

ORDINANCE NO. 5834

**AN ORDINANCE TO AMEND FGC SECTIONS 10-66 AND 10-67,
ADOPTING THE 2009 INTERNATIONAL BUILDING CODE WITH
AMENDMENTS, AND SETTING AN EFFECTIVE DATE.**

WHEREAS, the Building Code Review and Appeals Commission reviewed the **2009** International Building Code and the amendments thereto and recommended adoption of the **2009** International Building Code with amendments; and

WHEREAS, the City Council now desires to accept the recommendations of the Building Code Review and Appeals Commission,

NOW, THEREFORE, BE IT ENACTED BY THE CITY COUNCIL OF THE CITY OF FAIRBANKS, ALASKA, as follows:

Section 1. Fairbanks General Code Sections 10-66 and 10-67 are hereby repealed and re-enacted as follows:

Sec. 10-66. Adoption.

The International Building Code **2009** Edition as published by the International Conference of Building Officials is hereby adopted by the City of Fairbanks.

Sec. 10-67 Amendments.

The 2009 International Building Code is hereby amended as follows:

Section 101.2.1 Appendices. Amend this section to read as follows: Appendices E and H are hereby adopted.

Chapter I Administration. Delete this chapter in its entirety and replace with the Administrative Code for the City of Fairbanks Building Department

Section 202 Definitions. Create a new definition for Family Child Care Homes to read as follows:

A family child care home is 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.

Section 202 Definitions. Townhouse. Delete the definition and replace as follows:

Townhouse. 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.

Section 305.2 Day Care. Revise this section as follows:

The use of a building or structure, or portion thereof, for educational, supervision or personal care services for more than five children older than 2 ½ years of age, including children related to the staff, shall be classified as a Group E occupancy.

Section 305.2 Day Care. Add the following exception to this section:

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, provided that no more than 5 children are under the age of 2 ½ years. Family child care homes as defined are classified as an (R3) occupancy and shall comply with section 907.2.10 (smoke detectors), section 908.7 (carbon monoxide detectors) and section 1003 (emergency escape and rescue openings as required by section 1029 for napping and sleeping rooms. Fire extinguishers shall be provided in accordance with the International Fire Code.

Section 305.3 Day Care Hours of Operation. Create a new section title to read as follows:

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 Chief. 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.**

Section 308.2 Group I-1. Revise this section by deleting the last paragraph and replace with the following:

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

Section 308.3.1 Definition. Child Care Facility. Amend the definition to read as follows:

A child care facility that provides care on a 24-hour basis to more than five children 2 ½ years of age or less, including children related to the staff, shall be classified as Group I-2.

Section 308.3.1 Definition. Nursing Homes. Delete the definition and revise as follows:

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.

Section 310.1 Residential Group R-4. Delete this paragraph in its entirety and replace as follow:

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 through out as required by section 903.3.1.3.

Section 406.1.4 Separation. Delete this section in its entirety and replace as follows.

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 X 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 firestopped 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.

Section 413.3 Usable space under floors. Add a new subsection to read as follows:

Usable 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 $\frac{3}{8}$ " inches in thickness or a twenty minute door assembly may be used.

Exception:

Areas protected by approved automatic sprinkler systems.

Section 501.3 Location on property. Create a new section 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.

Table 508.2.5 Incidental Accessory Occupancies. Amend table by adding footnote (a) to read as follows:

footnote (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

Table 601 Fire-resistance rating requirements for building elements. Amend footnote (d) by adding the following sentence.

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.

Section 603.1 Allowable Materials. Add the following item to allowable materials.

26.4 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.

Section 717.4.2 Groups R-1 and R-2.

Delete the last sentence in its entirety and replace 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.

Delete exception 1 in its entirety.

Revise 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.

Section 808.1.1.1 Suspended acoustical ceilings. Delete this section in its entirety and replace as follows:

Suspended acoustical ceiling systems shall be installed in accordance with the provisions of ASTM C635 and ASTM C636 and the following installation standards.

1. A heavy duty-rated grid system shall be used in all occupancies. The perimeter wall angle shall be deemed to provide structural support for the perimeter cross-tee and main runner intersections and the edge support for the ceiling tiles provided it is secured.

Exception: Intermediate duty rated systems may be used in R-3 Occupancies.

