

§535.227. Standards of Practice: General Provisions

(a) Definitions.

(1) Accessible -- In the judgment of the inspector, the part, component or system can be approached, entered or viewed without moving large, heavy, fragile or valuable objects or obstacles, probing, using specialized tools or procedures, damaging property or disassembly, and without physical limitation or danger to the inspector.

(2) Chapter 1102 – Texas Occupations Code, Chapter 1102

(3) Deficiency – A condition adversely and materially affecting the performance of a system or component or constituting a hazard to life, limb, or property as specified by these standards of practice in the judgment of the inspector. General deficiencies include but are not limited to inoperability, material distress, interior water penetration, damage, deterioration, missing parts, and unsuitable installation.

(4) Deficient – Reported on the standard inspection report form as having one or more deficiencies.

(5) Inspect – To observe accessible systems or items and report observed deficiencies.

(6) Performance – Achievement of an operation, function, or configuration consistent with accepted industry practice.

(7) Report – To provide the inspector's opinions, judgment, and findings in writing.

(8) Specialized tools and procedures – Tools and procedures such as thermal imaging equipment, moisture meters, gas leak detection equipment, environmental testing equipment and devices, elevation determination devices, ladders capable of reaching surfaces over one story above ground surfaces, or any method employing destructive testing that damages otherwise sound materials or finishes.

(9) Standards of practice – §§535.227-535.231 of this title.

(b) Scope.

(1) These standards of practice define the minimum levels of inspection required for substantially completed residential improvements to real property up to four dwelling units. A real estate inspection is a limited survey and basic operation of the systems and components of a building using normal controls and does not require the use of specialized tools or procedures. The purpose of the inspection is to provide the client with information regarding the general condition of the residence at the time of inspection. The inspector may provide a higher level of inspection performance than required by these standards of practice and may inspect parts, components, and systems in addition to those described by the standards of practice.

(2) General Requirements. The inspector shall:

(A) operate fixed or installed equipment and appliances listed herein in at least one mode with ordinary controls at typical settings;

(B) inspect accessible systems or components from near proximity to the systems and components, and from the interior of the attic and crawl spaces; and

(C) complete the standard inspection report form as required by §§535.222 and 535.223 of this title.

(3) General limitations. The inspector is not required to:

(A) inspect:

(i) items other than those listed herein;

(ii) detached structures, decks, docks, fences or waterfront structures or equipment;

- (iii) anything buried, hidden, latent or concealed; or
- (iv) 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;
- (B) report:
 - (i) past repairs that appear to be effective and workmanlike
 - (ii) cosmetic or aesthetic conditions;
 - (iii) wear and tear from ordinary use; or
 - (iv) decay, deterioration, or damage that may occur after the inspection;
- (C) determine:
 - (i) insurability, warrantability, habitability, adequacy, capacity, reliability, marketability, operating costs, recalls, life expectancy, age, insulation characteristics, energy efficiency, vapor barriers, thermostatic operation, code compliance, utility sources, or manufacturer or regulatory requirements;
 - (i) presence or absence of pests or wood-destroying organisms;
 - (ii) presence, absence or risk of any environmental pathogen, carcinogen, toxin, mycotoxin, pollutants, fungal presence or activity, or poison, or
 - (iii) types of wood or preservative treatment and fastener compatibility;
- (D) anticipate future events or conditions, including but not limited to:
 - (i) decay, deterioration, or damage that may occur after the inspection;
 - (ii) deficiencies from over or under use;
 - (iii) changes in performance of any part, component, or system due to changes in use or occupancy;
 - (iv) the consequences of the inspection or its effects on current or future buyers and sellers; or
 - (v) common household accidents, personal injury, or death;
- (E) warrant:
 - (i) absence of water penetration(s); or
 - (ii) future performance of any item;
- (F) operate shut-off, safety, stop, pressure, or pressure-regulating valves or items requiring the use of codes, keys, combinations, or similar devices;
- (G) designate conditions as safe;
- (H) recommend or provide engineering, architectural, appraisal, mitigation, physical surveying, realty, or other specialist services;
- (I) review historical records, installation instructions, repair plans, cost estimates, disclosure documents, or other reports;
- (J) verify drain systems;
- (K) operate recirculation or sump pumps;
- (L) remedy conditions preventing inspection of any item;
- (M) apply open flame to operate any appliance;
- (N) turn on decommissioned equipment, systems, or utility services; or

(O) provide repair cost estimates, recommendations, or re-inspection services.

(4) In the event of a conflict between specific provisions and general provisions in the standards of practice, specific provisions shall take precedence.

(5) Departure.

