainage to prevent the ponding of water. We recommend that a roofing contractor evaluate this type of roof.

ROOF TYPE	LIFE EXPECTANCY
Asphalt 3 tab Shingles	15-20 years
*Asphalt Multi-Thickness Shingles**	20-30 years
*Asphalt Interlocking. Shingles**	15-25 years
Asphalt Rolls	10 years
Built-up Roofing	10-20 years
*Wood Shingles**	10-40 years 1
*Clay Tiles**, *Cement Tiles**	20 + years 20 + years
*Slate Shingles**	30-100 years 2
*Asbestos Cement Shingles**	30-75 years
Metal Roofing	15-40 + years
Single Ply Membrane	15-25 years
Polyurethane with Elastomeric Coating	10-40 years 1

* Not recommended for use on low slope roof
1 Depending on local conditions and proper installation
2 Depending on quality of slate

Roof coverings should be visually checked in the spring and fall for any visible missing shingles, damaged coverings or other defects. Before re-roofing, the underside of the roof structure and roof sheathing should be inspected to determine that the roof structure can support the additional weight of the shingles.

Wood shakes and shingles will vary in aging, due to the quality of the material, installation, maintenance, and surrounding shade trees. Ventilation and drying of the wood material is critical in extending the life expectancy of the wood. Commercial preservatives are available on the market, which could be applied to wood to impede deterioration.

Exterior Remarks

CHIMNEYS

Chimneys built of masonry will eventually need tuckpointing. A cracked chimney top that allows water and carbonic acid to get behind the surface brick/stone will accelerate the deterioration. Moisture will also deteriorate the clay flue liner. Periodic chimney cleaning will keep you apprised of the chimney's condition. The flashing around the chimney may need resealing and should be inspected every year or two. Fireplace chimneys should be inspected and evaluated by a chimney professional before using. Chimneys must be adequate height for proper drafting. Spark arrestors are recommended for a wood burning chimney, and chimney caps for fossil fuels.
Unlined Chimney - should be re-evaluated by a chimney technician. Have flue cleaned and re-evaluated. The flue lining is covered with soot or creosote and no representation can be made as to the condition.

NOT EVALUATED

The flue was not evaluated due to inaccessibility such as roof pitch, cap, cleanout not accessible, etc.

CRICKET FLASHING

Small, sloped structure made of metal and designed to drain moisture away from a chimney. Usually placed at the back of a chimney. The latest building standards state a cricket flashing is required if the chimney chase is 30" or wider.

GUTTERS AND DOWNSPOUTS

This is an extremely important element in basement/crawlspace dampness control. Keep gutters clean and downspout extensions in place (6' or more). Paint the inside of galvanized gutters, which will extend the life. Shortly after a rain or thaw in winter, look for leaks at seams in the gutters. These can be recaulked before they cause damage to fascia or soffit boards. If no gutters exist, it is recommended that they be added.

SIDING

Wood siding should not come in contact with the ground. The moisture will cause rotting to take place and can attract carpenter ants. Brick and stone veneer must be monitored for loose or missing mortar. Some brick and stone are susceptible to spalling. This can be caused when moisture is trapped and a freeze/thaw situation occurs. There are products on the market that can be used to seal out the moisture. This holds true for brick and stone chimneys also. Metal siding will dent and scratch. Oxidation is a normal reaction in aluminum. There are good cleaners on the market and it is recommended that they be used occasionally. Metal siding can be painted.

EIFS

This type of siding is a synthetic stucco and has experienced serious problems. It requires a certified EIFS inspector to determine condition.

DOORS AND WINDOWS

These can waste an enormous amount of energy. Maintain the caulking around the frames on the exterior. Check for drafts in the winter and improve the worst offenders first. Windows that have leaky storm windows will usually have a lot of sweating. Likewise, well-sealed storms that sweat indicate a leaky window. It is the tighter unit that will sweat (unless the home has excess humidity to begin with).