2. Changes in the ceiling plane elevation shall be provided with structural support or additional wires capable of maintaining a positive bracing system.

3. Cable trays and electrical conduits shall be independently supported and braced independently of the ceiling.

4. Compression posts are not required if the distance from the plane of the suspended ceiling and the lowest structural framing elements are 24 inches or less.

5. Cross-tees, which are 8 inches or less in length and located at the perimeter of any room, do not require additional vertical 12 gauge support wires.

6. A 90 degree cross tee return system may be used to support the cross-tee to the perimeter wall angle. Rivets, zip-it wall anchors and/or screws may be used to positively attach the cross tee to the perimeter wall angle or wall substrate in lieu of additional perimeter wires. The installation shall be in accordance with this suspended ceiling policy.

7. Lighting fixtures seismically supported in accordance with CISCA 3-4 are not required to be positively attached to the suspended grid members.

8. Recessed can or bullet type lighting fixtures weighing less than 20 pounds shall be supported to the grid system and shall be positively

attached to the structure above with a minimum of one 12 gauge wire or safety chain. Fixtures weighing more than twenty pounds shall be supported with a minimum of two 12 gauge wires or two safety chains attached to the fixture and secured to the structure above. These wires may be slack.

9. Suspended acoustical ceiling systems may not be used to provide lateral support for non-bearing partitions unless: a) designed by an engineer or b) installed in accordance with an approved evaluation report recognized by the International Building Code.

10. Ceiling mounted air terminals weighing less than 20 pounds shall be positively attached to the ceiling suspension main runners or cross tees having the same carrying capacity as the main runners. Air terminals weighing more than twenty pounds shall be provided with a minimum of two 12-gauge wires, connected from the terminal to the structure above and shall be positively attached to the grid system.

11. Corridors which are 6 feet in width or less may have the seismic splay wires installed in the direction of the long axis of the corridor. These splay wires shall be spaced 12 feet on center and splayed at a 45 degree angle. Splay wires are not required in the short axis of the corridor.

12. When all ceiling tiles are replaced in an existing non-complying suspended ceiling, the lights and mechanical air terminals shall be upgraded and seismically braced prior to the new tile installation.

13. When lighting fixtures are replaced or relocated in an existing suspended ceiling, the new lights or relocated lights shall be seismically-braced in accordance with CISCA 3-4 and this section.

14. When mechanical ductwork or air terminals are altered or relocated in an existing suspended ceiling, those mechanical devices shall comply with the seismic requirements with CISCA and this section.

15. When 50% or more of the grid system is replaced or altered, the entire grid system shall be upgraded to meet the current seismic standards in accordance with CISCA 3-4.

16. Two inch wide perimeter angles are not required.

Section 903.2.3 Group E. Delete this section in its entirety and replace as follows:

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.

Section 903.2.11.7. Pit Sprinklers. Add a new subsection and title 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.

Section 903.3.1.1 NFPA 13 Sprinkler systems is revised by adding a new Subsection 903.3.1.1.2 to read as follows:

Elevator Hoist ways and Machine Rooms. Where the provisions of this code require the installation of automatic sprinkler systems, such installation in Elevator hoist ways and machine rooms shall be in accordance with NFPA [13, Section 5-13.6.1] 13-2002 and ASME A17.1 Safety Code for Elevators and Escalators, 2000 edition

Exception:

Sprinklers may be deleted in an elevator machine room when such room is:

- (1) Separated from the remainder of the building in accordance with Section 3006.4
- (2) Smoke detection is provided in accordance with NFPA 72
- (3) Notification of alarm activation is received at a constantly monitored location.

Section 903.4.2 Alarms. Amend this section by adding the following sentence to the paragraph:

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.

Section 907.2.3 Group E. Revise this section by adding a second paragraph to read as follows:

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.

Section 908 Emergency alarm systems. Revise this section by adding new subsections 908.7, 908.71 and 908.72

Section 908.7 Carbon Monoxide Detectors. Create a new subsection and title to read as follows:

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. Create a new subsection and title to read as follows:

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. Create a new subsection and title to read as follows:

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.

Section 1008.1.9.3 Locks or Latches. Add Exception 6 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. Create a new subsection and title to read as follows:

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.