(A) An inspector may depart from the standards of practice only if the requirements of subparagraph (B) are met, and:

(i) the inspector and client agree the item is not to be inspected;

(ii) the inspector is not qualified to inspect the item;

(iii) conditions beyond the control of the inspector reasonably prevent inspection of an item;

(iv) the item is a common element of a multi-family development (shared by more than one unit) and does not physically affect the unit being inspected;

(v) the inspector reasonably determines that conditions or materials are hazardous to the health or safety of the inspector; or

(vi) the inspector reasonably determines that actions of the inspector may cause damage to the property.

(B) If a part, component, or system required for inspection is not inspected, the inspector shall:

(i) advise the client at the earliest practicable opportunity that the part, component, or system will not be inspected;

(ii) make an appropriate notation on the standard inspection report form; and

(iii) clearly state the reason the part, component, or system was not inspected.

(c) Enforcement. Failure to comply with the standards of practice is grounds for disciplinary action as prescribed by Chapter 1102.

§535.228. Standards of Practice: Minimum Inspection Requirements for Structural Systems

(a) Foundations. The inspector shall:

(1) inspect slab surfaces, foundation framing components, sub flooring, and related structural components;

(2) report the method used to inspect the crawl space(s); and

(3) report as Deficient:

(A) exposed or damaged reinforcement;

(B) a crawl space that does not appear to be adequately ventilated;

(C) crawl space drainage that does not appear to be adequate;

(D) deteriorated materials;

(E) damaged beams, joists, bridging, blocking, piers, posts, pilings, or sub-floor;

(F) non-supporting piers, posts, pilings, columns, beams, sills, or joists;

(G) damaged retaining walls related to foundation performance;

(H) general indications of adverse performance that are present and visible, such as:

(i) open or offset concrete cracks;

- (ii) binding, out-of-square, non-latching, warped, or twisted doors or frames;
 - (iii) framing or frieze board separations;
 - (iv) out-of-square wall openings or separations at wall openings or between the veneer and window or door frames;
 - (v) sloping floors, counter tops, cabinet doors, or window/door casings;
 - (vi) wall, floor, or ceiling cracks;
 - (vii) rotating, buckling, or deflecting masonry veneer panels;
 - (viii) separating of walls from ceilings or floors; and
 - (ix) soil erosion adjacent to the foundation and differential movement of abutting walkways, driveways and patios; and
- (l) foundations in need of remedial work or further evaluation, if applicable.
- (b) Specific limitations for foundations. The inspector is not required to:
- (1) enter a crawlspace or any area where headroom is less than 18 inches or the access opening is less than 24 inches wide and 18 inches high;
 - (2) provide an exhaustive list of indicators of possible adverse performance; or
 - (3) inspect retaining walls not related to foundation performance.
- (c) Grading and drainage. The inspector shall inspect the grading and drainage and report as Deficient:
- (1) improper or inadequate grading around the foundation;
 - (2) plumbing leaks;
 - (3) erosion;
 - (4) water ponding; and
 - (5) deficiencies in installed gutter and downspout systems.
- (d) Specific limitations for grading and drainage. The inspector is not required to:
- (1) inspect flatwork or detention/retention ponds;
 - (2) determine area hydrology or the presence of underground water; or
 - (3) determine the efficiency or operation of underground drainage systems.
- (e) Roof covering materials. The inspector shall inspect the roof covering materials from the roof level and:
- (1) report:
 - (A) the type(s) of roof covering(s);
 - (B) the method used to inspect the roof;
 - (C) evidence of previous repairs to roof covering materials, flashing, skylights, and other roof penetrations; and
 - (D) evidence of water penetration; and
 - (2) report as Deficient:
 - (A) a roof covering that is not appropriate for the slope of the roof;
 - (B) fasteners that are not present or that are not appropriate for material and location, (where it can be reasonably determined);
 - (C) deficient or missing flashing details; and
 - (D) deficiencies in skylights.

- (f) Specific limitations for roof covering. The inspector is not required to:
 - (1) determine the remaining life expectancy of the roof covering;
 - (2) inspect the roof from the roof level if, in the judgment of the inspector, the inspector cannot safely reach or stay on the roof, or that damage to the roof or roof covering may result from walking on the roof;
 - (3) determine the number of layers of roof covering material;
 - (4) identify latent hail damage; or
 - (5) provide an exhaustive list of locations of water penetrations or previous repairs.
- (g) Roof structure and attic. The inspector shall inspect the roof structure and attic and:
 - (1) report:
 - (A) the method used to inspect the attic;
 - (B) approximate average depth of insulation where visible; and
 - (C) evidence of water penetration; and
 - (2) report as Deficient:
 - (A) attic space that does not appear to be adequately ventilated;
 - (B) deficiencies in installed framing members and decking;
 - (C) deflections or depressions in the roof's surface as related to the adverse performance of the framing and the roof deck;
 - (D) missing insulation;
 - (E) deficiencies in attic access ladder and access opening; and
 - (F) deficiencies in attic ventilators.
- (h) Specific limitations for roof structure and attic. The inspector is not required to:
 - (1) enter attics or unfinished spaces where openings are less than 22 inches by 30 inches or headroom is less than 30 inches;
 - (2) operate powered ventilators; or
 - (3) provide an exhaustive list of locations of water penetrations.
- (i) Interior walls, doors, ceilings, and floors. The inspector shall inspect the interior walls, doors, ceilings, and floors and report as Deficient:
 - (1) evidence of water penetration;
 - (2) doors and hardware that do not operate properly; and
 - (3) deficiencies related to structural performance and water penetration.
- (j) Specific limitations for interior walls, doors, ceilings, and floors. The inspector is not required to:
 - (1) report cosmetic damage to floor, wall, or ceiling coverings; or
 - (2) determine the condition of floor, wall, or ceiling coverings, paints, stains and other surface coatings, cabinets, or countertops if the condition is not related to structural performance or water penetration;
- (k) Exterior walls, doors, and windows. The inspector shall inspect the exterior walls, doors, and windows and report as Deficient:
 - (1) evidence of water penetration;
 - (2) the lack of functional emergency escape and rescue openings in all sleeping rooms;

