CHAPTER 23.15 LOCAL AMENDMENTS TO THE INTERNATIONAL BUILDING CODE 2009 EDITION

23.15.100	Local amendments to the International Building Code, 2009 Edition.
23.15.103-115	Delete.
23.15.202	"U" definitions.
23.15.305.2	Day care.
23.15.308.3.1	Definitions.
23.15.308.5	Group I-4, day care facilities.
23.15.310.1	Residential Group R.
23.15.406.1.4	Separation.
23.15.424	Special security requirements for Group E buildings.
23.15.425	Carbon monoxide detectors.
23.15.426	Residential care/assisted living facilities.
23.15.508.2.5	Table 508.2.5 Incidental Accessory Occupancies.
23.15.717.4.2	Groups R-1 and R-2.
23.15.903.2.3	Group E.
23.15.903.2.6	Group I.
23.15.903.2.11	Specific building areas and hazards.
23.15.903.3.5	Water supplies.
23.15.903.4.1	Monitoring.
23.15.906.1	Where required.
23.15.907.1.2	Fire alarm shop drawings.
23.15.907.2.1	Group A.
23.15.907.2.2	Group B.
23.15.907.2.2.1	Group B ambulatory health care facilities.
23.15.907.2.3	Group E.
23.15.907.2.4	Group F.
23.15.907.2.7	Group M.
23.15.907.2.8.1	Manual fire alarm system.
23.15.907.2.9.1	Manual fire alarm system.
23.15.907.7.5	Monitoring.
23.15.1008.1.9.7	Delayed egress locks.
23.15.1110.1	Signs.
23.15.1403.2	Weather protection.
23.15.1503	Weather protection.
23.15.1507.2.2	Slope
23.15.1507.3.3	Underlayment.
23.15.1507.3.3.1	Low slope roofs
23.15.1507.3.3.2	High slope roofs.
23.15.Table 1507.3.7	Clay and concrete tile attachment.
23.15.1603.1.10	Live loads posted.
23.15.1604.4	Analysis.
23.15.1608.1	General.
23.15.1608.3	Flat roof snow loads.

23.15.1609.3	Basic wind speed.
23.15.1609.4.3	Exposure categories.
23.15.1613.1	Scope.
23.15.1613.2	Definitions.
23.15.1613.10	ASCE 7, Section 13.4.2
23.15.1704.1	General.
23.15.1704.1.2	Report requirement.
23.15.1704.1.3	Pre-construction special inspection meeting.
23.15.1704.1.4	Special inspector pre-approval program.
23.15.1704.1.4.1	Special inspector intern program.
23.15.1704.1.4.2	Approval suspension.
23.15.1704.1.4.3	Removal of pre-approved status.
23.15.1704.1.5	Ad hoc special inspector peer committee.
23.15.1704.3	Steel construction.
23.15.1704.4	Concrete construction.
23.15.1802.1	Definitions.
23.15.1803.5.4	Groundwater table.
23.15.1803.5.11	Seismic design Categories C through F.
23.15.1803.5.12	Seismic design Categories D through F.
23.15.1803.5.13	Permafrost.
23.15.1803.6	Reporting.
23.15.1804.3	Site grading.
23.15.1804.5	Compacted fill material.
23.15.1805.1.3	Ground-water control.
23.15.1805.3	Waterproofing.
23.15.1807.1.4	Permanent wood foundation systems.
23.15.1808.1	General.
23.15.1808.7	Footings on or adjacent to slopes.
23.15.1809.5	Frost protection.
23.15.1810.2.4.1	Seismic design Categories D through F.
23.15.1810.3.5.3.2	Steel pipes and tubes.
23.15.1905.12	Cold weather requirements.
23.15.1907.5	Installation of anchors
23.15.1908.11	ACI 318, Section 10.9.1.
23.15.2104.5	Installation of anchors.
23.15.2205.2.2	Seismic Design Category D, E, or F.
23.15.2208.1	Storage racks.
23.15.2303.4.5	Alteration to trusses.
23.15.2304.11.2.2	Wood supported by exterior foundation walls.
23.15.2308.9.2.2	Top plates for studs spaced at 24 inches.
23.15.2308.9.8	Pipes in walls.
23.15 Table 2902.1.	
23.15.3005.4	Personnel and material hoists.
23.15.3006.1	Access.
23.15.3412.2	Applicability.
23.15	Appendix.

23.15.H.101.2 Signs exempt from permits.
23.15.H.101.3 Permits required.
23.15.H.101.4 Application for permit.

23.15.100 Local amendments to the International Building Code, 2009 Edition.

The amendments to the 2009 Edition of the International Building Code are listed hereafter by section. The last digits of the number (after the title and chapter digits) are the sections of the International Building Code to which the amendments refer.

23.15.103-115 Delete.

Delete IBC sections 103 through 115; refer to the Anchorage Administrative Code.

23.15.202 "U" definitions.

Add the following definition:

> **Usable space** is space in a structure used for utility or equipment placement, storage, or building service, such as laundry and maintenance areas, and not defined as habitable space. Space used for ducts, water and sewer lines, and electrical wiring is not considered usable space.

23.15.305.2 Day care.

Amend first paragraph to read 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 2-1/2 years of age, including children related to the staff, shall be classified as a Group E occupancy.

Add a new Exception to read as follows:

> **Exception:** A child [~~day~~] care facility located in a detached one-or two-family dwelling unit or townhouse (as defined in the International Residential Code) operating between the hours of 6:00 a.m. and 10:00 p.m. may accommodate a maximum of eight (8) children of any age, including children related to staff, without conforming to the requirements of this code for a group E occupancy. Such facilities shall comply with Anchorage Municipal Code Chapter 16.55, Child Care and Education Facilities – Centers and Homes. Smoke alarms, carbon monoxide detectors, means of egress, and emergency escape and rescue openings shall be provided as required by the International Residential Code. Fire extinguishers shall be provided as required by the International Fire Code for a group E occupancy. Child [~~day~~] care shall be limited to the basement, first and second stories. Child [~~day~~] care facilities located in a basement or above the first story shall have access to not less than two means of egress separated by a minimum of

½ the maximum overall diagonal of the area served. One of the required means of egress may consist of a code compliant emergency escape and rescue opening. When child [~~day~~] care facilities are located in a basement, at least one exit or emergency escape and rescue opening shall discharge directly to the exterior of the building at or near grade.