Wood that exhibits blistering or peeling paint should be examined for possible moisture sources: roof leaks, bad gutters, interior moisture from baths or laundry or from a poorly vented crawl space. Some paint problems have nological explanation, but many are a symptom of an underlying problem. A freshly painted house may mask these symptoms, but after you have lived in the home for a year or two, look for localized paint blistering (peeling).

New glazing will last longer if the raw wood is treated with boiled linseed oil prior to glazing. It prevents the wood from drawing the moisture out of the new glazing.

CAULKING

Many different types of caulk are available on the market today. Check with a paint or hardware store for the kind of application you need.

Electrical/A/C – Heat Pump Remarks

EXTERIOR DOORS

The exposed side of exterior wood doors needs to be painted or properly stained and varnished to prevent discoloring and delamination. Weatherstripping is a must to prevent drafts.

ELECTRICAL

It is recommended that exterior receptacles be GFCI protected and that you test (and reset) them monthly. When you push the test button, the reset button should pop out, shutting off power to the receptacle. If it doesn't, the breaker is not working properly. If you don't test them once a month, the GFCI receptacles have a tendency to stick and may not protect you when needed.

If you have overhead service conductors leading to the house they should be a minimum of 10' above walkways and the yard and 12' above driveways. Wires that are too low need to be repaired either by the power company or a qualified licensed electrical contractor.

A/C –HEAT PUMP

The circuit breakers to A/C should be on for a minimum of 24 hours and the outside temperature at least 60 degrees for the past 24 hours or an A/C system otherwise potential damage to the system may occur. We recommend checking the instructions in your A/C manual before starting the unit up in summer. A heat pump should only be tested in the mode it's running in. Outside temperature should be at least 65 degrees for the past 24 hours to run in cooling mode.

Temperature differential, between 14-22 degrees, is usually acceptable. If this is out of range, have an HVAC contractor examine it. It isn't always feasible to do a temperature differential due to high humidity, low outside temperature, etc.

A/C CONDENSOR COIL

They should be kept clear from overgrown foliage. Clearance requirements vary, but 2' on all sides should be considered minimal with up to 6' of air discharge desirable. If clothes dryers vent within 5-10', either relocate the vent or do not run the dryer when the A/C is running. The lint can quickly reduce the efficiency of the A/C unit.

Garage/Carport Remarks

OVERHEAD DOOR OPENERS

We recommend that a separate electrical outlet be provided. Openers that do not have a **safety reverse** are considered a safety hazard. Small children and pets are especially vulnerable. We recommend the operating switches be set high enough so children cannot reach them. If an electric sensor is present, it should be tested occasionally to ensure it is working.

GARAGE SILL PLATES

Garage sill plates should be elevated or treated lumber should be used. If this is not the case, periodically monitor the sill plates for damage.

BURNERS

Any appliance such as a water heater, furnace, etc. should have the flame a minimum of 18" above the floor. Any open flame less than 18” from the floor is a potential safety hazard. The appliance should also be protected from vehicle damage. Elevation of the ignition source is not required for appliances that are listed as a flammable vapor ignition resistant.

Water Heaters

Many electric water heaters thermostats have enclosed contacts, but they are not sealed gas tight. Therefore if an electric water heater unit with an ignition source located less than 18” from the bottom of the unit, it is required that the unit be elevated so the ignition source is at least 18” above the garage floor. Electric water heaters having all switching controls above 18” from the bottom of the water heater are not required to be elevated.

Interior Kitchen Remarks

PLASTER ON WOOD LATH

Plaster on wood lath is an old technique and is no longer in general use. Wood lath shrinks with time and the nails rust and loosen. As a result, the plaster may become fragile and caution is needed in working with this type of plastering system. Sagging ceilings are best repaired by laminating drywall over the existing plaster and screwing it to the ceiling joists.

PLASTER ON GYPSUM LATH (ROCK LATH)

Plaster on gypsum lath will sometimes show the seams of the 16” wide gypsum lath, but this does not indicate a structural fault.

