Real Estate Inspector

What is actually involved with a real estate inspection? Requirements vary by state, but there are some preferred elements. Not all states may require a license and the standards for the license can differ.

Education and Experience Requirements for a License (Varies by Jurisdiction/State)

Real Estate Inspectors need a solid understanding of all the components in the home. Here are some of the core areas with which they should have education and experience:

- 1. Foundations;
- 2. Framing;
- 3. Building enclosure;
- 4. Roof systems;
- 5. Plumbing systems;
- 6. Electrical systems;
- 7. Heating, ventilation, and air conditioning systems (HVAC);
- 8. Appliances;
- 9. Standards of Practice;
- 10. Experience with a certain amount of inspections of real property in the prior 12 months.

While much of this education may consist of direct coursework, many individuals may come to the profession with a background in various facets related to inspections.

- 1. Experience over a number of years installing, servicing, repairing or maintaining the structural, mechanical and electrical systems found in improvements to real property, and/or
- 2. Experience as an active practicing licensed or registered architect, professional engineer, or engineer-in-training.

What are examples of knowledge an inspector acquires in each area?

Foundations:

- 1. site analysis/location;
- 2. grading;
- 3. foundations;
- 4. flat work;
- 5. material;
- 6. foundation walls;
- 7. foundation drainage;
- 8. foundation waterproofing and damp proofing;
- 9. columns; and
- 10. under floor space.

Framing:

- 1. flashing;
- 2. wood frame stick/balloon;
- 3. roof structure rafters/trusses;

- 4. floor structure;
- 5. porches/decks/steps/landings/balconies;
- 6. doors;
- 7. ceilings;
- 8. interior walls;
- 9. stairways;
- 10. guardrails/handrails/balusters;
- 11. fireplace/chimney;
- 12. sills/columns/beams/joist/sub-flooring;
- 13. wall systems/structure headers;
- 14. rammed earth;
- 15. straw bale;
- 16. ICF;
- 17. panelized;
- 18. masonry;
- 19. wood I joist;
- 20. roof sheathing;
- 21. wood wall;
- 22. steel wall;
- 23. wood structural panel; and
- 24. conventional concrete.

Building Enclosure:

- 1. review of foundation and roofing relation;
- 2. review of flashing;
- 3. cladding;
- 4. windows/glazing;
- 5. weather barriers;
- 6. vapor barriers;
- 7. insulation;
- 8. energy codes; and
- 9. ingress/egress.

Roof Systems:

- 1. review rafters, roof joist, ceiling joist, collar ties, knee walls, purling, trusses, wood I joist, roof sheathing, steel framing;
- 2. roof water control;
- 3. skylights;
- 4. flashing;
- 5. ventilation/non-ventilation;
- 6. attic access;
- 7. re-roofing;
- 8. slopes step roof/low slope/near flat;
- 9. materials asphalt, fiberglass, wood shake, wood shingle, slate, clay tile, concrete tile, fiber cement (asbestos cement, mineral cement), metal, roll, build up, modified bitumen, synthetic rubber (EPDM), plastic (PVC); and
- 10. valleys.

Plumbing Systems:

- 1. water supply systems;
- 2. fixtures;
- 3. drains;
- 4. vents;
- 5. water heaters (gas and electric);
- 6. gas lines; and
- 7. hydro-therapy equipment.

Electrical Systems:

- 1. general requirements, equipment location and clearances;
- 2. electrical definitions;
- 3. services;
- 4. branch circuit and feeder requirements;
- 5. wiring methods;
- 6. power and lights distribution;
- 7. devices and light fixtures; and
- 8. swimming pool.

HVAC Systems:

- 1. heating;
- 2. ventilation;
- 3. air conditioning; and
- 4. evaporative coolers.

Appliances:

- 1. dishwasher;
- 2. food waste disposer;
- 3. kitchen exhaust hood;
- 4. range, cooktop, and ovens (electric and gas);
- 5. microwave cooking equipment;
- 6. trash compactor;
- 7. bathroom exhaust fan and heater;
- 8. whole house vacuum systems;
- 9. garage door operator;
- 10. doorbell and chimes; and
- 11. dryer vents.