23.15.308.3.1 Definitions.

Amend the definition of child care facilities as follows:

Child Care Facilities: Facilities providing care on a 24-hour basis to more than five children, including children related to staff, 2 ½ years of age or less.

23.15.308.5 Group I-4, day care facilities.

Amend the second sentence to read:

A facility, such as the above, with five (5) or fewer persons, including persons related to the staff, shall be classified as a Group R-3 or shall comply with the International Residential Code in accordance with Section 101.2.

23.15.310.1 Residential Group R.

Under R-3 occupancies, delete "Adult care facilities that provide accommodations for five or fewer persons of any age for less than 24 hours".

Under R-3 occupancies, add the following paragraph:

Adult care facilities providing accommodations for five or fewer residents on a 24-hour basis. Facilities providing accommodations for three to five residents, where one or more residents are incapable of responding to an emergency situation without physical assistance from staff, shall comply with section 23.15.426, or shall be classified as Group I-2.

Under R-3 occupancies delete:

Child care facilities that provide accommodations for five or fewer persons of any age for less than 24 hours.

Under R-3 Occupancies, add the following paragraph:

Child care facilities providing accommodations for eight or fewer persons of any age for less than 24 hours, and/or five or fewer persons on a 24 hour basis. Child care facilities shall comply with AMC chapter 16.55 Child Care and Education Facilities – Centers and Homes.

Under R-3 Occupancies, add the following paragraph:

A detached structure occupied as a single-family dwelling unit and containing not more than five guest rooms, where guests pay rent in money, goods, labor, or otherwise shall be classified as a group R-3 occupancy, or shall comply with the International Residential Code.

Under R-4 Occupancies, add the following sentence to the end of the first paragraph:

Where one or more residents are incapable of responding to an emergency situation without physical assistance from staff, the facility

shall comply with section 23.15.426, or shall be classified as Group I-2.

23.15.406.1.4 Separation.
Amend by changing the reference “1/2-inch (12.7mm)” in the first sentence of item #1 to “5/8-inch Type X”.

23.15.424 Special security requirements for Group E buildings.
Amend Chapter 4 by adding a new section as follows:

424.1 All Group E buildings with the lower floor level above grade and open on the sides shall be fenced around the building exterior or have skirting below the exterior walls to prevent unauthorized access.

23.15.425 Carbon monoxide detectors.
Amend Chapter 4 by adding a new section 425 for carbon monoxide detectors, as follows:

425.1 Carbon monoxide detectors. The provisions of this section shall apply to Group I-1, R-2, R-3 R-4 occupancies and Group E daycare facilities. 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 one (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 appliances and that do not have an attached garage.
2. Carbon monoxide detectors are not required in dwelling units and structures with only direct vent combustion appliances and that do not have an attached garage.
3. Carbon monoxide detectors are not required in Group I-1 and R-2 occupancies where all combustion equipment is located within a mechanical room separated from the rest of the building by construction capable of resisting the passage of smoke. If the structure has an attached parking garage, the garage shall be ventilated by an approved automatic carbon monoxide exhaust system designed in accordance with the mechanical code.

425.2 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.

425.3 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 backup. 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 backup.

23.15.426 Residential care/assisted living facilities.

Amend Chapter 4 by adding a new Section 426 for residential care/assisting living facilities, as follows:

426.1 Scope. The provisions of this section apply to residential care/assisted living facilities licensed to provide accommodations for 3 to 16 residents, where one or more residents require physical assistance by staff to respond to an emergency situation. Facilities that comply with the requirements of this section and other applicable provisions of this code may be classified as group R-3 or R-4 based on the number of residents. Other facilities providing accommodations for three or more residents, where one or more residents is not capable of responding to an emergency situation without physical assistance from staff, shall be classified as Group I-2 and shall comply with the applicable provisions of this code.

426.2 Change of use permit required. Conversion of an existing building or portion thereof to a residential care/assisted living facility shall require a change of use permit in accordance with the Anchorage Administrative Code, chapter 23.10.

426.3 Automatic sprinkler system. An automatic sprinkler system shall be provided in accordance with section 903.2.8. NFPA 13D systems shall require a minimum 30-minute water supply.

426.4 Fire and smoke alarms. Fire and smoke alarms shall be installed in accordance with section 907 based on the occupancy classification.

426.5 Fire-resistive construction. All walls and partitions shall qualify as ½ hour fire-resistive construction. Floor assemblies, excluding floors over unusable crawl spaces, shall be protected on the underside with ½ inch thickness gypsum wall board, or equivalent. All structural elements shall be separated from the interior of the building by ½ inch thickness gypsum wall board, or equivalent, or shall qualify as ½ hour fire-resistive structural elements in accordance with chapter 7.

426.6 Sleeping rooms. Sleeping rooms shall be separated from adjacent spaces by construction capable of resisting the passage of smoke. Air transfer openings and louvers between sleeping rooms and adjacent spaces are prohibited. Sleeping rooms may be served by HVAC metallic duct systems constructed in accordance with the International Mechanical Code. Sleeping room doors shall be 1¾ inch solid wood core or 20-minute fire-rated, and shall be provided with latches suitable for keeping the doors closed.

426.7 Interior egress stairs. Interior egress stairs serving sleeping

rooms and living areas located above or below the level of exit discharge shall comply with sections 426.7.1 through 426.7.3.

426.7.1 Stairs serving a maximum of two stories shall be permitted to be unenclosed.

426.7.2 Stairs serving a maximum of three stories shall be enclosed with ½ hour rated-fire barriers and/or horizontal assemblies. Doors shall be self or automatic closing and shall be 20-minute rated.

426.7.3 Stairs serving more than three stories shall be enclosed in accordance with this code.

426.8 Protection of vertical openings. A maximum of two stories may communicate through unprotected openings. Additional stories shall be separated from communicating stories by ½ hour fire-resistive assemblies constructed to resist the passage of smoke. Openings, other than metallic HVAC ducts and vents, shall be protected with 20-minute fire-rated self or automatic closing doors.

426.9 Accessibility. Accessibility shall be provided in accordance with chapter 11.

426.10 Mixed use and occupancy. Residential care/assisted living facilities shall be separated from other occupancies by fire barriers constructed in accordance with section 707 and horizontal assemblies constructed in accordance with section 712, or both, having a two-hour fire-resistive rating, so as to completely separate adjacent occupancies. Egress from residential care/assisted living facilities shall not pass through other occupancies.