WOOD FLOORING

Always attempt to clean wood floors first before making the decision to refinish the floor. Wax removers and other mild stripping agents plus a good waxing and buffing will usually produce satisfactory results. Mild bleaching agents help remove deep stains. Sanding removes some of the wood in the floor and can usually be done safely only once or twice in the life of the floor, depending on the wood thickness. Wood laminate floors cannot be sanded.

NAIL POPS

Drywall nail pops are due to normal expansion and contraction of the wood members to which the drywall is nailed and are usually of no structural significance. In newer homes and remodels they use screws instead of nails so nail popping is becoming less common in homes.

CARPETING

Where carpeting has been installed, the materials and condition of the floor underneath cannot be determined.

APPLIANCES

(If report indicated appliances were operated, the following applies) Dishwashers are tested to see if the motor operates and water sprays properly. Stoves are tested to see that burners are working and that the oven and broiler get hot. Timer and controls are not tested. Refrigerators are not tested. Most new Dishwashers have the drain line looped automatically and may not be visible on the day of inspection. It is essential for the dishwasher drain line to have an anti-siphon break to prevent backflow. A drain line loop or Dishwasher air gap should be installed if found to be missing. No representation is made to continued life expectancy of any appliance.

ASBESTOS AND OTHER HAZARDS

Asbestos fibers in some form are present in many older homes, but are often not visible and cannot be identified without testing.

If there is reason to suspect that asbestos may be present and if it is of particular concern, a sample of the material in question may be removed and analyzed in a laboratory. However, detecting or inspecting for the presence or absence of asbestos is not a part of our inspection.

Also excluded from this inspection and report are the possible presence of, or danger from, radon gas, lead-based paint, urea formaldehyde, toxic or flammable chemicals and all other similar or potentially harmful substances and environmental hazards.

WINDOWS

A representative number of windows are inspected.

Bathroom(s) Remarks

STALL SHOWER

A metal shower pan in a stall shower has a potential or probable life of 10-20 years depending on quality of the pan installed. Although a visible inspection is made to determine whether a shower pan is currently leaking, it cannot be stated with certainty that no defect is present or that one may not soon develop. Shower pan leaks often do not show except when the shower is in actual use. New shower pans use a waterproof material underneath that doesn't have the same problems as the older metal shower pans.

CERAMIC TILE

Bathroom tile installed in a mortar bed is excellent. It is still necessary to keep the joint between the tile and the tub/shower caulked or sealed to prevent water spillage from leaking through and damaging the ceilings below.

Ceramic tile is often installed in mastic. It is important to keep the tile caulked or water will seep behind the tile and cause deterioration in the wallboard. Special attention should be paid to the area around faucets and other tile penetrations.

EXHAUST FANS

Bathrooms with a shower should have exhaust fans when possible. This helps to remove excess moisture from the room, preventing damage to the ceiling and walls and wood finishes. The exhaust fan should not be vented into the attic. The proper way to vent the fan(s) is to the outside. Running the vent pipe horizontally and venting into a gable end or soffit with a proper end fitting is preferred. Running the vent pipe vertically through the roof may cause condensation to run down the vent pipe, rusting the fan and damaging the wallboard. Insulating the vent pipe in the attic will help to reduce this problem. If there isn't a fan an operable window is also acceptable by the current building standards.

SLOW DRAINS

Slow drains on sinks, tubs, and showers are usually due to buildup of hair and soap scum. Most sink popups can be easily removed for cleaning. Some tubs have a spring attached to the closing lever that acts as a catch for hair. It may require removing a couple of screws to disassemble. If you cannot mechanically remove the obstruction, be kind to your pipes. Don't use a caustic cleaner. There are several bacteria drain cleaners available. They are available at hardware stores in areas where septic tanks are used. These drain cleaners take a little longer to work, but are safe for you and your pipes.

SAFETY HAZARDS

Typical safety hazards found in bathrooms are open grounds or reverse polarity by water. Replacing these outlets with G.F.C.I.'s are recommended.