Environmental Protection Agency; Consumer Product Safety Commission.

Professional Conduct and Ethics

- 1. The relationship between an inspector and a client should at a minimum meet the following guidelines.
 - a) In accepting employment as an inspector, the inspector should protect and promote the interest of the client to the best of the inspector's ability and knowledge, recognizing that the client has placed trust and confidence in the inspector.
 - b) In the interest of the client and the inspector's profession, the inspector should endeavor always to maintain and increase the inspector's level of knowledge regarding new developments in the field of inspection.
- 2. An inspector should consider/comply with the following:
 - a) An inspector should not inspect a property when any compensation or future referrals depend on reported findings or on the closing or settlement of a property. In other words, the inspector should not have his/her livelihood held hostage to providing an inspection as dictated by any
 - 1. federally related mortgage loan originator;
 - 2. mortgage broker;
 - 3. a lender or other person who provides any service related to the origination, processing or funding of a real estate loan;
 - 4. a title service provider;
 - 5. an attorney;
 - 6. a person who prepares documents, including notarization, delivery, and recordation;
 - 7. a person who provides credit report services;
 - 8. an appraiser;
 - 9. an inspector;
 - 10. a settlement agent;
 - 11. a person who provides mortgage insurance services;
 - 12. a person who provides services involving hazard, flood, or other casualty insurance, homeowner's warranties, or residential service contract;
 - 13. a real estate agent or broker; and
 - 14. a person who provides any other services for which a settlement service provider requires a borrower or seller to pay.
 - b) An inspector should not receive any compensation for any referrals to the inspector's client without the client's consent.

General Information on What an Inspector Actually Does and Doesn't Do

An inspection is a limited visual survey and basic performance evaluation of the systems and components of a building using normal controls that provides information regarding the general condition of a residence at the time of inspection. It is not intended to be a comprehensive investigation or exploratory probe to determine the cause or effect of deficiencies noted by the inspector; and does not require the use of specialized equipment or procedures such as:

- 1. specialized equipment, including but not limited to:
 - a) thermal imaging equipment;
 - b) moisture meters;
 - c) gas or carbon monoxide detection equipment;
 - d) environmental testing equipment and devices;
 - e) elevation determination devices.
- 2. specialized procedures, including but not limited to:
 - a) environmental testing;
 - b) elevation measurement;
 - c) calculations; or
 - d) any method employing destructive testing that damages otherwise sound materials or finishes.

The areas inspected must be accessible. In the reasonable judgment of the inspector, capable of being approached, entered, or viewed without:

- 1. hazard to the inspector;
- 2. having to climb over obstacles, moving furnishings or large, heavy, or fragile objects;
- 3. using specialized equipment or procedures;
- 4. disassembling items other than covers or panels intended to be removed for inspection;
- 5. damaging property, permanent construction or building finish.

There may be items the inspector identifies as Cosmetic issues (related only to appearance or aesthetics, and not related to performance, operability, or water penetration). The inspector may find Deficiencies where, in the reasonable judgment of the inspector, a condition exists that 1) adversely and materially affects the performance of a system, or component; or 2) constitutes a hazard to life, limb, or property as specified by these standards of practice. A judgment occurs as to whether systems operate within normal ranges, performance or operational function, normally through operating the system components.

In general, the inspector does not, or might not, inspect some items which might require specialized knowledge or might need to refer to other specialists for:

- 1. elevators;
- 2. detached buildings, decks, docks, fences, waterfront structures, or related equipment;
- 3. anything buried, hidden, latent, or concealed;
- 4. sub-surface drainage systems;

- 5. automated or programmable control systems, automatic shut-off, photoelectric sensors, timers, clocks, metering devices, signal lights, lightning arrestor system, remote controls, security or data distribution systems, solar panels or smart home automation components; or
- 6. concrete flatwork such as driveways, sidewalks, walkways, paving stones or patios.

