

**ORDINANCE NO. 5831, AS AMENDED**

**AN ORDINANCE TO REVISE FGC SECTION 10-401, ADOPTING THE  
2009 INTERNATIONAL RESIDENTIAL CODE WITH AMENDMENTS,  
AND SETTING AN EFFECTIVE DATE**

**WHEREAS**, the Building Code Review and Appeals Commission has reviewed the 2009 International Residential Code and the amendments thereto; 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**Section 1.** FGC Sec. 10-401 is repealed and re-enacted as follows:

**Sec. 10-401. Adopted; amendments.**

The 2009 International Residential Code is hereby adopted.

The 2009 International Residential Code is hereby amended as follows:

**Chapter 1 Administration**

Delete the following sections: R103 and R104.10.1, and refer to the Administrative Code for the City of Fairbanks.

**Section R105.2 Work exempt from permit.** Amend this section by deleting items 1, 2 and 10 and replace as follows: Further amend this section by adding the following item #11.

1. One story detached structures used as garages, tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 200 square feet. Separate permits are required for any electrical, plumbing or mechanical work.

2. Fences.

10. Uncovered Decks which are constructed not more than 30 inches above grade at any point.

11. Replacement of exterior siding, doors and windows; excluding required egress windows.

**Section R105.3.1.1 Determination of substantially improved or substantially damaged existing buildings in flood hazard areas.** Delete this section in its entirety and refer to Title 15 Fairbanks North Star Borough Flood Plain Management Regulations.

**Section R106.1.3 Information for construction in flood hazard areas.** Delete this section in its entirety and refer to Title 15 Fairbanks North Star Borough Flood Plain Management Regulations.

**Section R107.1 General.** Revise this section by amending the second sentence to read as follows:

Such permits shall be limited as to time of service, but shall not be permitted for more than 360 days.

**Section R108 Fees.** Delete this section in its entirety and replace with the City of Fairbanks Administrative Code.

**Section R109 Inspections.** Delete this section in its entirety and replace with the City of Fairbanks Administrative Code.

**Section R112.2.1 Determination of substantial improvement in areas prone to flooding.** Delete this section in its entirety and refer to the Title 15 Fairbanks North Star Borough Flood Plain Management Regulations.

**Section R 112.2.2 Criteria for issuance of a variance for areas prone to flooding.** Delete this section and refer to Title 15 Fairbanks North Star Borough Flood Plain management Regulations.

## **Chapter 2 Definitions**

Amend section R202 Definitions by adding the following definition:

Duplex Dwelling Unit. Buildings which contain not more than two dwelling units which are not otherwise distinguished or separated by a recorded lot line.

Amend Section R202 Definitions Townhouse by the deleting 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, fuel gas and electrical services.

**Table R301.2(1) Climatic and Geographic Design Criteria.** Amend this table to read as follows:

**Table R301.2 Climatic and Geographic Design Criteria:**

Roof Snow load:	50 psf
Wind speed:	90 mph
Seismic Design Category:	D1
Weathering:	Severe
Frost line depth:	42" below finished grade
Termite:	None to slight
Decay:	None to slight
Winter Design Temp.	- 47°
Flood Hazards:	Refer to FNSB Title 15

**Section R301.2.2.1.1 Alternate determination of seismic design category.**

Add the following sentence to the end of the paragraph to read as follows:

The seismic design category for the City Of Fairbanks shall be D1.

**Section R301.2.4 Floodplain Construction.** Delete this section in its entirety.

**Table R301.5 Minimum Uniformly Distributed Live Loads.** Amend this table by deleting the live load value of 30 psf live load for sleeping rooms and replace with 40 psf.

**Section R302.2 Townhouses.** Delete this section in its entirety and replace with the following.

Each townhouse shall be considered a separate building and shall be separated by fire-resistive wall assemblies meeting the requirements of section R302.1 for exterior walls. Each townhouse shall be protected from the adjacent dwelling unit by construction of independent one hour fire resistive exterior walls. The wall shall be rated for fire exposure on both sides. Plumbing, mechanical equipment, ducts or vents may be installed within independent one hour fire – resistive walls provided the openings are fire stopped as required by section 302.4. Electrical installations shall be installed in accordance with the National Electrical Code and shall be in accordance with section R302.4.