Section 1008.1.8.7 Delayed egress locks. Revise exception #3 to read as follows:

3. The door locks shall have the capability of being unlocked by a signal from an approved location.

Section 1009.4.2 Stair riser and tread depth. Amend section by adding an exception #8 to read as follows:

Stairs or ladders used only to attend equipment are exempt from the requirements of Section 1009.

Section 1021.5 Exits from basements. Create a new subsection and title to read as follows:

Exits from basements.

Basements in all occupancies except Group R-3, shall be provided with a minimum of at least two independent exits.

Exceptions:

1. Basements used exclusively for the service of the building.
2. Basements used exclusively for storage purposes and limited to 750 square feet.
3. Basements used for private offices, maintenance rooms or laundry rooms and similar uses limited to an aggregate floor area of 500 square feet, provided a hard wired smoke detector is installed in the basement and interconnected to a

smoke detector located on the level of discharge as approved by the City Fire Marshal.

4. Basements used for private offices, maintenance rooms or laundry rooms and similar uses which are provided with a direct exterior exit to grade shall be limited to an aggregate floor area of 750 square feet, provided a hard wired smoke detector is installed in the basement and interconnected to a smoke detector on the level of exit discharge as approved by the City Fire Marshal.
5. Buildings which are sprinklered throughout and contain a basement may have one exit provided:
 - 5.1 Basements are used exclusively for storage purposes and limited to 1500 square feet.
 - 5.2 Basements are used for private offices, maintenance rooms, or laundry rooms and similar uses limited to an aggregate floor area of 1000 square feet.
 - 5.3 Basements are used for private offices, maintenance rooms or laundry rooms and similar uses and are provided with a direct exterior exit to grade shall be limited to an aggregate floor area of 1500 square feet.

Section 1029.1 General. Revise the first sentence of the paragraph to read as follows:

In addition to the means of egress required by this chapter, provisions shall be made for emergency escape and rescue in Group R, I-1 day care occupancies where napping or sleeping rooms are provided.

Section 1029.1 Delete exceptions 1-4.

Section 1029.2 Minimum size. Delete the exception.

1101.2 Design. Add the following Paragraph:

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.

1102.1 Definitions. Add the following definitions:

CONVENTIONAL INDUSTRY TOLERANCES: Plus or minus ½ inch up to 36 inches and plus or minus 1 percent over 36 inches. Slopes may be plus or minus 1 percent.

ADAPTABLE: The ability of certain building spaces and elements, such as kitchen counters, sinks, and grab bars, to be added or altered so as to accommodate the needs of either disabled or non-disabled persons, or to

accommodate the needs of persons with different types or degrees of disability.

1103.1 Where required. Add the following sentence to this section:

Subject to the approval of the Building Official, areas where work cannot reasonably be performed by persons having a severe impairment (mobility, sight or hearing) need not have specific features which provide accessibility to such persons.

1103.2.4 Detached dwellings. Delete this paragraph as replace as follows:

Detached one and two family dwellings and three unit dwellings, including accessory structures and their associated sites and facilities, are not required to be accessible.

1108.2.7 Assistive listening systems. Add the following sentence to this section:

Assistive listening systems shall be required in groups B, E, and M occupancies which contain rooms of assembly.

1110.1 Signs. Delete Item 1 and replace with the following:

1. Accessible parking spaces as required by Section 1106.1

1110.3 Other signs. Add the following item to this section:

7. Building directories are required for the following occupancies as defined by the building code: Groups A, B, E, I, & M greater than 6000 sq. ft. or more than one story. Regardless of building size, directories shall be provided for governmental office buildings, medical care facilities, shopping malls, public transportation facilities, senior citizen housing and hotels. Directories shall be provided within or immediately adjacent to the main entrances as approved by the Building Official. Directory signage shall comply with ICC/ANSI A117.

1111.1 Public telephones. Add a new section as follows:

Public telephones are required in medical care facilities, governmental office buildings, shopping malls, public and private schools, hotels, convention centers, and shall be located on an accessible route.

(For the purpose of this section schools which meet the Group E, Division 1 occupancy classification as defined in Chapter 3 of the Building Code shall comply).

1111.2 Public text telephones. Add a new section.

A public text telephone is required in governmental office buildings including police and fire stations, medical care facilities, senior housing

facilities, hotels, conventions centers, libraries, public & private schools and shopping malls. A public text telephone is required in or adjacent to a hospital emergency room or hospital waiting room, and shall be located on an accessible route.