Other items outside the scope of identification are those where the inspector would be required to identify may be numerous and may not be detectable without specialized testing:

- 1. past repairs that appear to be effective and workmanlike except as specifically required by these standards;
- 2. cosmetic or aesthetic conditions; or
- 3. wear and tear from ordinary use;
- 4. the presence or absence of pests, termites, or other wood-destroying insects or organisms;
- 5. the presence, absence, or risk of:
 - a) asbestos;
 - b) lead-based paint;
 - c) mold, mildew;
 - d) corrosive or contaminated drywall "Chinese Drywall"; or
 - e) any other environmental hazard, environmental pathogen, carcinogen, toxin, mycotoxin, pollutant, fungal presence or activity, or poison;
 - f) types of wood or preservative treatment and fastener compatibility; or
 - g) the cause or source of a condition;
 - h) the cause or effect of deficiencies;
 - i) any of the following issues concerning a system or component:
 - 1. insurability or warrantability;
 - 2. suitability, adequacy, compatibility, capacity, reliability, marketability, or operating costs;
 - 3. recalls, counterfeit products, or product lawsuits;
 - 4. life expectancy or age;
 - 5. energy efficiency, vapor barriers, or thermostatic performance;
 - 6. compliance with any code, listing, testing or protocol authority;
 - 7. utility sources; or
 - 8. manufacturer or regulatory requirements

It also may be impossible to address things that may happen in the future. If something is deficient now, it should be identified. However, items which may occur in the future cannot be forecast. There are a number of conditions which the inspector may encounter which are beyond the scope of an inspection or which states may not require or may dissuade inspectors from doing, such as:

- 1. operate shut-off, safety, stop, pressure or pressure-regulating valves or items requiring the use of codes, keys, combinations, or similar devices;
- 2. designate conditions as safe;
- 3. recommend or provide engineering, architectural, appraisal, mitigation, physical surveying, realty, or other specialist services;
- 4. review historical records, installation instructions, repair plans, cost estimates, disclosure documents, or other reports;

- 5. verify sizing, efficiency, or adequacy of the ground surface drainage system;
- 6. verify sizing, efficiency, or adequacy of the gutter and downspout system;
- 7. operate recirculation or sump pumps;
- 8. remedy conditions preventing inspection of any item;
- 9. apply open flame or light a pilot to operate any appliance;
- 10. turn on decommissioned equipment, systems or utility services; or
- 11. provide repair cost estimates, recommendations, or re-inspection services.

What are some minimum Inspection Requirements expected for Structural Systems?

For foundations, render a written opinion as to the performance of the foundation; and report the type of foundations, and how it was inspected. This would also note present and visible indications used to render the opinion of adverse performance, such as: binding, out-of-square, non-latching doors; framing or frieze board separations; sloping floors; window, wall, floor, or ceiling cracks or separations; and rotating, buckling, cracking, or deflecting masonry cladding. Deficiencies to be reported would include: deteriorated materials; deficiencies in foundation components such as; beams, joists, bridging, blocking, piers, posts, pilings, columns, sills or subfloor; deficiencies in retaining walls related to foundation performance; exposed or damaged reinforcement; crawl space ventilation that is not performing; and crawl space drainage that is not performing.

For grading and drainage, the inspector should report as deficient: drainage around the foundation that is not performing; deficiencies in grade levels around the foundation; and deficiencies in installed gutter and downspout systems.

For roofing, the inspector should provide inspect the roof from the outside and inside and report: the type of roof covering material, evidence of water penetration; evidence of previous repairs to the roof covering material, flashing details, skylights and other roof penetrations. For any problems detected, the inspector should note as deficient and problems with: fasteners; adhesion; roof covering materials; flashing details; skylights; and other roof penetrations (such as vent stacks or chimneys). Items which also may be identified which the inspector should report are the condition and any deficiencies in attic insulation; attic space ventilation that is not performing; deflections or depressions in the roof surface as related to adverse performance of the framing and decking; missing insulation; problems with installed framing members and decking; problems with attic access ladders and access openings; and problems with attic ventilators.

