5.10.030 Building codes adopted.

The 2009 Edition of the International Building Code, the 2009 Edition of the International Residential Code, the 2009 Edition of the International Mechanical Code, the 2011 Edition of the National Electrical Code, the 2012 Edition of the Uniform Plumbing Code, and the 2009 Edition of International Fire Code, as well as all administrative provisions thereof, as modified by the state of Alaska in 8 AAC 63.010, 8 AAC 70.025, 13 AAC 50.020, 13 AAC 50.023, 13 AAC 50.025, and 15 AAC 150.035 are collectively adopted by reference as the building code of the city except as further modified by this chapter. (Ord. O-15-03-01A § 1, 2015: Ord. O-09-12-02 § 1, 2009: Ord. 01-12-1 § 1 (part), 2001)

5.10.040 International Building Code and International Residential Code amendments.

- (a) Section 101.2.1 of the IBC is amended to read as follows: Appendices E and H are hereby adopted.
- (b) Section 103.2 of the International Building Code (IBC) and Section R103.2 of the International Residential Code (IRC) are amended to replace "chief appointing authority" with "City Manager" and to add the following: "the City Manager shall be the ex-officio Building Official unless the City Manager appoints another person to be the Building Official."
- (c) Section 105.2 of the IBC and Section R105.2 of the IRC are amended by deleting the exemptions for water tanks less than five thousand gallons in size, structures with a floor area of less than one hundred twenty square feet (IBC) and structures with a floor area of less than two hundred square feet (IRC).
- (d) Section 105.5 of the IBC and Section R105.5 of the IRC are amended to read as follows:

Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 180 days after its issuance, and completed within 730 days after its issuance. The Building Official is authorized to grant, in writing, one or more extensions of time, for periods that cumulatively total not more than 730 days. Each extension shall be requested in writing and justifiable cause demonstrated and be accompanied by a fee equal to fifty percent (50%) of the original permit fee, or the fee that would be assessed for the remaining work whichever is less.

- (e) Section 111 of the IBC and Section R111 of the IRC are deleted.
- (f) Section 113 of the IBC and Section R113 of the IRC are amended to read:

The Planning Commission shall hear and decide appeals of orders, decisions or determinations made by the Building Official or the City Clerk relative to the application and interpretation of this Code. When hearing appeals, the Planning Commission shall use procedures established by the Planning Commission. In order to hear and decide appeals of orders, decisions or determinations made by the Planning Commission relative to the application and interpretation of this Code, there shall be and is hereby created a Board of Adjustment. That Board of Adjustment shall be made up of the City Council.

The Board shall operate under the procedures established by the NCO.

(g) Section 202 of the IBC is amended by adding a definition for "Family Child Care Home" and replacing the definitions for "Structure" and "Townhouse" with the following:

"STRUCTURE" means anything artificially built up or composed of parts joined together in some definite manner which requires location on the ground or attachment to something located on the ground. Structures include building, radio, T.V. and cellular telephone towers, storage vans, Connex vans, sheds, water, sewer or fuel tanks and permanent signs.

"TOWNHOUSE" means a single-family dwelling unit constructed in a group of two or more attached units in which each unit extends from foundation to roof and with a yard or public way on at least two sides. Each townhouse shall be considered a separate building as recognized by a recorded lot line between such units. Each townhouse unit shall be provided with separate water, sewer, heating and electrical services.

"FAMILY CHILD CARE HOME" means a licensed facility that is located within a single-family home in which personal care services are provided by the owner or tenant that normally occupies the residence on a twenty-four hour basis.

(h) Section 305 of the IBC is amended by revising Section 305.2 and adding a new Section 305.3 to read as follows:

The use of a building or structure, or portion thereof, for educational, supervision or personal care services for more than twelve children older than 2 1/2 years of age, including children related to the staff, shall be classified as a Group E occupancy.

Exception. Family child care homes operating between the hours of 6:00 am and 10:00 p.m. may accommodate a total of twelve children, including children related to the staff, provided that no more than 5 children are under the age of 2 1/2 years. Family child care homes as defined are classified as an (R3) occupancy and shall comply with section 422 (smoke detectors), section 908.7 (carbon monoxide detectors) and section 1003 (emergency escape and rescue openings as required by section 1026 for napping and sleeping rooms). Fire extinguishers shall be provided in accordance with the International Fire Code.

