Chapter 23.15 LOCAL AMENDMENTS TO THE INTERNATIONAL BUILDING CODE ~~2018 EDITION~~

23.15.100 Local amendments to the International Building Code ~~2018 Edition~~.

The amendments to the ~~2018 Edition of the~~ International Building Code (IBC) are listed hereafter by section. The edition adopted is as listed in AMC 23.05.010. The structure of amendments is as explained in AMC 23.05.015. ~~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.~~

23.15.101.2 Scope.

The provisions of this code shall apply to the construction, alteration, relocation, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

Exception: Detached one-, two-, and three-family dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress, and their accessory structures not more than three stories above grade plane in height, shall comply with this code or the International Residential Code.

23.15.103—23.15.116 Delete.

Delete IBC sections 103 through 116. Refer to the Anchorage Administrative Code.

23.15.202 Definitions.

Revise Section 202 by adding the following definitions:

COLD FOUNDATION. Any foundation where the temperature of the bearing soil is normally subject to freezing.

CONVENTIONAL INDUSTRY TOLERANCES. In reference to ICC A117.1 ~~2009~~2017, section ~~104.2~~105.3 Dimensions, convention industry tolerances shall be one percent or one-half inch, whichever results in the lesser tolerance.

REGISTERED DESIGN PROFESSIONAL. For purposes of Chapter 17, a civil engineer licensed in the State of Alaska.

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."

USABLE SPACE. 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.

WARM FOUNDATION. Any foundation where the temperature of the bearing soil is normally maintained.

23.15.406.3.2.1 Dwelling unit separation.

Amend by changing all references to "½ - inch" to " ⅝ - inch Type X".

23.15.412.3.1 Exterior walls.

Revise section 412.3.1 by adding the following exception:

Exception: Group III hangars.

23.15.429 Special security requirements for group E buildings.

Amend Chapter 4 by adding the following section:

SECTION 429

SPECIAL SECURITY REQUIREMENTS FOR GROUP E BUILDINGS

429.1 General. 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.

23.15.430 Licensed residential care/assisted living facilities.

Amend Chapter 4 by adding the following section:

SECTION 430

LICENSED RESIDENTIAL CARE/ASSISTED LIVING FACILITIES

430.1 Scope. The provisions of this section apply to licensed residential care/assisted living facilities providing accommodations for 3 to 16 residents.

430.2 Multiple facilities within a single structure. Where more than one licensed residential care/assisted living facility is located within a single structure, the combined occupant load of all facilities shall be used to determine the occupancy classification.

Exceptions:

1. Facilities separated by fire barriers constructed in accordance with section 707 and horizontal assemblies constructed in accordance with section 711, or both, having a minimum two hour fire resistance rating so as to completely separate the facility from adjacent occupancies and facilities.
2. Townhouses where each townhouse is separated from adjacent dwelling units with either (two) one hour fire resistance rated walls or (one) two hour fire resistance rated wall, constructed in accordance with the IRC.

430.3 Facilities in new buildings and additions. Facilities located in new buildings and additions shall comply with this code.

430.3.1 Mixed use and occupancy. Residential care/assisted living facilities shall be separated from other occupancies and uses by fire barriers constructed in accordance with section 707 or horizontal assemblies constructed in accordance with section 711, or both, having a minimum 2 hour fire resistive rating, so as to completely separate adjacent occupancies. Egress from residential care/assisted living facilities shall not pass through other occupancies.

430.4 Existing facilities. Existing facilities shall comply with the International Fire Code as amended under AMC 23.45.

430.4.1 Issuance of a new license. An existing facility issued a new license shall be protected by an automatic sprinkler system in accordance with section 903.

430.4.2 Increase in the number of residents. An increase in the number of residents that results in a change of occupancy classification requires a change of use permit in accordance with this code.

430.4.3 Modification of license for facilities housing 6 to 16 residents. A license modification from individuals receiving custodial care who are capable of responding to an emergency to complete building evacuation (Group R-4, Condition 1) to individuals who require limited verbal or physical assistance while responding to an emergency to complete building evacuation (Group R-4, Condition 2), or to individuals who may be incapable of self-preservation (Group I-2), requires a change of use permit in accordance with this code.

430.5 Change of use. Conversion of an existing building or portion thereof to a residential care/assisted living facility shall comply with sections 430.5.1 through 430.5.10.

430.5.1 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, AMC 23.10.

430.5.2 Occupancy classification. Facilities shall be classified in accordance with this code. Residents who require more than limited verbal or physical assistance while responding to an emergency situation to complete building evacuation are considered incapable of self-preservation.

430.5.3 Automatic sprinkler system. An automatic sprinkler system shall be provided in accordance with section 903. NFPA 13D systems require a minimum 30 minute water supply, or minimum 20 minute supply with a fire department connection.

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

430.5.5 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 thick gypsum wall board, or equivalent. All structural elements shall be separated from the interior of the building by ½ inch thick gypsum wall board, or equivalent, or shall qualify as ½ hour fire resistive structural elements in accordance with chapter 7.

430.5.6 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 solid wood core or 20 minute fire rated, and shall be provided with latches suitable for keeping the doors closed.

430.5.7 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 430.5.7.1 through 430.5.7.3.

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

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

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

430.5.8 Protection of vertical openings. A maximum of 2 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.

430.5.9 Accessibility. Accessibility shall be provided in accordance with Chapter 11.

430.5.10 Mixed use and occupancy. Residential care/assisted living facilities shall be separated from other occupancies and uses by fire barriers constructed in accordance with section 707 or horizontal assemblies constructed in accordance with section 711, or both, having a minimum 2 hour fire resistive rating, so as to completely separate adjacent occupancies. Egress from residential care/assisted living facilities shall not pass through other occupancies.

23.15.431 Childcare facilities.

Amend Chapter 4 by adding the following section:

SECTION 431 CHILDCARE FACILITIES

431.1 Scope. Childcare facilities shall comply with this code.

Exception: Childcare facilities are permitted to comply with the International Residential Code provided all of the following requirements are met:

1. The facility is located in a detached one- or two-family dwelling or townhouse (as defined in the International Residential Code).
2. Day care: The facility is limited to a maximum of eight (8) children of any age, including children related to staff, between the hours of 6:00 a.m. and 10:00 p.m.
3. Night care: The facility is limited to a maximum of five (5) children of any age, including children related to staff, between the hours of 10:00 p.m. and 6:00 a.m.
4. The facility shall comply with AMC Chapter 16.55 Child Care and Education Facilities - Centers and Homes.
5. Smoke alarms and carbon monoxide detectors are provided in accordance with the International Residential code.
6. Means of egress and emergency escape and rescue openings comply with the International Residential code.