The inspector might/should not:

- a) enter attics or unfinished spaces where openings too small;
- b) operate powered ventilators; or
- c) provide an exhaustive list of locations of deficiencies and water penetrations.

For interior walls, ceilings, floors, and doors the inspector should report evidence of water penetration; report deficiencies in the condition and performance of doors and hardware; report deficiencies related to structural performance or water penetration; and report the absence of or deficiencies in fire separation between the garage and the living space and between the garage and its attic. As with limits as to what might be reported, the inspector might/should not:

- a) report cosmetic damage or the condition of floor, wall, or ceiling coverings; paints, stains, or other surface coatings; cabinets; or countertops, or
- b) provide an exhaustive list of locations of deficiencies and water penetrations.

For exterior walls, doors, and windows, the inspector provides more details. A report should include any evidence of water penetration. It also should note deficiencies such as the absence of emergency escape and rescue openings in all sleeping rooms; a solid wood door less than 1-3/8 inches in thickness, a solid or honeycomb core steel door less than 1-3/8 inches thick, or a 20-minute fire-rated door between the residence and an attached garage; missing or damaged screens; deficiencies related to

structural performance or water penetration; and deficiencies in a) weather stripping, gaskets or other air barrier materials, b) claddings (the exterior veneer such as siding or brick), c) water resistant materials and coatings, d) flashing details and terminations, e) the condition and performance of exterior doors, garage doors and hardware, and f) the condition and performance of windows and components. This generally will not include addressing the condition of awnings, blinds, shutters, security devices, or other non-structural systems; determine the cosmetic condition of paints, stains, or other surface coatings; operating a lock if the key is not available, or providing an exhaustive list of locations of deficiencies and water penetrations.

For exterior and interior glazing (generally this is windows), a report of deficiencies would include noting insulated windows that are obviously fogged or display other evidence of broken seals; deficiencies in glazing, weather stripping and glazing compound in windows and doors; and the absence of safety glass in hazardous locations.

For interior and exterior stairways, the report focuses mostly on safety issues such as spacing between intermediate balusters, spindles, or rails for steps, stairways, guards, and railings that permit passage of an object greater than 4 inches in diameter, except that on the open side of the staircase treads, spheres less than 4-3/8 inches in diameter may pass through the guard rail balusters or spindles; and deficiencies in steps, stairways, landings, guardrails, and handrails. But the inspector is not going to measure every stairway component

Fireplaces and chimneys can be fire hazards. An inspector should note any built-up creosote in accessible areas of the firebox and flue; the presence of combustible materials in near proximity to the firebox opening; the absence of fireblocking at the attic penetration of the chimney flue, where accessible; and deficiencies in the damper, lintel, hearth, hearth extension, and firebox, gas valve and location, circulating fan, combustion air vents; chimney structure, termination, coping, crown, caps, and spark arrestor. But to do so, the inspector generally will not verify the integrity of the flue, perform a chimney smoke test; or determine the adequacy of the draft.

Porches, Balconies, Decks, and Carports need to be examined for safety as well as structural integrity. Ata minimum, an inspector would inspect attached balconies, carports, and porches as well as abutting porches, decks, and balconies that are used for ingress and egress. Part of that includes childproof review such as noting deficiencies if on decks 30 inches or higher above the adjacent grade, spacings between intermediate balusters, spindles, or rails that permit passage of an object greater than four inches in diameter. The inspector is not going to measure every detail however or access any areas which are hard to enter or access.

Electrical Systems need special care as many fires originate from improper electrical work or deficient electrical systems.