305.3 Day care hours of operation. A Day Care that operates between the hours of 10:00 p.m. and 6:00 a.m. shall be equipped with an approved automatic sprinkler system throughout, designed and installed in accordance with NFPA Standard 13-D-1996 or an approved equivalent system as approved by the Fire Marshal. An approved emergency escape or rescue window meeting the requirements of IBC Section 1026 shall be provided in each sleeping or napping room. Smoke detectors and carbon monoxide detectors shall be installed in accordance with sections 907.2.10 and

- 908.7. Fire extinguishers shall be provided in accordance with the International Fire Code.
- (i) Section 308.2, Group I-1, of the IBC is amended by deleting the last paragraph and replacing with the following:

A facility housing more than 2 persons and no more than 16 persons shall be classified as a Group R-4.

(j) Section 308.3.1 of the IBC is amended by replacing the definition of "Nursing Homes" with the following:

Nursing homes are long-term care facilities on a 24 hour basis, including both intermediate care facilities and skilled nursing facilities, serving more than two persons and any of the persons are incapable of self-preservation.

(k) Section 310.1, Residential Group R-4, of the IBC is amended by replacing this paragraph with the following:

Residential occupancies shall include buildings arranged for occupancy as Residential Care/Assisted Living Facilities including more than 2 and no more than 16 persons, excluding staff, shall be classified as Group R-4. Occupants of a residential care/assisted living facility are capable of responding to an emergency situation without physical assistance from the staff. Occupancies which include Individuals who are not capable of responding to an emergency situation or incapable of self-preservation shall be classified as an I occupancy. R-4 occupancies shall be sprinklered throughout as required by section 903.3.1.3.

- (I) Section 406.1.4, Separation, of the IBC is amended by replacing this paragraph with the following:
 - 1. The private garage shall be separated from all dwelling units by a one hour fire resistive wall assembly. The fire resistive wall may terminate at the ceiling provided: a) the ceiling framing construction is protected by a layer of 5/8 inch thick type × gypsum board and the area above the ceiling is a non-habitable attic space. Garages located beneath habitable rooms or dwelling units shall be separated by an approved one hour fire resistive horizontal floor ceiling assembly and one hour fire resistive vertical wall assemblies. Penetrations of the fire resistive assemblies shall be fire stopped with materials approved for the hourly rating. Door openings between a private garage and a dwelling shall be provided with a minimum rating of 45 minutes and be equipped with self-closing and self-latching doors. In addition these doors shall be provided with gasket seals on the top and sides including installation of a tight fitting threshold. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted.
 - 2. Ducts in a private garage and ducts penetrating the walls or ceilings separating the dwelling unit from the garage shall be constructed of a minimum 0.019-inch (0.48 mm) sheet steel and shall have no openings into the garage. The duct shall be fire-stopped with materials approved for a one hour fire

resistive assembly.

- 3. A separation is not required between a group R-3 and U carport, provided the carport is entirely open on two or more sides and there are not enclosed areas above.
- (m) Section 413, Combustible Storage, of the IBC is amended by adding a new subsection to read as follows:

413.3 Useable Space Under Floors Useable space under the first story shall be enclosed except in groups R-3 and U occupancies, and such enclosure when constructed of metal or wood shall be protected on the side of the usable space as required for one hour fire resistive construction. Doors shall be self-closing, of noncombustible construction or solid core, not less than 1 3/8" inches in thickness or a twenty minute door assembly may be used.

Exception: Areas protected by approved automatic sprinkler systems.

(n) Section 501 of the IBC is amended by adding a new subsection 501.3 to read as follows:

For the purposes of allowable area limitations, required yards shall be permanently maintained. Buildings shall adjoin or have access to a permanent public way or yard on not less than one side.