7. Fire extinguishers are provided in accordance with the International Fire Code as required for a group E occupancy.
8. Childcare is limited to the basement, first and second stories.
9. Childcare facilities located in a basement or second 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 childcare 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.

23.15.901.6.1 Automatic sprinkler systems.

Amend exception number 1 by adding the following to the end of the sentence: "not used as an assisted living or custodial care facility."

23.15.901.6.~~3~~ 2 Fire alarm systems.

Amend exception number 3 by adding the following to the end of the sentence: "not used as an assisted living or custodial care facility."

23.15.903.2.3 Group E.

Revise 903.2.3 to read as follows:

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 having an occupant load of 49 or less.

Daycare uses licensed to care for more than five 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.

23.15.903.2.8 Group R.

Amend Section 903.2.8 by adding the following section:

23.15.903.2.8.~~5~~ 4 Group R-2. An automatic sprinkler system installed in accordance with Section 903.3.1.3 shall be permitted in Group R-2 occupancies with 4 or fewer dwelling units.

23.15.903.2.11 Specific building areas and hazards.

~~Amend Section 903.2.11 by changing "903.2.11.6" to "903.2.11.7".~~

Amend Section 903.2.11 by adding the following section:

903.2.11.7 Sprinkler systems shall not be allowed in elevator machine rooms/spaces or control room/spaces and at the tops of hoistways, except as required by NFPA 13.

~~23.15.903.3 Installation requirements.~~

~~Amend 903.3 by changing "903.3.8" to "903.3.9".~~

23.15.903.3.1.3 NFPA 13D sprinkler systems.

Amend Section 903.3.1.3 by adding the following sections:

903.3.1.3.1 Group R-3 care facilities and Group R-4, Condition 1 occupancies. An automatic sprinkler system serving a Group R-3 care facility or Group R-4, Condition 1 occupancy shall have a minimum 30 minute water supply or a minimum 20 minute water supply with fire department connection (FDC). Fire sprinkler protection shall be provided in attached garages.

23.15.903.3.1.3.2 Group R-2 with 4 or fewer dwelling units. Automatic sprinkler systems installed in Group R-2 occupancies with 4 or fewer dwelling units shall be permitted to be installed throughout in accordance with NFPA 13D. A fire department connection shall be installed in accordance with Section 912. Automatic sprinkler protection shall be provided in attached garages. Systems shall be monitored in accordance with Section 903.4.

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23.15.903.3.5 Water supplies.

Amend by adding new Section 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 minimum flow rate and pressure safety factor at the water source. Hydrant flow test shall be witnessed by the fire code official or their designee.

23.15.903.3.~~9~~ 10 Seismic Design.

Add a new Section 903.3.9 as follows:

903.3.~~9~~ 10 Seismic Design. Fire sprinkler systems shall have a minimum seismic design coefficient Cp of 0.72 or greater as by NFPA 13.

23.15.903.4 Sprinkler system supervision and alarm.

Amend exception number 1 by adding the following to the end of the sentence: "not used as an assisted living or custodial care facility."

23.15.907.2 Where required - new buildings and structures.

~~Amend Section 907.2 by replacing "907.2.23" with "907.2.24".~~

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23.15.907.2.1 Group A.

Delete Exception 1.

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23.15.907.2.2 Group B.

Delete Exception.

23.15.907.2.3 Group E.

Amend 907.2.3 (Group E) by adding a second paragraph to read:

Rooms used for sleeping or napping within a Group E day care shall be provided with smoke alarms that comply with Section 907.2.10.2.

Delete Exceptions 3 and 4.

23.15.907.2.4 Group F.

Delete Exception.

23.15.907.2.7 Group M.

Delete Exception 2.

23.15.907.2.8.1 Group R-1: Manual fire alarm system.

Delete Exception 2.

23.15.907.2.9.1 Group R-2: Manual fire alarm system.

Amend section 907.2.9.1 by deleting the 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 any of the following conditions apply:

Delete Exception 2.

23.15.907.2 Fire Alarm and Detection Systems - Where Required - New Buildings and Structures.

Add the following section:

907.2.24 Group R-4: Manual and Automatic Fire Alarm System. Fire alarm systems and smoke alarms shall be installed in Group R-4 assisted living or custodial care occupancies as required in Sections 907.2.24.1 through 907.2.24.3.

907.2.24.1 Manual fire alarm system. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group R-4 assisted living or custodial care facilities.

Exceptions:

1. A manual fire alarm system is not required in buildings not more than two stories in height where all individual sleeping units and contiguous attic and crawl spaces to those units are separated from each other and public or common areas by at least 1-hour fire partitions and each individual sleeping unit has an exit directly to a public way, egress court or yard.
2. Manual fire alarm boxes in resident or patient sleeping areas shall not be required at exits where located at all nurses' control stations or other constantly attended staff locations, provided such stations are visible and continuously accessible and that travel distances required in Section 907.4.2.1 are not exceeded.

907.2.24.2 Automatic smoke detection system. An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be installed in corridors, waiting areas open to corridors and habitable spaces other than sleeping units and kitchens.

Exceptions:

1. Smoke detection in habitable spaces is not required where the facility is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.
2. An automatic smoke detection system is not required in buildings that do not have interior corridors serving sleeping units and where each sleeping unit has a means of egress door opening directly to an exit or to an exterior exit access that leads directly to an exit.

907.2.24.3 Smoke alarms. Single- and multiple-station smoke alarms shall be installed in accordance with Section 907.2.10.

23.15.907.5.2.1 Audible alarms.

Amend Section 907.5.2.1 by adding the following section:

907.5.2.1.~~3~~ 4 Minimum sound pressure. The minimum sound pressure level in every occupiable space shall be 75 dBA in Group I-1 and R occupancies and 60 dBA in all other occupancies.

23.15.907.5.2.3 Visible alarms.

Amend section 907.5.2.3 by adding the following to Exception No. 1:

An upgrade shall be the replacement of a fire alarm panel, or fire system components providing improved functional performance or capabilities. (A software upgrade is exempt from this requirement.)

23.15.907.6.1 Wiring.

Amend Section 907.6.1 by adding the following:

Exposed wiring, transformers and equipment installed below 7 feet above finished floor shall be protected from physical damage by an enclosure, raceway or metallic cable.

23.15.907.6.2 Power supply.

Amend 907.6.2 by adding the following:

Exposed wiring, transformers and equipment installed below 7 feet above finished floor shall be protected from physical damage by an enclosure, raceway or metallic cable.