**Exception 1.**

A common 2- hour fire resistive rated wall is permitted provided such walls do not contain plumbing, mechanical equipment, ducts, or vents in the cavity of the common wall.

**Exception 2.**

A common 1- hour fire resistive rated wall is permitted provided such walls do not contain plumbing, mechanical equipment, ducts or vents in the cavity wall of the common wall and the townhouses are protected with an approved sprinkler system throughout.

**Section R302.2.4 Structural Independence.** Delete exception #5 of this section and replace as follows:

5. Townhouses separated by a common 2- hour fire- resistive wall as provided in section R302.2 as amended.

**Section R302.3 Two – family dwellings.** Revise the last sentence of exception #2 to read as follows:

The structural framing supporting the ceiling shall be protected by not less than 5/8 inch thick type X gypsum board or equivalent.

**Section R302.5.1 Opening protection.** Add the following sentence to this section:

Doors between the garage and residence shall be self-closing and latching. Doors shall be equipped with tight fitting smoke gasket seals installed along the top and sides of doors. A tight fitting threshold seal shall also be installed.

**Table R302.6 Dwelling/Garage Separation.** Amend this table as follows:

Revise all references in the table to ½ inch gypsum board and replace with 5/8 inch thick type X gypsum board.

Revise line two of the Material column to read as follows:

Not less than one layer 5/8 inch T Type X gypsum board for nominal dimensional lumber or two layers of gypsum board as required by ICC report ESR 1336 or as required by other proprietary research reports for specific engineered I Joists which achieve a one hour rated assembly.

**Section R303.1 Habitable Rooms (Light and Ventilation).** Replace this section and the exceptions with the following:

All habitable rooms shall be provided with natural light by means of exterior glazed openings with an area of not less than 5 percent of the floor area of such rooms with a minimum area of 5 square feet, except that minimum egress requirements shall govern. Natural ventilation shall be provided by openings to the exterior of not less than 4 percent of the floor area of habitable rooms. Such openings shall be operable and readily controllable by the building occupants. In lieu of required exterior openings for natural ventilation, a mechanical ventilating system may be provided. Such system shall be capable of providing air changes in accordance with the 2009 IECC as adopted and amended.

**Section R303.3 Bathrooms.** Delete this section in its entirety, rename and replace with the following:

**Section R303.3 Bathrooms and Kitchens.** Bathrooms, water closet compartments and similar rooms shall have a mechanical ventilating system connected directly to the outside capable of providing five air changes per hour.

Moisture exhaust ducts shall be smooth and rigid. All moisture exhaust ducts located in an unconditioned space shall be insulated with a minimum R-11 and installed so as not to create low points where condensation may collect. All exhaust ducts shall be equipped with a back-draft damper.

Kitchens shall have mechanical exhaust ventilation provided directly above or immediately adjacent to the primary cooking appliance. All vents shall be connected directly to the exterior. A total exhaust ventilation rate for the structure shall be a minimum of 80 cfm per 1000 square feet of habitable floor space. All exhaust ducts shall be equipped with a back draft damper.

Structures of unusually tight construction containing fuel-burning appliances, including fireplaces and mechanically exhausted range-top cooking appliances shall be provided with supplemental supply air in accordance with the Mechanical Code. A draft activated damper allowing air to flow into the structure when depressurization exceeds 10 pascals may be installed within a supply air duct.

**Section R309.3 Flood hazard areas.** Delete this section and refer to Title 15 Fairbanks North Star Borough Flood Management Regulations

**Section R310.1.1 Minimum opening area.** Delete the exception.

**Section R 313 Automatic Fire Sprinkler Systems.** Delete this section in its entirety.

**Section 315.1 Carbon Monoxide Alarms.** Delete this section in its entirety and replace as follows:

For new construction, an approved carbon monoxide alarm shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms in dwelling units within which fuel-fired appliances are installed and in dwelling units that have attached garages. Carbon monoxide detectors shall be listed and installed in accordance with their listing. Combination carbon monoxide/smoke detectors are acceptable provided they are installed in accordance with this section and section R314.3 for sleeping room locations.