(3) the lack of a solid wood door not less than 1 3/8 inches in thickness, a solid or honeycomb core steel door not less than 1 3/8 inches thick, or 20-minute fire-rated door between the residence and an attached garage;

(4) missing or damaged screens; and

(5) deficiencies:

(A) related to structural performance and water penetration;

(B) in the condition and operation of exterior doors, garage doors, and hardware; and

(C) in window operation and components.

(l) Specific limitations for exterior walls, doors, and windows. The inspector is not required to:

(1) report the condition or presence of awnings, shutters, security devices, or systems;

(2) determine the condition of paints, stains, or other surface coatings; or

(3) operate a lock if the key is not available.

(m) Exterior and interior glazing. The inspector shall inspect the window and door glazing and report as Deficient:

(A) insulated windows that are obviously fogged or display other evidence of broken seals;

(B) deficiencies in glazing in windows and exterior doors;

(C) deficiencies in the glazing weather stripping and glazing compound; and

(D) absence of safety glass in hazardous locations:

(n) Specific limitation for exterior and interior glazing. The inspector is not required to:

(1) exhaustively observe insulated windows for evidence of broken seals;

(2) exhaustively observe glazing for identifying labels; or

(3) identify specific locations of damage.

(o) Stairways (interior & exterior). The inspector shall inspect the stairways and report as Deficient:

(1) spacing between intermediate balusters, spindles, or rails for steps, stairways, guards, and railings that permit passage of an object greater than four inches in diameter except that spheres 4 3/8 inches in diameter cannot pass through the guard rail balusters or spindles on the open side of the staircase treads; and

(2) deficiencies in guardrail systems, steps, stairways, landings, and handrails.

(p) Specific limitation for stairways. The inspector is not required to exhaustively measure every stairway component.

(q) Fireplace and chimney. The inspector shall inspect the fireplace(s) and chimney(s) and report as Deficient:

(1) built-up creosote in visible areas of the firebox and flue;

(2) the presence of combustible materials in near proximity to the firebox opening;

(3) absence of fireblocking at the attic penetration of the chimney flue, where accessible;

(4) circulating fan that does not operate; and

(5) deficiencies in the:

(A) damper;

(B) lintel, hearth, hearth extension and firebox;

- (C) gas log lighter valve and location,
 - (D) combustion air vents; and
 - (E) chimney structure, termination, coping, crown, caps, and spark arrestor.
- (r) Specific limitation for fireplace and chimney. The inspector is not required to:
- (1) verify the integrity of the flue;
 - (2) perform a chimney smoke test; or
 - (3) determine the adequacy of the draft.
- (s) Porches, Balconies, Decks, and Carports. The inspector shall inspect balconies, attached carports and attached porches or abutting porches, decks and balconies that are used for ingress and egress and report as Deficient:
- (1) 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;
 - (2) deficiencies in visible footings, piers, posts, pilings, beams, joists, decking, water proofing at interfaces, flashing, surface coverings, and attachment points of porches, decks, balconies, and carports; and
 - (3) deficiencies in guardrails and handrails.
- (t) **Specific limitation for porches, balconies, decks, and carports.** The inspector is not required to:
- (1) exhaustively measure the porch, balcony, deck or attach carport components; or
 - (2) enter any area where headroom is less than 18 inches or the access opening is less than 24 inches wide and 18 inches high.