(For the purpose of this section schools classified as group E, occupancy as defined in Chapter 3 of the building code shall comply).

Section 1203.2 Attic spaces. Delete this section in its entirety and replace 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.

Section 1203.3.1 Openings for under-floor ventilation. Delete section 1203.3.1, 1203.3.2 in their entirety and replace with the following:

Each under-floor space shall be ventilated by an approved mechanical means or by openings in exterior foundation walls. Such openings shall have a net area of not less than 0.1 square foot for each 150 square feet of under-floor area. There shall be two openings located as close to corners as practical on opposite sides to provide cross ventilation. The openings shall be covered with corrosion resistant wire mesh approximately 1/4" in size. All structures with a crawl space shall have a minimum 6 mil ground vapor retarder to prevent the flow of water vapor from soils into the heated building interior.

Section 1205.2 Natural light. Delete the paragraph in its entirety and replace as follows:

Guest rooms and habitable rooms within a dwelling unit or congregate residence shall be provided with natural light by means of exterior glazed openings with any area not less than one twentieth of the floor area of such rooms with a minimum of 5 square feet, except that minimum egress requirements shall govern.

1209.2 Attic Spaces. Add a sentence as follows:

Attic access shall not be located in a room containing bathing facilities.

1210.1 Floor and wall base finish materials. Delete this paragraph and replace with the following:

In other than dwelling units, toilet and bathing room floors shall have a smooth, nonporous, non-absorbent surface such as non-cushioned sheet vinyl, sealed concrete or ceramic tile with sealed joints or other approved materials. Base shall be of similar materials, shall extend up the wall 5 inches (127 mm) minimum, and shall be sealed to the flooring and wall surface and allowing differential movement without water penetration.

1210.2 Walls and partitions wainscot. Revise this section by renaming the section and delete the first paragraph to read as follows:

Walls and partitions wainscot.

Walls and partitions within 2 feet (610 mm) of the front and sides of urinals, water closets and sinks shall have a smooth, non-porous, hard, non-absorbent surface such as non-cushioned sheet vinyl, sealed concrete, ceramic tile with sealed joints, approved plastic panels, or other approved materials, installed to a minimum height of 4 feet above the finished floor and except for structural elements, the materials in such walls shall be of a type that is not adversely affected by moisture.

1210.2 Walls and partitions. Delete exception 1 and 2 and replace as follows:

Exception.

1. Dwelling Units

1210.2.1 Walls and partitions moisture resistive gypsum board application. Create a new subsection and title to read as follows:

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.

Chapter 13 ENERGY EFFICIENCY. Delete this chapter in its entirety and refer to chapters 1-4 of the International Energy Conservation Code as amended.

Section 1507.2.2 Slope. Delete this paragraph and replace as follows:

Asphalt shingles shall be used only on roof slopes of two units vertical in 12 units horizontal or greater. Required underlayment shall be provided as follows: A roof slope of 2:12 shall be provided with an approved self-adhering polymer modified bitumen on the entire roof surface. A roof slope of 3:12 shall be provided with

double underlayment in accordance with section 1507. Roof slopes of 4:12 or greater shall be provided with a single layer of underlayment in accordance with section 1507.

Section 1507.2.6 Fasteners. Add an exception to read:

Staples may be substituted for nails on new work only. They must be galvanized or stainless steel with a (1) inch crown and of sufficient length to completely penetrate the shingle and roof sheathing. Staples must be straight and flush with the shingle surface.

Section 1507.2.8 Underlayment application. In the first sentence, change "two units vertical" to "three units vertical".

Section 1507.2.8.2 Ice barrier. Delete this section in its entirety and replace as follows:

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.

Section 1607.11.2 Reduction in roof live loads. Delete this section in its entirety and replace as follows:

Roof snow loads shall not be reduced.

Section 1608.3 Roof snow loads. Add a new section to read as follows:

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 (P_g) of 60 pounds per square foot shall be used in the determination of drift loads.

Section 1608.4 Sliding snow. Create a new subsection and title to read as follows:

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 exit discharge.

Section 1612 Flood loads. Delete this entire section.