- (o) Section 508.2.5, Incidental Accessory Occupancies, of the IBC is amended by adding footnote a. to the table to read as follows:
 - a. Regardless of the Btu rating, psi rating or horsepower rating a one hour separation or automatic fire-extinguishing system is required for furnace or boiler rooms providing heat for group E, R-1, R-2, I and R-4 Occupancies
- (p) Table 601 of the IBC is amended by amending footnote d. to the table by adding the following:

In group E Occupancies, an automatic sprinkler system may be substituted for 1 hour fire-resistance-rated-construction provided the system is designed in accordance with section 903.3.1.1.

(q) Section 603.1 of the IBC is amended by adding a new subsection 25.4 to read as follows:

Fire-retardant treated wood may be used as furring for exterior bearing and nonbearing wall construction provided the building is sprinklered throughout and the required fire rating of the wall is 2 hours or less.

(r) Section 717.4.2, Groups R-1 and R-2, of the IBC is amended by replacing the last sentence with the following:

Draft stops in attic spaces shall be installed so that the maximum area between draft stops does not exceed 3,000 square feet, and the greatest horizontal dimension does not exceed 60 feet. Such draft stops are not required to be located directly above or in line with walls separating tenant spaces.

By deleting exception 1 in its entirety and by revising exception 3 to read as follows:

In R-2 occupancies that do not exceed four stories in height, the attic space shall be subdivided into areas not exceeding 3,000 square feet.

(s) Section 903.2.3, Group E, of the IBC is amended by replacing this subsection with the following:

An automatic sprinkler system shall be provided throughout all Group E occupancies. An automatic sprinkler system shall also be provided for every portion of educational buildings below the level of exit discharge. Day care uses that are licensed to care for more than 5 persons between the hours of 10 p.m. and 6 a.m. shall be equipped with an automatic sprinkler system designed and installed in accordance with Section 903.3.1.3, or an approved equivalent system. The use of a firewall or fire barrier does not establish a separate building or fire area for the purpose of this section.

Exceptions:

- 1. Buildings with E occupancies having an occupant load of 49 or less.
- 2. Day care uses not otherwise required to have automatic sprinkler system by other provisions of the code.
- (t) Section 903.2.11 of the IBC is amended by adding a new subsection .7 to read as follows:

Pit Sprinklers. Sprinklers shall be installed in the bottom of all new and existing elevator pits below the lowest projection of the elevator car but no higher than 24 inches from the bottom of the pit.

(u) Section 903.4.2, Alarms, of the IBC is amended by adding the following:

Buildings equipped with a sprinkler system without an alarm system shall have at least one notification device (horn/strobe) located inside the building in a commonly occupied area to alert occupants of a sprinkler activation.

(v) Section 907.2.3, Group E, of the IBC is amended by adding the following:

Rooms used for sleeping or napping purposes within a day care use for a Group E occupancy shall be provided with smoke detectors that comply with section 907.2.11.2 and carbon monoxide detectors as specified in section 908.7.

(w) Section 908, Emergency Alarm Systems, is amended by adding new subsections to read as follows:

Section 908.7 Carbon Monoxide Detectors.

The provisions of this section apply to Group I-1, R-2, R-3 and R-4 occupancies. At least one (1)

carbon monoxide detector shall be installed on each floor level. If a floor level contains bedrooms or sleeping rooms, at least (1) detector shall be located in the immediate vicinity of the sleeping area, outside of the bedrooms/sleeping rooms. Carbon monoxide detectors shall be listed and installed in accordance with their listing. The alarm shall be clearly audible in all sleeping rooms with intervening doors closed.

Exceptions:

- 1. Carbon monoxide detectors are not required in dwelling units and structures with no combustion (carbon base fuels) type appliances and with no attached garages or parking of vehicles in close proximity of openings such as windows, doors and fresh air inlets.
- 2. Carbon monoxide detectors are not required in Group R-2 occupancies where all combustion (carbon base fuel) equipment is located within a mechanical room separated from the rest of the building by construction capable of resisting the passage of smoke or the structure has an attached garage and is ventilated by an approved automatic carbon monoxide exhaust system designed in accordance with the mechanical code.

Section 908.7.1 Interconnection.

In new construction, all carbon monoxide detectors located within a single dwelling unit shall be interconnected in such a manner that actuation of one alarm shall activate all of the alarms within the individual dwelling unit.

Section 908.7.2 Power Source.