§535.229. Standards of Practice: Minimum Inspection Requirements for Mechanical Systems: Appliances, Cooling Systems, Heating Systems, Ducts, Vents, and Plumbing Systems

- (a) Dishwasher. The inspector shall inspect the unit(s) and report as Deficient:
- (1) inoperative unit(s);
 - (2) rust on the interior of the cabinet or components;
 - (3) failure to drain properly;
 - (4) the presence of active water leaks; and
 - (5) deficiencies in the:
 - (A) door gasket;
 - (B) control and control panels;
 - (C) dish racks;
 - (D) rollers;
 - (E) spray arms;
 - (F) operation of the soap dispenser;
 - (G) door springs;
 - (H) dryer element;
 - (I) door latch and door disconnect;
 - (J) rinse cap;
 - (K) secure mounting of the unit; and
 - (L) backflow prevention.
- (b) Food waste disposer. The inspector shall inspect the unit(s) and report as Deficient:

- (1) inoperative unit(s);
 - (2) unusual noise or vibration level;
 - (3) presence of active water leaks; and
 - (4) deficiencies in the:
 - (A) splash guard;
 - (B) grinding components;
 - (C) exterior casing; and
 - (D) secure mounting of the unit.
- (c) Range exhaust vent. The inspector shall inspect the unit(s) and report as Deficient:
- (1) inoperative unit(s);
 - (2) vent pipe that does not terminate outside the structure, if the unit is not of re-circulating type or configuration;
 - (3) inadequate vent pipe material;
 - (4) unusual sounds or vibration levels from the blower fan(s);
 - (5) blower(s) that do not operate at all speeds; and
 - (6) deficiencies in the:
 - (A) filter;
 - (B) vent pipe;
 - (C) light and lens;
 - (D) secure mounting of the unit; and
 - (E) switches.
- (d) Electric or gas ranges, cooktops, and ovens. The inspector shall inspect the unit(s) and report as Deficient:
- (1) inoperative unit(s);
 - (2) lack of a gas shut-off valve;
 - (3) gas leaks; and
 - (4) deficiencies in the:
 - (A) controls and control panels;
 - (B) thermostat(s) sensor support;
 - (C) glass panels;
 - (D) door gasket(s), hinges, springs, closure, and handles;
 - (E) door latch;
 - (F) heating elements or burners;
 - (G) thermostat accuracy (within 25 degrees at a setting of 350 °F);
 - (H) drip pans;
 - (I) lights and lenses;
 - (J) clearance to combustible material;
 - (K) anti-tip device;
 - (L) gas shut-off valve(s) and location(s);
 - (M) gas connector materials and connections; and
 - (N) secure mounting of the unit.
- (e) Microwave oven. The inspector shall inspect the unit(s) and report as Deficient:
- (1) inoperative unit(s); and
 - (2) deficiencies in:
 - A) controls and control panels;
 - B) handles;
 - C) the turn table;

- D) interior surfaces;
- E) the door and door seal;
- F) glass panels;
- G) lights and lenses;
- H) secure mounting of the unit; and
- I) operation, as determined by heating a container of water or with other means of testing.

(f) Trash compactor. The inspector shall inspect the unit(s) and report as Deficient:

- (1) inoperative unit(s);
- (2) unusual noise or vibration levels; and
- (3) deficiencies in the secure mounting of the unit.

(g) Mechanical exhaust vents and heaters. The inspector shall inspect the unit(s) and report as Deficient:

- (1) inoperative unit(s);
- (2) unusual sounds, speed, and vibration levels;
- (3) vent pipes that do not terminate outside the structure;
- (4) a gas heater that is not vented to the exterior of the structure; and
- (5) the lack of an exhaust ventilator in required areas.

(h) Doorbell and chimes. The inspector shall inspect the unit(s) and report as Deficient:

- (1) inoperable unit(s); and
- (2) deficiencies in components.

(i) Garage door operator. The inspector shall inspect the unit(s) and report as Deficient:

- (1) inoperative unit(s);
- (2) door locks or side ropes that have not been removed or disabled; and
- (3) deficiencies in:
 - (A) installation;
 - (B) condition and operation of the garage door operator;
 - (C) automatic reversal during the closing cycle;
 - (D) electronic sensors;
 - (E) the control button;
 - (F) the emergency release components.

(j) Hydro-massage therapy equipment. The inspector shall inspect the equipment and report as Deficient:

- (1) inoperative unit(s) and controls;
- (2) leaks;
- (3) inaccessible pump(s) or motor(s);
- (4) the lack of or inoperative ground fault circuit interrupter device; and
- (5) deficiencies in the ports, valves, grates, and covers.