The parts of the electrical system are usually inexpensive to fix. There may be times when this is not the case. You can normally see if a light switch works or an outlet works. A fix there might cost less than \$5. But is it part of a larger problem when there are a couple of issues? An inspector will look at the entire system and an inspector should inspect and test visible items, switches, outlets and report deficiencies for:

- 1. Service entrance and panels should be noted as problematic if:
 - a. a drop, weatherhead or mast that is not securely fastened to the building;
 - b. the absence of or deficiencies in the grounding electrode system;
 - c. missing or damaged dead fronts or covers plates;
 - d. conductors not protected from the edges of electrical cabinets, gutters, or cutout boxes;
 - e. electrical cabinets and panel boards not appropriate for their location; such as a clothes closet, bathrooms or where they are exposed to physical damage;
 - f. electrical cabinets and panel boards that are not accessible or do not have a minimum of 36-inches of clearance in front of them;
 - g. there are any operating issues with electrical cabinets, gutters, cutout boxes, and panel boards; the insulation of the service entrance conductors, drip loop, separation of conductors at weatherheads, and clearances; the compatibility of overcurrent devices and conductors; the overcurrent device and circuit for labeled and listed 240 volt appliances; bonding and grounding; conductors; the operation of installed ground-fault or arc-fault circuit interrupter devices; or there are missing elements such as trip ties on 240 volt overcurrent devices or multi-wire branch circuit; appropriate connections; anti-oxidants on aluminum conductor terminations; a main disconnecting means.

The inspector is not an electrician re-wiring or wiring the house. There are very special items which an inspector might not be proficient in or able to perform safely. These include determining the present or future sufficiency of service capacity amperage, voltage, or the capacity of the electrical system; testing arc-fault circuit interrupter devices when the property is occupied or damage to personal property may result, in the inspector's reasonable judgment; conducting voltage drop calculations; determining the accuracy of overcurrent device labeling; removing covers where hazardous as judged by the inspector; verifying the effectiveness of overcurrent devices; or operating overcurrent devices. The inspector might note or recommend a licensed electrician review any concerns or issues.

The inspector should review branch circuits, connected devices, and fixtures. These are the wires that run to outlets, switches, appliances and such. In reviewing and testing, the inspector should manually test the outlets (receptacles), switches, appliances, and installed and accessible smoke and carbon monoxide alarms and note the type of branch circuit conductors. There should be Ground Fault Circuit Interrupter (GFCI) protection (these trip a shut off near water and can be reset at the outlet) for all of the following: bathroom receptacles; garage receptacles; outdoor receptacles; crawl space receptacles; unfinished basement receptacles; kitchen countertop receptacles; and receptacles that are located within six feet of the outside edge of a sink. The inspector would report the failure of operation of ground-fault circuit interrupter protection devices; missing or damaged receptacle, switch or junction box covers; the absence of equipment disconnects; appropriate connections, such as copper/aluminum approved devices, if branch circuit aluminum conductors are discovered in the main or sub-panel based on a random sampling of accessible receptacles and switches. Also, if there are any defects or problems found, the inspector would note those problems concerning receptacles, switches, bonding or grounding, wiring, wiring terminations, junction boxes, devices, and fixtures, including improper location, doorbell and chime components, smoke and carbon monoxide alarms, improper use of extension cords, absence of conduit, where applicable, absence of smoke alarms (in or outside sleeping rooms and living space in each story of the building).

The inspector is not going to test and inspect everything. Some things that need special attention may be omitted such as low voltage wiring, disassembling and mechanical appliances; verifying the effectiveness of smoke alarms (only testing), verifying interconnectivity of smoke alarms, activating smoke or carbon monoxide alarms that are or may be monitored or require the use of codes, verifying that smoke alarms are suitable for the hearing-impaired, or removing the covers of junction, fixture, receptacle or switch boxes unless specifically required by these standards.

Heating, Ventilation, and Air Conditioning Systems (HVAC).