23.15.508.2.5 Table 508.2.5 Incidental Accessory Occupancies.

Amend Table 508.2.5 by changing the wording in the first block under the left column to read as follows:

Furnace rooms in E and R-1, R-2, and R-4 occupancies, regardless of Btu input, and furnace rooms of all other occupancies where the largest piece of equipment is over 400,000 Btu per hour input.

23.15.717.4.2 Groups R-1 and R-2.

Amend Exception 3 to read as follows:

Exception 3: The attic space may be subdivided by draftstops into areas not exceeding 3000 square feet, or above every two dwelling units, whichever is smaller. When draftstopping is installed to separate every two dwelling units and each of these units is separated by a corridor, draftstopping is not required at the corridor wall. Where required, all subdivided areas shall be ventilated in accordance with Section 1203.2.

23.15.903.2.3 Group E.

Delete 903.2.3 and replace with the following:

An automatic sprinkler system shall be provided throughout all buildings

that contain a Group E occupancy and for every portion of educational buildings below the level of exit discharge. The use of a fire wall does not establish a separate building for purposes of this section.

Exception: Buildings with Group E occupancies having an occupant load of 49 or less.

Daycare uses licensed to care for more than five (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 subsection 903.3.1 or an approved equivalent system.

23.15.903.2.6 Group I.

Delete the exception and replace with:

Exception: Group I-1 facilities shall be protected throughout with an automatic sprinkler system designed and installed in accordance with 903.3.1.1 or 903.3.1.2. Existing group I-1 facilities with previously approved and installed sprinkler systems designed in accordance with NFPA 13D and 903.3.1.3 shall be considered as in compliance.

23.15.903.2.11 Specific building areas and hazards.

Add a new subsection 903.2.11.7 as follows:

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

23.15.903.3.5 Water supplies.

Add a new subsection 903.3.5.3 as follows:

903.3.5.3 Fire sprinkler hydraulic water flow design. Fire sprinkler hydraulic water flow design shall be by one of the following methods:

1. Preferred method. Fire sprinkler hydraulic design water supply shall be from AWWU computer model Max Day demand.
2. Alternate method. Can only be used if AWWU computer model cannot be obtained. Fire sprinkler system being designed with water supply data from a hydrant flow test shall have a 10 percent psi minimum safety factor at the water source. Hydrant flow test shall be witnessed by the fire code official or their designee.

23.15.903.4.1 Monitoring.

Amend section by adding a new sentence to read as follows:

Central stations, remote stations or proprietary monitoring stations shall be located within the Municipality or shall have a local representative capable of responding to the location within sixty (60) minutes of notification.

23.15.906.1 Where required.

Revise by deleting the exception under item number one.

23.15.907.1.2 Fire alarm shop drawings.
Revise section 907.1.2 by adding the following construction documents to those required for plan review:

14. System riser diagrams

23.15.907.2.1 Group A.
Delete Exception.

23.15.907.2.2 Group B.
Delete Exception.

23.15.907.2.2.1 Group B ambulatory health care facilities.
Delete Exception.

23.15.907.2.3 Group E.
Delete Exceptions 2 and 3.

23.15.907.2.4 Group F.
Delete Exception.

23.15.907.2.7 Group M.
Delete Exceptions 1 and 2.

23.15.907.2.8.1 Manual fire alarm system.
Delete Exception 2.

23.15.907.2.9.1 Manual fire alarm system.
Amend section 907.2.9.1 by deleting first sentence and replacing it with:

A manual fire alarm system and an automatic fire detection system with smoke detection in the public and common use areas shall be installed in Group R-2 occupancies where:

Amend section 907.2.9.1: Amend by deleting Exception # 2.

23.15.907.7.5 Monitoring.
Amend by adding a new subsection to read as follows:

907.7.5.2 Connection to municipal fire alarm circuit.

A. A person having a private fire alarm system for one building may connect the system to a municipal fire alarm circuit, or directly connect the system to the fire department communications center, after obtaining a permit for the connection from the fire chief. The fire chief may issue a permit for the connection if it is determined the connection:
   1. Is compatible with the municipal fire alarm circuit or system.
   2. Connects an adequate, properly installed and maintained

private alarm system.

3. Substantially benefits the municipal fire prevention system.

B. The permit required by this section shall be issued subject to the Fire Department rules and regulations and shall be conditional upon such reasonable requirements, terms, and conditions as the fire chief may require.

C. A permit may be revoked by the fire chief for noncompliance with the permit standards, rules, regulations, conditions, or restrictions. The permit may be revoked by the fire chief if, in the fire chief's discretion, it is found the disconnection of the private alarm system is in the best interests of the Municipality. The permit holder may appeal a decision to revoke a permit to the Building Board.

D. The permit holder shall pay the Municipality for the cost of a radio fire alarm box or for covering an existing radio fire alarm box, and for the cost of the initial hookup (one box per building). The permit holder shall pay the cost of providing, installing and maintaining the private system, up to the radio fire alarm box. The maintenance of the private system shall be by a qualified person engaged in the business of installing and maintaining a supervisory fire alarm system, who shall use NFPA 72 as an installation and maintenance standard.

E. It shall be unlawful for a person not authorized by the fire chief to connect or disconnect, temporarily or otherwise, a private fire alarm system, or other wires or conduits leading to a municipal fire alarm circuit or municipal fire system. The fire chief shall authorize specific connection or disconnection by written permit.

F. The permit holder shall pay the following fees for the connection of the private fire alarm system, for one building, to the municipal fire system:

1. Permit Fee $10
2. Initial Connection Fee $150
3. Annual Inspection Fee $1,200

G. It shall be unlawful for any person, firm, association, or corporation to do any act prohibited under this section or to fail to do any act required under this section. Any person, firm, association, and/or corporation violating this section shall be guilty of a misdemeanor and shall be subject to the penalties and remedies set forth in section 23.10.025.

23.15.1008.1.9.7 Delayed egress locks.

Revise item number 3 to read as follows:

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

23.15.1106 Parking and passenger loading facilities.

Delete section 1106. Accessible parking and passenger loading facilities shall be provided in accordance with Title 21.

23.15.1110.1 Signs.
Delete Items 1 and 2 and replace with the following:

1. Accessible parking spaces required by Title 21.
2. Accessible passenger loading zones required by Title 21.

23.15.1203.2 Attic spaces.
In the first sentence, add the words “insulation and” before the word “ceilings.”
Amend third sentence by changing “1 inch” to “1 ½ inch.”
Amend fourth sentence by changing "1/300" to 1/150".