In new construction, carbon monoxide detectors shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with battery backup. Wiring shall be permanent and without a disconnecting switch other than those required for over current protection. Carbon monoxide detectors shall be permitted to be cord-and-plug type with battery backup in existing construction.

- (x) Section 1008.1.9.3, Locks and Latches, of the IBC is amended by adding Exception 6 and a new Section 108.1.9.3.1 to read as follows:
 - 6. In Groups B, F, M and S occupancies, a single thumb turn may be used in exit doors, where the occupant load is 100 or less, in conjunction with an approved lock set when the thumb turn requires no more than one-half turn to unlock. Hardware height shall comply with Section 1008.1.8.2. This exception does not apply when panic hardware is required or installed.

Section 1008.1.9.3.1 Manual security bar for limited use. Assembly occupancies such as restaurants, taverns and lounges and B, F, M, S occupancies with an occupant load of less than 100 may utilize a

manual security bar for the second required exit when the building is not occupied by the public. The security bar shall be pre-approved by the fire marshal before installation. The bar must be easily removed and shall not be provided with padlocks, chains or other locking devices requiring special tools or knowledge. The bar shall be identified by a contrasting color. The exit door shall be provided with a sign stating, "This door to remain unlocked during business hours." The use of this provision may be revoked by the fire marshal for non-compliance. Assembly occupancies with an occupant load of 300 or less which are provided with an approved sprinkler system throughout may install a security bar on the second required exit as specified above. The conditions and approval of the security bar installation shall be kept on file with the fire marshal. The use of this provision may be revoked by the fire marshal for noncompliance.

- (y) Section 1009.4.2, Stair riser and tread depth, of the IBC is amended by adding exception 8 to read as follows:
 - 8. Stairs or ladders used only to attend equipment are exempt from the requirements of Section 1009.
- (z) Section 1203.2, Attic Spaces, of the IBC is amended by replacing this section with the following:

Enclosed attics and enclosed rafter spaces formed where ceilings are applied direct to the underside of the roof rafters or trusses shall have cross ventilation for each separate space by ventilating openings protected against the entrance of snow and rain. The net free ventilation area for each space shall be not less than 1/150 of that area of the space ventilated. One-half of this required ventilating area shall be provided in the upper one-third portion of the space to be ventilated and the remaining required ventilating area shall be evenly distributed at eave vents. A minimum continuous opening of 1.5 inches in width shall be provided at the eave vents. The openings shall be covered with corrosion-resistant metal mesh covering.

- (aa) Section 1210.2 of the IBC is amended by deleting exception 2 and replacing exception 1 with the following:
 - 1. Dwelling Units
- (bb) Section 1210.2, Walls and partitions moisture resistive gypsum board application, of the IBC is amended by adding the following subsection:
 - 1210.2.1 In addition to the wainscot provisions as required by section 1202.2, moisture resistive gypsum board, cement board or other approved material shall be applied to walls within two feet from the front and sides of urinals, water closets, tub, shower, lavatories and service sinks. Moisture resistive gypsum board shall be applied on walls in the spaces as stated above in all occupancies up to a height of 4 feet. Walls immediately adjacent to tub and shower areas shall be provided with moisture resistive gypsum board to a height of 7 feet above the drain inlet.
- (cc) Section 1507.2.8.2, Ice barrier, of the IBC is amended by replacing this subsection with the following:

Where a non-energy heel truss design is utilized, an approved self-adhering polymer modified bitumen sheet shall be installed on the roof deck extending from the eave up the roof to 36 inches inside the exterior wall line of the building. Exception: Detached accessory structures that contain no conditioned floor area.

(dd) Section 1607.11.2 of the IBC is amended by replacing this section with the following:

Roof snow loads shall not be reduced.

(ee) Section 1608 of the IBC is amended by adding new subsections to read as follows:

1608.3 Roof Loads. In no case shall the roof design snow load be less than 50 psf. There is no snow load duration increase allowed for wood framed or wood trussed roofs. A minimum ground snow load (Pg) of 60 pounds per square foot shall be used in the determination of drift loads.

1608.4 Sliding Snow. Metal roofs with a slope greater than 2:12 shall have barriers installed to resist the sliding action and subsequent dumping of ice and snow on persons and property. These barriers shall be constructed to specifically protect required public parking areas, public walkways, entrances and required exits.