Section 1704.4 Concrete construction. Delete exception 2.3 and replace with the following:

The structural design is based on an f_c no greater than 3,000 pounds per square inch (psi).

Section 1803.1 General. Add the following sentence to the paragraph.

The effects of soil densification and differential settlement shall also be considered in the investigation, reporting and determination of potential soil strength loss when conditions warrant, also reference Section 1802.2.7.

Section 1803.5.2 Questionable soil. Add the following sentence to the paragraph.

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

Section 1804.3 Site grading. Add the following sentence to the last paragraph.

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

Section 1804.5 Compacted fill material. Delete the first sentence and replace 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.

Section 1805.4.2 Foundation drain. Delete this section in its entirety.

Section 1806.2 Presumptive load-bearing values. Add a third paragraph to the section to read as follows:

Footings shall bear upon in-situ, coarse-grained soils as defined in ASTM 2487 with the exception of groups SM and SC. Soils grouped in the SM and SC classifications shall be acceptable provided the footings are at a depth as required above and placed upon a minimum of 1'-6" of compacted, clean gravel fill.

Table 1807.1.6.2 Concrete foundation walls. Add a footnote f to read as follows:

f. Plain concrete foundation walls are prohibited in Seismic Design Category D.

Section 1807.1.3 Rubble Stone. Delete this section and referenced tables in its entirety.

Table 1807.1.6.3(1) Plain masonry foundation walls. Add a footnote (g) to read as follows:

(f.) Plain masonry foundation walls are prohibited in seismic design category D.

Section 1807.1.6.3.1. Alternative foundation wall reinforcement. Delete this section in its entirety and replace as follows:

In lieu of the reinforcement provisions for masonry foundation walls in table 1807.1.6.3(2), 1807.1.6.3(3) or 1807.1.6.3(4), alternative reinforcing bar sizes and spacing having an equivalent cross-sectional area of reinforcement per linear foot of wall shall be permitted to be used, provided the spacing of reinforcement does not exceed 48 inches and reinforcing bar sizes do not exceed No.11.

Section 1809.1 General. Delete this section and replace as follows:

Shallow foundations shall be designed by a registered engineer licensed by the State of Alaska. Such design shall comply with sections 1809.2 through 1809.13.

Section 1809.2. Supporting soils. Add the following sentence to the paragraph.

Footings and foundations shall be built on unfrozen, undisturbed, non-frost susceptible soil or compacted unfrozen NSF fill or CLSM.

Section 1809.4 Depth and width of footings. Delete this section in its entirety and replace as follows:

The minimum depth of footings below the undisturbed ground surface shall be 3'-6" unless substantiated by a design prepared by a registered engineer licensed in the State of Alaska. The minimum width of footings shall be in accordance with a design prepared by a registered engineer licensed in the State of Alaska.

Section 1809.5 Frost protection. Delete item 1 and replace with the following:

1. The minimum depth of footings shall be 3'-6" below the undisturbed ground surface.

Delete item 2 under the exceptions and replace with the following:

2. Area of 400 feet (56 m²) or less for light-framed construction.

Delete the last sentence of the paragraph and replace with the following:

Footings shall not bear on frozen soil.

Section 1809.7 Prescriptive footings for light frame construction. Delete this section in its entirety including table 1809.7 and replace as follows:

Where a specific design is not provided, concrete footings supporting walls of light-frame single family–duplex residential construction are permitted to be constructed in accordance with the City of Fairbanks Standard Foundation Details SFD1-SFD8. Commercial foundation designs shall be prepared by a registered engineer licensed by the State of Alaska.

Section 1809.8. Plain concrete footings. Delete this section in its entirety.

Section 1809.9 Masonry-unit footings. Delete this section and the exception in its entirety and replace as follows:

Masonry-unit footings shall be reinforced and shall be designed by a registered engineer licensed by the State of Alaska.

Section 1809.12 Timber footings. Add the following sentence to the end of the paragraph.

Timber footings shall be designed by a registered engineer licensed by the State of Alaska.

Section 1905.12 Cold weather requirements. Add the following sentence to the paragraph.

For the purposes of near freezing weather considerations, 40 degrees F shall be used. The protection shall be capable of maintaining the temperature of the curing concrete at or above 50 degree F for the required time periods stated in section 1905.11.