23.15.907.6.6 Monitoring.

Amend exception item number 3 by adding the following to the end of the sentence: "not used as an assisted living or custodial care facility"

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~~23.15.915 Carbon Monoxide Detection.~~

~~Amend Section 915.1 as follows:~~

~~**915.1 General.** Carbon monoxide detection shall be installed in new buildings in accordance with Sections 915.1.1 through 915.6 and NFPA 72. Carbon monoxide detection shall be installed in existing buildings in accordance with IFC Section 1103.9 and NFPA 72.~~

~~**23.15.915.5.1 General.**~~

~~Amend Section 915.5.1 by replacing NFPA 720 with NFPA 72.~~

~~**23.15.915.5.2 Locations.**~~

~~Amend Section 915.5.2 by replacing NFPA 720 with NFPA 72.~~

~~**23.15.915.6 Maintenance.**~~

~~Amend Section 915.6 by replacing NFPA 720 with NFPA 72.~~

23.15.1006.3.4 Single exits

Amend Section 1006.3.4 (Single exits) by adding item No. 6 as follows:

6. Inside the Anchorage Building Safety Service Area, stories located within a building containing only Group R-2 dwelling units are permitted to be served by a single exit under the following limitations:

6.1 The building use shall be limited to Group R-2 dwelling units. Other uses are not allowed.

6.2 The building shall not be used as a boarding house.

6.3 The number of dwelling units on any story shall not exceed 4.

6.4 The exit access travel distance shall not exceed 125 feet.

6.5 Exit access corridors shall be fire resistance rated in accordance with Section 1020.2 regardless of the occupant load served.

6.6 The minimum stairway width shall be 44 inches.

6.7 The number of stories shall be limited to 6, including basements.

6.8 Interior exit stairways serving more than 4 stories shall be *smokeproof enclosures* in accordance with Section 909.20.

6.9 An approved water supply capable of supplying the required fire flow for fire protection shall be provided in accordance with International Fire Code Section 507. Exception 23.45.507.1 for areas of the jurisdiction not served by a water utility shall not be applied.

6.10 Regardless of the building construction type, interior exit stairway sprinkler head locations shall comply with NFPA 13 requirements for combustible stairway construction.

6.11 Electrical receptacles shall be prohibited in the interior exit stairway.

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23.15.1007.1.2 Three or more exits or exit access doorways.

Amend Section 1007.1.2 to read as follows:

1007.1.2 Three or more exits or exit access doorways. Where access to three or more exits is required, not less than two exit or exit access doorways shall be arranged in accordance with the provisions of Section 1007.1.1. Three exits or exit access doorways shall be separated from each other by a minimum distance of one-third the maximum overall diagonal dimension of the area served. Additional required exit or exit access doorways shall be arranged a reasonable distance apart so that if one becomes blocked, the others will be available.

~~**23.15.1010.1.9 Door operations.**~~

~~**23.15.1010.1.9.12 Stairway doors.**~~

~~Amend Section 1010.1.9.12 by adding the following:~~

~~Where a building is protected by an automatic sprinkler system in accordance with Section 903 or a fire alarm system in accordance with Section 907, including automatic smoke detection located at the top and every other landing in stairways, doors are permitted to be locked opposite the egress side, provided they are openable from the egress side and shall be unlocked simultaneously without unlatching upon sprinkler waterflow or activation of occupant notification devices.~~

~~**1010.1.9.13 Electrically locked egress doors from elevator lobbies.**~~

~~Amend by adding Section 1010.1.9.13 as follows:~~

~~For elevator lobbies not having direct access to an egress stair, the lobby doors may be electrically locked to secure all or part of a floor. In addition to the requirements of Section 1010.1.9.9 or 1010.1.9.10, a manual unlocking device listed in accordance with UL 294 shall be provided within 12 inches of the door frame and is clearly labeled "Pull handle (or push button) to release door".~~

23.15.1015.6 Mechanical equipment, systems, and devices.

Replace the exception with the following:

Exceptions:

1. Guards shall not be required when replacing existing equipment, systems, or devices where replacement does not increase the existing hazard (i.e. replacement is closer to the edge then before).
2. Equipment installed on an existing roof and located minimum five feet from the edge where the side requiring regular service or access faces away from the roof edge shall not require guards where fall arrest/restraint anchorage connector devices that comply with ANSI/ASSP Z359.1 are installed.
3. Guards shall not be required as otherwise approved by the building official.

23.15.1015.7 Roof access.

Replace the exception with the following:

Exceptions:

1. Guards shall not be required when replacing existing roof access hatch where replacement does not increase the existing hazard (i.e. replacement is closer to the edge then before).
2. Roof access hatch installed on an existing roof and located minimum five feet from the edge where the side providing access faces away from the roof edge shall not require guards where fall arrest/restraint anchorage connector devices that comply with ANSI/ASSP Z359.1 are installed.
3. Guards shall not be required as otherwise approved by the building official.

Commented [DK1]: Topic of discussion: proposed middle ground amendment, based on previous approvals, see IMC 304.11 and IFGC 306.6.

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23.15.1106 Parking and passenger loading facilities.

Parking and passenger loading facilities are regulated by AMC Title 21.

23.15.1110.11 Lifts.

Add item 11 as follows:

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11. An *accessible route* in buildings with occupancy class other than Institutional Group I, where a required accessible floor is less than four stories above or below the level of exit discharge.

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23.15.~~11111~~1112.1 Signs.

Delete Items 1 through 3. Signage for accessible parking and passenger loading facilities is regulated by AMC Title 21.

23.15.1202.2.1 Ventilated attics and rafter spaces.

Amend section 1202.2.1 as follows:

In the first sentence, add the words "insulation and" before the word "ceilings".

Amend the third sentence by changing "1 inch" to "1½ inch".

Delete the exception.

23.15.1208.2 Attic spaces.

Add the following sentence:

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

23.15.~~1210~~ 1212 Moisture control in insulated assemblies.

Amend Chapter 12 by adding the following section:

SECTION ~~1210~~1212

MOISTURE CONTROL IN INSULATED ASSEMBLIES

~~1210~~1212.1 Moisture control strategies. The building design shall incorporate both interior and exterior moisture control strategies to prevent the accumulation of moisture within insulated assemblies. Exterior moisture control shall comply with Chapters 14 and 15. Interior moisture control shall comply with section 1210.1.1. Should insulated assemblies become wet or start out wet, the design strategy shall allow the assembly to dry to either the exterior or interior. Materials shall be allowed to dry prior to enclosure.