(ff) Section 1803.5.2 of the IBC is amended by adding the following:

In the event permafrost conditions are suspected, a soils investigation may be required.

(gg) Section 1804.3, Site grading, of the IBC is amended by adding the following:

It shall be the responsibility of the building owner to assure that discharge of roof and surface runoff is disposed of without negatively affecting adjacent property.

(hh) Section 1804.5 of the IBC, Compacted fill material, is amended by replacing the first sentence with the following:

Where footings will bear on compacted fill material, the compacted fill shall, when required by the Building Official, comply with the provisions of an approved report, which shall contain the following:

Fill material used to support building foundations and/or floor slabs shall consist of not more than five percent by weight of particles passing the No. 200 sieve and shall be compacted to a minimum of 95 percent of maximum density. The Building Official may require that verification of compaction be submitted in the event a site inspection reveals questionable soil conditions.

(ii) Section 2308.12.1, Number of stories, of the IBC is amended by replacing this section with the following:

Structures of conventional light-frame construction shall not exceed two stories in height unless

designed by a registered engineer licensed by the State of Alaska.

- (jj) Section 2509.3, Limitations, of the IBC is amended by deleting subsection .1 in its entirety.
- (kk) Section 3411.1, Scope, of the IBC is amended by adding the following:

The design and construction of buildings or portions of buildings to meet the requirements of the Americans with Disabilities Act and Fair Housing Act is the exclusive responsibility of the owner of the structure.

- (II) Section 23.85, Table R302.6, Dwelling/garage separation, of the IRC is amended by replacing one-half-inch gypsum board with five-eighths-inch Type X gypsum board in all locations within the table.
- (mm) Section 23.85, R302.10.2, Loose-fill insulation, of the IRC is amended by adding the following after exception:

Depth gages or truss markings shall be provided for blown-in insulation to allow for verification of depth throughout the attic space.

- (nn) Section 23.85, R303.1, Habitable Rooms, of the IRC is amended by adding the following exception:
 - 4. Theater rooms are exempt from ventilation requirements of this section.
- (oo) Section 23.85, R310.1, Emergency escape and rescue required, of the IRC is amended by adding the following exception:
 - 2. Where windows are provided as a means of escape or rescue in a basement, they shall have a finished sill height of not more than forty eight (48) inches above the finished floor.
- (pp) Section 23.85 of the IRC is amended by deleting section R313 in its entirety.
- (qq) Section 23.85, R315.1, Carbon monoxide alarms, of the IRC is amended by replacing this section with the following:

At least one carbon monoxide detector shall be installed on each floor level. If a floor level contains bedrooms, at least one detector shall be located in the immediate vicinity but outside of the bedrooms. Carbon monoxide detectors shall be listed and installed in accordance with their listing. Combination carbon monoxide/smoke detectors are acceptable as long as they meet all requirements.

Exceptions:

1. Carbon monoxide detectors are not required in dwelling units that have no combustion appliances and that do not have an attached garage.

- 2. Carbon monoxide detectors are not required in dwelling units that have only direct vent combustion appliances and that do not have an attached garage.
- (rr) Section 23.85, R315.2, of the IRC is amended by replacing this section with the following:

Interconnection. In new construction, carbon monoxide detectors shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual dwelling unit.

(ss) Section 23.85, R315.3, of the IRC is amended by replacing this section with the following:

Power source. In new construction, carbon monoxide detectors shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a battery back-up. Wiring shall be permanent and without disconnecting switch other than those required for overcurrent protection. In existing construction, carbon monoxide detectors shall be permitted to be battery powered or cord-and-plug type with battery back-up.

- (tt) Section 23.85, R406.3, Dampproofing for wood foundation, of the IRC is amended by replacing the words dampproofing and dampproofed throughout this section with the word waterproofing and waterproofed respectively.
- (uu) Section 23.85, R703.3.1, Panel siding, of the IRC is amended by adding the following:

Exterior type plywood siding with a grooved pattern shall not be installed horizontally.

(Ord. O-15-07-01A § 2, 2015: Ord. 01-12-1 § 1 (part), 2001)