WHIRLPOOL TUBS

This relates to interior tubs hooked up to interior plumbing. Where possible, the motor will be operated to see that the jets are working. Hot tubs and spas are not inspected. There should also be an easy to access panel that can be removed to gain access to the motor

Interior Room(s) Remarks

DOOR STOPS

All swinging doors should be checked for door stops. Broken or missing door stops can result in door knobs breaking through drywall or plaster.

CLOSET GUIDES

Sliding closet doors should be checked to see that closet guides are in place. Missing or broken closet guides can cause scratches and damage to doors.

COLD AIR RETURNS

Bedrooms that do not have cold air returns in them should have a 3/4" gap under the doors to allow cold air to be drawn into the hall return.

AN INSPECTION VERSUS A WARRANTY

A home inspection is just what the name indicates, an inspection of a home...usually a home that is being purchased. The purpose of the inspection is to determine the condition of the various systems and structures of the home. While an inspection performed by a competent inspection company will determine the condition of the major components of the home, no inspection will pick up every minute latent defect. The inspector's ability to find all defects is limited by access to various parts of the property, lack of information about the property and many other factors. A good inspector will do his or her level best to determine the condition of the home and to report it accurately. The report that is issued is an opinion as to the condition of the home. This opinion is arrived at by the best technical methods available to the home inspection industry. It is still only an opinion.

A warranty is a policy sold to the buyer that warrants that specific items in the home are in sound condition and will remain in sound condition for a specified period of time. Typically, the warranty company never inspects the home. The warranty company uses actuarial tables to determine the expected life of the warranted items and charges the customer a fee for the warranty that will hopefully cover any projected loss and make a profit for the warranty seller. It is essentially an insurance policy.

The service that we have provided you is an inspection. We make no warranty of this property. If you desire warranty coverage, please see your real estate agent for details about any warranty plan to which their firm may have access.

WINDOW FRAMES AND SILLS

Window frames and sills are often found to have surface deterioration due to condensation that has run off the window and damaged the varnish. Usually this can be repaired with a solvent style refinisher and fine steel wool. This is sometimes a sign of excess humidity in the house. See comments regarding caulking doors and windows.

FIREPLACES

It is important that a fireplace be cleaned on a routine basis to prevent the buildup of creosote in the flue, which can cause a chimney fire. Masonry fireplace chimneys are normally required to have a terra cotta flue liner or 8 inches of masonry surrounding each flue in order to be considered safe and to conform with most building codes. During visual inspections, it is not uncommon to be unable to detect the absence of a flue liner either because of stoppage at the firebox, a defective damper or lack of access from the roof. Creosote buildup is common with wood burning fireplaces if not cleaned annually and the fireplace is used often. Metal Flues are also acceptable that service a fireplace.

WOODBURNERS

Once installed, it can be difficult to determine proper clearances for woodburning stoves. Manufacturer specifications, which are not usually available to the inspector, determine the proper installation. We recommend you ask the owner for paperwork, verifying that it was installed by a professional contractor.

VENTILATION

Ventilation is recommended at the rate of one square foot of vent area to 300 square feet of attic floor space, this being divided between soffit and rooftop. Power vents should ideally have both a humidistat and a thermostat, since ventilation is needed to remove winter moisture as well as summer heat. Evidence of condensation such as blackened roof sheathing, frost on nail heads, etc. is an indication that ventilation may have been or is blocked or inadequate.

INSULATION

The recommended insulation in the attic area is R-38 but varies depending on where you live, if the insulation is fiberglass approximately 12-17". If insulation is added, it is important that the ventilation is proper.

SMOKE DETECTORS

Smoke detectors should be tested monthly. At least one detector should be on each level, ideally in each bedroom as well. CO detectors are highly recommended.

VAPOR BARRIERS

The vapor barrier should be on the warm side of the surface (depending where you live.) Most older homes were built without vapor barriers. If the vapor barrier is towards the cold side of the surface, it should be sliced or removed. Most vapor barriers in the attic are covered by insulation and therefore, not visible.

SAFETY GLAZING

Safety glazing requirements vary depending on the age of the home. Every attempt is made to identify areas where the lack of safety glazing presents an immediate safety hazard, such as a shower door. In some older homes it is difficult to determine if safety glazing is present, since the glass is not marked. Therefore, no representation is made that safety glazing exists in all appropriate areas.