~~1210~~1212.1.1 Interior moisture control in insulated assemblies. Methods to control moisture accumulation within insulated assemblies from the building interior shall address both vapor diffusion and air leakage. Ventilated attics and enclosed rafter spaces shall be separated from the interior (conditioned portion) of the building by a Class I vapor retarder. Unvented attics and enclosed rafter assemblies shall comply with section 1202.3. Vapor diffusion through wall assemblies shall be controlled in accordance with Section 1404.3. ~~shall be controlled by the installation of a class I vapor retarder on the warm-in-winter side of the insulation. The~~ A vapor retarder shall be continuous, and ~~seams shall be lapped 6 inches minimum. P~~penetrations and seams shall be sealed with approved tape or sealant to control air leakage.

Exceptions:

1. A vapor retarder is not required in construction where moisture or its freezing will not damage materials.
2. A vapor retarder is not required on crawlspace walls designed to dry to the interior.
3. A vapor retarder is not required on basement walls designed to dry to the interior. Above grade portions of ~~S~~such walls shall be insulated to a minimum depth of 24 inches below grade as follows:
    a. Two inches minimum of EPS or XPS foam plastic insulation applied directly against the exterior of the foundation wall, and one inch of EPS, XPS or polyisocyanurate (PIR) applied between the interior surface of the foundation wall and framing. The framing cavity may be insulated with any type of approved insulation.
    b. Three inches minimum of two pound density closed cell foam plastic insulation applied to the interior side of the foundation wall with one inch minimum of insulation between any wall framing and the foundation wall.
    c. Equivalent moisture resistant system approved by the building official.

Additionally, the basement wall shall comply with the provisions in the adopted energy code.

4. A vapor retarder is not required at cantilevered floor assemblies where the floor decking consists of nominal ¾ inch OSB or other approved material having a perm rating of less than one. Joints shall be sealed in an approved manner. Joint sealing is not required where the deck is covered with concrete or a gypsum based floor topping.
5. The rim joist does not require a vapor retarder when insulated to a minimum value of R-21 with air-impermeable expanding spray foam.
6. A class III vapor retarder may be used on walls and roof insulated to a minimum value of R-21 with air-impermeable expanding spray foam.
7. Up to one-third of the total installed insulation R-value may be installed on the warm side of the vapor retarder. This exception applies only when the daily average indoor relative humidity is maintained below 35 percent during the heating months of November through March. This exception is not intended to prohibit the provisions in Section 1404.3.
8. Factory manufactured insulated panels consisting of a metal skin encapsulating and bonded to a foam plastic core do not require a vapor retarder.
9. ~~Unvented attic and enclosed rafter assemblies in accordance with section 1202.3.~~

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23.15.1402.2 Weather protection.

Amend third sentence by adding the words "vapor permeable" after "water-resistive."

23.15.1503 Weather protection.

Add the following section:

1503.6 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. Table 1507.1.1(1) Underlayment Types**~~

~~Revise Table 1507.1.1(1) as follows:~~

~~Change the title of the third column to "Underlayment Type".~~

~~Delete the fourth column.~~

~~Add "ASTM D1970" to each roof covering in column three.~~

~~**23.15. Table 1507.1.1(2)**~~

~~Replace Table 1507.1.1(2) with the following:~~

Table 1507.1.1(2)
UNDERLAYMENT APPLICATION

Roof Covering	Section	Underlayment Application
Asphalt shingles	1507.2	For roof slopes from two units vertical in 12 units horizontal (2:12), up to, but not including four units vertical in 12 units horizontal (4:12), underlayment shall be of self-adhering polymer-modified bitumen sheet complying with ASTM D 1970. Apply a 19-inch strip of underlayment parallel to and starting at the eaves. Starting at the eave, apply 36-inch-wide sheets of underlayment, overlapping previous sheets 19 inches. End laps shall be 4 inches and shall be offset 6 feet. Distortions in the underlayment shall not interfere with the ability of the shingles to seal. For roof slopes of four units vertical in 12 units horizontal (4:12) or greater, underlayment shall be one layer applied as follows: Underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 2 inches. Distortions in the underlayment shall not interfere with the ability of the shingles to seal. End laps shall be 4 inches and shall be offset by 6 feet.
Clay and concrete tile	1507.3	Underlayment shall be self-adhering polymer modified bitumen sheet complying with ASTM D1970. The underlayment shall cover the entire roof. Apply a 36-inch strip of underlayment parallel to and starting at the eaves. Apply 36-inch-wide sheets of underlayment, overlapping previous sheets 2 inches. End laps shall be 4 inches and shall be offset 6 feet.
Metal roof panels	1507.4	Apply in accordance with the manufacturer's installation instructions.
Metal roof shingles	1507.5	For roof slopes from three units vertical in 12 units horizontal (3:12) up to, but not including four units vertical in 12 units horizontal (4:12), underlayment shall consist of self-adhering polymer-modified bitumen sheet complying with ASTM D 1970. For roof slopes four units vertical in 12 units horizontal (4:12) and greater, apply in accordance with the manufacturer's installation instructions.
Mineral surface roll roofing	1507.6	For roof slopes from one unit vertical in 12 units horizontal (1:12) up to, but not including four units vertical in 12 units horizontal, underlayment shall consist of self-adhering polymer-modified bitumen sheet complying with ASTM D 1970. For roof slopes one unit vertical in 12 units horizontal (1:12) and greater, apply in accordance with the manufacturer's installation instructions.
Slate shingles	1507.7	Underlayment shall be self-adhering polymer modified bitumen sheet complying with ASTM D 1970. The underlayment shall cover the entire roof surface installed in accordance with the manufacturer's recommendations.

Wood shakes	1507.8	For roof slopes from three units vertical in 12 units horizontal (3:12) up to, but not including four units vertical in 12 units horizontal (4:12), underlayment shall consist of self-adhering polymer-modified bitumen sheet complying with ASTM D 1970. For roof slopes four units vertical in 12 (4:12) units horizontal and greater, apply in accordance with the manufacturer's installation instructions.
Wood shingles	1507.9	For roof slopes from three units vertical in 12 units horizontal (3:12) up to, but not including four units vertical in 12 units horizontal (4:12), underlayment shall consist of self-adhering polymer-modified bitumen sheet complying with ASTM D 1970. For roof slopes four units vertical in 12 units horizontal (4:12) and greater, apply in accordance with the manufacturer's installation instructions.
Photovoltaic shingles	1507.17	For roof slopes from three units vertical in 12 units horizontal (3:12), up to four units vertical in 12 units horizontal (4:12), underlayment shall be two layers applied as follows: Apply a 19-inch strip of underlayment felt parallel to and starting at the eaves. Starting at the eave, apply 36-inch-wide sheets of underlayment, overlapping successive sheets 19 inches. End laps shall be 4 inches and shall be offset by 6 feet. Distortions in the underlayment shall not interfere with the ability of the shingles to seal. For roof slopes of four units vertical in 12 units horizontal (4:12) or greater, underlayment shall be one layer applied as follows: Underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 2 inches. Distortions in the underlayment shall not interfere with the ability of the shingles to seal. End laps shall be 4 inches and shall be offset by 6 feet.