(k) Dryer vents. The inspector shall inspect the vent(s) and report as Deficient:

- (1) improper routing and length of vent pipe;

- (2) deficiencies in material used for the vent pipe system;
 - (3) improper termination;
 - (4) the lack of a dryer vent system when a dryer utility connection is present; and
 - (5) damaged or missing exterior cover.
- (l) Specific limitations for appliances. The inspector is not required to:
- (1) operate or determine the condition of other auxiliary components of inspected items;
 - (2) test for microwave oven radiation leaks;
 - (3) inspect self-cleaning functions;
 - (4) test trash compactor ram pressure;
 - (5) adequacy of venting systems; or
 - (6) determine the adequacy of self-draining features of circulation systems.
- (m) Water heaters. The inspector shall inspect the unit(s) and:
- (1) report the energy source;
 - (2) report as Deficient:
 - (A) inoperative unit(s);
 - (B) leaking or corroded fittings or tank(s);
 - (C) broken or missing parts or controls;
 - (D) the lack of a cold water shut-off valve;
 - (E) if applicable, the lack of a pan and drain system and the improper termination of the pan drain line;
 - (F) an unsafe location;
 - (G) 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;
 - (H) the lack of protection from physical damage to the unit;
 - (I) a temperature and pressure relief valve that:
 - (i) does not operate manually;
 - (ii) leaks;
 - (iii) is damaged;
 - (iv) cannot be tested due to obstructions;
 - (v) is corroded; or
 - (vi) is improperly located;
 - (J) temperature and pressure relief valve discharge piping that:
 - (i) lacks gravity drainage;
 - (ii) is improperly sized;
 - (iii) has inadequate material; or
 - (iv) lacks proper termination;
 - (3) in electric units, report as Deficient:

- (A) deficiencies in:
 - (i) operation of heating elements; and
 - (ii) condition of conductors; and
- (4) in gas units, report as Deficient:
 - (A) gas leaks;
 - (B) inappropriate location;
 - (C) inadequate clearances;
 - (D) lack of burner shield(s);
 - (E) flame impingement, uplifting flame, improper flame color, or excessive scale build-up;
 - (F) the lack of a gas shut-off valve; and
 - (G) deficiencies in:
 - (i) combustion and dilution air;
 - (ii) gas shut-off valve(s) and location(s);
 - (iii) gas connector materials and connections;
 - (iv) vent pipe, draft hood, draft, proximity to combustibles, and vent termination point and clearances;
- (n) Specific limitations for water heater. The inspector is not required to:
 - (1) verify the effectiveness of the temperature and pressure relief valve discharge piping or pan drain pipes;
 - (2) operate the temperature and pressure relief valve if the operation of the valve may in the judgment of the inspector cause damage to persons or property; or
 - (3) determine the sizing, efficiency, or adequacy of the unit.
- (o) Cooling systems other than evaporative coolers. The inspector shall inspect the equipment and:
 - (1) report the type of system; and
 - (2) report as Deficient:
 - (A) inoperative unit(s);
 - (B) inadequate cooling as demonstrated by its performance in the judgment of the inspector;
 - (C) noticeable vibration of the blower fan or condensing fan;
 - (D) deficiencies in the condensate drain and auxiliary/secondary pan and drain system;
 - (E) water in the auxiliary/secondary drain pan;
 - (F) a primary drain pipe that does not terminate in an active use trap;
 - (G) missing or deficient refrigerant pipe insulation
 - (H) dirty evaporator or condensing coils, where accessible;
 - (I) damaged casings on the coils;
 - (J) a condensing unit lacking adequate clearances or air circulation or that has deficiencies in the condition of fins, location, levelness, or elevation above ground surfaces; and

- (K) deficiencies in thermostats.
- (p) Evaporative coolers. The inspector shall inspect the equipment and:
 - (1) report:
 - (A) the type of system (one- or two-speed); and
 - (B) the type of water supply line; and
 - (2) report as Deficient:
 - (A) inoperative unit(s);
 - (B) **corrosive build-up** at the pump;
 - (C) less than a one-inch air gap between water discharge at float and water level in the reservoir;
 - (D) **corrosion**, decay, or deterioration of the louvered panels, water trays, exterior housing, or the roof frame;
 - (E) **corrosion** on the pulleys of the motor or fan;
 - (F) the lack of a damper; and
 - (G) deficiencies in:
 - (i) the electrical **circuit and** connections; **(Ray says the pigtail connection needs to be emphasized)**
 - ~~(ii) the condition and position of the electrical pigtail connection from the receptacle to the motor and the motor connection;~~
 - (iii) the function of the pump;
 - (iv) the spider tubes, tube clips, and bleeder system;
 - (v) the float bracket;
 - (vi) the fan, squirrel cage, bearings or **corrosion build-up; [ARE THESE REFERENCES TO CORROSION DUPLICATIVE? OR CAN THEY BE CONSOLIDATED?]**
 - (vii) the fan belt;
 - (viii) the installation of the legs on the roof rails and fasteners;
 - (ix) the roof jack; and
 - (x) thermostats.
- (p) Heating systems. The inspector shall inspect the equipment and:
 - (1) report:
 - (A) the type of heating system;
 - (B) the energy source(s); and
 - (2) report as Deficient:
 - (A) an inoperative unit;
 - (B) deficiencies in the controls and operating components of the system;
 - (C) the lack of protection from physical damage to the unit;
 - (D) 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;
 - (E) deficiencies in thermostats;
 - (3) in electric units report as Deficient:
 - (A) deficiencies in:
 - (iii) operation of heating elements; and
 - (iv) condition of conductors; and
 - (4) in gas units report as Deficient:

(i) gas leaks;
(ii) inappropriate location;
(iii) inadequate clearances;
(iv) the presence of forced air in the burner compartment;
(v) flame impingement, uplifting flame, improper flame color, or excessive scale buildup;
(vi) the lack of a gas shut-off valve; and
(vii) deficiencies in:
(I) combustion and dilution air;
(II) gas shut-off valve(s) and location(s);
(III) gas connector materials and connections; and
(IV) the vent pipe, draft hood, draft, proximity to combustibles, and vent termination point and clearances.