23.15.1209.2 Attic spaces.
Add a sentence at the end of the paragraph to read as follows:
Attic access shall not be located in a room containing bathing facilities.

23.15.1403.2 Weather protection.
Amend third sentence by adding the words “vapor permeable” after “water-resistive.”

23.15.1503 Weather protection.
Add the following section:

1503.7 Protection from falling ice and snow. Buildings and structures shall be designed and constructed to minimize a hazardous accumulation of snow and ice on downward sloped eaves, roof surfaces and architectural projections. Where the accumulation of snow and/or ice creates a hazardous condition, the areas below the accumulation shall be protected from falling snow and/or ice. These areas include (but are not limited to) building entrances and exits, pedestrian areas, parking lots, driveways, public right-of-way, children’s play areas and utility locations for fire department connections, gas meters, and electrical meters, services and disconnects.

23.15.1507.2.2 Slope.
Replace slopes of two units vertical in 12 units horizontal with three units vertical in 12 units horizontal.

23.15.1507.3.3 Underlayment.
Replace paragraph with the following:

Underlayment shall be self-adhering polymer modified bitumen sheet complying with ASTM D 1970. The underlayment shall cover the entire roof surface.

23.15.1507.3.3.1 Low slope roofs.
Delete section in its entirety.

23.15.1507.3.3.2 High slope roofs.
Delete section in its entirety.

23.15.Table 1507.3.7 Clay and concrete tile attachment.
Delete column titled "Roof slope up to < 3:12" in its entirety.

23.15.1603.1.10 Live loads posted.
Add a new subsection to read as follows:

> Where the design live load is unusual, and is located on a floor not directly supported by ground, the design live load shall be posted in a conspicuous location.

23.15.1604.4Analysis.
Add a paragraph after the last sentence:

> Exterior walls and cladding of building and interior partitions shall accommodate gravity system deflections or be capable of resisting loads imposed by vertical movement of the gravity system.

23.15.1608.1General.
Add the following sentence:

> Greenhouses heated year round may be designed for ten (10) psf roof live load without considering roof snow loads.

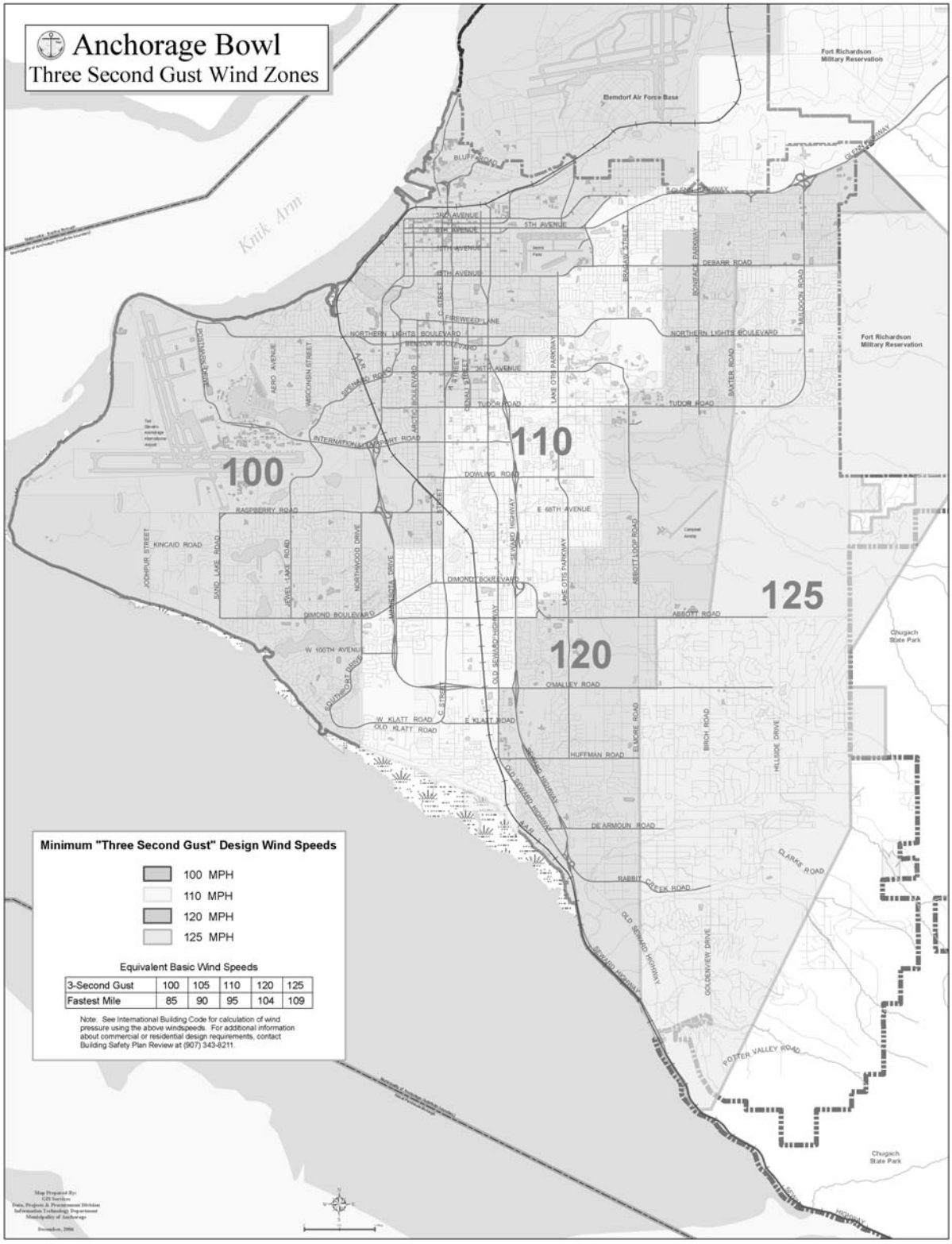
23.15.1608.3 Flat roof snow loads.
Add the following section subsection:

> The minimum flat roof snow load, $P_{f,}$ shall be forty (40) pounds per square foot.

23.15.1609.3 Basic wind speed.
Replace the first paragraph with the following:

> The basic wind speed, in mph, for the determination of the wind loads shall be determined in accordance with the Anchorage “Three Second Gust” Wind Zone Map.