INSULATED GLASS

Broken seal in thermopane/insulated windows are not always visible nor detectible due to humidity and temperature changes during the day. Other factors such as window covering, dirty windows, and lack of accessibility, personal property placed in front of the windows all affect the view of the windows at the time of the inspection.

Basement Remarks

BASEMENT/CRAWLSPACE

Most block basements/crawlspace have step cracks in various areas. If little or no movement has occurred and the step cracks, are uniform, this is considered acceptable. Horizontal cracks in the third or fourth block down indicate the block has moved due to outside pressure. They can be attributed to many factors such as improper grading, improperly functioning gutter and downspout system, etc. Normally if little or no movement has taken place and proper grading and downspouts exist, this is considered acceptable. If the wall containing the stress crack(s) has moved considerably, this will require some method of reinforcement. Basements/crawlspace that have been freshly painted or tuckpointed should be monitored for movement. This will be indicated by cracks reopening. If cracks reappear, reinforcement may be necessary. Reinforcing a basement/crawlspace wall can become expensive.

FOUNDATION (COVERED WALLS)

Although an effort has been made to note any major inflections or weaknesses, it is difficult at best to detect these areas when walls are finished off, or basement/crawlspace storage makes areas inaccessible. **No representation is made as to the condition of these walls.**

INSULATED CONCRETE FORMS (ICF'S)

ICF's are formwork for concrete that stays in place as permanent building insulation for energy-efficient, cast-in-place, reinforced concrete walls, floors and roofs.

MONITOR

Indicates that the walls have stress cracks, but little movement has occurred. In our opinion, the cracks should be filled with mortar and the walls monitored for further movement and cracking. If additional movement or cracking occurs, reinforcement may be necessary.

HAVE EVALUATED

We recommend that the walls be re-evaluated by a structural engineer or basement/crawlspace repair company and estimates be obtained if work is required.

VAPOR BARRIER

Floors that are dirt or gravel should be covered with a vapor barrier and properly sealed.

MOISTURE PRESENT

Basement/crawlspace dampness is frequently noted in houses and in most cases the stains, moisture or efflorescence present is a symptom denoting that a problem exists outside the home. Usual causes are improper downspout extensions or leaking gutters and/or low or improper grade (including concrete surfaces) at the perimeter of the house. A proper slope away from the house is one inch per foot for five to six feet. **No representation is made to future moisture that may appear.**

PALMER VALVE

Many older homes have a valve in the floor drain. This drain needs to remain operational.

DRAIN TILE

We offer no opinion about the existence or condition of the drain tile, as it cannot be visibly inspected.

BASEMENT ELECTRICAL OUTLETS

We recommend that you have an outlet within 6' of each appliance. The appliance you plan to install may be different than what exists, therefore the inspection includes testing a representative number of receptacles that exist. It is also recommended to have ground fault circuit interrupters for any outlet in the unfinished part of the basement and crawl spaces. Except for outlets where the sump pump is plugged into.

Crawlspace Remarks

CRAWL SPACES

Crawl spaces are shallow spaces between the first level floor joist and the ground. Access to this area may be from the inside, outside or not accessible at all. Ductwork, plumbing, and electrical may be installed in the space in which access may be necessary. The floor of the crawl space may be covered with concrete, gravel, or may be the original soil. A vapor barrier may be a sheet of plastic or tar paper and installed over or under this material. The vapor barrier will deter the moisture from the earth from escaping into the crawl space and causing a musty smell. Every attempt is made to determine if paneling is warped, moisture stains are bleeding through, etc. Storage that blocks the visibility of a wall is not removed to examine that area. Therefore, it is important that on your walk-through before closing, you closely examine these areas. There is debate about crawlspace ventilation; we recommend you contact a basement contractor for advice.

HAVE EVALUATED

We recommend that the walls be re-evaluated by a structural engineer or basement repair company and estimates be obtained if work is required.