**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.

**Section R315.1.1 Interconnection.** Add new subsection to read as follows:

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.

**Section R315.1.2 Power source.** Add new subsection 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 a battery back-up. Wiring shall be permanent and without disconnecting switch other than those required for over-current protection. In existing construction, carbon monoxide detectors shall be permitted to be battery powered or cord-and-plug type with battery back-up.

**Section R315.2 Where required in existing dwellings.** Amend this section by adding the following exceptions:

Exceptions:

1. Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck are exempt from the requirements of this section.
2. Installation, alteration or repairs of plumbing or mechanical systems are exempt from the requirements of this section.

**Section R318 Protection against subterranean termites.** Delete this section in its entirety.

**Section R322. Flood – Resistant Construction.** Delete this section in its entirety and refer to Title 15 Fairbanks North Star Borough Flood Plain Management Regulations

**Section R323 Storm Shelters.** Delete this section in its entirety.

**Section R324 Moisture Vapor Retarders.** Create a new section and title to read as follows:

**Section R324.1 Moisture control**

The building design shall not create conditions of accelerated deterioration from moisture condensation. All exterior wall, ceiling, roof and floor assemblies which enclose heated spaces and which are exposed to outdoor ambient temperatures shall be protected against water vapor transmission. Assemblies not otherwise of impermeable construction shall have installed, on the heated side of the insulation or air spaces, vapor retarders having a perm rating of 0.06 minimum (equivalent to 6 mils polyethylene sheeting) or other material approved by the Building Official. All seams shall be lapped a minimum of one stud or joist bay or sealed with an approved tape or sealant. All voids between joists and studs all be insulated and sealed in an approved manner.

**Exceptions:**

1. In construction where moisture or its freezing will not damage materials.

2. One-third of the total installed insulation may be installed on the warm side of approved vapor retarders.

**Section R324.2 Crawl space moisture protection.** Create a new sub section and title to read as follows:

**Crawl space moisture protection.**

Exposed earth in crawl space foundations shall be covered with a continuous vapor retarder. All joints of the vapor retarder shall be overlapped by 6 inches or shall be sealed or taped in approved manner. The edges of the vapor retarder shall either extend over the concrete footing and secured in approved manner.

**Section R401.3 Drainage.** Delete the section and the exception and replace with the following:

Surface drainage shall be diverted to a storm sewer conveyance or other approved point of collection so as to not create a hazard. Lots shall be graded to drain surface water away from foundation walls. The grade shall be sloped a minimum of 2% within the first 10 feet. It shall be the responsibility of the owner or contractor to assure that discharge of roof and surface runoff is disposed of without affecting the adjacent property. Surface drainage across lot lines is prohibited.

**Section R403.1 General.** Delete the reference to "wood foundations" in the first sentence and add the following sentence to the end of the section to read as follows:

Wood footings shall be designed and stamped by a registered engineer licensed in the State of Alaska.

**Section R 403.1.1 Minimum size.** Delete this section in its entirety and replace as follows:

The footing width shall be based on the load - bearing value of the soil in accordance with Table R401.4.1. All footing and foundation systems shall comply with standard foundations details (SFD1-SFD8). In no case shall the minimum size for concrete and masonry footings be less than 1'-4". The size of footings supporting piers and columns shall be based on the tributary load and allowable soil pressure in accordance with table R401.4.1.

**Table R403.1 Minimum width of concrete or masonry footings.** Delete the table in its entirety and reference standard foundation details (SFD1-SFD8).

**Section R403.1.3 Seismic reinforcing.** Delete this section in its entirety and replace as follows:

Seismic reinforcing shall be provided in accordance with standard foundation details SFD1 through SFD8 unless reinforcing is specifically designed by a

registered engineer licensed by the State of Alaska. Bottom reinforcement shall be located a minimum of 3 inches clear from the bottom of the footing.

