

Effective 7/1/2016

Chapter 6 Additional Construction Requirements

Part 1 Nitrogen Oxide Emission Limits for Natural Gas-fired Water Heaters

15A-6-101 Title.

- (1) This chapter is known as "Additional Construction Requirements."
- (2) This part is known as "Nitrogen Oxide Emission Limits for Natural Gas-Fired Water Heaters."

Enacted by Chapter 249, 2016 General Session

15A-6-102 Nitrogen Oxide emission limits for natural gas-fired water heaters.

- (1) As used in this section:
 - (a) "BTU" means British Thermal Unit.
 - (b)
 - (i) "Heat input" means the heat of combustion released by fuel burned in a water heater based on the heating value of the fuel.
 - (ii) "Heat input" does not include the enthalpy of a water heater's incoming combustion air.
 - (c) "Heat output" means the enthalpy of a water heater's working fluid output.
 - (d) "Natural gas-fired water heater" means a device that heats water:
 - (i) using natural gas combustion;
 - (ii) for use external to the device at a pressure that is less than or equal to 160 pounds per square inch gage; and
 - (iii) to a thermostatically controlled temperature less than or equal to:
 - (A) 210 degrees Fahrenheit; or
 - (B) 99 degrees Celsius.
 - (e) "Ozone nonattainment area" means an area that does not meet the primary or secondary air quality standards for ozone under the National Ambient Air Quality Standards described in 42 U.S.C. Sec. 7407(d).
 - (f) "PM2.5 nonattainment area" means an area that does not meet the primary or secondary air quality standards for fine particulate matter, PM2.5, under the National Ambient Air Quality Standards described in 42 U.S.C. Sec. 7407(d).
 - (g) "ppm" means parts of Nitrogen Oxide per million parts of water heater air output.
 - (h) "Recreational vehicle" means the same as that term is defined in Section 13-14-102.
- (2) A person may not sell or install a natural gas-fired water heater with an emission rate greater than the following limits:
 - (a) except as provided in Subsection (6), for a water heater that has a heat input of less than or equal to 75,000 BTU per hour that is not installed in a mobile home, a limit of:
 - (i) 10 nanograms per Joule of heat output; or
 - (ii) 15 ppm, corrected to 3% oxygen;
 - (b) for a water heater that has a heat input of greater than 75,000 BTU per hour and less than 2,000,000 BTU per hour that is not installed in a mobile home, a limit of:
 - (i) 14 nanograms per Joule of heat output; or
 - (ii) 20 ppm, corrected to 3% oxygen;
 - (c) for a water heater installed in a mobile home, a limit of:

- (i) 40 nanograms per Joule of heat output; or
 - (ii) 55 ppm, corrected to 3% oxygen;
- (d) for a pool or spa water heater with a heat input that is less than or equal to 400,000 BTU per hour, a limit of:
 - (i) 40 nanograms per Joule of heat output; or
 - (ii) 55 ppm, corrected to 3% oxygen; and
- (e) for a pool or spa water heater with a heat input of greater than 400,000 BTU per hour and less than 2,000,000 BTU per hour, a limit of:
 - (i) 14 nanograms per Joule of heat output; or
 - (ii) 20 ppm, corrected to 3% oxygen.
- (3) A water heater manufacturer shall use California South Coast Air Quality Management District Method 100.1 to calculate the emissions rate of a water heater subject to this section.
- (4) A water heater manufacturer shall display on a water heater subject to this section, as a permanent label, the model number and the Nitrogen Oxide emission rate of the water heater.
- (5) The requirements of this section do not apply to:
 - (a) a water heater using a fuel other than natural gas;
 - (b) a water heater used in a recreational vehicle;
 - (c) a water heater manufactured in the state for sale and shipment outside of the state;
 - (d) a water heater manufactured before July 1, 2018; or
 - (e) a water heater intended for installation in an area of Utah that is not included in an ozone nonattainment area or a PM2.5 nonattainment area.
- (6) A person may sell or install a natural gas-fired water heater with an emission rate greater than the limits established in Subsection (2)(a) if:
 - (a) the water heater is replacing a water heater of equal BTUs per hour;
 - (b) there is not available for purchase in the United States a water heater that:
 - (i) has an input of equal BTUs per hour as the water heater being replaced; and
 - (ii) meets the limits established in Subsection (2)(a); and
 - (c) the purpose of the water heater is to heat water and provide space heating.

Amended by Chapter 47, 2026 General Session

Part 2

Insulated Concrete Forms

15A-6-201 Polyurethane insulated concrete forms.

- (1) Notwithstanding any other provision of this title, a governing body in the state that issues a building permit may not:
 - (a) deny issuing a building permit to a project solely because the project uses polyurethane insulated concrete form block that complies with Subsection (2); or
 - (b) require a project to surface flame retardants on polyurethane insulated concrete form block that has a flame spread that is less than or equal to 25.
- (2) A project may use polyurethane insulated concrete form block if:
 - (a) the polyurethane insulated concrete form block is manufactured using expanded polyurethane foam that:
 - (i) has a flame spread index that is less than or equal to 50;
 - (ii) has a smoke index that is less than 350; and

- (iii) is capable of withstanding fluid pressure created by fresh concrete; and
- (b) the project is designed and stamped by a structural engineer licensed in the state.

Enacted by Chapter 249, 2016 General Session

15A-6-202 Non-polyurethane insulating concrete forms.

- (1) Notwithstanding any other provision of this title, a governing body in the state that issues a building permit may not:
 - (a) deny issuing a building permit to a project solely because the project uses non- polyurethane insulating concrete form block that complies with Subsection (2); or
 - (b) require a project to apply additional flame retardants to the surface of non- polyurethane insulating concrete form block that has a flame spread that is less than or equal to 25.
- (2) A project may use non-polyurethane insulating concrete form block if:
 - (a) the non-polyurethane insulating concrete form block is manufactured using foam plastic insulation that complies with applicable requirements in Title 15A, State Construction and Fire Codes Act, for flame spread index and smoke development index;
 - (b) the non-polyurethane insulating concrete form block complies with any other requirements applicable to insulating concrete forms in Title 15A, State Construction and Fire Codes Act; and
 - (c) the project is designed and stamped by a structural engineer who is licensed in the state.

Enacted by Chapter 249, 2016 General Session

Part 3 Tower Cranes

15A-6-301 Tower crane operation.

- (1) As used in this section:
 - (a) "Affected land" means the same as that term is defined in Section 10-20-622.
 - (b) "Airspace approval" means the same as that term is defined in Section 10-20-622.
 - (c) "Jib" means the part of a tower crane that:
 - (i) extends horizontally or almost horizontally from the main vertical component of the tower crane; and
 - (ii) carries the live load.
 - (d) "Live load" means the same as that term is defined in Section 10-20-622.
 - (e) "Minimum hook height" means the distance that, measured from the lowest point of a hook suspended from a jib, is:
 - (i) 50 feet above the ground level of affected land; or
 - (ii) 20 feet above a building on affected land.
 - (f) "Tower crane" means the same as that term is defined in Section 10-20-622.
- (2) An operator of a tower crane shall operate the tower crane in accordance with the requirements of the manufacturer of the tower crane.
- (3)
 - (a) A live load may travel over affected land at the minimum hook height with airspace approval.
 - (b) A jib, but not a live load, may travel over the affected land at the minimum hook height without airspace approval.

(4) The functioning of a tower crane in accordance with Subsection (3) does not constitute a trespass on affected land.

Amended by Chapter 15, 2025 Special Session 1