MONITOR

Indicates that the walls have stress cracks, but little movement has occurred. In our opinion, the cracks should be filled with mortar and the walls monitored for further movement and cracking. If additional movement or cracking occurs, reinforcement may be necessary.

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Although an effort has been made to note any major inflections or weaknesses, it is difficult at best to detect these areas when walls are finished off, or basement/crawlspace storage makes areas inaccessible. **No representation is made as to the condition of these walls.**

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Basement/crawlspace dampness is frequently noted in houses and in most cases the stains, moisture or efflorescence present is a symptom denoting that a problem exists outside the home. Usual causes are improper downspout extensions or leaking gutters and/or low or improper grade (including concrete surfaces) at the perimeter of the house. A proper slope away from the house is one inch per foot for four to six feet. **No representation is made to future moisture that may appear.**

Plumbing Remarks

WELLS

Examination of wells is not included in this visual inspection. It is recommended that you have well water checked for purity by the local health authorities and, if possible, a check on the flow of the well in periods of drought. A well pit should have a locked cover on it to prevent anyone from falling into the pit.

SEPTIC SYSTEMS

The check of septic systems is not included in our visual inspection. You should have the local health authorities or other qualified experts check the condition of the septic system. In order for the septic system to be checked, the house must have been occupied within the last 30 days.

WATER PIPES

Galvanized water pipes rust from the inside out and may have to be replaced within 20 to 30 years. This is usually done in two stages: horizontal piping in the basement first, and vertical pipes throughout the house later as needed. Copper pipes usually have more life expectancy and may last as long as 60 years or more before needing to be replaced.

HOSE BIBS

During the winter months it is necessary to make sure the outside faucets are winterized. This can be done by means of a shut-off valve located in the basement or crawlspace. Leave the outside faucets open to allow any water standing in the pipes to drain, preventing them from freezing. Hose bibs cannot be tested when winterized. Hoses should always be disconnected in winter, in cold climates.

WATER HEATER

The average life expectancy of a water heater is 5-10 years. Water heaters generally need not be replaced unless they leak. It is a good maintenance practice to drain 5-10 gallons from the heater several times a year. Missing relief valves or improper extension present a safety hazard. The temperature/pressure valve should be tested several times a year by lifting the valve's handle. Caution: very hot water will be discharged. If no water comes out, the valve is defective and must be replaced.

WATER SOFTENERS

During a visual inspection it is not possible to determine if water is being properly softened.

SHUT-OFF VALVES

Most shut-off valves have not been operated for long periods of time. We recommend operating each shut-off valve to: toilet bowl, water heater, under sinks, main shut-off, hose faucets, and all others. We recommend you have a plumber do this, as some of the valves may need to be repacked or replaced. Once the valves are in proper operating order, we recommend opening and closing these valves several times a year.

POLYBUTYLENE PIPING

This type of piping has a history of problems and should be examined by a licensed plumber and repaired or replaced as necessary.

MECHANICAL DEVICES MAY OPERATE AT ONE MOMENT AND LATER MALFUNCTION; THEREFORE, LIABILITY IS SPECIFICALLY LIMITED TO THOSE SITUATIONS WHERE IT CAN BE CONCLUSIVELY SHOWN THAT THE MECHANICAL DEVICE INSPECTED WAS INOPERABLE OR IN THE IMMEDIATE NEED OF REPAIR OR NOT PERFORMING THE FUNCTION FOR WHICH IS IT WAS INTENDED AT THE TIME OF INSPECTION.

CSST

Corrugated Stainless Steel Tubing is an alternative to traditional black iron gas piping. It is a continuous, flexible, stainless steel pipe with an exterior PVC covering. Many areas of the country require that CSST be continuous and directly bonded to the electrical ground system of the premises in which it was installed.