**Section R403.1.3.1 Foundations with stemwalls.** Delete this section in its entirety and replace as follows:

Foundations with stemwalls shall have installed a minimum of two #4 bars within 6 inches of the top of the wall and one #4 bar located 3 inches to 4 inches above the top of the footing. All reinforcing steel shall comply with standard foundation details SFD1 - SFD8 unless specifically designed and stamped by a registered engineer licensed by the State of Alaska.

**Section R403.1.3.2 Slabs-on-ground with turned-down footings.** Delete this section and the exception in its entirety and replace as follows:

Slabs-on-ground with turned-down footings shall be designed and stamped by an engineer licensed by the State of Alaska. Insulation for such slabs and footings shall be in accordance with section 403.3, figure 403.3(1) and table R403.3(1).

**Section R403.1.4 Minimum depth.** Delete this section in its entirety and replace as follows:

All exterior footings shall be placed at least 42 inches below finished grade unless the foundation system is designed by a registered engineer licensed by the State of Alaska. Where applicable the depth of footings shall also conform to sections R403.1.4.1 through R403.1.4.2.

**Exception:**

1. Non habitable detached single story accessory structures less than 480 square feet.

**Section R403.1.4.1 Frost protection.** Amend this section by deleting the exceptions and replace as follows:

**Exceptions:**

1. Protection of non-habitable freestanding accessory single story structures with an area of 480 square feet or less shall not be required.
2. Decks not covered with a roof and decks which are not more than 30 inches above grade at any point need not be provided with footings that extend below the frost line.

**Section R403.2 Footings for wood foundations.** Delete this section in its entirety including references to figures R403.1(2) and R403.1(3) and replace as follows:



Wood foundations shall comply with standard foundation details SFD3 and SFD6 or the wood foundation system shall be specifically designed and stamped by a registered engineer licensed by the State of Alaska.

**Section R403.3 Frost protected shallow foundations.** Delete the first sentence and replace with the following:

Frost protected shallow foundations shall be designed and stamped by an engineer licensed in the State of Alaska. The design must be in constructed in accordance with Sections R403.3.1 thru R403.3.3, including Figures R403.3(1), R403.3(3) or R403.3(4) and Table R403.3 (1).

**Section R403.3.3 Drainage.** Delete this section in its entirety and replace with the following:

Final site drainage shall be in accordance with Section R401.3

**Section R403.3.4 Termite damage.** Delete this section in its entirety.

**Section R403.4.1 Crushed stone footings.** Delete this section in its entirety.

**Table R403.4 Minimum Depth of Crushed Stone Footings.** Delete this table in its entirety.

**Section R404.1.1 Masonry foundation walls.** Delete this section in its entirety and all references to tables R404.1.1(1), R404.1.1(2), R404.1.1(3), R404.1.1(4) and replace as follows:

The minimum design for masonry foundation walls shall comply with The City of Fairbanks Standard Foundation Details (SFD) #1, #4 or #7 unless an alternate foundation design has been prepared and stamped by a registered engineer licensed by the State of Alaska.

**Section R404.1.2 Concrete foundation walls.** Add the following sentence to the end of the paragraph.

The minimum design for concrete foundation walls shall comply with The City of Fairbanks Standard Foundation Details (SFD) #2, #5 or #8 unless an alternate foundation design has been prepared and stamped by an engineer licensed by the State of Alaska.

**Table R404.1.2(1).** Delete the table in its entirety and replace as follows:

Two #4 bars are required to be installed within the top 6 inches of the wall and one #4 bar shall be provided near mid-height of the wall story where the maximum unsupported height of the basement wall is greater than 4 feet and less than or equal to 8 feet. When the maximum unsupported height of basement wall is greater than 8 feet required reinforcing shall be installed in accordance with a design provided by a registered engineer licensed by the State of Alaska.