23.15. Table 1507.1.1(3)

Delete Table 1507.1.1(3) in its entirety.

23.15.1508.3 Vapor retarders.

Amend section 1508 by adding the following subsection:

1508.3 Vapor retarders. Refer to section 23.15.1210.

23.15.1511.1 Reroofing - General.

Modify the Exceptions as follows:

In Exception number 1, delete "Roof replacement or".

In Exception number 2, delete "or replacing".

~~Add Exception number 3 as follows:~~

~~3. Minimum roof slope requirements shall not be required when positive drainage is provided and headwall flashings of existing openings or drainable cavity wall assemblies other than open rainscreen systems restrict the available flashing heights.~~

23.15.1603.1.10 Live loads posted.

Add a new section to read as follows:

1603.1.10 Live loads posted. 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.

23.15.1604.4 Analysis.

Add the following paragraph at the end of the section:

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.

23.15.1608.1 General.

Add the following sentence at the end of the paragraph:

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

~~**23.15. Table 1608.2 Ground Snow Load Table for Alaskan Locations.**~~

~~Replace the Anchorage entry in the table with the following:~~

~~Anchorage~~	~~50 for elevations up to 500 ft~~ ~~For higher elevations, a 7 lbs/ft^2 every 100 ft above 500 ft~~

~~Add the following entry:~~

~~Girdwood~~	~~140 lbs/ft^2 for elevations up to 300 ft. Higher elevations require site-specify case study.~~

~~**23.15.1608.4 Flat roof snow loads.**~~

~~Add the following section 1608.4:~~

~~**1608.4 Flat roof snow loads.** The minimum flat roof snow load, Pf, shall be 40 psf.~~

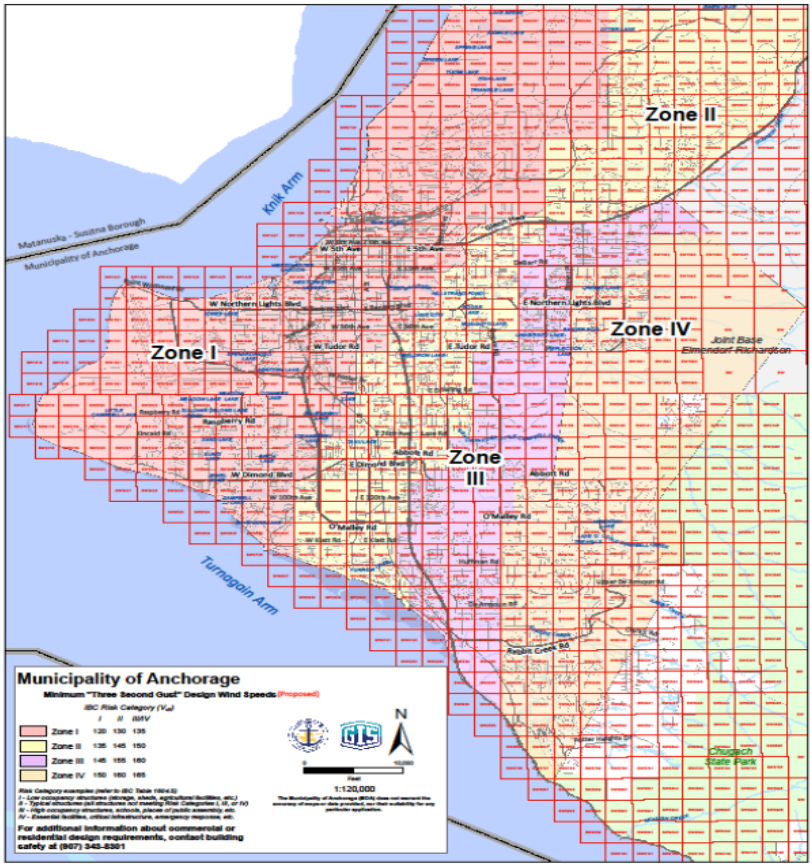
23.15.1609.3 Basic design wind speed.

Replace the first paragraph with the following:

The ultimate design wind speed, V_{ult}, in mph, for the determination of the wind loads shall be determined in accordance with the ~~2013~~ 2024 Anchorage "Three Second Gust" Wind Zone Map and associated tables.

23.15. Figure 1609.3 Anchorage "Three Second Gust" Wind Zone Map.

Replace Figures 1609.3(1), 1609.3(2), 1609.3(3) and 1609.3(4) with the following:



23.15.1609.4.3 Exposure categories.

Add the following definitions to Exposure D:

SHORELINE. The high tide line, as indicated by the edge of vegetation on the most recent Municipality base aerial photograph set.

UNOBSTRUCTED. Any site not sheltered from the shoreline by vegetation or other impediments at least 4 feet high and covering a minimum of 60 percent of an area extending a minimum of 30 feet perpendicular to a line connecting the building to any point of the shoreline.

~~**23.15.1610.1 Soil lateral loads - General.**~~

~~Add the following sentence at the end of the paragraph:~~

~~Design lateral pressure shall consider the effects of seasonal frost penetration.~~

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23.15.1611.4 Modifications to ASCE 7.

Amend section 1611 by adding the following subsection:

1611.4 Modifications to ASCE 7

1611.4.1 ASCE 7, Section 8.2. Delete subsection (c).

23.15.1613.~~4~~ 7 Modifications to ASCE 7.

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Amend section 1613 by adding the following subsection:

1613.~~4~~ 7 Modifications to ASCE 7

1613.~~4~~7.1 ASCE 7, Section 12.2.5.6.1a. Modify Section 12.2.5.6.1a by adding an exception to the end of the section as follows:

> **Exception:** Mezzanines meeting the definition in the IBC where the weight of the mezzanines do not exceed 25% of the total building weight of the structure shall be permitted.

1613.~~4~~7.2 ASCE 7, Section 12.2.5.6.1b. Modify Section 12.2.5.6.1b by revising the first sentence to read as follows: "Steel ordinary moment frames in structures assigned to Seismic Design Categories D or E not meeting the limitations set forth in Section 12.2.5.6.1a are permitted within light-framed construction (light-framed construction shall have seismic systems mostly made up of systems that meet Table 12.2-1 No. A.16, A.17, A.18, A.19, B.23, B.24, B.25 or Table 12.14-1 No. A.13, A.14, A.15, A.16, B.22, B.23, B.24.)…"~~Table 12.2-1A systems 15, 16, 17 or 18 [12, 1 OR 18] or Table 12.2-1B systems 22, 23 or 24 or Table 12.14-1A systems 13, 14, 15, or 16 or Table 12.14-1B systems 22, 23 or 24)…"~~

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23.15.1703.7 Special inspector pre-approval program.