Replace Figure 1609 with the Anchorage “Three Second Gust” Wind Zone Map:


Anchorage Bowl
Three Second Gust Wind Zones
Knik Arm
Elmendorf Air Force Base
Fort Richardson Military Reservation
100
110
120
125
Minimum "Three Second Gust" Design Wind Speeds
100 MPH
110 MPH
120 MPH
125 MPH
Equivalent Basic Wind Speeds
3-Second Gust 100 105 110 120 125
Fastest Mile 85 90 95 104 109
Note: See International Building Code for calculation of wind pressure using the above windspeeds. For additional information about commercial or residential design requirements, contact Building Safety Plan Review at (907) 343-8211.
Chugach State Park

23.15.1609.4.3 Exposure categories.

Add the following to the definition of "EXPOSURE D":

Shoreline is defined as the high tide line (as indicated by the edge of vegetation on the most recent Municipality base aerial photograph set).

Unobstructed is defined as any site not sheltered from the shoreline by vegetation or other impediments at least four (4) feet high and covering at least sixty (60) percent of an area extending at least thirty (30) feet perpendicular to a line connecting the building to any point of the shoreline.

23.15.1613.1 Scope.

Revise first sentence to also exclude ASCE 7 Appendix 11B.

23.15.1613.2 Definitions.

Add the following definition:

SEISMICALLY-INDUCED GROUND FAILURE ZONES. For the various mapped ground failure zones see the *Anchorage Coastal Resource Atlas, Vol.1: The Anchorage Bowl.* for the purposes of these amendments the following numbers are assigned to the various mapped areas:

Zone 1 – "Lowest ground failure susceptibility."
Zone 2 – "Moderately low ground failure susceptibility."
Zone 3 – "Moderate ground failure susceptibility."
Zone 4 – "High ground failure susceptibility."
Zone 5 – "Very high ground failure susceptibility."

23.15.1613.10 ASCE 7, Section 13.4.2.

Add a new subsection to read as follows:

Modify ASCE 7, Section 13.4.2 as follows:

13.4.2 Anchors in concrete or masonry. Anchors embedded in concrete or masonry shall be proportioned to carry the least of the following:

a. 1.3 times the force in the component and its supports due to the prescribed forces.
b. The maximum force that can be transferred to the anchor by the component and its supports.

The value of R_p used in Section 13.3.1 to determine the forces in the connection part shall not exceed 1.5 unless one of the following is met:

a. The component anchorage is designed to be governed by the strength of a ductile steel element.
b. The design of post-installed anchors in concrete used for the component anchorage is prequalified for seismic applications in accordance with ACI 355.2.

23.15.1704.1 General.

Amend by adding the following to the end of the paragraph:

Provided the Engineer of Record is a registered professional engineer in the State of Alaska, the Engineer of Record shall be deemed qualified to perform special inspections required under this chapter without further statements of qualifications or resumes to the building official. Intermediate and special moment frame welds shall be inspected by a welding special inspector certified under AMC section 23.15.1704.1.4.

23.15.1704.1.2 Report requirement.

Delete the fourth and fifth sentences and insert the following:

All discrepancies shall be brought to the immediate attention of the contractor for correction, and shall be documented in a Special Inspection Report. If action is not taken immediately or within an agreed time frame to correct the nonconformance, the Special Inspector shall promptly inform the Engineer of Record and the building official, verbally and in writing through a Special Inspection Report. Discrepancies discovered by the Special Inspector after the fact shall be reported to the Engineer of Record and the building official in writing.

Copies of inspection reports shall be available at the construction site for review by Municipality Building Safety Personnel.

23.15.1704.1.3 Pre-construction special inspection meeting.

Add new subsection 1704.1.3 as follows:

A pre-construction special inspection meeting shall be required by the building official or designee, prior to the start of construction, when construction valuation meets or exceeds $1 million. A pre-construction special inspection meeting shall also be required whenever special inspection is performed on an essential facility or when the building official believes such a meeting facilitates the inspection process of any project. Such meetings are tools used to address and coordinate the special inspection activities among all people involved in the construction project. The building official or designee shall chair these meetings.

23.15.1704.1.4 Special inspector pre-approval program.

Add a new subsection 1704.1.4 to read as follows:

A. Unless otherwise approved by the building official, special inspectors shall be pre-qualified and approved by the building official before performing special inspection activities on any project within the Municipality. Special inspectors shall obtain pre-approval for each category of inspection they wish to perform. Applicants for pre-approval as special inspectors shall submit an application describing documentable qualifications for each category of inspection(s) to be performed, with years of experience, project references, certifications where appropriate, and references with contact information. Once qualifications are

accepted by the building official, an applicant special inspector shall be issued a unique special inspector number. Provisions may be made for pre-qualification of special inspector interns not meeting the basic requirements of a special inspector in a certain category, but who are supervised by a pre-qualified special inspector or design professional.

B. Approval shall be by letter from the Municipality and shall include a pocket or wallet card defining special inspector's information and the categories the special inspector has been pre-approved. Special inspectors shall carry the wallet card on their person when performing inspections and show the card upon request of building official's representative or designated design professional. Special inspector approvals shall be renewed every two (2) years by reapplication of the special inspector.

23.15.1704.1.4.1 Special inspector intern program.

Add a new subsection 1704.1.4 to read as follows:

A. The Special Inspection firm proposing to use an intern for part of a Special Inspection shall submit to the building official a written Special Inspector Intern Program for approval. The program shall define:

1. Minimum pre-qualifying experience required for the proposed intern to participate as a Special Inspector Intern. Minimum qualifications to begin the Special Inspector Program shall be defined by the building official.
2. The Special Inspection Intern shall be supervised as described by the written Special Inspector Intern Program. Individuals designated as supervisors shall be pre-approved Special Inspectors in the discipline the Intern is training for. Special Inspection reports and documents shall be signed by the intern and countersigned by the supervisor prior to being submitted to the Contractor, the Engineer of Record, and the building official.
3. Completion of Special Inspector Intern training in a particular category of inspection shall be demonstrated by application for pre-approval as a Special Inspector and acceptance by the building official.
4. Should an Intern fail to perform, the building official may require additional training, additional supervision, or removal from the project.

23.15.1704.1.4.2 Approval suspension.

Add a new subsection 1704.1.4.2 to read as follows:

The building official may suspend an individual's approval as a special inspector for a project where the special inspector demonstrates a lack of knowledge, neglects duties due to the special inspector's own fault or

falsifies documents. The special inspector shall be provided written notification and shall be afforded the opportunity by the building official to be heard. Decisions may be appealed to the Building Board of Appeals.

