## Section 535.230. STANDARDS OF PRACTICE: MINIMUM INSPECTION REQUIREMENTS FOR HEATING, VENTILATION, AND AIR CONDITIONING SYSTEMS.

(a) Heating equipment.

- (1) General requirements. The inspector shall:
  - (A) report:
    - (i) the type of heating systems; and
      - (ii) the energy sources; and
  - (B) report as Deficient:
    - (i) inoperative units;(ii) deficiencies in the thermostats;
    - (iii) inappropriate location;
    - (iv) the lack of protection from physical damage;
    - (v) 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;
    - (vi) the absence of an opening that would allow access to equipment for inspection, service, repair or replacement without removing permanent construction or building finish;
    - (vii) when applicable; a floored passageway and service platform that would allow access for equipment inspection, service, repair or replacement; and (viii) deficiencies in mounting and performance of window and wall units.
- (2) Requirements for electric units. The inspector shall report deficiencies in:
  - (A) performance of heat pumps;
  - (B) performance of heating elements; and
  - (C) condition of conductors; and
- (3) Requirements for gas units. The inspector shall report as Deficient:
  - (A) gas leaks in the heating equipment not associated with the gas distribution system;(B) flame impingement, uplifting flame, improper flame color, or excessive scale buildup; and
  - (C) deficiencies in:
    - (i) combustion, and dilution air; and
    - (ii) the vent pipe, draft hood, draft, proximity to combustibles, and vent termination point and clearances.

## (b) Cooling equipment.

- (1) Requirements for cooling units other than evaporative coolers.
  - (A) the inspector shall:
    - (i) report the type of systems;
    - (ii) measure and report the temperature difference between the supply air and the returned air or report industry-accepted method used to determine performance; and
    - (iii) generally report extraneous factors or conditions, present on the day of the inspection, that would adversely impact the temperature differential of an otherwise performing unit; and
- (B) the inspector shall report as Deficient:
  - (i) inoperative units;
  - (ii) deficiencies in the performance of the cooling system that:
    - (I) fails to achieve a 15 degrees Fahrenheit to 22 degrees Fahrenheit temperature differential; or
    - (II) fails to cool adequately as determined by other industry-accepted methods;

(iii) the absence of an opening that would allow access to equipment for inspection, service, repair or replacement without removing permanent construction or building finish;

(iv) when applicable; a floored passageway and service platform that would allow access for equipment inspection, service, repair or replacement;(v) noticeable vibration of blowers or fans;

(vi) water in the auxiliary/secondary drain pan;

(vii) a primary drain pipe that discharges in a sewer vent;

(viii) missing or deficient refrigerant pipe insulation;

(ix) dirty coils, where accessible;

(x) condensing units lacking adequate clearances or air circulation or that has deficiencies in the fins, location, levelness, or elevation above grade surfaces; and

(xi) deficiencies in:

(I) the condensate drain and auxiliary/secondary pan and drain system;

- (II) mounting and performance of window or wall units; and
- (III) thermostats.
- (2) Requirements for evaporative coolers.
  - (A) the inspector shall report:
    - (i) type of systems; and
    - (ii) the type of water supply line; and
  - (B) the inspector shall report as Deficient:
    - (i) inoperative units;
    - (ii) inadequate access and clearances;
    - (iii) deficiencies in performance or mounting;
    - (iv) missing or damaged components;
    - (v) the presence of active water leaks; and
    - (vi) the absence of backflow prevention.

(c) Duct systems, chases, and vents.

(1) the inspector shall report as Deficient:

- (A) damaged duct systems or improper material;
- (B) damaged or missing duct insulation;
- (C) the absence of air flow at accessible supply registers;
- (D) the presence of gas piping and sewer vents concealed in ducts, plenums and chases;
- (E) ducts or plenums in contact with earth; and
- (F) deficiencies in:
  - (i) filters;
    - (ii) grills or registers; and
    - (iii) the location of return air openings.

(d) For heating, ventilation, and air conditioning systems inspected under this section, the inspector is not required to perform the following actions:

(1) program digital thermostats or controls;

(2) inspect:

(A) for pressure of the system refrigerant, type of refrigerant, or refrigerant leaks;

(B) winterized or decommissioned equipment; or

(C) 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;

(3) operate:

(A) setback features on thermostats or controls;

(B) radiant heaters, steam heat systems, or unvented gas-fired heating appliances; or

(C) cooling or heating systems when weather conditions or other circumstances may cause equipment damage, including:

(i) cooling equipment when the outdoor temperature is less than 60 degrees Fahrenheit; and

(ii) heat pumps, in the heat pump mode, when the outdoor temperature is above 70 degrees Fahrenheit;

## (4) verify:

(A) compatibility of components;

(B) tonnage and manufacturer match of indoor coils and outside coils or condensing units;

(C) the accuracy of thermostats; or

(D) the integrity of the heat exchanger; or

(5) determine:

(A) sizing, efficiency, or adequacy of the system;

(B) balanced air flow of the conditioned air to the various parts of the building; or

(C) types of materials contained in insulation.

The provisions of this §535.230 adopted to be effective January 1, 2014, 38 TexReg 3350; amended to be effective September 7, 2016, 41 TexReg 6742 amended to be effective February 1, 2022, 46 TexReg 5770