Heating System Remarks

HEATING AND AIR CONDITIONING units have limited lives. Normal lives are:

	Approximate Age
GAS-FIRED HOT AIR	15-25 years
OIL-FIRED HOT AIR	20-30 years
CAST IRON BOILER (Hot water or steam) or more	30-50 years
STEEL BOILER (Hot water or steam)	30-40 years
COPPER BOILER (Hot water or steam)	10-20 years
CIRCULATING PUMP (Hot water)	10-15 years
AIR CONDITIONING COMPRESSOR	8-12 years
HEAT PUMP	8-12 years

Gas-fired hot air units that are close to or beyond their normal lives have the potential of becoming a source of carbon monoxide in the home. You may want to have such a unit checked every year or so to assure yourself that it is still intact. Of course a unit of such an age is a good candidate for replacement with one of the new, high efficiency furnaces. The fuel savings alone can be very attractive.

Boilers and their systems may require annual attention. If you are not familiar with your system, have a heating contractor come out in the fall to do routine maintenance. **Caution: do not add water to a hot boiler!**

Forced air systems should have filters changed every 30 to 60 days of the heating and cooling season. This is especially true if you have central air conditioning. A dirty air system can lead to premature failure of your compressor - a $1,500 component.

Oil-fired furnaces and boilers should be serviced by a professional each year. Most experts agree you will pay for the service cost in fuel saved by having a properly tuned burner.

Read the instructions for maintaining the humidifier on your furnace. A malfunctioning humidifier can rust out a furnace rather quickly. It is recommended that the humidifier be serviced at the same time as the furnace, and be cleaned regularly. **During a visual inspection it is not possible to determine if the humidifier is working.**

Have HVAC technician examine - A condition was found that suggests a heating contractor should do a further analysis. We suggest doing this before closing.

Heat exchangers cannot be examined nor their condition determined without being disassembled. Since this is not possible during a visual, non-technically exhaustive inspection, you may want to obtain a service contract on the unit or contact a furnace technician regarding a more thorough examination.

Testing pilot safety switch requires blowing out the pilot light. Checking safety limit controls requires disconnecting blower motor or using other means beyond the scope of this inspection. If the furnace has not been serviced in last 12 months you may want to have a furnace technician examine.

CO Test - This is not part of a non-technical inspection. If a test was performed, the type of tester is indicated.

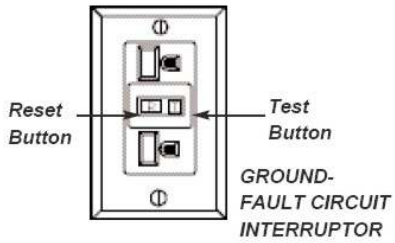
Combustible Gas Detector - If a gas detector was used during the inspection of the furnace and evidence of possible combustible gases was noted, we caution you that our test instrument is sensitive to many gases and not a foolproof test. None-the-less, this presents the possibility that a hazard exists.

A/C CONDENSER COIL

They should not become overgrown with foliage. Clearance requirements vary, but 2’ on all sides should be considered minimal with up to 6’ of air discharge desirable. If a clothes dryer vent is within five to ten feet, either relocate the vent or do not run when the A/C is running. The lint will quickly reduce the efficiency of the A/C unit.

Electrical/Cooling Remarks

Every effort has been made to evaluate the size of the service. Three wires going into the home indicates 240 volts. The total amperage can be difficult to determine. We highly recommend that ground fault circuit interrupters (G.F.C.I.) be connected to all outlets around water. This device automatically shuts the circuit off when it senses a current leak to ground. This device can be purchased in most hardware stores. G.F.C.I.'s are recommended by all outlets located near water, outside outlets, or garage outlets. Pool outlets should also be protected with a G.F.C.I.
See diagram below:



If you do have G.F.C.I.'s, it is recommended that you test (and reset) them monthly. When you push the test button, the reset button should pop out, shutting off the circuit. If it doesn't, the breaker is not working properly. If you don't test them once a month, the breakers have a tendency to stick and may not protect you when needed.

Knob and tube wiring found in older homes should be checked by an electrician to insure that the wire cover is in good condition. Under no circumstances should this wire be covered with insulation. Recess light fixtures that are not IC - Rated should have a baffle around them so that they are not covered with insulation. The newer recessed fixtures will shut off if they overheat. (no representation is made as to proper recess lighting fixtures).