**Section R404.1.2.2 Reinforcement for foundation walls.** Delete this section in its entirety and replace as follows:

Concrete foundation walls shall be laterally supported at the top and bottom. Horizontal reinforcement shall be provided in accordance with table R404.1.2(1) as amended. Vertical reinforcement shall be provided in accordance with Standard foundation Details SFD1-SFD8. In buildings assigned to Seismic Design Category D1 or concrete foundation walls shall also comply with Section R404.1.4.2.

**Table R404.1.2(2).** Delete this table in its entirety and replace as follows:

Minimum vertical reinforcement shall be installed in accordance with Standard foundation Details SFD1-SFD8 or shall be installed in accordance with a design provided by a registered engineer licensed by the State of Alaska.

**Table R404.1.2(3).** Delete this table in its entirety and replace as follows:

Minimum vertical reinforcement shall be installed in accordance with Standard foundation Details SFD1-SFD8 or shall be installed in accordance with a design provided by a registered engineer licensed by the State of Alaska.

**Table R404.1.2(4).** Delete this table in its entirety and replace as follows:

Minimum vertical reinforcement shall be installed in accordance with Standard foundation Details SFD1-SFD8 or shall be installed in accordance with a design provided by a registered engineer licensed by the State of Alaska.

**Table R404.1.2(5).** Delete this table in its entirety and replace as follows:

Vertical wall reinforcement shall be installed in accordance with the manufactures installation instructions or a design provided by a registered engineer license by the State of Alaska.

**Table R404.1.2(6).** Delete this table in its entirety and replace as follows:

Minimum vertical reinforcement shall be installed in accordance with the manufactures installation instructions or shall be installed in accordance with a design provided by a registered engineer licensed by the State of Alaska.

**Table R404.1.2(7).** Delete this table in its entirety

**Table R404.1.2(8).** Delete this table in its entirety and replace as follows:

Minimum vertical reinforcement shall be installed in accordance with Standard foundation Details SFD1-SFD8 or shall be installed in accordance with a design provided by a registered engineer licensed by the State of Alaska.

**Section R404.1.4.1 Masonry foundation walls.** Delete this section in its entirety and replace as follows:

Foundation walls in buildings assigned to seismic Design Category D1 as established in Table R301.2(1), supporting more than 4 feet of unbalanced backfill or exceeding 8 feet in height shall be constructed in accordance with Table R404.1.1(2), R404.1.1(3) or R404.1.1(4) as amended or a design shall be provided by a registered engineer licensed by the State of Alaska. Masonry foundation walls shall have two #4 bars horizontal in bars located in the upper 6 inches of the wall.

**Section R404.1.4.2 Concrete foundation walls.** Delete this section in its entirety and replace as follows:

In buildings assigned to Seismic Design Category D1 as established in table R301.2(1), concrete foundation walls that support light-frame walls shall comply with this section and concrete foundation walls that support above-grade concrete walls shall comply with ACI 318, ACI 332 or PCA 100 (see section R404.1.2). In addition to the horizontal reinforcement by table R404.1.2(1) as amended concrete foundation walls shall comply with standard foundation details SFD1-SFD8.

**Section R404.2 Wood foundations.** Delete this section in its entirety and replace as follows:

Wood foundation walls shall be constructed in accordance with the provisions of sections R404.2.1 through R404.2.6 and standard foundation details SFD3 and SFD6 as adopted by the City of Fairbanks. An alternate design may be submitted for review and approval if the design is prepared and stamped by a registered engineer licensed by the State of Alaska.

**Section R404.2.5 Drainage and Dampproofing.** Delete this section in its entirety and replace as follows:

Wood foundation basements shall be drained and dampproofed in accordance with Standard Foundation Details SFD3 and SFD6.

**Section R405.1 Concrete or masonry foundations.** Delete this section in its entirety and replace as follows:

Concrete and masonry foundations shall be installed in compliance with Standard foundation details SFD1-SFD8. A drainage system is not required when the foundation is installed on well-drained ground or sand gravel mixture soils according to the Unified Soil Classification System, Group I soil, as detailed in Table R405.1.