Section 1908.1.8 ACI 318, Section 22.10. Amend this section by revising paragraph 22.10.1 to read as follows

22.10.1- Structures assigned to seismic design category C, D, E or F shall not have elements of structural plain concrete.

Section 1908.1.8 ACI 318, Section 22.10. Amend this section by further deleting sub paragraphs (a), (b) and (c).

Section 2304.7.2. Structural Roof Sheathing Add a new paragraph to read as follows:

Roof sheathing installed on structural supports spaced (2) feet on center shall have a minimum (32/16) span rating with panel edge clips placed midway between such supports. Roof sheathing with a minimum (40/20) span rating may

be applied to framing supports spaced at (2) feet on center without panel edge clips.

Section 2304.7.2.1 Spaced lumber sheathing Add a new subsection and exception to read as follows:

Spaced lumber sheathing installed on roofs located in seismic design category D shall be designed by a licensed engineer registered in the State of Alaska. Drawings and supporting calculations shall be submitted for review and approval. Truss design shall consider effects of spaced sheathing.

Exception:

Detached residential garages, storage sheds green houses and other non habitable accessory structures. A shop building or warehouse does not qualify for the exception unless designed by an Engineer licensed by the State of Alaska. Truss design shall consider effects of spaced sheathing.

Section 2305.4. Seismic framing connectors. Create a new section and title to read as follows:

Seismic framing connectors. Seismic framing connectors (hurricane ties) shall be installed at each exterior bearing end of each truss or rafter and shall have a minimum lateral load capacity of not less than 400 pounds unless otherwise substantiated by design calculations provided by a civil engineer licensed in the State of Alaska.

Table 2306. 2.1(1) Allowable Shear. Add the following sentence to footnote (d).

Where necessitated by sheathing nail spacing, two 2-inch nominal members fastened together in accordance with section 2301.1 to transfer design shear value between the framing members is permitted.

Table 2306. 2.1(2) Allowable Shear. Add the following sentence to footnote (e).

Where necessitated by sheathing nail spacing, two 2-inch nominal members fastened together in accordance with section 2301.1 to transfer design shear value between the framing members is permitted.

Table 2306.3 Allowable Shear. Add the following sentence to footnote (f.)

Where necessitated by sheathing nail spacing, two 2-inch nominal members fastened together in accordance with section 2301.1 to transfer design shear value between the framing members is permitted.

Table 2306.3 Allowable Shear. Delete the last sentence to footnote (i) and replace as follows:

Foundation anchor bolts shall have a steel plate washer under each nut not less than 2-1/2 x 2-1/2 x 1/4 inch. The plate washer shall extend to within 1/2 inch of the edge of the bottom plate on the sheathed side.

Section 2306.7 Shear walls sheathed with other materials. Amend this section by revising the last sentence of the paragraph to read as follows:

Shear walls sheathed with portland cement plaster, gypsum lath, gypsum sheathing or gypsum board shall not be used to resist seismic forces in structures assigned to seismic design category D, E or

F.

Table 2306.7 Allowable shear for wind or seismic forces for shear walls of lath and plaster or gypsum board wood framed wall assemblies. Add a footnote (I) to read as follows:

Lath and plaster or gypsum board values not permitted in Seismic Design Category D.

Section 2308.2 Limitations. Amend this section by revising item 3.1 to read as follows:

3.1. Average dead loads shall not exceed 29 psf for combined roof and ceiling, exterior, walls and partitions.

Section 2308.2 Limitations. Amend this section by revising item 3.2 to read as follows:

Live loads shall not exceed 50psf.

Section 2308.2 Limitations. Amend this section by revising item 3.3 to read as follows:

Ground snow loads shall not exceed 60 psf.

Section 2308.6. Foundation plates or sills. Amend this section by adding the following sentence to the end of the paragraph to read as follows:

A minimum washer of 2 inch X 2 inch by 3/16 inch is required for each sill plate bolted connection unless an alternate design is provided by a registered engineer licensed by the State of Alaska.

Section 2308.12.1 Numbers of Stories. Delete this section in its entirety and replace 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.

Section 2509.3 Limitations. Delete exception 1 in its entirety.

Chapter 27 Electrical. Delete this chapter in its entirety and replace with the National Electric Code as adopted and amended by the City of Fairbanks.