23.15.1704.1.4.3 Removal of pre-approved status.

Add a new subsection 1704.1.4.3 to read as follows:

The building official may revoke or suspend an individual's pre-approval status when a special inspector neglects duties, demonstrates a lack of knowledge, falsifies documents or misrepresents qualifications. Pre-approved status may be reinstated on recommendation of the Special Inspector Peer Committee or after 365 days and upon submission of proof of additional training or certifications. The special inspector shall be provided written notification and shall be afforded the opportunity by the building official to be heard. Pre-approval status decisions may be appealed to the Building Board of Appeals.

23.15.1704.1.5 Ad hoc special inspector peer committee.

Add a new subsection 1704.5 to read as follows:

An advisory committee of special inspection peers may meet to provide guidance on special inspection matters including but not necessarily limited to, special inspector qualifications, special inspection related code issues, special inspection requirements, remedies to disputes regarding special inspection duties and procedures, and special inspector approval program issues. The Ad Hoc Special Inspection Committee shall be comprised of a balanced membership of peers and shall include a balanced representation of the special inspection profession, design professionals, and public officials. The committee shall meet as required and shall be chaired by the building official or designee. Decisions by the building official may be appealed to the Building Board of Appeals. For a quorum, a peer committee requires attendance of individuals from four (4) businesses performing similar special inspections, and the building official.

23.15.1704.3Steel construction.

Add the following exception under Item 2, to read as follows:

2.6 Welds listed under exception 2 shall not require special inspection where $R_u \leq 0.5\ \phi R_n$ for LRFD or $R_a \leq 0.5\ R_n/\Omega$ for ASD, and welds are placed by AWS certified welders. The registered design professional in responsible charge shall indicate on the drawings which welds, if any, do not require special inspection under this chapter.

23.15.1704.4 Concrete construction.

Add the following exception:

6. Shotcrete work not of a structural nature or not for water retention structures, fully supported on earth, for minor repairs or when no

special hazard exists and special inspection is waived by the building official.

23.15.1802.1 Definitions.

Amend by adding the following definitions:

Cold Foundation: Any foundation where the temperature of the bearing soil is normally subject to freezing.

Registered Design Professional: A civil engineer licensed in the State of Alaska.

Warm Foundation: Any foundation where the temperature of the bearing soil is normally maintained above freezing.

23.15.1803.5.4 Groundwater table.

Replace the subsection with the following:

Any subsurface soil investigation completed in accordance to this chapter shall identify the location and elevation of any ground water found within the limits explored.

23.15.1803.5.11 Seismic design Categories C through F.

Add the following after the paragraph:

A. Evaluation of liquefaction, slope stability, and surface rupture due to faulting or lateral spreading shall show through historic record, subsurface exploration, and analysis the building site and all natural, permanent cut, fill, or stabilized slopes exhibit an acceptable factor of safety or an acceptable level of risk. It may be necessary to extend the investigation beyond the immediate site boundaries in order to evaluate applicable hazards.

B. The level of evaluation shall be a function of the Occupancy Category of the structure and its location relative to the mapped Seismically-Induced Ground Failure Zones shown in the *Municipality of Anchorage 1980 Anchorage Coastal Resource Atlas, Volume I.*

C. Liquefaction: The evaluation of liquefaction potential for Occupancy Category I and II structures located in Seismically-Induced Ground Failure Zones 1, 2, or 3 may be based on historic record. The evaluation of liquefaction potential for all Occupancy Category III and IV structures, and for Occupancy Category I and II structures located in Seismically-Induced Ground Failure Zones 4 or 5, shall follow an accepted empirical procedure. The potential for liquefaction and soil strength loss shall be evaluated in terms of peak ground acceleration, earthquake magnitude and duration.

D. Slope Stability & Lateral Spreading: Evaluations of slope stability and surface rupture due to lateral spreading may be analyzed following one of two methods defined below. All analyses shall consider the potential loss of soil strength due to liquefaction, or

due to remolding of sensitive cohesive materials.

Method 1. Pseudo-Static Analysis: Following a Limit-Equilibrium analysis, the building site and all natural, permanent cut, fill, or stabilized slopes shall exhibit a minimum factor of safety of 1.50 under static loading conditions; and a minimum factor of safety of 1.10 for seismic loading conditions, when applying the minimum horizontal inertia force determined by multiplying the acceleration factor in Table 23.15.1803.5.11 to the weight of the potential sliding mass.

Method 2. Dynamic Analysis: The stability of the building site and all natural permanent cut, fill or stabilized slopes shall exhibit an acceptable safety factor or magnitude of displacement under seismic loading following a dynamic analysis. Dynamic analyses shall be based on site-specific design ground motions defined in Table 23.15.1803.5.11.

TABLE 23.15.1803.5.11
Seismic Horizontal Acceleration Factors

Method of Evaluation	Horizontal Acceleration Coefficient
1. Limit-Equilibrium: Zone[(a)] 1, 2, and 3 Zone[(a)] 4 and 5	 0.30 0.20
2. Dynamic Analysis	Peak horizontal acceleration corresponding to a 475-year return period ground motion (in bedrock), as modified for the site conditions (Ref: ASCE 7-05, Section 11.4 and Chapters 20-22).

a. Seismically-Induced Ground Failure Zones (Ref: *Municipality of Anchorage 1980 Anchorage Coastal Resource Atlas, Volume I*).

23.15.1803.5.12 Seismic design Categories D through F.
In Item 2, delete the last two sentences. Delete the Exception.

23.15.1803.5.13 Permafrost.
Add a new subsection 1803.5.13 to read as follows:

A subsurface investigation shall be performed to evaluate whether permafrost exists at any building site located within areas delineated on the Mass Wasting map (*Anchorage Coastal Resources Atlas, Volume 1: The Anchorage Bowl, 1980*) as having a high potential for isolated permafrost conditions.

23.15.1803.6 Reporting.
Amend by adding the following items to read as follows:

11. When groundwater is known or suspected to exist within six feet (1.8m) of final grade, the report shall include surface and subsurface drainage recommendations.
12. The report shall address the potential for isolated permafrost. When permafrost is known or suspected to exist within the building site, the report shall include discussion of the potential for thaw or creep settlement and foundation recommendations to mitigate such consequences.
13. The soils report shall provide a summary of the methods, parameters and assumptions used to evaluate the hazards of liquefaction, slope stability, and lateral spreading.