Add the following section:

1703.7 Special inspector pre-approval program. 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.

1703.7.1 Special inspector intern program. 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 preapproved 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.

1703.7.2 Application and fee. 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, and the special inspection license fee is paid per section 23.10.108, Table 3-K, 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.

1703.7.3 Special inspector approval. 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.

1703.7.3.1 Approval suspension. 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 Examiners and Appeals.

1703.7.3.2 Removal of pre-approval status. 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 Examiners and Appeals.

23.15.1703.8 Ad hoc special inspector peer committee.

Add the following section:

1703.8 Ad hoc special inspector peer committee. 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 Examiners and Appeals. For a quorum, a peer committee requires attendance of individuals from four (4) businesses performing similar special inspections, and the building official.

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23.15.1704.2.1 Special inspector qualifications.

Replace the second paragraph with the following:

The registered design professional in responsible charge and other licensed engineers involved in the design of the project are deemed qualified for special inspections on any material except that on welding they are only qualified to perform visual inspections unless the person is licensed by the jurisdiction for welding inspections. Other personnel not involved with the design of the project under the registered design professional in responsible charge must be licensed by the jurisdiction to perform special inspections.

23.15.1704.2.4 Report requirement.

Delete the fourth and fifth sentence and replace with 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 registered design professional 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 registered design professional and the building official in writing. Copies of inspection reports shall be available at the construction site for review by Municipal Building Safety Personnel.

23.15.1705.2.1 Structural steel.

Add a second exception as follows:

2. Special inspection of welds under this section shall not be required where Ru ≤ 0.5ΦRn for LRFD or Ra ≤ 0.5Rn/Ω for ASD, and where welds are placed by AWS certified welders. The registered design professional in responsible charge shall indicate on the drawings which welds do not require special inspection under this chapter.

23.15.1705.3 Concrete construction.

Add a sixth exception as follows:

6. Shotcrete work not of a structural nature or not for water retention structures, are fully supported on earth, are for minor repairs, or when no special hazard exist, where approved by the building official.

23.15.1705.3.1 Welding of reinforcing bars.

Add the following exception:

Exception: Special inspection of welds under this section shall not be required where $R_u \leq 0.5\Phi Rn$ for LRFD or $R_a \leq 0.5\ Rn/\Omega$ for ASD, and where welds are placed by AWS certified welders. The registered design professional in responsible charge shall indicate on the drawings which welds do not require special inspection under this chapter.

23.15.1705.5.~~3~~ 4 Small wood buildings.

Amend section 1705.5 by adding the following subsection:

23.15.1705.5.~~3~~ 4 Small wood buildings. Wood lateral-force-resisting systems in buildings that satisfy all of the following criteria do not require special inspections:

A) Building is categorized as Risk Category I or II.

B) Building height is equal to or less than 2 stories.

C) Building total square footage is less than or equal to 6,000 square feet.

Where Special Inspections are not required ~~(A, B & C above are all satisfied)~~, it shall be specifically stated on the approved drawings.

23.15. Table 1705.~~8~~7.

Add line item ~~4~~ 8 as follows:

~~4~~8. For helical piles, verify the torque is recorded every 1 foot.

23.15.1705.~~19~~ 21 Post-installed concrete and masonry anchors.

Add the following section:

1705.~~19~~ 21 Post-installed concrete and masonry anchors. Post-installed concrete and masonry anchors (includes screw, expansion, adhesive, undercut, carbon steel, stainless steel, rebar, etc.) do not require special inspection where all of the following criteria are satisfied:

1. The building Risk Category is I, II, or III.
2. The building is not classified as a high-rise.
3. The anchor is not installed at an inclined angle or overhead under direct sustained tension.

4. Either A or B is satisfied:

   A. Usage on Nonstructural (consistent with the definition used in Chapter 13 of ASCE 7).

      1. The Nonstructural Component Importance Factor (Ip) is 1.0.

      2. The maximum tension/shear interaction ratio (considering all applicable gravity and lateral load combinations) is less than 0.5.

   B. Usage on Building and Non-Building Structures (consistent with the definition used in Chapters 12 and 15 of ASCE 7).

      1. The maximum tension/shear interaction ratio (considering all applicable gravity and lateral load combinations) is less than 0.25.

Where Special Inspection is not required for post-installed anchors (Item Nos. 1 through 4 are satisfied), it shall be specifically stated on the approved drawings.

~~**23.15.1803.5.4 Groundwater table.**~~

~~Revise the section to read as follows:~~

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

~~**23.15.1803.5.10 Alternate setback and clearance.**~~

~~Revise the section to read as follows:~~

~~A geotechnical investigation shall be conducted to demonstrate the stability of any slope supporting or adjacent to a foundation. The investigation shall include consideration of the geotechnical conditions, slope geometry, load intensity, erosion characteristics of the materials, and potential reduction in soil strength due to cyclic loading or liquefaction. Evaluation of the slope stability shall be performed by a registered design professional in accordance with Section 23.15.1803.5.12.~~

23.15.1803.5.12 Seismic Design Categories D through F.

Add the following items:

5. A slope shall be considered stable if, based on a limit equilibrium analysis, the minimum factor of safety equals or exceeds:

   a. ~~Equals or exceeds~~ 1.50 under static and ~~post~~pre-earthquake loading conditions, ~~and;~~

   b. ~~Equals or exceeds~~ 1.10 under earthquake loading conditions using a horizontal seismic coefficient of 0.30 in Seismically-Induced Ground Failure Zones 1, 2, and 3~~;~~ and 0.20 in Seismically-Induced Ground Failure Zones 4 and 5~~.~~, and

   c. 1.10 under static post-earthquake loading conditions with consideration of residual soil strengths.

For slopes that do not satisfy all of the above criteria, the building official may approve an evaluation of the slope performance using a displacement-based method, including methods derived from Newmark sliding block model, or more advanced numerical modeling. Evaluations of slopes using any displacement-based method shall be based on site-specific probabilistic or deterministic ground motions predicted in accordance with ~~Section~~ Chapter 21~~.1~~ of ASCE 7~~-16~~, with the maximum considered earthquake (MCE).

6. It may be necessary to extend the geotechnical investigation beyond the immediate site boundaries in order to evaluate the applicable hazard.

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23.15.1803.5.13 Permafrost.