These can be expensive to fix. They are certainly very expensive to replace. In addition, cracks or other deficiencies can be dangerous. **In general, a buyer might want to make sure a seller replaces any system over 15-20 years old.** An inspector isn't going to make that determination though. An inspector will test to see if the system is working within normal operating limits and will look for problems. For heating equipment, the inspector will report the type of heating systems; and the type of energy source (gas, electrical, fuel oil, etc). Problems that should be noted are inoperative units; deficiencies in the thermostats; inappropriate location; the lack of protection from physical damage; burners, burner ignition devices or heating elements, switches, and thermostats that are not a minimum of 18 inches above the lowest garage floor elevation, unless the unit is listed for garage floor installation; the absence of an opening that would allow access to equipment for inspection, service, repair or replacement without removing permanent construction or building finish; when applicable; a floored passageway and service platform that would allow access for equipment inspection, service, repair or replacement; and deficiencies in mounting and performance of window and wall units.

Depending on what type of heating system is in place, the inspector looks for different problems. For electric units, the inspector checks and notes problems with performance of heat pumps; performance of heating elements; and condition of conductors. For gas units, the inspector has more items to check and notes any gas leaks, flame impingement, uplifting flame, improper flame color, or excessive scale buildup, the absence of a gas shut-off valve within six feet of the appliance, the absence of a gas appliance connector or one that exceeds six feet in length, gas appliance connectors that are concealed within or extended through walls, floors, partitions, ceilings or appliance housings, and problems with combustion, and dilution air, gas shut-off valves, access to a gas shutoff valves that prohibits full operation, gas appliance connector materials, and the vent pipe, draft hood, draft, proximity to combustibles, and vent termination point and clearances.

Cooling equipment follows much of the review of heating equipment since central HVAC is very common. There are certainly separate systems. Eliminating the overlap between heating and cooling, the additional items an inspector would look for in cooling systems would start with the type of system. Cooling equipment problems which should be noted include: inoperative units, inadequate cooling as demonstrated by its performance (there should be a minimum ability to maintain an indoor temperature at least 20 degrees lower than exterior temperature), the absence of an opening that would allow access to equipment for inspection, service, repair or replacement without removing permanent construction or building finish, when applicable; a floored passageway and service platform that would allow access for equipment inspection, service, repair or replacement, noticeable vibration of blowers or fans, water in the auxiliary/secondary drain pan (there should be a primary and secondary drain), a primary drain pipe that discharges in a sewer vent, missing or deficient refrigerant pipe insulation, dirty coils, where accessible, condensing units lacking adequate clearances or air circulation or that has deficiencies in the fins, location, levelness, or elevation above grade surfaces, problems with the condensate drain and auxiliary/secondary pan and drain system, the mounting and performance of window or wall units; and thermostats. Evaporative coolers are different and function on moving air over water. Inspectors should note the type of systems and the type of water supply line. Problems to note would include inoperative units, inadequate access and clearances, deficiencies in performance or mounting, missing or damaged components, the presence of active water leaks, and the absence of backflow prevention.

Ductwork can be a primary cause of inefficiency or warm and cold spots. However, the inspector is not checking these. A buyer may want to see if there is an issue at either the warmest or coldest part of the day. A long duct which crosses the house from the HVAC unit to the vent into a room will have lower airflow than a nearer room if the ductwork is not well done. The inspector should examine duct systems, chases, and vents and will look for problems with damaged duct systems or improper material, damaged or missing duct insulation, the absence of air flow at accessible supply registers, the presence of gas piping and sewer vents concealed in ducts, plenums and chases, ducts or plenums in contact with earth; and poor filters, grills or registers, and the location of return air openings.

An inspector is not going to perform certain tests which are specialized to HVAC experts such as programming digital thermostats or controls, for pressure of the system refrigerant, type of refrigerant, or refrigerant leaks, winterized or decommissioned equipment, or duct fans, humidifiers, dehumidifiers, air purifiers, motorized dampers, electronic air filters, multi-stage controllers, sequencers, heat reclaimers, wood burning stoves, boilers, oil-fired units, supplemental heating appliances, de-icing provisions, or reversing valves. This means the inspector also might not report on compatibility of components, tonnage match of indoor coils and outside coils or condensing units, the accuracy of thermostats, the integrity of the heat exchanger, the sizing, efficiency, or adequacy of the system, the balanced air flow of the conditioned air to the various parts of the building, or types of materials contained in insulation.