(r) Duct system, chases, and vents. The inspector shall inspect the duct system, chases, and vents and:

(1) report as Deficient:
(A) damaged ducting or insulation, improper material, or improper routing of ducts;
(B) the absence of air flow at accessible supply registers in the habitable areas of the structure;
(C) improper or inadequate clearance from earth; and
(D) deficiencies in:
(i) duct fans;
(ii) filters;
(iii) grills or registers;
(iv) the location of return air openings; and
(v) gas piping, sewer vents, electrical wiring, or junction boxes in the duct system, plenum(s), and chase(s).

(s) Specific limitations for the cooling system, heating system, duct system, chases, and vents. The inspector is not required to:

- (1) program digital thermostats or controls;
- (2) Inspect:
 - (A) for pressure of the system refrigerant, type of refrigerant or refrigerant leaks;
 - (B) window units or through-wall systems; or
 - (C) humidifiers, dehumidifiers, air purifiers, motorized dampers, electronic air filters, multi-stage controllers, sequencers, heat reclaimers, wood burner stoves, boilers, oil-fired units, supplemental heating appliances, de-icing provisions or reversing valves;
- (3) operate:
 - (A) setback features on thermostats or controls;

- (B) cooling equipment when the outdoor temperature is less than 60 degrees Fahrenheit;
 - (C) radiant heaters, steam heat systems, or unvented gas-fired heating appliances; or
 - (D) heat pumps when temperatures may damage equipment.
- (4) verify:
- (A) compatibility of components;
 - (B) the accuracy of thermostats; or
 - (C) the integrity of the heat exchanger;
- (5) determine:
- (A) sizing, efficiency, or adequacy of the system;
 - (B) uniformity of the supply of conditioned air to the various parts of the structure; or
 - (C) types of materials contained in insulation.
- (t) Plumbing systems. The inspector shall inspect the plumbing system and report as Deficient:
- (1) lack of fixture shut-off valves;
 - (2) lack of dielectric unions, when applicable;
 - (3) lack of back-flow devices, anti-siphon devices, or air gaps at the flow end of fixtures;
- and
- (4) deficiencies in:
- (A) water supply pipes and waste pipes;
 - (B) the installation and termination of the vent system;
 - (C) the operation of fixtures and faucets not connected to an appliance;
 - (D) water supply, as determined by viewing functional flow in two fixtures operated simultaneously;
 - (E) functional drainage at fixtures;
 - (F) orientation of hot and cold faucets;
 - (G) installed mechanical drain stops;
 - (H) installation, condition, and operation of commodes;
 - (I) fixtures, showers, tubs, and enclosures; and
 - (J) the condition of the gas distribution system.
- (u) Specific limitations for plumbing systems. The inspector is not required to:
- (1) operate any main, branch, or shut-off valves;
 - (2) operate or inspect sump pumps or waste ejector pumps;
 - (3) inspect:
 - (A) any system that has been shut down or otherwise secured;

(B) 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;

(C) the inaccessible gas supply system for leaks;

(D) for sewer clean-outs; or

(E) for the presence or operation of private sewage disposal systems;

(4) determine:

(F) quality, potability, or volume of the water supply; or

(G) effectiveness of backflow or anti-siphon devices; or

(5) verify the functionality of clothes washing drains or floor drains.

§535.230. Standards of Practice: Minimum Inspection Requirements for Electrical Systems

(a) Service entrance and panels. The inspector shall inspect the service entrance and panels and:

(1) report the lack of arc-fault circuit interrupting devices serving bedroom outlets; and

(2) report as Deficient:

(A) a drop, weatherhead, or mast that is not securely fastened to the structure;

(B) the lack of a grounding electrode conductor or the lack of a secure connection to the grounding electrode or grounding system;

(C) deficiencies in the insulation of the service entrance conductors, drip loop, separation of conductors at weatherheads, and clearances;

(D) electrical cabinets, gutters, meter cans, and panel boards that:

(i) are not secured to the structure;

(ii) are not appropriate for their location;

(iii) have deficiencies in clearances and accessibility;

(iv) are missing knockouts; or

(v) are not bonded and grounded.