Federal Pacific Stab-Lok® Electrical panels may be unsafe. See www.google.com (Federal Pacific)
Aluminum wiring in general lighting circuits has a history of over heating, with the potential of a fire. If this type of wiring exists, a licensed electrical contractor should examine the whole system.

Arc Faults

In some areas arc faults are required in new homes, starting in 2002 and these control outlets in the bedrooms. In some areas arc faults are required for all 120 Volt circuits that are not GFCI protected in new homes starting in 2009.
Upgraded as desired for enhanced safety. Requirements will vary, across the US.

Cooling

Testing A/C System and Heat Pump- The circuit breakers to A/C should be on for a minimum of 24 hours and the outside temperature at least 60 degrees for the past 24 hours or an A/C system cannot be operated without possible damage to the compressor. Check the instructions in your A/C manual or on the outside compressor before starting up in the summer. Heat pump can only be tested in the mode it's running in. Outside temperature should be at least 65° for the past 24 hours to run in cooling mode.
Temperature differential, between 14°-22°, is usually acceptable. If out of this range, have an HVAC contractor examine it. It is not always feasible to do a differential test due to high humidity, low outside temperature, etc.

PREVENTIVE MAINTENANCE TIPS

I. FOUNDATION & MASONRY:

Basements, Exterior Walls: To prevent seepage and condensation problems.

a. Check basement for dampness & leakage after wet weather.

b. Check chimneys, deteriorated chimney caps, loose and missing mortar.

c. Maintain grading sloped away from foundation walls.

II. ROOFS & GUTTERS:

To prevent roof leaks, condensation, seepage and decay problems.

a. Check for damaged, loose or missing shingles, blisters.

b. Clean gutters, leaders, strainers, window wells, drains. Be sure downspouts direct water away from foundation. Cut back tree limbs.

c. Check flashings around roof stacks, vents, skylights, chimneys, as sources of leakage. Check vents, louvers and chimneys for birds nests, squirrels, insects.

d. Check fascias and soffits for paint flaking, leakage & decay.

III. EXTERIOR WALLS:

To prevent paint failure, decay and moisture penetration problems.

a. Check painted surface for paint flaking or paint failure. Cut back shrubs.

b. Check exterior masonry walls for cracks, looseness, missing or broken mortar.

IV. DOORS AND WINDOWS:

To prevent air and weather penetration problems.

a. Check caulking for decay around doors, windows, corner boards, joints. Recaulk and weatherstripping as needed. Check glazing, putty around windows.

V. ELECTRICAL:

For safe electrical performance, mark & label each circuit.

a. Trip circuit breakers every six months and ground fault circuit interrupters (G.F.C.I.) monthly.

b. Check condition of lamp cords, extension cords & plugs. Replace at first sign of wear & damage.

c. Check exposed wiring & cable for wear or damage.

d. If you experience slight tingling shock from handling or touching any appliance, disconnect the appliance & have it repaired. If lights flicker or dim, or if appliances go on and off unnecessarily, call a licensed electrician.

VI. PLUMBING:

For preventive maintenance.

a. Drain exterior water lines, hose bibs, sprinklers, pool equipment in the fall.

b. Draw off sediment in water heaters monthly or per manufacturer's instructions.

c. Have septic tank serviced every 2 years.

VII. HEATING & COOLING:

For comfort, efficiency, energy conservation and safety.

a. Change or clean furnace filters, air handler filters, electronic filters as needed.

b. Clean and service humidifier. Check periodically and annually.

c. Have oil burning equipment serviced annually.

VIII. INTERIOR:

General house maintenance.

a. Check bathroom tile joints, tub grouting & caulking. Be sure all tile joints in bathrooms are kept well sealed with tile grout to prevent damage to walls, floors & ceilings below.

b. Check underside of roof for water stains, leaks, dampness & condensation, particularly in attics and around chimneys.

IX. Know the location of:

- Main water shutoff valve.
- Main electrical disconnect or breaker.
- Main emergency shutoff switch for the heating system.