23.15.1804.3 Site grading.

Add the following paragraph to the end of the section:

There shall not be an increase in surface drainage to adjacent properties. Approved discharge locations shall include street gutters, drainage easements, ditches or other approved locations per title 21. Surface runoff may be retained on site to prevent impacts to neighboring properties.

Add the following paragraph to the end of the section:

Footing drains or sump pumps shall discharge to a ditch or storm sewer for new construction where available. Backup emergency systems may discharge to the surface. Primary systems shall not discharge onto adjacent properties. Where sump pumps or footing drains discharge on the soil surface, the effluent shall be directed toward drainage easements, street gutters, ditches or other approved locations per title 21. Effluent may be retained on site to prevent impacts to neighboring properties.

23.15.1804.5 Compacted fill material.

Replace “90 percent” in the Exception with “Ninety-five (95) percent”.

23.15.1805.1.3 Ground-water control.

Add the following at the end of the paragraph:

The space between the side of a basement excavation and the exterior of a basement wall shall be backfilled for half the height of the excavation with the same material (Type GW, GP, SW, or SP soils) on which the footing is placed.

23.15.1805.3Waterproofing.

Amend by adding the following paragraph to read as follows:

In addition, all exterior below grade walls enclosing habitable spaces shall be waterproofed in accordance with section 1805.3.2.

23.15.1807.1.4 Permanent wood foundation systems.

Add the following to the beginning of the first paragraph:

All footings shall be concrete. All-weather wood foundation systems may only be installed in Type GW, GP, SW, and SP soils unless a complete soils investigation and foundation design, prepared by a civil engineer registered in the State of Alaska, is submitted for approval.

Add a second paragraph as follows:

Hot dipped zinc-coated fasteners may not be used for basement or crawl space construction. Fasteners and anchor bolts used in concrete footings shall be stainless steel. Anchor bolts shall be a minimum ten inch (10") by 5/8-inch nominal diameter embedded at least seven (7) inches (178 mm) into the concrete. Treated wood foundation plates or sills shall be installed in accordance with section 23.15.2308.6.

23.15.1808.1 General.

Add the following at the beginning of the paragraph:

Footings and foundations shall be constructed of masonry, concrete, or treated wood. Footings of concrete and masonry shall be of solid material. Foundations supporting wood shall extend at least six (6) inches above the adjacent grade. Unless other recommendations are provided by a foundation investigation report, footings shall meet the following requirements:

Except for the upper 12 inches, peat or organic silts (Pt. OL, or OH soils - as defined by the Unified Soil Classification System) shall not be used for backfill within eighteen (18) inches of the footing or stem wall.

23.15.1808.7 Footings on or adjacent to slopes.

Add the following paragraph before the first sentence:

When a foundation investigation is required in accordance with section 23.15.1803.2, the minimum building and structure clearances and setbacks shall be as defined in sections 1808.7.1 and 1808.7.2, or fifteen (15) feet (4572 mm) from the surface projection of the most critical theoretical failure plane determined from the slope stability analysis, whichever is greater.

23.15.1809.5 Frost protection.

Delete "Except where otherwise protected from frost," and change "foundation" to "Foundation."

Replace item 2 with:

2. Designing in accordance with ASCE 32, using a Design Air-Freeze Index (F_{100}) of 3,340 F-Days: or

Add the following at the end of the section:

Minimum footing depths shall be as indicated in Table 23.15.1809.5. Footings shall bear on undisturbed natural inorganic soil, or suitably compacted fill.

Table 23.15.1809.5

Foundation Type	Minimum Footing Depth, Inches [6] (mm)	
	Warm Foundation	Cold Foundation [3, 4]
Perimeter Footing [1]	42 (1067)	60 (1524)
Interior or Interior Isolated Spread Footing [2]	8 (203)	60 (1524)
Cast-in-Place Concrete Pier	42 (1067)	120 [5] (3048)
Exterior Isolated Foundation	NA	120 [5] (3048)

Notes:

1. Dimension indicated is from bottom of footing to adjacent exterior grade. Required depth to bottom of footing within a crawl space shall not be less than eight (8) inches (203 mm). Basements or crawl space walls supporting more than five (5) feet (1524 mm) differential fill on opposite faces shall be restrained as necessary against lateral movement.
2. Dimension indicated is from bottom of footing to nearest adjacent grade.
3. Exterior decks, landings, and platforms not rigidly attached to the building and not greater than thirty (30) inches (702 mm) above grade may bear directly on the ground. Bearing materials shall meet other provisions of this code.
4. The minimum footing depths may not be adequate for frost susceptible soils. Cold footings shall be founded below the frost line, or be protected from freezing with insulation or other appropriate means. In addition, provisions shall be made to resist uplift forces due to frost jacking on the sides of cold foundations.
5. Foundations installed in non-frost-susceptible material may be sixty (60) inches (five feet) (1524 mm).
6. Non-load-bearing site structures not attached to the building, such as fences, light poles, sign posts, shall have a footing depth based on an analysis of the vertical and lateral loads on the structure and the structure's susceptibility to damage from frost action.

23.15.1810.2.4.1 Seismic design Categories D through F.

Delete the section in its entirety, including the exception.

23.15.1810.3.5.3.2 Steel pipes and tubes.

Amend by adding the following exception:

3. The building official may permit small diameter piles provided that an analysis is submitted indicating that the piles have sufficient capacity to transfer the required gravity and lateral loads. The safe installation of the piles of smaller diameter is the responsibility of the contractor.

23.15.1905.12 Cold weather requirements.

Amend by adding the following paragraph to read as follows:

Freezing or near freezing weather is defined as a period when, for more than three consecutive days, the following conditions exist: (1) the average daily air temperature is less than 40 degrees F; and (2) the air temperature is not greater than 50 degrees F for more than one-half of any 24-hour period. The average daily air temperature is the average of the highest and lowest temperatures occurring during the period from midnight to midnight.

23.15.1907.5 Installation of anchors.

Amend by adding the following paragraph to read as follows:

Except where approved by the registered design professional, anchors shall be in place prior to placing concrete.

Exception: Anchors for light-framed construction having a required embedment length of seven (7) inches or less may be field placed while concrete is in plastic condition.