(E) cabinets, disconnects, and panel boards that do not have dead fronts secured in place with proper fasteners;

(F) conductors not protected from the edges of electrical cabinets, gutters, or cutout boxes;

(G) trip ties not installed on 240 volt circuits;

(H) deficiencies in the type and condition of the wiring in the cutout boxes, cabinets, or gutters;

(I) deficiencies in the compatibility of overcurrent devices and conductors;

(J) deficiencies in the overcurrent device and circuit for labeled and listed 240 volt appliances;

(K) a panel that is installed in a hazardous location, such as a clothes closet, a bathroom, where there are easily ignitable materials, or where the panel is exposed to physical damage;

devices; (L) the absence of appropriate connections, such as copper/aluminum-approved

(M) the absence of anti-oxidants on aluminum conductor terminations;

(N) the lack of a main disconnecting means; or

(O) failure of operation of installed arc-fault circuit interrupter devices;

(b) Specific limitations for service entrance and panels. The inspector is not required to:

(1) determine present or future sufficiency of service capacity amperage, voltage, or the capacity of the electrical system;

(2) test arc-fault circuit interrupter devices when the property is occupied or that damage to personal property may result in the judgment of the inspector;

(3) conduct voltage drop calculations;

(4) determine the accuracy of overcurrent device labeling;

(5) remove covers where hazardous as judged by the inspector;

(6) verify the effectiveness of overcurrent devices; or

(7) operate overcurrent devices.

(c) Branch circuits, connected devices, and fixtures. The inspector shall inspect the branch circuits, connected devices, and fixtures and:

(1) report:

(A) the type of branch circuit conductors; and

(B) the lack of ground fault circuit interrupter protection in all:

(i) bathroom receptacles;

(ii) garage receptacles;

(iii) outdoor receptacles;

(iv) crawl space receptacles;

(v) unfinished basement receptacles;

(vi) kitchen countertop receptacles; and

(vii) laundry, utility, and wet bar sink receptacles located within 6 feet of the outside edge of a laundry, utility, or wet bar sink;

(2) report as Deficient:

(A) the failure of operation of ground fault circuit interrupter protection devices;

(B) receptacles that:

(i) are damaged;

(ii) are inoperative;

(iii) have incorrect polarity;

(iv) are not grounded, if applicable;

(v) display evidence of arcing or excessive heat;

(vi) are not securely mounted; or

(vii) have missing or damaged covers;

(C) switches that:

(i) are damaged;

(ii) are inoperative;

- (iii) display evidence of arcing or excessive heat;
 - (iv) are not securely mounted; or
 - (v) have missing or damaged covers;
- (D) deficiencies in or absences of conduit (where applicable);
- (E) appliances that are not bonded or grounded;
- (F) deficiencies in wiring, wiring terminations, junctions, junction boxes, and fixtures;
- (G) the lack of equipment disconnects;
- (H) the absence of 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;
- (I) improper use of extension cords;
- (J) deficiencies in the installation of smoke alarms that are not connected to a central alarm system; and
- (K) the lack of smoke alarms:
- (i) in each sleeping room;
 - (ii) outside each separate sleeping area in the immediate vicinity of the sleeping rooms; and
 - (iii) on each additional story of the dwelling, including basements but excluding crawl spaces and uninhabitable attics (in dwellings with split levels and without an intervening door between the levels, a smoke alarm installed on the upper level and the adjacent lower level shall suffice provided that the lower level is less than one full story below the upper level).
- (d) Specific limitations for branch circuits, connected devices, and fixtures. The inspector is not required to:
- (1) inspect low voltage wiring;
 - (2) exhaustively examine all outlets;
 - (3) verify the interconnection of installed smoke alarms; or
 - (4) activate smoke alarms or verify that smoke alarms are suitable for the hearing-impaired.

§535.231. Standards of Practice: Minimum Inspection Requirements for Optional Systems.

If an inspector agrees to inspect a component described in this section, §535.227 of this title relating to Standards of Practice: General Provisions and the applicable provisions below apply.

- (1) Lawn and garden sprinkler system. The inspector shall inspect the system and:
- (A) operate all zones or stations on the system manually; and
 - (B) report as Deficient:
 - (i) surface water leaks;
 - (ii) the absence or improper installation of anti-siphon devices and backflow preventers;
 - (iii) the absence of shut-off valves;
 - (iv) deficiencies in water flow or pressure at the zone heads;
 - (v) the lack of a rain or freeze sensor;
 - (vi) deficiencies in the condition of the control box and electrical circuit; and

(vii) deficiencies in the operation of each zone, associated valves, and spray head patterns.

(2) Specific limitations for lawn and garden sprinkler system. The inspector is not required to inspect:

- (A) for effective coverage of the sprinkler system
- (B) the automatic function of the timer or control box;
- (C) the effectiveness of the rain or freeze sensor; or
- (D) sizing and effectiveness of anti-siphon devices or backflow preventers.