Add the following subsection:

1803.5.13 Permafrost. Anchorage has areas of high potential for isolated permafrost conditions as evident by the Mass Wasting Map in the Anchorage Coastal Resources Atlas, Vol 1: The Anchorage Bowl (1980). All subsurface investigation shall include evaluation of whether permafrost exists at any building site~~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, Vol. 1: The Anchorage Bowl, 1980) as having a high potential for isolated permafrost conditions.~~

23.15.1803.6 Reporting.

Add the following to the end of Item 5:

"…, and mitigation of the effects of seasonal freezing and thawing, and permafrost."

23.15.1804.4 Site grading.

Add the following paragraph at the end of the section:

There shall not be an increase in surface drainage to adjacent properties. Approved drainage locations shall conform to Title 21 requirements for stormwater treatment and discharge.

23.15.1804.6 Compacted fill material.

Replace "90 percent" in the exception with "95 percent".

23.15.1805.1.3 Ground-water control.

Add the following sentence 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.

23.15.1805.3 Waterproofing.

Add the following paragraph to the end of the section:

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 sentence to the beginning of the first paragraph:

All footings shall be concrete. Permanent wood foundation systems may only be installed in Type GW, GP, SW, or SP soils unless a complete geotechnical investigation and foundation design, prepared by a registered design professional, is submitted for review.

Add the following paragraph at the end of the section:

Hot dipped zinc-coated fasteners may not be used for basement or crawlspace construction. Fasteners and anchor bolts used in concrete footings shall be stainless steel. Anchor bolts shall be a minimum of 10 inch length by 5/8 inch nominal diameter with a minimum embedment of 7 inches into the concrete. Treated wood foundation plates and sills shall be installed in accordance with Section 2308.3.1.

23.15.1807.3.1 Embedded posts and poles - Limitations.

Add the following item at the end of the section:

The embedment depth to least dimension ratio shall be less than or equal to 12.

Exception: Embedment depth to least dimension ratio shall not be limited for non-building structures.

23.15.1808.7 Foundations on or adjacent to slopes.

Add the following to the end of the first sentence:

"…, and shall be 15 feet beyond the surface projection of the most critical theoretical failure surface plane determined from the slope stability analysis in accordance with Section 23.15.1803.5.10."

23.15.1809.5 Frost protection.

~~Replace the first sentence with the following:~~

~~Foundations and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:~~Replace Item 1 with the following:

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

~~Replace Item 2 with the following:~~

~~Designing in accordance with ASCE 32, using a Design Air Freeze Index (F100) of 3,340 F-Days.~~

~~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.~~

Add the following table:

Table 23.15.1809.5 Minimum Footing Depths.

Foundation Type	Minimum Footing Depth (inches)[6]	
	Warm Foundation	Cold Foundation[3, 4]
Perimeter footing[1]	42	60
Interior continuous or isolated spread footing[2]	8	60
Cast-in-place concrete pier	42	120[5]
Exterior isolated foundation	N/A	120[5]

Notes:

1. Dimension indicated is from bottom of footing to adjacent exterior grade. Required depth to bottom of footing within a crawlspace shall not be less than 8 inches. Basements or crawl space walls supporting more than 5 feet of 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 attached to the building and not greater than 72 inches above grade may bear directly on ground. Bearing material shall meet other provisions of this code. The potential for and the effects of seasonal freeze and thaw shall be considered.
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 appropriate means. The effects of seasonal freeze and thaw shall be considered.
5. The minimum footing depth for foundations installed in non-frost susceptible soils may be 60 inches.
6. Non-load bearing site structures not attached to the building, such as fences, light poles, and signposts, shall have a footing depth based on analysis of the vertical and lateral loads on the structure, and shall consider the effects of seasonal freeze and thaw.

23.15.1810.3.1 Design conditions.

Add the following at the end of the sentence:

"…, with consideration of the effects of seasonal freeze and thaw."

23.15.1810.3.2.3 Structural steel.

Add the following exception:

The building official may approve alternate material specifications where documentation is provided showing the specified material meets or exceeds the requirements for stress, ductility, weldability, and corrosion resistance of any of the listed specifications.

23.15.1810.3.5.3.4 Steel pipes and tubes.

Add the following exception:

The building official may permit smaller diameter piles provided that an analysis is submitted indicating that the piles have sufficient capacity to transfer the required axial and lateral loads.

23.15.1810.3.11 Pile caps.

Add the following exception at the end of the section:

Exception: Pile caps and grade beams of material other than concrete are permitted where the connection of the pile to the pile cap has been assumed to be a pinned connection.

~~**23.15.1905 Modifications to ACI 318.**~~

~~Replace the section in its entirety with the following:~~

~~**1905.1 General.** The text of ACI 318 shall be modified as indicated in Sections 1905.1.1 through 1905.1.3.~~

~~**1905.1.1 ACI 318, Section 2.2.** Add the following definition to ACI 318, Section 2.2:~~

~~**FREEZING/NEAR FREEZING WEATHER.** A period when, for more than 3 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.~~

~~**1905.1.2 ACI 318, Section 20.7.**~~

~~Add section 20.7.6 as follows:~~

~~**20.7.6.** Except where approved by the registered design professional, anchors shall be tied in place prior to placing concrete.~~

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

~~**1905.1.3 ACI, Section 22.9.5.**~~

~~Add section 22.9.5.2 as follows:~~

~~22.9.5.2. Where the geometry of the member does not permit the full hooked development length, it is permissible to extend the hook the full development length to meet this provision. The development length shall be measured from the end of the hook bend.~~

23.15.2002.2 Modifications to AA ADM 1.

Add section 2002.2 as follows:

2002.2 Modifications to AA ADM 1. Add the following to the end of AA ADM 1, Section ~~A3.3.7~~A4.4.7 Screws:

Other screw type fasteners are permitted for non-structural components, non-building structures, window wall, and curtain wall systems per American Architecture Manufactures Association Technical Information Report AAMA TIR-A9-14 section 4.0.

23.15.2104 Masonry (Construction).

Add a new subsection as follows:

2104.2 Installation of anchors. Except where approved by the registered design professional, anchors shall be tied in place prior to grouting.

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

23.15.2106 Seismic design.

Add the following sections:

23.15.2106.2 ASCE 7 Section 13.4.2.2 modification.

Amend ASCE 7 Section 13.4.2.2 by deleting the second sentence and the exception.

23.15.2106.3 ASCE 7 Section 15.4.9.2 modification.

Amend ASCE 7 Section 15.4.9.2 by deleting the second sentence and the exception.

23.15.2209.1 Storage racks.

Add the following exception to 2209.1 and 2211.1:

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

23.15.2303.4.5 Alterations to trusses.

Revise the last sentence to read as follows.

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 the International Existing Building Code.