23.15.1908.11 ACI 318, Section 10.9.1.

Add a new subsection to read as follows:

Delete ACI 318, Section 10.9.1, and replace with the following:

10.9.1 – Area of longitudinal reinforcement, A_{st}, for composite compression members with a least dimension to height ratio of 3 to 1 or greater shall be not less than 0.01 A_g. Where the least dimension to height ratio is less than 3 to 1, A_{st} shall be not less than 0.005 A_g.

23.15.2104.5 Installation of anchors.

Add a new section 2104.5 to read as follows:

Anchors shall be in place prior to grouting.

Exception: Anchors for light-framed construction having a required embedment of thirteen (13) inches or less may be field placed while grout is in plastic condition.

23.15.2205.2.2 Seismic Design Category D, E, or F.

Amend by adding the following exception:

Exception: Diaphragm, collector, and strut connections need not meet the ductile limit state requirement of AISC 341, Section 7.1.

23.15.2208.1 Storage racks.

Add the following exception to 2208.1:

Exception: The building official may waive the design requirement for storage racks less than or equal to eight (8) feet in height.

23.15.2303.4.5 Alteration to trusses.

Amend by adding the following exception:

Exception: Alterations resulting in the addition of loads to any member (e.g. HVAC equipment, piping, additional roofing or insulation, etc.) shall be evaluated in accordance with Section 303 of the International Existing Building Code.

23.15.2304.11.2.2 Wood supported by exterior foundation walls.
Amend by deleting the paragraph and replacing with the following:

Wood framing members, including wood sheathing, that rest on exterior foundation walls and are less than six inches (152 mm) from exposed earth, shall be of naturally durable or preservative-treated wood.

23.15.2308.9.2.2 Top plates for studs spaced at 24 inches.
Delete paragraph in its entirety and substitute the following:

When bearing studs are spaced at 24-inch (610 mm) intervals, joists or trusses shall bear within five inches (127 mm) of the studs beneath or a third plate shall be installed.

23.15.2308.9.8 Pipes in walls.
Amend the section by adding a paragraph as follows:

All studs in exterior plumbing walls shall be a minimum six-inch (152 mm) nominal width unless otherwise approved.

23.15 Table 2902.1.
Replace the reference to section 410.1 of the International Plumbing Code with the following:

Where water is served in restaurants, drinking fountains shall not be required. In other occupancies where drinking fountains are required, bottle water dispensers shall be permitted to be substituted for the required drinking fountains. Drinking fountains shall not be required in B and S occupancies containing break rooms with sinks.

Replace the reference to section 419.2 of the International Plumbing Code with the following:

Substitutions for water closets. In each bathroom or toilet room, urinals shall not be substituted for more than 67 percent of the required water closets.

Replace the reference to section 411 of the International Plumbing Code with the following:

Waste connections shall not be required for emergency showers and eyewash stations.

23.15.3005.4 Personnel and material hoists.
Add new first sentence to read:

Personnel and material hoists shall meet the requirements of ANSI A10.4.

Add new subsection 3005.4.1 to read:

3005.4.1 Elevators for construction and demolition. All elevators, hoists, and material lifts used for construction to convey personnel and

materials for construction and demolition operations shall be required to be certified by either the elevator or lift manufacturer or an independent, NAESA certified elevator inspector at the start of construction, prior to initial use, and each six (6) months thereafter while it remains installed at the project site. Such inspection shall include, but is not be limited to, inspection of the erected frame, the motor, hoist mechanisms, braking mechanism, means of entry and egress, load testing, and governor test. Tests reports and certification letter shall be submitted to the elevator section of the Building Safety Division within 72 hours of completion of the inspection. This requirement shall be retroactive to all permits, started prior to the approval of this code, which remain open.

All outstanding non-conformances to ANSI A10.4 shall be corrected, reinspected, and certified before said elevator or hoist is placed in use.

23.15.3006.1 Access.

Add new paragraph to read:

Access to elevator machine rooms shall be from the inside of the building or shall be by an enclosed, ventilated, and well lighted passageway protected from the weather. Passageway shall be a minimum of 3'- 6" wide by 6'-8" high, and shall meet the material and construction requirements of this code.

23.15.3412.2 Applicability.

Insert the date "June 9, 1948" in the space provided.

23.15 Appendix.

Adopt Appendices A, C, G and H.

23.15.H.101.2 Signs exempt from permits.

Delete subsection in its entirety and substitute the following:

A. The following signs shall not require a permit under this chapter. An exemption shall not affect the requirement for a sign to be installed and maintained so as to conform to the new requirements of this code and any other applicable law.

1. The changing of the advertising copy or message on a painted or printed sign only. Except for theater marquees or similar signs specifically designed for the use of replaceable copy, electric signs shall not be included in this exemption.
2. Painting, repainting or cleaning of an advertising structure or the changing of advertising copy or message thereon shall not be considered an erection or alteration requiring a sign permit, unless structural change is made.
3. Official signs erected by a federal, state or municipal agency.
4. Signs not exceeding six (6) square feet in area on any one of its faces.
5. Signs affixed to or painted on a currently operable and licensed vehicle.

6. Printed messages carried on any surface not attached to or supported from the ground or from a structure. (OA 88-30S).

23.15.H.101.3 Permits required.

Add a new section H.101.3 as follows:

A sign permit shall be required before any sign is erected. No permit shall be issued unless the proposed sign fully conforms to all requirements of this chapter and AMC title 21.

23.15.H.101.4 Application for permit.

Add a new section H.101.4 as follows:

A. An application for a sign permit shall be made in writing on forms prescribed by the building official and shall be complete only if accompanied by:
   1. The location by street and number of the proposed sign structure;
   2. The name, address, and telephone number of the owner of the property on which the sign is to be erected;
   3. The name, address, and telephone number of the sign contractor or erector;
   4. A drawing to scale showing the design of the sign, including dimensions, sign size, method of attachment, structural specifications, source of illumination and showing the relationship to any building or structure to which it is or is proposed to be installed or affixed to which it relates;
   5. For permanent, freestanding signs only, a plot plan to scale, indicating location of the sign relative to property lines, streets and sidewalks, utility easements, buildings, driveways, parking spaces, existing signs (for B-1 and R-0 zones only), and structures identified by their principal use;
   6. For B-1 and R-0 zones only, a list of all existing signs on the property on which the proposed sign is to be erected and a description of the size and square footage of each such existing display surface area; and
   7. Such other information as the building official determines is reasonably necessary to an evaluation of the proposed sign's compliance with this code.