Section 2901.1 Scope. Revise this section by deleting the reference to the International Plumbing Code and International Private Sewage Disposal Code.

Add the following note to the beginning of this paragraph:

Where reference to any Plumbing Code is made in this Code it shall be taken to mean the *Uniform Plumbing Code* as adopted and amended by the City of Fairbanks.

Table 2902.1 Minimum Number of Required Plumbing Fixtures. Delete the footnotes to the table and replace as follows:

Add footnotes (g) and (i) in the “*water closet*” column heading; add footnote (i) in the “*other*” column heading. Add footnote (h) at row 4 under the Factory and Industrial heading and under the Bathtubs and Showers column.

- a. The fixtures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction of the number of persons indicated. The number of occupants shall be determined by the *International Building Code*.
- b. Toilet facilities for employees shall be separate from facilities for inmates or patients.
- c. A single-occupant toilet room with one water closet and one lavatory serving not more than two adjacent patient rooms shall be permitted where such room is provided with direct access from each patient room and with provisions for privacy.
- d. The occupant load for seasonal outdoor seating and entertainment areas shall be included when determining the minimum number of facilities required.
- e. Where water is served in restaurants, drinking fountains shall not be required. Excluding A and E occupancies, bottled water dispensers shall be permitted to be substituted for not more than 50 percent of the required drinking fountains. In B occupancies with fewer than 75 occupants, bottled water dispensers or sinks shall be permitted to be substituted for the required drinking fountains.
- f. The minimum number of drinking fountains shall comply with Table 3902.1 as amended and chapter 11 of the IBC.
- g. In each bathroom or toilet room, urinals shall not be substituted for more than 67 percent of the required water closets in assembly and educational occupancies. Urinals shall not be substituted for more than 50 percent of the required water closets in all other occupancies.
- h. Emergency showers and eyewash stations shall conform to ISEA Z358.1.
- i. Floor drains shall be installed in Toilet rooms containing two (2) or more water closets or a combination of at least one (1) water closet and one (1) urinal, except in a dwelling unit. Floor drains shall also be installed in commercial kitchens, laundry rooms in commercial buildings, and common laundry facilities in multi-family dwelling buildings.

Section 3002.1 Hoistway Enclosure Protection. Add the following:

Elevator hoistway shaft enclosure walls not required to have a fire resistive rating may be constructed with glass. Such glass shall be laminated glass that passes the requirements of ANSI A17.1.

Section 3004.1 Vents Required. Delete this section in its entirety and replace as follows:

Hoistways of elevators and dumbwaiters penetrating more than two stories shall be provided with a means for venting smoke and hot gases to the outer air in

case of fire. When energy conservation requires that the vents be normally closed, automatic venting by actuation of an elevator lobby detector or power failure may be accepted. When hoist way pressurization is used, venting upon power failure may be accepted. In either case a manual override must be provided.

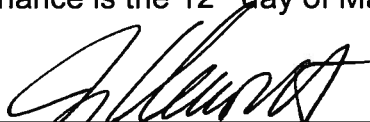
Section 3004.3 Area of vents. Amend this section by adding a second paragraph to the exception to read as follows:

Vents shall be mechanically operated and shall be automatically activated upon operations of any elevator lobby smoke detector. An approved fire alarm system or sprinkler system, for activation purposes, may be used in lieu of the elevator lobby detectors. A manual override shall be provided in an approved location, for fire department use and to address potential power failures. Vents shall be equipped with a failsafe device to open when power failure occurs. The venting of each individual hoistway shall be independent from any other hoistway venting, and the interconnection of separate hoistways for the purpose of venting is prohibited.

Section 3411.1 Scope (Accessibility to Existing Buildings). Add the following paragraph:

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.

Section 2. The effective date of this Ordinance is the 12th day of March, 2011.




Jerry Cleworth, Mayor

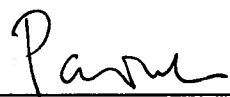
AYES: Roberts, Matherly, Gatewood, Eberhart, Stiver
NAYS: None
ABSENT: Bratcher
ABSTAIN:
ADOPTED: March 7, 2011

ATTEST:

APPROVED AS TO FORM:



Janey Hovenden, CMC, City Clerk



Paul Ewers, City Attorney