23.15.2303.4.6.1 Modifications to TPI 1.

Amend TPI 1 by adding the following sections:

TPI 1 6.4.10.4 Fabrication Tolerance for Long-Span Trusses.

For trusses with clear spans of 30 ft. or greater, the Fabrication Tolerance shall be 20% minimum for design (Quality Control Factor C_q = 0.8 or less).

23.15.2304.12.1.2 Wood supported by exterior foundation walls.

Replace "8 inches" in the sentence with "6 inches".

23.15.2305 General Design Requirements for Lateral Force-Resisting Systems.

Add the following sections:

2305.4 Anchorage at shear wall ends. 1,000 lbs. (ASD) net uplift at shear wall boundaries for upper story walls and 1,500 lbs (ASD) net uplift for shear walls directly connected to concrete or masonry foundations may be neglected when determining overturning restraint. Where overturning forces exceed these limits, the full calculated force shall be used to design the anchorage.

2305.5 Modifications to NDS SDPWS.

Add the following to NDS SDPWS Section 4.3.6.4.3:

The edge of plate washers shall be installed ½ inch from the inside face of the rim joist for shear walls constructed on top of platform framed floors.

Add the following exceptions to NDS SDPWS Section 4.3.6.4.3:

d. A 3× nominal sill plate may be used in lieu of extending the washer to within ½ inch of the edge of the plate on the side(s) with sheathing.

e. Where required nominal capacity does not exceed 1,200 plf, a 2× nominal sill plate may be used where the sill plate is anchored using two times the number of anchors required by design and 0.229-inch by 3-inch by 3-inch plate washers are used.

Add the following to NDS SDPWS section 4.4.1.6a:

The edge of plate washers shall be installed ½ inch from the inside face of the rim joist for shear walls constructed on top of platform framed floors.

23.15.2308.~~5~~9.8 Pipes in walls.

Add the following paragraph at the end of the section:

All studs in exterior plumbing walls shall be a minimum 6-inch nominal width unless otherwise approved.

23.15. Table 2902.1 Minimum Number of Required Plumbing Fixtures.

Amend Table 2902.1 as follows:

Under the WATER CLOSETS column: Replace "URINALS SEE SECTION 424.2 OF THE INTERNATIONAL PLUMBING CODE" with "In each bathroom or toilet room, urinals shall not be substituted for more than 67 percent of the required water closets."

Under the DRINKING FOUNTAINS column: Replace "SEE SECTION 410 OF THE INTERNATIONAL PLUMBING CODE" with "Where water is serviced 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 required drinking fountains. Drinking fountains shall not be required in Group B, F, or S occupancies containing break rooms with sinks.

23.15.3001.2 Elevator Emergency ~~Elevator~~ Communication Systems ~~for the Deaf, Hard of Hearing and Speech Impaired~~.

Delete this section in its entirety.

23.15.3003.2 Firefighter Emergency Operation.

Amend section to read as follows:

Elevators shall be provided with Phase 1 emergency recall operation and Phase 2 emergency In-car operation in accordance with ASME A17.1/CSA B44. LULA Elevators, when permitted shall be provided with Phase 1 emergency recall operation in accordance with ASME A17.1/CSA B44.

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23.15.3004.3 Conveyors.

Add a new subsection as follows:

3004.3.3 Plan review, acceptance inspection and periodic inspections. Plan review and acceptance inspections and tests of vertical reciprocating conveyors shall be in accordance with ASME-B20.1 (2021) Safety Standard for Conveyors and Related Equipment. ~~Periodic inspection shall be performed on vertical reciprocating conveyors, in accordance with ASME-B20.1, Section I-7. Periodic inspections shall be performed at intervals not to exceed 2 years.~~

23.15.3004.4 Personnel and Material Hoists.

Add the following subsections:

23.15.3004.4.1 Construction and demolition sites. Personnel hoists and employee elevators on construction and demolition sites shall meet the requirements of ANSI A10.4.

23.15.3004.4.1.1 Inspection, testing and certification. Inspections, testing, and certification shall be conducted by the conveyance manufacturer or by an independent inspector certified to inspect and certify this type of equipment prior to the conveyance being placed into service. All inspections and testing shall be in accordance with ANSI A10.4 and the requirements of the manufacturer of the conveyance. Copies of all inspection reports and certification letters shall be submitted to the Municipality of Anchorage Building Safety Division, Elevator Inspection Section for review within 72 hours following the completion of the inspections.

Periodic inspections shall be performed as required by ANSI A10.4 and manufacturer's recommendations. Inspection reports shall be submitted to the Municipality of Anchorage Building Safety Division, Elevator Inspection for review within 72 hours following the completion of the inspections.

23.15.3005.1 Access.

Replace section with the following:

3005.1 Access. Access to elevator machine/control rooms and machine/control spaces shall be from the inside of the building or shall be by an enclosed, ventilated, and well lighted access 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.

23.15.3006.3 Elevator Hoistway Door Protection.

Add item 6 to read as follows:
6. When doors or curtains are in their closed position, they shall not prevent firefighter's from visually observing the elevator landing (Lobby) when the elevator hoistway door is no more than one-quarter open.

23.15.3108.1.1 Modifications to TIA-222.

Add the following sentence to the end of the first paragraph of TIA-222 Section 2.6.4:
The basic wind speed without ice shall not be less than that determined in AMC 23.15.1609

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23.15 Chapter 35 Referenced Standards.

Amend the Reference Standards as follows:

Change NFPA 13-~~16~~ 22 to NFPA 13-~~19~~25: Standard for the Installation of Sprinkler Systems.

Change NFPA 13D-~~16~~ 22 to NFPA 13D-~~19~~25: Standard for the Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Homes.

Change NFPA 13R-~~16~~ 22 to NFPA 13R-~~19~~25: Standard for the Installation of Sprinkler Systems in Low-rise Residential Occupancies.

Change NFPA 20-~~16~~ 22 to NFPA 20-~~19~~25: Standard for the Installation of Stationary Pumps for Fire Protection.

Change NFPA 72-~~16~~ 22 to NFPA 72-~~19~~25: National Fire alarm and Signaling Code.

Change NFPA 2001-~~15~~ 22 to NFPA 2001-~~18~~ 25 Standard on Clean Agent Fire Extinguishing Systems.

23.15 Appendices.

Adopt Appendices A, C 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 that a sign be installed and maintained so as to conform with 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 88-305)~~.

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23.15.H.101.3 Permits required.

Add a new section H.101.3 to read 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 of Anchorage Municipal Code 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 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, and structures identified by their principal use; and
6. Such other information as the building official determines is reasonably necessary to an evaluation of the proposed sign's compliance with this code.