Plumbing Systems.

While there are issues with plumbing systems which may be expensive and inexpensive to repair or correct, the potential for water to cause substantial and costly damage inside a home is a concern. Water leaks should always be repaired and stopped as soon as possible and any water removed as quickly as possible to avoid mold or other damage.

When examining plumbing systems, an inspector should report where the water meter is located, where the main shutoff valve is located, and the water pressure for the house. After that, the inspector checks that various items work correctly and identifies problems with active leaks, the lack of a pressure reducing valve when the water pressure exceeds 80 PSI, the lack of an expansion tank at the water heater(s) when a pressure reducing valve is in place at the water supply line/system, the absence of fixture shut-off valves, dielectric unions, when applicable, back-flow devices, anti-siphon devices, or air gaps at the flow end of fixtures. If there are other issues, the inspector should not problems with water supply pipes and waste pipes, the installation and termination of the vent system, the performance of fixtures and faucets not connected to an appliance, water supply, as determined by viewing functional flow in two fixtures operated simultaneously, fixture drain performance, orientation of hot and cold faucets, installed mechanical drain stops, commodes, fixtures, showers, tubs, and enclosures.

The inspector might not inspect clothes washing machine drains, hose bibbs, any system that has been winterized, shut down or otherwise secured, circulating pumps, free-standing appliances, solar water heating systems, water-conditioning equipment, filter systems, water mains, private water supply systems, water wells, pressure tanks, sprinkler systems, swimming pools, or fire sprinkler systems, inaccessible gas supply system components for leaks, for sewer clean-outs, for the presence or performance of private sewage disposal systems (septic tanks). This would also mean that the inspector is not going to render an opinion on the quality of the water or test the effectiveness of backflow or anti-siphon devices.

Water heaters failures are a primary source of water leaks. The inspector cannot determine if or when the water heater might fail or leak and will report on the type of water heaters (gas/electric) and the capacity of the units. Some issues which would be noted are any inoperative units, leaking or corroded fittings or tanks, damaged or missing components, the absence of a cold water shut-off valve, if applicable, the absence of a pan or a pan drain system that does not terminate over a waste receptor or to the exterior of the building above the ground surface, inappropriate locations, the lack of protection from physical damage, burners, burner ignition devices or heating elements, switches, or thermostats that are not a minimum of 18 inches above the lowest garage floor elevation, unless the unit is listed for garage floor installation, the absence of an opening that would allow access to equipment for inspection, service, repair or replacement without removing permanent construction or building finish, the absence or deficiencies in the temperature and pressure relief valve and discharge piping.

There are different reviews between gas and electric units. Electric units mainly are inspected for performance and electrical connections. Gas units are also inspected for this, but also that the same venting and tests for a gas HVAC heating unit also apply to a gas water heater.

Any Jacuzzi or hydro-massage equipment will also be reviewed for working, leaks, damage and proper connection.

Appliances

All appliances should be tested to determine if each is in working order. In general, the test will see if any appliances don't operate, are mounted incorrectly, have missing or damaged parts. There are appropriate reviews for water leaks, anti-tip (they are stable so that a child or someone leaning on it won't cause it to tip over, any gas appliances have proper venting and controls as noted in gas HVAC and water heaters. Don't forget that appliances include garage door openers and safety features, bathroom fans, dryer vents, and other items which may not be thought of by a homeowner.

Optional Systems

There may be additional features of a house which a buyer might want inspected. The buyer should discuss with the inspector whether these are included in the inspection. These have separate inspection requirements and should be discussed when engaging an inspector. Some optional systems are:

Landscape irrigation (sprinkler) systems; Pools, hot tubs and pool equipment; Outbuildings; Water wells; Septic systems.