**Section R405.2 Wood foundations.** Delete this section in its entirety and replace as follows:

Wood foundations shall comply with Standard foundation details SFD1-SFD8.

**Section R405.2.1 Base.** Delete this section in its entirety.

**Section R405.2.3 Drainage system.** Delete this section in its entirety.

**Section R406.1 Concrete and Masonry Foundation Dampproofing.** Amend this section by revising the first sentence to read as follows:

Except where required by section R406.2 to be water proofed, foundation walls that retain earth and enclose interior spaces and floors below grade shall be dampproofed from the top of the footing to 6 inches above finished grade.

**Section R406.1.** Amend this section by adding exception #2 to read as follows:

2. Crawl space foundation walls or walls backfilled on both sides, such as those used in conjunction with a "slab on grade", do not require damp-proofing.

**Section R406.3 Dampproofing for wood foundations.** Amend this section by adding the following sentence to the end of the paragraph.

Foundation foundations shall comply with Standard foundation details SFD1-SFD8.

**Section R406.3.2 Below-grade moisture barrier.** Delete the first sentence and replace with the following:

A double layer of 6-mil polyethylene film shall be applied over the below-grade portion of the exterior foundation walls prior to backfilling. A single layer of self adhering polymer modified bitumen sheet material may be used in lieu of the polyethylene film.

**Section R406.3.2 Below-grade moisture barrier.** Delete the last sentence of the paragraph and replace with the following:

The moisture barrier shall overlap onto the footing.

**Section R408.1 Ventilation.** Delete this section in its 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 R502.1 Identification.** Add the following exception:

Exception: Rough sawn, ungraded, dimensional lumber may be used for framing materials in floors, walls and roofs of detached garages, utility buildings and other unheated accessory building and other applications where approved by the Building Official.

**Section 502.1.4.1 Usable space under floors.** Add a new subsection to read as follows:

Usable space under floors. Usable space under the first story limited to daylight and full basements which are framed with light weight I joists shall be protected with a minimum of ½ inch thick gypsum board applied directly to the ceiling.

Exceptions.

- 1) Conventional crawl spaces
- 2) Buildings equipped with an approved residential sprinkler system throughout.

**Section 505.1.3.1 Protection of cold-formed steel floor joists.** Add a new subsection to read as follows:

Protection of cold-formed steel joists. Usable space under the first story limited to daylight and full basements which are framed with steel joists shall be protected with a minimum of ½ inch thick gypsum board applied directly to the ceiling.

Exceptions.

- 1) Conventional crawl spaces
- 2) Buildings equipped with an approved residential sprinkler system throughout.

**Section R601.3 Vapor retarders.** Delete this section in its entirety including the exceptions and replace as follows:

Class I vapor retarders are required to be installed on the interior side of framed walls in zone 8. The vapor retarder may be installed within the wall such that not less than 2/3 of the total wall R-value is placed on the cold side of the vapor retarder.

Exception: Construction where moisture or its freezing will not damage the materials.

**Section R601.3.1 Class III vapor retarders.** Delete this section in its entirety and refer to section R601.3 as amended.

**Table R601.3.1 Class III Vapor Retarders.** Delete this section in its entirety and refer to section R601.3 as amended.

**Section R602.11.1 Wall anchorage.** In the second sentence, replace “3 inch by 3 inch” with the following:  
2 inch by 2 inch.

**Section R703.2 Water-resistive barrier.** Delete this section in its entirety.

**Section R802.10.2 Design.** Add the following sentence to end of paragraph:  
A 15% load duration increase shall not be utilized for wood trusses where the live load considered is snow.

**Section 806.2 Minimum area.** Amend this section by deleting the last sentence of the paragraph and replace as follows:

As an alternative, the net free cross-ventilation area may be reduced to 1/300 when a class I vapor barrier is installed on the warm-in-winter side of the ceiling.

**Section 806.4 Unvented attic assemblies.** Delete this section in its entirety.

**Section R807.1 Attic access.** Add the following sentence to the end of the paragraph:

Attic access shall not be located in a room containing bathing facilities. Access may be located in closets with minimum depth of 23 inches and minimum width of 48 inches.