(3) Swimming pools, spas, hot tubs, and equipment. The inspector shall inspect the swimming pool(s), spa(s), hot tub(s), and equipment and:

- (A) report the type of construction; and
- (B) report as Deficient:
 - (i) a pump motor, blower, or other electrical equipment that lacks visible external grounding;
 - (ii) the absence of or deficiencies in safety barriers;
 - (iii) water leaks in above-ground pipes and equipment;
 - (iv) deficiencies in lighting fixture(s) or the lack of ground fault circuit interrupter protection;
 - (v) deficiencies in:
 - (I) surfaces;
 - (II) tiles, coping, and decks;
 - (III) slides, steps, diving boards, handrails, and other equipment;
 - (IV) drains, skimmers, and valves;
 - (V) filters, gauges, pumps, motors, controls, and sweeps;
 - (VI) when inspecting a pool heater, report deficiencies that the standards of practice would require to report for the heating system.

(4) Specific limitations for swimming pools, spas, hot tubs, and equipment. The inspector is not required to:

- (A) dismantle or otherwise open any components or lines;
- (B) operate valves;
- (C) uncover or excavate any lines or otherwise concealed components of the system or determine the presence of sub-surface leaks;
- (D) fill the pool, spa, or hot tub with water;
- (E) determine the presence of sub-surface water tables;
- (F) inspect ancillary equipment such as computer controls, covers, chlorinators or other chemical dispensers, or water ionization devices or conditioners other than required by this section.

(5) Outbuildings. The inspector shall inspect the outbuildings and report as Deficient:

- (A) the lack of ground fault circuit interrupter protection in grade-level portions of unfinished accessory buildings used for storage or work areas, boathouses, and boat hoists; and

(B) deficiencies in the structural, electrical, plumbing, heating, ventilation, and cooling systems that the standards of practice would require the inspector to report for the principal structure.

(6) Outdoor cooking equipment. The inspector shall inspect the equipment and:

(A) report the energy source; and

(B) report as Deficient:

(i) inoperative unit(s)

(ii) a unit or pedestal that is not stable;

(iii) gas leaks; and

(iv) deficiencies in:

(I) operation;

(II) control knobs, handles, burner bars, grills, the box, the rotisserie (if present), and heat diffusion material;

(III) gas shut-off valve(s) and location(s); and

(IV) gas connector materials and connections.

(7) Gas supply systems. The inspector shall inspect the system and:

(A) test gas lines using a local or an industry-accepted procedure; and

(B) report as Deficient:

(i) leaks; and

(ii) deficiencies in the condition and type of gas piping, fittings; and valves.

(8) Specific limitation for gas lines. The inspector is not required to inspect sacrificial anode bonding or for its existence.

(9) Private water wells. The inspector shall inspect the private water well(s) and:

(A) operate at least two fixtures simultaneously;

(B) recommend or arrange to have performed water quality or potability testing; and

(C) report:

(i) the type of pump and storage equipment; and

(ii) the proximity of any known septic system; and

(D) report deficiencies in:

(i) water pressure and flow and operation of pressure switches;

(ii) the condition of visible and accessible equipment and components;

(iii) the electrical circuit; and

(iv) the well head, including improper site drainage.

(10) Specific limitations for private water wells. The inspector is not required to:

(A) open, uncover, or remove the pump, heads, screens, lines, or other components or parts of the system;

(B) determine the reliability of the water supply or source; or

(C) locate or verify underground water leaks.

(11) Private sewage disposal (septic) systems. The inspector shall inspect the system(s) and:

(A) report:

- (i) the type of system;
- (ii) the location of the drain field; and
- (iii) the proximity of any known water wells, underground cisterns, water supply lines, bodies of water, sharp slopes or breaks, easement lines, property lines, soil absorption systems, swimming pools, or sprinkler systems; and

(B) report as Deficient:

- (i) visual or olfactory evidence of effluent seepage or flow at the surface of the ground;
- (ii) inoperative aerators or dosing pumps; and
- (iii) deficiencies in:
 - (I) accessible or visible components;
 - (II) functional flow;
 - (III) site drainage around or adjacent to the system;
 - (IV) the electrical circuit; and
 - (V) the aerobic discharge system.

(12) Specific limitations for individual private sewage systems (septic systems). The inspector is not required to:

- (A) excavate or uncover the system or its components;
- (B) determine the size, adequacy, or efficiency of the system; or
- (C) determine the type of construction used.

(13) Whole-house vacuum system. The inspector shall inspect the system and report as Deficient:

- (A) inoperative units;
- (B) deficiencies in the main unit; and
- (C) deficiencies in outlets.

(14) Specific limitations for whole-house vacuum systems. The inspector is not required to:

- (A) inspect the attachments or hoses; or
- (B) verify that accessory components are present.

(15) Other built-in appliances. The inspector shall report deficiencies in condition or operation of other built-in appliances not listed in this section.