Exception:

Attic access may be provided from the exterior gable vent in accordance with size and opening requirements of this section. The gable vent must be readily accessible.

**Section R903.1 General.** Add the following sentence to the end of section:

1. All valleys shall have a modified bitumen ice barrier lapped eighteen inches minimum each side of valley centerline. No penetrations shall be located in required valley ice barrier.

**Section R903.4 Roof drainage.** Add the following sentence to the end of the paragraph:

Roof drainage shall be diverted to a storm sewer conveyance or other approved point of collection so as to not create a hazard. Lots shall be graded to drain surface water away from foundation walls. The grade shall be sloped a minimum of 2% within the first 10 feet. It shall be the responsibility of the owner or contractor to assure that discharge of roof and surface runoff is disposed of without affecting the adjacent property. Water drainage which migrates across property lines is strictly prohibited.

**Section R905.2.2 Slope.** Delete the section and replace with the following:

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 R905.2.7. Roof slopes of 4:12 or greater shall be provided with a single layer of underlayment in accordance with section R905.2.7.

**Section R905.2.5 Fasteners.** Add an exception to read as follows:

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 the roof sheathing. Staples must be straight and flush with the shingle surface.

**Section R905.2.7 Underlayment application.** Amend this section by deleting the first sentence and replace 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 the following manner.

**Section R905.2.7.1 Ice Barrier.** Delete this section in its entirety and replace 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.

**Section R905.14 Sprayed polyurethane foam roofing.** Delete this section in its entirety.

**Chapter 11 Energy Efficiency.** Delete this chapter in its entirety and reference the International Energy Conservation Code as currently adopted and amended.

## **MECHANICAL**

**Chapters 12-23.** Delete these chapters and reference the Mechanical Code as currently adopted and amended by the City of Fairbanks.

## **FUEL GAS**

**Chapter 24.** Delete this chapter and reference the Fuel Gas code as currently adopted and amended by the City of Fairbanks.

## PLUMBING

**Chapters 25-31.** Delete these chapters and reference the Plumbing code as currently adopted and amended by the City of Fairbanks.

## APPENDICES

**Appendix K Sound Transmission.** Adopt Appendix K Sound Transmission and revise section AK 102 AIR-BORNE Sound and section AK 103 Structural-Borne Sound to read as follows:

### **Section AK 102 AIRBORNE SOUND**

Air-borne sound insulation for a wall and floor- ceiling assemblies shall meet a Sound Transmission Class (STC) rating of 50 when tested in accordance with ASTM E90. Penetrations or openings in construction assemblies for piping; electrical devices, recessed cabinets, bathtubs soffits or heating ventilating or exhaust ducts shall be sealed, lined, insulated or otherwise treated to maintain the required ratings. Dwelling unit entrance doors, which a share a common space shall be tight fitting to the frame and sill and shall be provided with gasket seals at the top and sides of such doors.

### **Section Ak 103 Structural-Borne Sound**

Floor/ceiling assemblies between a dwelling unit and public space or service area within the structure shall have an impact insulation class (IIC) rating of not less than 50 when tested in accordance with ASTM E 492.

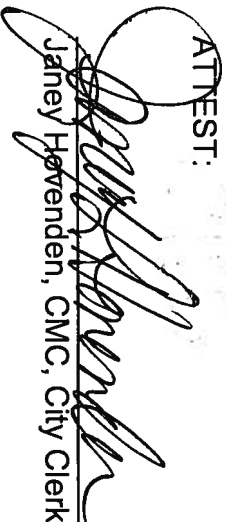
**Section 2.** That the effective date of this Ordinance shall be the 12<sup>th</sup> day of March, 2011

  
\_\_\_\_\_  
Jerry Cleworth

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

ATTEST:

APPROVED AS TO FORM:

  
\_\_\_\_\_  
Janey Herenden, CMC, City Clerk

  
\_\_\_\_\_  
Paul Ewers, City Attorney